

# CITY OF EAST PALO ALTO, CALIFORNIA

# **INVITATION FOR BIDS FOR** ANNUAL STREET RESURFACING PROJECT 2024/2025

PUBLIC WORKS PROJECT NO. ST-07-24

# DATE OF AD PUBLICATION

WEDNESDAY, AUGUST 14, 2024

**BIDS DUE:** 

#### 9/5/2024

At the Office of the City Clerk City of East Palo Alto 2415 University Avenue East Palo Alto, CA 94303

Contact Person During Bidding Period: Michael Cortez, Assistant Engineer (650) 732-6536 <u>mcortez@cityofepa.org</u>

# **TABLE OF CONTENTS**

Project No. ST-07-24

I.	NOTICE INVITING BIDS	2
II.	INSTRUCTIONS TO BIDDER	4
III.	BID FORMS	11

# **ATTACHMENTS**

- A. PLANS AND SPECIFICATIONS
- B. GENERAL CONSTRUCTION CONTRACT
- C. GENERAL PROVISIONS
- D. SPECIAL PROVISIONS

THIS PAGE INTENTIONALLY LEFT BLANK

# CITY OF EAST PALO ALTO I. NOTICE INVITING BIDS

#### ANNUAL STREET RESURFACING PROJECT 2024/2025 City Project No. ST-07-24

SEALED BIDS will be received by the City of East Palo Alto City Hall, 2415 University Avenue, East Palo Alto, California 94303, 9/5/2024 at which time they will be publicly opened in the City Hall, 2415 University Avenue, East Palo Alto, Ca, and read for performing work as follows:

Furnishing all labor, materials, and equipment and performing all work necessary and incidental to the completion of the project known as ANNUAL STREET RESURFACING PROJECT 2024/2025 (the "Project") consisting of site preparation, concrete work, pavement resurfacing, striping, traffic control and so on according to plans and specifications prepared by the City of East Palo Alto.

Project is to be completed within a total maximum of seventy (70) working days.

Bid documents can be obtained by downloading the set from the City website at www.cityofepa.org under RFP-RFQ-Bids. Questions should be directed to Michael Cortez, Associate Engineer, (650) 732-6536, <u>mcortez@cityofepa.org</u>.

Bid Security in an amount not less than ten percent (10%) of the total bid dollar amount and conforming to the prescribed bidding procedures is required to be submitted with each bid.

Pursuant to the provisions of the California Labor Code Section 6707, if applicable to this job, each bid submitted in response to this Notice Inviting Bids shall contain, as a bid item, adequate sheeting, shoring, and bracing, or equivalent method, for the protection of life and limb in trenches and open excavation, which shall conform to applicable safety orders.

Pursuant to Public Contract Code Section 22300, for monies earned by the Contractor and withheld by the City of East Palo Alto to ensure the performance of the contract, the Contractor may, at his or her option, choose to substitute securities meeting the requirements of Section 22300.

To be considered, all bidders shall:

- Be licensed under the provisions of Chapter 9, Division 3 of the Business and Professions Code of the State of California to do the type of work contemplated in the project. The general class or type of work called for under the Contract requires a class "A" license.
- Perform with their own organizations work amounting to at least (25)% of the contract price, except specialty items.
- Have completed a minimum of three (3) projects involving work of similar type and complexity, each project valued at not less than \$1,000,000 in the last five years.
- Meet other mandatory bid requirements set forth in the bid documents.

# THIS PAGE INTENTIONALLY LEFT BLANK

# II. INSTRUCTIONS TO BIDDER

- 1. <u>Preparation of Bid</u> Bid shall be made on Bid Forms inserted in the cover of this Invitation for Bids. The Bid Forms include the documents entitled Bid, Bid Schedule, Subcontractor List, Bidder's Information, Statement of Qualifications, and Non-Collusion Affidavit. Bidder shall enter all requested information in the appropriate spaces on the Bid Forms. No oral, telephone, facsimile or electronic bids will be accepted. All costs of bid preparation shall be borne by the bidder.
- 2. <u>Mandatory Qualifications</u> In order for a bid to be considered responsive to this invitation for bids, the minimum experience of the bidder shall be the completion of three (3) projects of similar type and complexity, and value not less than \$1,000,000.00. Documentation of mandatory qualifications shall be made on the document entitled "Bidder's Information" included in the Bid forms.
- 3. <u>Pre-Bid Conference</u> –N/A
- 4. <u>Examination of Bid Documents</u> The Bid Documents consist of this Invitation for Bids, each and every document listed in the Table of Contents of the invitation, any documents referenced in the specifications, and any addenda which may have been issued. Bidder shall thoroughly examine and be familiar with all Bid Documents, including legal and procedural aspects. Submission of a bid shall constitute bidder's acknowledgment upon which the City may rely that bidder has thoroughly examined and is familiar with the Bid Documents. Failure or neglect of bidder to receive or examine all or part of the Bid Documents shall in no way relieve the bidder from any obligations with respect to this bid invitation or any resultant contract. No claim for additional compensation will be allowed which is based upon a lack of knowledge of any part of the Bid Documents.
- 5. Inspection of Site Bidder must examine and judge for itself the location of the proposed work and the nature and extent of the work to be done. The technical specifications, including drawings, plans, maps, diagrams and/or other graphic representations of the project, show conditions as they are supposed or believed by City to exist at the site, but the conditions shown do not constitute a representation by City that they actually exist. Utilities (underground or above-ground), buildings, structures and other improvements may be within or adjacent to the project site. These may or may not be included in the project's technical specifications. Bidder is required to inspect the project location to satisfy itself, by examination or other appropriate means, of the actual conditions at the site.

Submission of a bid shall constitute a representation by bidder that it has visited and examined the project site and is relying on its own examination and knowledge of the site in making its bid, and not on any representation by City. No claim for additional compensation shall be allowed that is based upon a failure to examine, or lack of knowledge of, the work site.

- 6. Interpretation of Bid Documents and Addenda – Should a bidder discover conflicts or ambiguity in the bid documents that require a decision or explanation, bidder may request an interpretation. Such a request shall be made in writing and delivered to the person identified on the cover page of this bid invitation no later than five (5) working days before the deadline for receipt of bids. Every interpretation made to bidders will be in the form of an Addendum issued by the City. Addenda, if issued, will be sent as promptly as possible to all parties that have been issued bid documents. All such Addenda will become part of the bid documents and shall be binding in the same way as if originally written in the bid documents. Only properly issued addenda shall be binding upon City, any oral and/or other form of interpretation or clarification will have no legal or contractual effect. Bidders shall acknowledge the receipt of Addenda on the Bid Forms.
- 7. <u>Bid Security</u> Bidder shall submit bid security with the bid in an amount equal to at least ten percent (10%) of the total bid amount (Base Bid plus Alternates, if any) and in the form of a certified check, cashier's check or surety bond issued by an admitted surety insurer authorized to conduct business in the State of California. The total amount of the successful bidder's bid security shall be forfeited

to the City if the bidder fails to execute the contract and furnish bonds and insurance as required by the bid documents within ten (10) calendar days after being notified in writing by City that the contract award has been made.

- 8. <u>Bonds and Insurance</u> The successful bidder shall furnish performance and payment (labor and materials) bonds, each in an amount equal to one hundred percent (100%) of the total contract price (Base Bid plus Alternates, if any) and issued by an admitted surety insurer authorized to operate in the State of California. The only bonds acceptable to the City shall be those included with the bid documents. The successful bidder shall also maintain throughout performance of the work the insurance coverage specified in the bid documents.
- 9. <u>Employment of Apprentices</u> The provisions of Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code concerning the employment of apprentices are applicable during the performance of the work described in the bid documents.
- 10. <u>Wage Rates</u> Pursuant to Sections 1770, 1771 and 1774 of the California Labor Code, the successful bidder shall pay not less than the prevailing rate of per diem wages as determined by the Director of the State of California Department of Industrial Relations. Copies of such prevailing wage rates are available for review at the City. Wage rates can also be obtained through the California Department of Industrial Relations website at: http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm.

Bidders shall promptly notify the person identified on the cover page of this bid invitation, in writing, about all labor classifications not listed in the prevailing wage determinations but necessary for the performance of the work described in the bid documents.

The successful bidder/contractor, and each subcontractor shall keep accurate payroll records, and comply in all respects with Labor Code section 1776, including the timely response to written notices requiring copies of such records, as provided for in such section. In the event the contractor or subcontractor fails to comply within the ten day period, that contractor or subcontractor shall forfeit one hundred dollars (\$100.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated, as provided by Labor Code section 1776(h).

- 11. <u>Contractor Registration with the State of California</u> In order to be considered for contract award, Contractor and any Subcontractors must be registered with the State of California, Department of Industrial Relations (DIR) through the Public Works Contractor Registration Program. Contractors shall list all applicable DIR registration numbers on the Bid Form.
- 12. <u>Utilization of Local Workforce in Construction Projects</u> When possible, it is encouraged that the contractor shall utilize local workforces, including State-certified apprentices, as a means of supporting economic opportunities for all members of the community.
- 13. <u>Sheeting, Shoring and Bracing (As Applicable)</u> In accordance with the provisions of Section 6707 of the California Labor Code, when bidding on a project that calls for trenches or open excavations, bidder shall specify on the Bid Forms that the item price for such work includes adequate sheeting, shoring and bracing, or equivalent method, to protect its employees and others from injury to life or limb, in conformance with applicable California Construction Safety Orders. This section shall not be construed to impose tort liability on the City or any of its employees or agents.
- 14. <u>Subcontractors</u> Bidder shall complete the "List of Subcontractors" included in the Bid Forms. Bidder shall include all requested information for each subcontractor who will perform work or render service to the bidder during the performance of the work described in the bid documents and any subcontractor licensed by the State who, under subcontract to the bidder, specially fabricates and installs a portion of the work or improvements described in the bid documents. Bidder shall complete the List in each instance where the amount of the subcontractor's work is in excess of one-half of one percent (.5%) of the bidder's total bid, or, in the case of bids or offers for

the construction of streets or highways, including bridges, in excess of one-half of one percent (.5%) of the total bid or ten thousand dollars (\$10,000), whichever is greater.

The apparent successful bidder will be required to establish, to the City's satisfaction, the responsibility and reliability of the subcontractors it has listed. Prior to the award of the contract, the Purchasing Officer will notify the apparent successful bidder, in writing, if City, after due investigation, has a reasonable objection to any proposed subcontractor. If, after notification of such objection, bidder is unable to address City's concern with the subcontractor, City shall give bidder the opportunity to submit an acceptable substitute. In the event bidder is unable to provide such a substitute, its bid will be deemed non-responsive.

A bidder whose bid is accepted may not substitute a different subcontractor in place of the subcontractor listed in the original bid, except with the prior written consent of the City and in accordance with the procedures set forth in Section 4107 of the Public Contract Code.

- 15. <u>Bidders Interested in More Than One Bid</u> A bidder submitting a bid as a prime contractor may submit only one bid as a prime contractor and may not also submit one or more bids as a subcontractor to competing prime contractors. Failure to comply with this requirement will result in the rejection of all bids from the non-complying bidder. A bidder who is not submitting a bid as a prime contractor may submit any number of bids as a subcontractor to competing prime contractors.
- 16. <u>Bid Price</u> Bid price shall include all costs for:
  - Furnishing all tools, equipment, materials, apparatus, facilities, labor, transportation, supervision and management necessary to perform the work described in the bid documents;
  - b. Providing the necessary safety precautions for the protection of the public, such as barricades and warning signs;
  - c. Cleanup activities to restore the work site to a satisfactory condition;
  - d. Federal, state and local taxes; and
  - e. All permits and licenses required to perform the work described in the bid documents.

Any items shown in the specifications, contract drawings, or any part of the contract documents, and not specifically listed in the bid price are to be considered included; and no additional or special compensation will be allowed.

17. <u>Submission of Bid</u> – Bidder shall submit the completed Bid Forms and the required bid security no later than the time and date set for receiving bids as stated in the Notice Inviting Bids or any modifying Addenda. Bid shall be delivered in a sealed envelope *clearly marked with the applicable bid number* addressed to: City of East Palo Alto

Office of the City Clerk 2415 University Avenue East Palo Alto, CA 94303

- 18. Modification or Withdrawal of Bids
  - a. Before Date and Time for Receipt of Bids Bids that contain mistakes discovered by a bidder before the date and time for receipt of bids may be modified or withdrawn by written notice to City's Purchasing Officer received prior to the deadline. Any modification shall be clearly identified as such and shall be made in writing, executed and submitted in the same form and manner as the original bid.
  - b. After Date and Time for Receipt of Bids A bidder may not change its bid after the date and time set for receipt of bids except that the bidder may seek the City's consent to the substitution of a subcontractor where the bidder can demonstrate, under the provisions of state law, that the name of the substituted subcontractor was listed as the result of an inadvertent clerical error. A bidder alleging a mistake in a bid may be permitted to withdraw

its bid in conformance with state law (see Public Contract Code Sections 5101, 5103 and 5105).

- 19. <u>Postponement of Opening; Extensions</u> The City reserves the right to postpone the date and time for receipt of bids at any time prior to the date and time announced in the Notice Inviting Bids. The date and time shall be extended by at least 72 hours in the event the City issues any material changes, additions or deletions to the bid documents within 72 hours prior to the bid closing.
- 20. <u>Late Bids</u> Bidder shall be responsible for the timely delivery of bid. Bids received after the deadline for receipt of bids shall not be accepted and shall be returned to bidder unopened unless necessary for identification purposes.
- 21. <u>Public Opening of Bids</u> Each bid, irrespective of any defects or irregularities, that has been received by the deadline for receipt of bids, except those that have been properly withdrawn, will be publicly opened by a representative of the Purchasing Division at the date and time announced for such opening. If one or more members of the public are present, the name and address of each bidder, the total amount of each bid, and the nature and amount of the bid security furnished with each bid will be read aloud at or shortly following the deadline for receipt of bids.
- 22. <u>Bid to Remain Open</u> The bidder shall guarantee its bid for a period of ninety (90) calendar days from the date of bid opening.
- 23. <u>Bid Evaluation</u> City's Purchasing Officer will evaluate all bids received to determine if the bidder is responsive and responsible. A Bidder will be deemed to be responsive if it has submitted a bid that conforms in all material respects to the requirements of the bid documents and demonstrates compliance with the mandatory experience as described in Section 2. A Bidder will be deemed to be responsible if the Bidder:
  - a. Has the ability, capacity, experience and skill to perform the work in accordance with the bid specifications;
  - b. Has the ability to perform the work promptly or within the time specified, without delay;
  - c. Has equipment, facilities and resources of such capacity and location to enable it to perform the work;
  - d. Has a record of satisfactory or better performance under prior contracts with the City or others; and
  - e. Has complied with laws, regulations, guidelines and orders governing prior or existing contracts.
- 24. <u>Mandatory Post Bid-opening Information</u> In order to assist in the bid evaluation, the apparent low bidder will be required to complete and submit the form entitled "Statement of Qualifications" included in the Bid forms within two working days of notification by City that it is the apparent low bidder. Notice may be given orally, by telephone, or by facsimile sent to the number supplied by bidder. Failure to submit the Statement of Qualifications by 5:00 p.m. of the second day may result in the bid being deemed non-responsive, and the City will then determine the next apparent low bidder.
- 25. <u>Discrepancies in Bid Forms</u> The City may waive minor defects of irregularities in any bid, provided that the discrepancy does not materially affect the bid amount or give the bidder an advantage over others. For instance, if there are unit price bid items in a bid schedule, and the amount indicated for a unit price bid item does not equal the product of the unit price and quantity listed, the unit price shall govern. Likewise, if there is more than one bid item in a bid schedule, and the total of the schedule does not equal the sum of the bid items, the individual amounts of the bid items shall govern. If there is a difference between the bid price entered in words and the bid price entered in figures for the same quotation, the price in words shall prevail.

The City may make any investigations deemed necessary to determine if a bidder is responsive and responsible.

- 26. <u>Rejection of Bids</u> The City reserves the right to reject any and all bids; and further reserves the right to reject any bids that are found to be non-responsive or submitted by a bidder that is not responsible.
- 27. <u>Tie Bids</u> In the event that an identical price is received from two or more responsive and responsible bidders, the City may re-advertise for bids or the successful bidder may be determined by the casting of lots with the tie bidders in public at a date and time set by City's Purchasing Officer.
- 28. <u>East Palo Alto Business License</u> The successful bidder must either possess a current, valid East Palo Alto business license or must have submitted a East Palo Alto business license application and fee at the time of contract execution.
- 29. <u>Contract Award</u> Contract award will be made to the lowest responsive and responsible bidder. In the event that bids are required on a Base Bid and Additive Alternates, contract award will be based solely on the Base Bid. The acceptance of a bid will be evidenced by a written Notice of Award delivered to the successful bidder.
- 30. <u>Bid Protest</u> The City will issue a Notice of Intent to Award prior to the actual award. Any Bid protest must be submitted in writing to the Purchasing Division, City Hall Annex, 2415 University Avenue, East Palo Alto, California 94303, before 5:00 p.m. of the fifth (5th) calendar day following posting of a Notice of Intent to Award for Construction in the Lobby of the City Hall Annex. City will use reasonable efforts to deliver by electronic means a copy of the Notice of Intent to Award to all Bidders who submitted Bids and provided an email address or other forms of electronic communication no later than the working day after issuance, although any delay or failure to do so will not extend the Bid protest deadline described above. The following conditions will apply to all protests.
  - a. The initial protest document must contain a complete statement of the basis for the protest;
  - b. The protest must refer to the specific portion of the document that forms the basis for the protest;
  - c. The protest must include the name, address and telephone number of the person representing the protesting party. If a fax number is available, it should also be included;
  - d. The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other Bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

The procedure and time limits set forth in this paragraph are mandatory and are Bidder's sole and exclusive remedy in the event of Bid protest. Bidder's failure to comply with these procedures shall constitute a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings. A Bidder may not rely on a protest submitted by another Bidder, but must timely pursue its own protest.

#### 31. Post-Notice of Award Requirements

- a. Within ten (10) calendar days of Notice of Award, the successful bidder shall submit to the person identified on the cover of this bid invitation the following:
  - 1. The General Construction Contract executed in duplicate by the successful bidder;
  - 2. Performance and Payment Bonds;
  - 3. Guaranty
  - 3. Evidence of the required insurance coverage;

- 4. A East Palo Alto business license tax and fee if bidder does not already possess such license; and
- 5. A completed Internal Revenue Service Form W-9.
- b. Successful Bidder's failure to submit the documents required herein, in a proper and timely manner, entitles City to rescind its award, and to cause Bidder's Bid Security to be forfeited as provided in paragraph 32.
- c. City may elect in its sole discretion to extend the time to receive any of the documents listed herein.
- 32. <u>Failure to Execute and Deliver Documents</u> If Bidder to whom Notice of Award is issued shall, for 10 days after such award, fail or neglect to execute and deliver all required contract documents, bonds, insurance certificates and other documents, City may, in its sole discretion, deposit Bidder's surety bond, cashier's check or certified check for collection, and retain the proceeds thereof as liquidated damages for Bidder's failure to perform. Bidder agrees that calculating the damages City may suffer as a result of Bidder's failure to execute and deliver all documents would be extremely difficult and impractical, and that the amount of Bidder's required Bid security shall be the agreed and presumed amount of City's damages. City may then turn to the next Apparent Low Bidder and proceed as if this Apparent Low Bidder were the original Apparent Low Bidder.

# THIS PAGE INTENTIONALLY LEFT BLANK

# III. BID FORMS

#### ANNUAL STREET RESURFACING PROJECT 2024/2025

Project No. ST-07-24

#### Bid To: City of East Palo Alto, City Clerks office 2415 University Avenue East Palo Alto, CA 94303

The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with the City in the form included in the Contract Documents to perform the Work as specified or indicated in these Contract Documents entitled: ANNUAL STREET RESURFACING PROJECT 2024/2025, Project ST-07-24.

Bidder accepts all the terms and conditions of the Contract Documents, including without limitation those in the Notice Inviting Bids and Instructions to Bidders, dealing with the disposition of the Bid Security. Attached hereto is a cashier's check, certified check or bid bond in the amount of \$\_\_\_\_\_as required in the Notice Inviting Bids.

This bid will remain open for the period stated in the Instructions to Bidders. Bidder will enter into an Agreement within the time and in the manner required in the Information to Bidders, and will furnish the insurance certificates, Payment Bond, Performance Bond, and Permits required by the Contract Documents.

Bidder has examined copies of all the Contract Documents including the following Addenda (receipt of which is hereby acknowledged):

Number	Number
Number	Number
Number	Number

Bidder has familiarized itself with the nature and extent of the Contract Documents, the Work, the site, the locality where the Work is to be performed, the legal requirements (federal, state, and local laws, ordinances, rules, and regulations), and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as Bidder deems necessary.

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

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self insurance in accordance with the provisions before commencing the performance of the work of this contract.

Bidder agrees to complete the Work required under the Contract Documents (including all Bid Schedules, Subcontractor List, Bidder's General Information, and Non-Collusion Affidavit contained in these Bid Forms) within the Contract Time specified, and to accept in full payment the Contract Price based on the Lump Sum or Unit Bid Price(s) listed in the Bid Schedule(s).

Dated:	Bidder:	
	By:	(Print Name)
	By:	(Signature)

Title:

## **BID SCHEDULE**

Notes:

- The Contract will be awarded on the basis of Total Base Bid amount only. 1.
- The Addition of Additive Alternate Bid items does not change the basis by which the project will be awarded. The bidder must complete the Alternate Bid in full for the bid to be considered. 2.
- 3.

#### BASE BID

Item Number	Item Description	Qty	Unit	Unit Cost	Total Cost
1	Mobilization	1	LS		
2	Traffic Control	1	LS		
3	Construction Staking and Surveying	1	LS		
4	Stormwater Pollution Prevention and Dust Control	1	LS		
5	Construction Signage	2	EA		
6	PCC: Curb & Gutter	871	LF		
7	PCC: Curb Only	50	LF		
8	PCC: Curb Ramp	67	EA		
9	PCC: Sidewalk	4015	SF		
10	PCC: Driveway	775	SF		
11	Asphalt Concrete Grinding - 1 Inch Wedge Grind (6' wide)		LF		
12	Asphalt Concrete Grinding - 2 Inch Full Grind	219044	SY		
13	HMA Concrete Paving (2 inch thickness)	13172	TON		
14	Type II Slurry Seal	71789	SY		
15	Slurry + CS	54296	SY		
16	Multi Layer Treatment	33915	SY		
17	Base Repair (4 inch digouts)	50000	SF		
18	Thermoplastic: Symbols and Legends	9968	SF		
19	Thermoplastic: 12 inch	3287	LF		
20	Raise to Grade: Stormwater Manhole	16	EA		
21	Raise to Grade: Sanitary Sewer Manhole	46	EA		
22	Raise to Grade: Survey Monument	17	EA		
23	Raise to Grade: Water Valve Covers	20	EA		
24	Raise to Grade: PG&E Gas Cover	1	EA		
25	Construct Speed Hump	3	EA		
26	Remove and Replace: Traffic Loops		EA		
27	Thermoplastic: 6 inch	4223	LF		
28	Thermoplastic: 6 Inch Double Yellow	7954	LF		
29	Thermoplastic: Sharrows	68	EA		

					Page 14
30	Thermoplastic: Class II Lane Symbols (20 ft of Green Lane)	8	EA		
31	Sign Poles	11	EA		
32	Share the Road Sign	11	EA		
33	Thermoplastic: Green Lane	360	SF		
34	Thermoplastic: Yellow Symbols and Legends		SF		
35	Thermoplastic: Yellow Crosswalk	2	EA		
36	Thermoplastic: Yellow Symbols and Legends		SF		
37	Thermoplastic: Yellow 12 inch		LF		
38	Thermoplastic: 6 inch dashed		LF		
			TOTAL	. BASE BID	

TOTAL BASE BID IN WORDS: \_\_\_\_\_

#### ALTERNATIVE BID 1: BULBOUTS

Item Number	Item Description	Qty	Unit	Unit Cost	Total Cost
39	Construction Staking and Surveying (Bulbouts)	1	LS		
40	PCC: Curb & Gutter	78	LF		
41	PCC: Sidewalk	300	SF		
42	PCC: Curb Ramp	6	EA		
		ALT	ERNATIV	VE 1 TOTAL	

TOTAL BASE BID+ALTERNATIVE BID

TOTAL BASE BID + ALTERNATIVE IN WORDS:

Page 15

#### SUBCONTRACTOR LIST (Public Contract Code 4100 et seq.)

Name of SubcontractorAddress of Subcontractor and License Number (PWC Registration Numbers shall be included in Part E under the 'Statement of Qualifications')Work to Be PerformedValue of Work to De Performed by Subcontractor (\$)1.(License No.)	(Public Contract Code 4100 et seq.)						
included in Part E under the 'Statement of Qualifications')         Image: Statement of Qualifications')           1.         (License No.)         Image: Statement of Qualifications')           2.         (License No.)         Image: Statement of Qualifications')           3.         (License No.)         Image: Statement of Qualifications')           3.         (License No.)         Image: Statement of Qualifications')           4.         (License No.)         Image: Statement of Qualifications')           5.         (License No.)         Image: Statement of Qualifications')           6.         (License No.)         Image: Statement of Qualifications')           7.         (License No.)         Image: Statement of Qualifications')           8.         (License No.)         Image: Statement of Qualifications')           9.         (License No.)         Image: Statement of Qualifications')           10.         Image: Statement of Qualifications')         Image: Statement of Qualifications'		License Number		Performed by			
'Statement of Qualifications')         Image: Constraint of Qualifications')           1.         (License No.)         Image: Constraint of Qualifications')           2.         (License No.)         Image: Constraint of Qualifications')           3.         (License No.)				Subcontractor (\$)			
1.       (License No.)							
(License No.)       Image: Constant of the second of the sec	1.	,,					
2.		(Liconso No.)					
(License No.)							
3.       (License No.)	2.						
3.       (License No.)		(Liconco No.)					
(License No.)       Image: Constraint of the second s							
4.	3.						
4.		(License No.)					
(License No.)       Image: Constant of the second sec							
5.       (License No.)       -         6.       (License No.)       -         7.       (License No.)       -         8.       (License No.)       -         9.       (License No.)       -         10.       -       -	4.						
5.       (License No.)       -         6.       (License No.)       -         7.       (License No.)       -         8.       (License No.)       -         9.       (License No.)       -         10.       -       -		(License No.)					
(License No.)	5						
6.       (License No.)       -         7.       (License No.)       -         8.       (License No.)       -         9.       (License No.)       -         10.       -       -	0.						
(License No.)       (License No.)         7.       (License No.)         8.       (License No.)         9.       (License No.)         10.       Image: Comparison of the second of the se		(License No.)					
(License No.)       (License No.)         7.       (License No.)         8.       (License No.)         9.       (License No.)         10.       Image: Comparison of the second of the se	6.						
7.       (License No.)         8.       (License No.)         9.       (License No.)         10.       Image: Constraint of the second secon							
(License No.)       (License No.)         8.       (License No.)         9.       (License No.)         10.       (License No.)		(License No.)					
8.       (License No.)	7.						
8.       (License No.)		(License No.)					
(License No.)       9.         (License No.)       (License No.)         10.       10.							
9. (License No.)	8.						
9. (License No.)		(License No.)					
(License No.)         (License No.)           10.         (License No.)							
10.	ອ.						
		(License No.)					
	10		1				
(License No.)							
		(License No.)					

Bidder:

By: (signature or initials)

### **BIDDER'S INFORMATION**

The Bidder shall furnish the following information. Additional sheets shall be attached as required.

1.	BIDDER'S name and street address:							
	Name:							
	Address:							
2.		Fax No.: ( )						
	BIDDER's E-mail Address:							
3.	BIDDER'S East Palo Alto Business	License No.: BIDDER'S Tax ID						
4.	TYPE OF BUSINESS	TYPE OF BUSINESS						
	If you are an individual or partnership, so state. If you are a partnership, list the names of all general partners composing the partnership. If a corporation, list the names of president, secretary, treasurer, and manager.							
	Individual Name(s):							
	Partnership							
	Corporation	Names of Corporate Officers						
	State of Incorporation President							
	Secretary							
	Treasurer	·						
	Manager							
	Joint Venture							
	Other							
	(Describe)							

5.	CONTRACTOR'S license: Primary Classification							
	State License No.:	Expiration Date:	/	/				
	Supplemental license classifications:							
6.	NAME of person who inspected the site of the proposed Work for the Bidder:							
	Name:	Date of inspection:						
7.	BIDDER'S EXPERIENCE							
	1. Bidder has been doing business under its	present name for		years.				

2. Bidder has experience in work comparable in type and complexity with that required under the proposed contract for \_\_\_\_\_\_ years as a General Contractor.

Bidder shall sign under penalty of perjury that all the information provided in this information sheet is true and correct.

Signature

Title

#### STATEMENT OF QUALIFICATIONS

Apparent low bidder shall complete this entire Statement of Qualifications questionnaire and submit it to City upon notification, in accordance with paragraph 23, Instruction to Bidders. Failure to complete the questionnaire or inclusion of any false statement is grounds for immediate disqualification. The City reserves the right to waive minor irregularities, inconsequential deviations and to make all final determinations. The City will evaluate the information contained in each applicant's questionnaire and responses received in reference checks. The sole and discretionary judgment of the City will determine if the Contractor is deemed qualified.

#### **CONTACT INFORMATION**

Company Name:			
Form of Company:	Sole Proprietor	Partnership	Non-Profit 501 C3
	Corporation	other (please attach e	xplanation)
Owner of Company:			
Contact Person:			
Street Address:			
Mailing Address:			
Phone:	Fax:		
Federal Tax I.D. No.			
	PART A: GEI	NERAL INFORMATIO	N
Complete Part A before	proceeding to Part B.		
•	esses a valid and ″ license for the work		Yes No
2. Contractor has a r coverage.	ninimum of \$1,000,000	0.00 liability insurance	Yes No
<ol> <li>Contractor's licens five (5) years.</li> </ol>	se has been revoked a	at any time in the last	Yes No
4. Contractor has be	en "default terminated'	' by an owner (not for	Yes No

Page 18

convenience), or a Surety has completed a contract for Contractor within the last five (5) years.

5. Contractor has been cited more than twice for failure to pay Yes \_\_\_\_ No \_\_\_\_ prevailing wages in the last five (5) years.

Contractor will be immediately disqualified if any answer to questions 1 or 2 is No. Contractor will be immediately disqualified if any answer to question 3 is Yes. Contractor may be immediately disqualified if the answer to questions 4 or 5 is Yes. At a minimum to avoid such disqualification, Contractor must include with this Questionnaire a full description of the applicable circumstance and sufficient information to permit City to evaluate Contractor's overall qualifications to perform the work. City retains sole discretion to disqualify any Contractor who answers yes to either question 4 or 5.

# PART B: SAFETY, PREVAILING WAGE, DISPUTES AND BONDS

## <u>SAFETY</u>

1. Has CAL OSHA, Federal OSHA, the EPA or any Air Quality Management District cited your firm in the past five (5) years? Yes\_\_\_\_\_ No\_\_\_\_\_ If yes, attach description of each citation.

2. How often do you require documented safety meetings be held for:

Field Supervisor	Weekly	Bi-weekly	Monthly	Less than monthly
Employees	Weekly	Bi-weekly	Monthly	Less than monthly
New Hires	Weekly	Bi-weekly	Monthly	Less than monthly
Subcontractors	Weekly	Bi-weekly	Monthly	Less than monthly

3. How often do you conduct documented safety inspections?

 Quarterly \_\_\_\_\_
 Semi-annually \_\_\_\_\_
 Annually \_\_\_\_\_

4. Do you have home office safety representatives who visit/audit the job site?

Quarterly \_\_\_\_\_ Semi-annually \_\_\_\_\_ Annually \_\_\_\_\_

## PREVAILING WAGE PROVISIONS

5. Has your firm been fined, penalized or otherwise found to have violated any prevailing wage or labor code provision? If yes, attach description of each fine/penalty. Yes\_\_\_\_\_ No\_\_\_\_\_

#### (License Provisions)

6. Has your company changed names or license numbers in the past 10 years? If so, please state reason for change. Yes\_\_\_\_\_ No\_\_\_\_\_ Reason \_\_\_\_\_

#### (Disputes)

7. Has your firm had any claims, litigation, or disputes ending in mediation or arbitration, or termination for cause associated with any project in the past five (5) years? If yes, attach description of each such instance including details of total claim amount, settlement amount, and owner's name and phone number.

Yes \_\_\_\_\_ No\_\_\_\_\_

#### PART C: EXPERIENCE

The unique nature of this project requires prior similar project experience of the firm. Summarize your similar project experience below and provide the detailed project information requested:

General Contractor - List at least three (3) projects of similar size and scope with a construction cost not less than \$1,000,000 completed in the past (3) years.

Project name	Const. Cost (\$)	Date completed (year)	Name, address and telephone number of owners representative

#### Most Recently Completed Project.

In order to be considered responsive, Contractor <u>must</u> provide information about its most recently completed project. Names and references must be current and verifiable. If a separate sheet is used, it must contain all of the following information:

1. Project Name: \_\_\_\_\_

Location:
Owner:
Owner Contact (name and phone number):
Architect:
Architect Contact (name and phone number):
Const. Mgr. or Project Mgr. (name and phone number):
Description of Project, Scope of Work Performed:

Value of Change Orders:
Original Scheduled Date of Completion:
Time Extensions Granted (number of days):
Actual Date of Completion:
Number of Stop Notices filed by subcontractors or suppliers:

# PART D: FINANCIAL AND OTHER INFORMATION

- 1. Has your firm ever reorganized under the protection of the bankruptcy laws? Yes \_\_\_\_\_ No \_\_\_\_\_
- 2. Have you ever had insurance terminated by a carrier? Yes\_\_\_\_ No\_\_\_\_ If yes, explain on separate signed sheet.

Contractor shall sign under penalty of perjury that all the information provided in this questionnaire is true and correct. Contractor's signature authorizes the City and its agents and representatives, to obtain a credit report and/or verify any of the above information

Signature

Title

# PART E: CONTRACTOR REGISTRATION WITH STATE OF CALIFORNIA

Please list your Public Works Contractor (PWC) Registration number(s) and Email Addresses:

		Name	PWC Registration Number	Email Address (Please Print)
1.	General Contractor			
2.	Subcontractors			

Page 21

#### **NON-COLLUSION AFFIDAVIT**

State of California

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

I, \_\_\_\_\_\_, being first duly sworn, deposes and says that he or she is \_\_\_\_\_\_\_, of \_\_\_\_\_\_\_\_, the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, an undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; and 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.

Name of Bidder By (Signature) Title:

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

Seal and Notary <u>Acknowledgement</u> subscribed and sworn to me this

\_\_\_\_\_ of \_\_\_\_\_\_, \_\_\_\_\_\_,

# ATTACHMENT A

PLANS AND SPECIFICATIONS

# CITY OF EAST PALO ALTO, CALIFORNIA DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

# PLANS FOR THE CONSTRUCTION OF ANNUAL STREET RESURFACING PROJECT 2024/2025 CIP PROJECT NO. ST-07-25



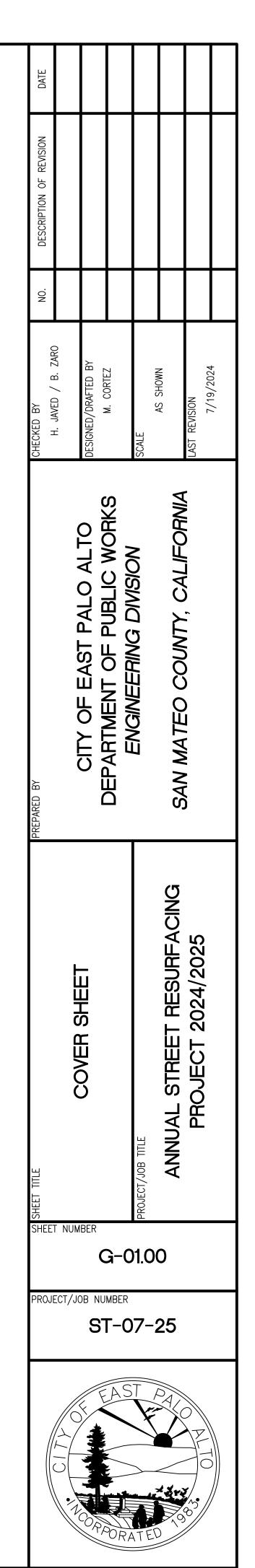
# ND UNIVERSITY SQU 01.00 THRU/C-01

# INDEX TO SHEETS

SHEET NUMBER	St
	GENERAL SHEETS
G-01.00	COVER SHEET
G-02.00	GENERAL NOTES AND ABBREVIATIONS
G-03.00	DETAILS
CIVIL F	ROADWAY IMPROVE
C-01.01 THRU C-01.05	GARDENS & UNIVERSITY SQUARE NEIGH
C-02.01 THRU C-02.04	WEEKS NEIGHBORHOOD
C-03.01 THRU C-03.03	UNIVERSITY VILLAGE & RAVENSWOOD BU
C-04.01 THRU C-04.03	KAVANAUGH NEIGHBORHOOD
C-05.01 THRU C-05.04	PALO ALTO PARK NEIGHBORHOOD
C-06.01 THRU C-06.04	WILLOW & WOODLAND NEIGHBORHOODS

# EMENTS

**IBORHOODS** USINESS DISTRICT



CONSTRUCTION FOR NOT CHECKPRINT 100%

# GENERAL NOTES

- 1. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- 2. THE ENGINEER ASSUMES NO RESPONSIBILITY BEYOND THE ADEQUACY OF THE DESIGN CONTAINED HEREIN.
- 3. THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE CAL/OSHA STATE OF CALIFORNIA CONSTRUCTION SAFETY ORDERS.
- 4. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR SUCH FURTHER EXPLANATIONS AS BE NECESSARY.
- 5. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS, SPECIAL PROVISIONS, SAN MATEO COUNTY STANDARD PLANS, AND REQUIREMENTS SET FORTH IN THE COUNTY OF SAN MATEO'S ENGINEERING STANDARDS.
- 6. THE CONTRACTOR SHALL SUBMIT TO THE CITY AND HAVE IN THE SUPERINTENDENT'S VEHICLE, EMERGENCY TELEPHONE NUMBERS FOR POLICE, FIRE, AMBULANCE, AND THOSE AGENCIES RESPONSIBLE FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF THE JOBSITE.
- 7. EMERGENCY PHONE NUMBERS TO REACH CONTRACTOR SHALL BE PROVIDED TO THE CITY OF EAST PALO ALTO DEPARTMENT OF PUBLIC WORKS.
- 8. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS, OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY.
- 9. EXCAVATIONS SHALL BE ADEQUATELY SHORES, BRACED, AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE. ANY DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING, BRACING, AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THEY SHALL AFFECT NECESSARY REPAIRS OR RECONSTRUCTION AT THEIR OWN EDPENSE. WHERE THE EXCAVATION FOR A CONDUIT TRENCH AND/OR STRUCTURE IS FIVE FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING, SHORING, AND BRACING OR EQUIVALENT METHOD FOR THE PROTECTION OF LIFE OR LIMB, CONFORMING TO THE APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA. THE CONTRACTOR SHALL ALWAYS COMPLY WITH OSHA REQUIREMENTS.
- 10. NO WORK SHALL BE DONE ON THIS PROJECT PRIOR TO A PRE-CONSTRUCTION CONFERENCE TO BE HELD WITH THE CITY ENGINEER.
- 11. THE CONTRACTOR SHALL CONFINE THEIR OPERATIONS AND ACTIVITIES TO WITHIN THE PROJECT LIMITS, CONSISTING OF ROAD RIGHT-OF-WAY, RIGHTS OF ENTRY, AND/OR PROJECT CONFORMS, AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
- 12. THE CONTRACTOR SHALL INFORM THE CITY ENGINEER 48 HOURS IN ADVANCE OF THE TIME THEY REQUIRE AN INSPECTOR, INCLUDING FORM WORK REVIEW AND APPROVAL.
- 13. THE FOLLOWING CONTROL MEASURES FOR GRADING AND CONSTRUCTION ACTIVITIES SHALL BE ADHERED TO, UNLESS OTHERWISE APPROVED BY THE CITY:
- A. GRADING AND CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE HOURS OF 8:00 AM UNTIL 5:00 PM ON WEEKDAYS. THERE SHALL BE NO GRADING OR CONSTRUCTION ACTIVITIES ON THE WEEKENDS OR ON CITY HOLIDAYS.
- B. GRADING AND CONSTRUCTION EQUIPMENT SHALL BE PROPERLY MUFFLED.
- C. UNNECESSARY IDLING OF GRADING AND CONSTRUCTION EQUIPMENT IS PROHIBITED.
- D. NOISE-GENERATING STATIONARY CONSTRUCTION EQUIPMENT, SUCH AS COMPRESSORS, SHALL BE LOCATED AS FAR AS PRACTICAL FROM OCCUPIED RESIDENTIAL HOMES.
- E. CONSTRUCTION TRASH AND DEBRIS SHALL BE CLEANED UP DAILY.
- F. ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND CONSTRUCTION STAGING AREAS SHALL BE WATERED OR TREATED WITH NON-TOXIC SOIL STABILIZERS AS NECESSARY TO PREVENT AIRBORNE DUST.
- G. CONSTRUCTION SITES SHALL BE KEPT CLEAN AT ALL TIMES. AT NO TIME SHALL THE CONTRACTOR OR PERMIT HOLDER BE ALLOWED TO LEAVE THE SITE PRIOR TO THOROUGHLY CLEANING SIDEWALKS, CURBS, GUTTERS, AND STREET SURFACES.
- H. ADJACENT STREETS AND APPROVED HAUL ROUTES SHALL BE SWEPT DAILY BY MECHANICAL SWEEPERS EQUIPPED WITH VACUUM UNITS AND THOROUGHLY FLUSHED AFTER SWEEPING IS COMPLETED.
- I. CONSTRUCTION ACCESS ROUTES SHALL BE APPROVED IN ADVANCE BY THE CITY OF EAST PALO ALTO.
- 14. THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH ALL UTILITY COMPANIES WHEN PERFORMING ANY EXCAVATION TO ENSURE UTILITY MAINS AND SERVICE LATERALS MAINTAIN ADEQUATE COVER.
- 15. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DUST CONTROL PLAN FOR SUBMITTAL TO THE COMMUNITY DEVELOPMENT DEPARTMENT. THE DUST CONTROL PLAN SHALL INCLUDE A SCHEDULE FOR WATERING AREAS OF EXPOSED SURFACES DURING THE CONSTRUCTION AND GRADING PROCESS (EARLY MORNING AND EARLY EVENING). OVERFILLING OF WATER TRUCKS WILL NOT BE ALLOWED.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE SITE OR SURROUNDING AREA DUE TO DUST OR EROSION RESULTING FROM WORK DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A SEVEN-DAY PHONE NUMBER TO RECEIVE AND RESPOND TO DUST COMPLAINTS RESULTING FROM ALL CONSTRUCTION OPERATIONS AND SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
- 17. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR REVIEW TO THE COMMUNITY DEVELOPMENT DEPARTMENT PRIOR TO CONSTRUCTION.
- 18. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF PREPARATION OF THESE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND DEPTH OF ANY EXISTING UNDERGROUND UTILITIES AND IMPROVEMENT WITH APPROPRIATE AGENCIES PRIOR TO THE START OF CONSTRUCTION IN THAT VICINITY. ANY CONFRLICTS SHALL BE REPORTED IMMEDIATELY TO THE CITY AND TO THE ENGINEER. NEITHER THE CITY NOR THE ENGINEER ASSUMES RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED ON THE PLANS WILL BE THE OBSTRUCTIONS ENCOUNTERED. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT 811 TWO WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
- 19. AT THE TIME OF CONSTRUCTION, ALL EXISTING MONUMENTATION, INCLUDING PROJECT SURVEY CONTROL POINTS, SHALL BE PRESERVED. IF MONUMENTS BECOME DAMAGED DURING CONSTRUCTION, THEY SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE.
- 20. THE CONTRACTOR SHALL IMMEDIATELY REPORT ANY SOIL OR WATER CONTAMINATION NOTICED DURING CONSTRUCTION TO THE CITY OF EAST PALO ALTO FIRE DEPARTMENT HAZARDOUS MATERIALS DIVISION, THE SAN MATEO COUNTY DEPARTMENT OF HEALTH, AND THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD.

- PRODUCE A SMOOTH SURFACE FOR PEDESTRIAN AND VEHICULAR TRAFFIC.
- 22. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE STREET AND SIDEWALK SUBGRADES DISTURBED DURING UNDERGROUND CONSTRUCTION. ALL EXISTING STREET IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE CITY ENGINEER.
- 23. ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE CITY ENGINEER AND THE UTILITY OWNER, AT THE SOLE EXPENSE OF THE CONTRACTOR.
- 24. THE CONTRACTOR SHALL NOT STOCKPILE DEBRIS ONSITE UNLESS APPROVED IN ADVANCE BY THE ENGINEER IN WRITING.

# CONSTRUCTION NOTES

- 1. STATIONING HEREON IS ALONG STREET CENTERLINE UNLESS OTHERWISE SHOWN OR INDICATED.
- 2. ALL CURB, GUTTER, SIDEWALK, AND PAVEMENT TO BE REMOVED SHALL BE SAWCUT AT THE CONFORM LIMITS.
- 3. EXACT LIMITS OF AC PATCHING (DIG-OUT REPAIR) WILL BE MARKED IN THE FIELD BY THE CITY ENGINEER.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MATCHING STREETS, SURROUNDING LANDSCAPE & OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALKS, OR GRADING TO AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPE, LOW SPOTS, OR HAZARDOUS CONDITIONS. PAVING CONFORMS SHALL BE MADE AT A SMOOTHLY TRIMMED BUTT JOINT. DO NOT OVERLAP EXISTING PAVEMENT.
- 5. PAVEMENT STRIPING AND MARKING SHALL BE RESTORED AND REPLACED AFTER APPLYING SURFACE TREATMENT TO EXISTING PAVEMENT. ALL PAVEMENT MARKINGS AND STRIPES SHALL BE THERMOPLASTIC UNLESS NOTED OTHERWISE.
- 6. ALL STRIPING SHALL BE CAT-TRACKED BY THE CONTRACTOR AND APPROVED BY THE CITY ENGINEER PRIOR TO FINAL INSTALLATION. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED.
- 7. AT A MINIMUM, THE FOLLOWING SPECIFIED PERCENTAGES OF THE WASTE TONNAGE GENERATED FROM SITE ACTIVITIES SHALL BE DIVERTED FROM GOING INTO A LANDFILL THROUGH USE OF RECYCLING. REUSE, AND DIVERSION PROGRAMS:
  - DEMOLITION: 60% OF WASTE TONNAGE INCLUDING CONCRETE AND ASPHALT, AND 25% OF WASTE TONNAGE EXCLUDING CONCRETE AND ASPHALT

#### CONSTRUCTION: 55% OF WASTE TONNAGE INCLUDING CONCRETE AND ASPHALT, AND 20% OF WASTE TONNAGE EXCLUDING CONCRETE AND ASPHALT

DEMOLITION DIVERSIONS AND CONSTRUCTION DIVERSIONS SHALL BE CALCULATED SEPARATELY.

# **EROSION CONTROL NOTES**

- 1. CONTRACTOR SHALL EMPLOY BEST MANAGEMENT PRACTICES (BMP'S) IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE OF CALIFORNIA CONSTRUCTION SITE BMP MANUAL AND THE SAN MATEO STORMWATER POLLUTION PREVENTION PROGRAM (SWPPP).
- 2. ALL CONSTRUCTION ACTIVITIES SHALL MEET THE REQUIREMENTS OF THE CITY OF EAST PALO ALTO NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT.
- 3. EROSION CONTROL MEASURES SHALL BE INSTALLED AS NECESSARY TO PREVENT SEDIMENT RUNOFF TO PUBLIC ROADWAYS, DRAINAGE FACILITIES, AND ADJACENT PROPERTIES.
- 4. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND NO LESS OFTEN THAN DAILY THEREAFTER. INSPECTOR MAY REQUIRE MORE FREQUENT CLEANING AS WEATHER CONDITIONS DICTATE.
- 5. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL EROSION CONTROL DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FORECAST OF RAIN PROBABILITY EXCEEDS 40% AND MAINTAINED THROUGHOUT THE YEAR.
- MAINTAINED SO THAT SEDIMENT-LADEN RUNOFF DOES NOT ENTER THE STORM DRAINAGE SYSTEM. GRAVEL BAG SILT BARRIERS OR SIMILAR DEVICE.
- 6. ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTHEN MATERIAL AND DEBRIS. THE SITE WILL BE 7. ALL STORM DRAIN STRUCTURES AND INLET PIPES SHALL BE PROTECTED FROM INFLOW OR SILT BY
- 8. CONTRACTOR SHALL POSSESS THE TOOLS, EQUIPMENT, AND MATERIALS REQUIRED TO PROVIDE EROSION CONTROL MEASURES MADE NECESSARY BY A CONSTRUCTION OPERATION ON THE JOB SITE PRIOR TO BEGINNING THE OPERATION.
- 9. ADJACENT PROPERTIES SHALL BE PROTECTED FROM STORM WATERS, MUD, SILT, ETC. ON A DAILY BASIS.
- 10. DUST CONTROL SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION. THE CONTRACTOR, WHEN THEIR SUBCONTRACTOR ARE OPERATING EQUIPMENT ON-SITE, SHALL PREVENT THE FORMATION OF ANY AIRBORNE NUISANCE BY WATERING AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFINE DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK. ADDITIONAL WATERING SHALL BE PROVIDED ON DRY OR WINDY DAYS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM THEIR OWN ACTIVITIES OR THEIR SUBCONTRACTOR'S ACTIVITIES IN PERFORMING THE WORK UNDER THIS CONTRACT. AND SHALL BE RESPONSIBLE FOR ANY CITATIONS, FINES, OR CHARGES RESULTING FROM DUST NUISANCE. DUST CONTROL SHALL BE DONE ON A DAILY BASIS.
- 11. CONCRETE WASH AREA SHALL BE CONSTRUCTED IN ACCORDANCE WITH CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICES DETAIL WM-8.
- 12. STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES SO AS TO PREVENT THEIR ENTRY TO THE STORM DRAIN SYSTEM. THE CONTRACTOR MUST NOT ALLOW CONCRETE, WASH WATERS, SLURRIES, PAINT, OR OTHER MATERIALS TO ENTER CATCH BASINS OR TO ENTER SITE RUNOFF.
- 13. USE FILTRATION OR OTHER MEASURES TO REMOVE SEDIMENTS FROM DEWATERING EFFLUENT.
- 14. NO CLEANING, FUELING, OR MAINTAINING VEHICLES ON SITE SHALL BE PERMITTED TO ALLOW DELETERIOUS MATERIALS FROM ENTERING CATCH BASINS OR TO ENTER SITE RUNOFF. 15. CONTRACTORS AND SUBCONTRACTORS SHALL BE PROPERLY TRAINED AND MADE AWARE OF THE STORM WATER POLLUTION PREVENTION PROGRAM MEASURES. FAILURE TO COMPLY WITH THE APPROVED BMP'S COULD RESULT IN A FINE OF \$1,000 FOR THE FIRST VIOLATION, INCREASING WITH EACH SUBSEQUENT VIOLATION.

# **EXISTING UTILITY NOTES**

- 1. ALL UTILITY STRUCTURE WORK SHALL BE IN ACCORDANCE WITH THE UTILITY DISTRICT OWNER'S STANDARD PLANS AND SPECIFICATIONS.
- 2. NO UTILITY WORK SHALL BE DONE UNTIL AUTHORIZED BY THE UTILITY OWNER. THE CONTRACTOR SHALL NOTIFY THE UTILITY OWNER AT LEAST TWO (2) WORKING DAYS PRIOR TO STARTING ANY WORK.
- 3. ALL UTILITY COVERS, BOXES, AND MANHOLES SHALL BE ADJUSTED TO THE FINISHED GRADE PRIOR TO THE COMPLETION OF THE PROJECT.
- 4. WATER METER COVERS, GAS VALVE COVERS, WATER VALVE COVERS, JOINT UTILITY BOXES, AND SANITARY SEWER CLEANOUT COVERS SHALL BE REPLACED WITH TRAFFIC-RATED FRAMES AND COVERS WHEN FALLING WITHIN A VEHICULAR TRAVEL WAY, INCLUDING ROADWAYS, PARKING AREAS, AND DRIVEWAYS.
- 5. CONTRACTOR SHALL INSTALL CURB ALIGNMENT ADJUSTMENT AROUND EXISTING UTILITY STRUCTURE AT ALL WATER METERS, GAS VALVES, WATER VALVES, SANITARY SEWER CLEANOUTS, AND UTILITY POLES THAT CONFLICT WITH THE PROPOSED CURB ALIGNMENT AS DETERMINED IN THE FIELD. CURB ALIGNMENT ADJUSTMENT SHALL BE REVIEWED AND APPROVED IN THE FIELD BY THE ENGINEER.
- 6. FIRE HYDRANTS SHALL BE ADJUSTED TO FINISH GRADE BY REPLACING THE RISE PIPE SUCH THAT THE HYDRANT HAS THE PROPER EXPOSURE IN ACCORDANCE WITH SAN MATEO COUNTY STANDARD DETAIL W-5. EXISTING HYDRANTS SHALL BE RE-USED.
- 7. FIRE HYDRANTS IN SIDEWALKS SHALL HAVE THEIR BOLLARDS REMOVED.
- 8. ADJUST SANITARY SEWER MANHOLES TO FINISH GRADE BY ADDING OR SUBTRACTING GRADE RINGS. RE-SET EXISTING FRAME AND COVER IN ACCORDANCE WITH SAN MATEO COUNTY STANDARD DETAIL C-1.
- 9. ADJUST STORM DRAIN MANHOLE TO FINISH GRADE BY ADDING OR SUBTRACTING GRADE RINGS. RE-SET EXISTING FRAME AND COVER IN ACCORDANCE WITH SAN MATEO COUNTY STANDARD DETAIL B-10.

# UTILITY OWNERS

WATER SUPPLY	VEOLIA PALO ALTO PARK MUTUAL WATER COMPANY O'CONNOR TRACT WATER DISTRICT
SANITARY SEWER	EAST PALO ALTO SANITARY DISTRICT AND WEST VALLEY SANITARY DISTRICT
STORM DRAIN	CITY OF EAST PALO ALTO
GAS	PACIFIC GAS & ELECTRIC (PG&E)
ELECTRIC	PACIFIC GAS & ELECTRIC (PG&E)
TELEPHONE	AMERICAN TELEPHONE & TELEGRAPH COMPANY (AT&T)
CABLE TELEVISION	COMCAST

VG

VAR

# ONSTRUCTION Ŭ NOT CKPF $\overline{\mathbf{O}}$ 200%

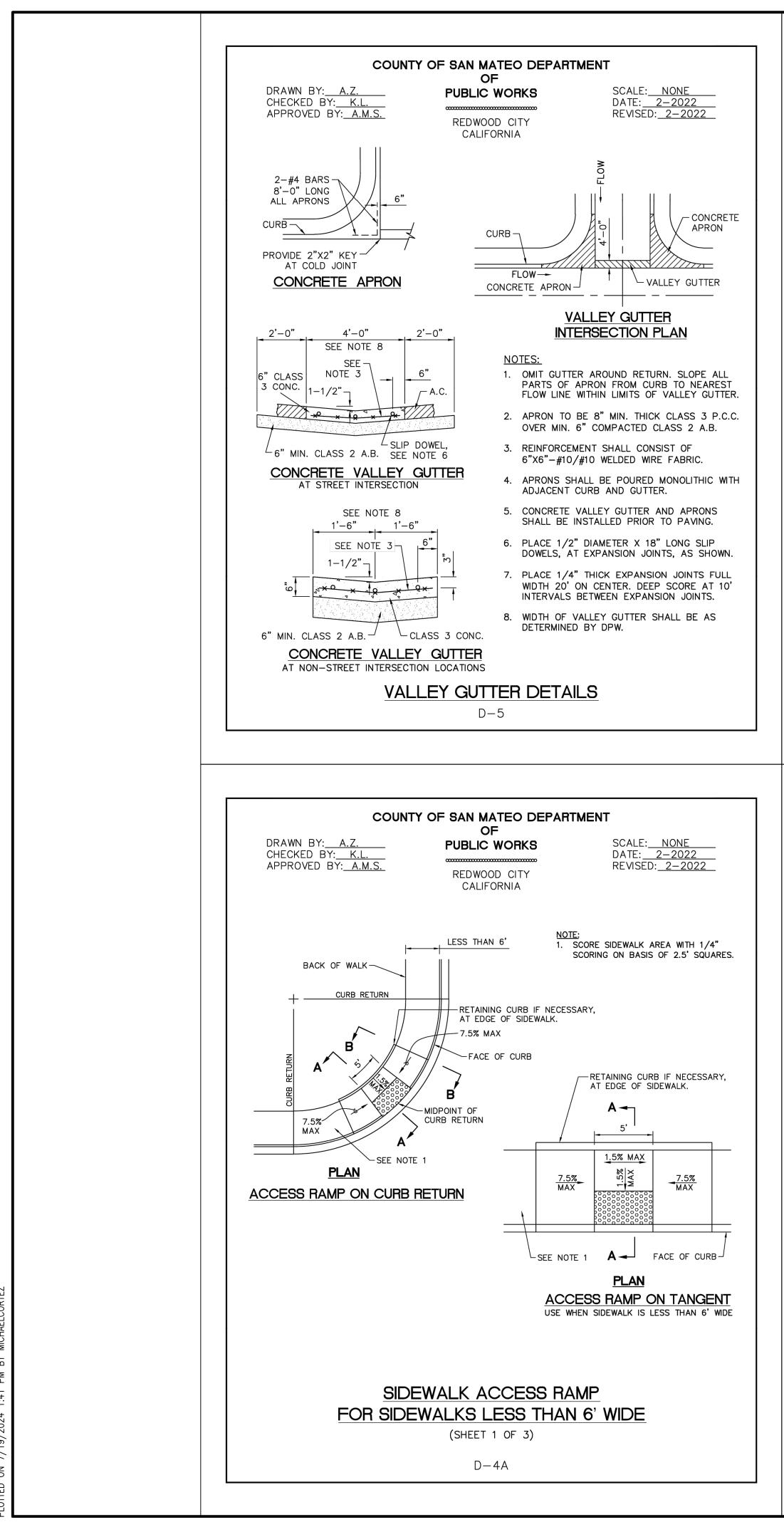
DESCRIPTION OF REVISION DATE								
DESCRIPTIC								
NO.								
CHECKED BY H. JAVED / B. ZARO		DESIGNED/DRAFTED BY	M. CURIEZ	SCALE	NMOLIC CH	LAST REVISION	+202/81/1	
PREPARED BY					SAN MATEO COUNTY CALIFORNIA			
SHEET TITLE				PROJECT/JOB TITLE	ANNUAL STREET RESURFACING	PROJECT 2024/2025		
		C		2.0	0			
PROJECT/JOB NUMBER ST-07-25								
		Le cort	A A A A A A A A A A A A A A A A A A A				40	

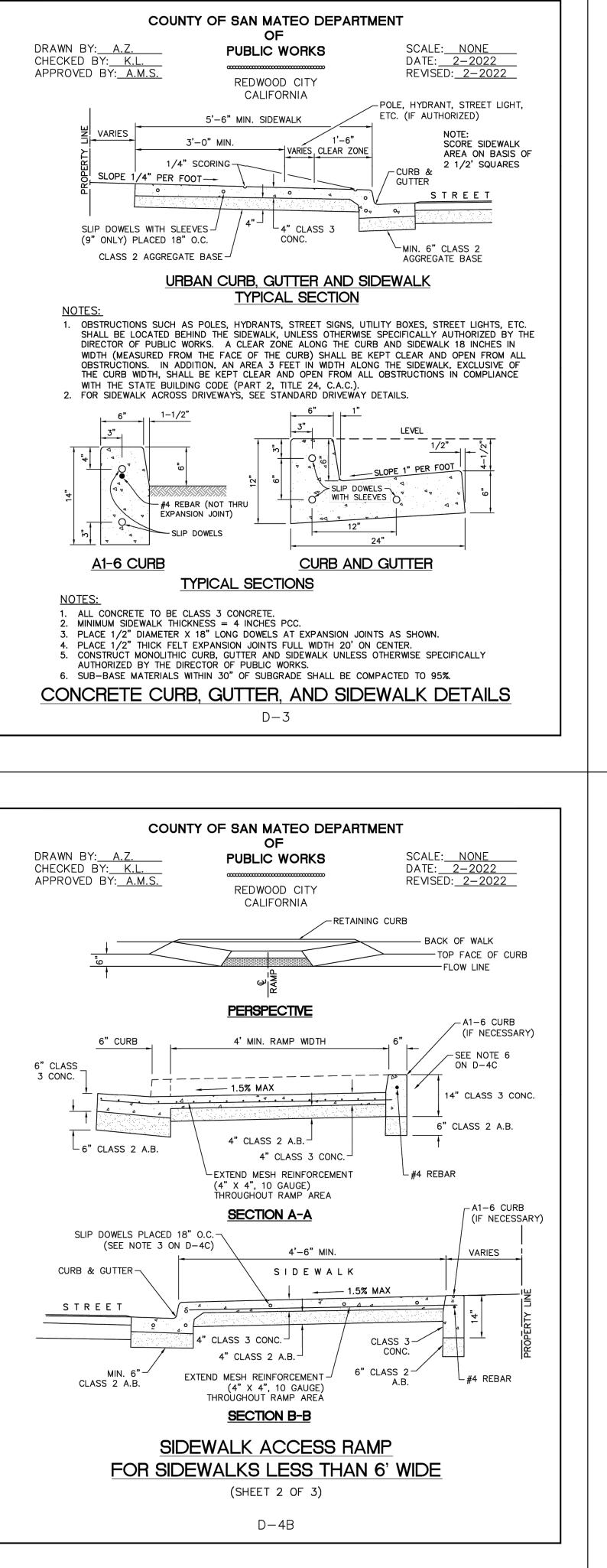
# ABBREVIATIONS

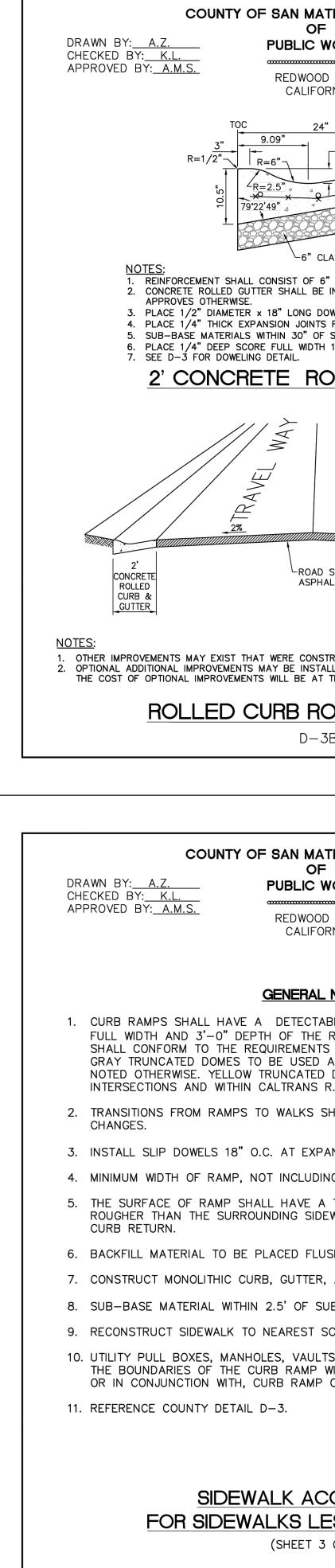
RECONST UTP WCR

ANGLE POINT ASPHALT CONCRETE BEGIN BACK OF WALK CONCRETE CURB & GUTTER CHAIN LINK CONCRETE DRAIN INLET DRIVEWAY EXISTING PROPERTY LINE PAVEMENT RECONSTRUCTION RELOCATE REMOVE SLOPE SHFFT SAN MATEO COUNTY SIDEWALK TRANSITION TOTAL TYPICAL UTILITY POLE WHEELCHAIR RAMP VALLEY GUTTER

VARIES







D-

	DATE	
ATEO DEPARTMENT DF WORKS SCALE: NONE	$\mathbf{H} \mathbf{H} \mathbf{H}$	┼┼┼┼┤
DATE: <u>2-2022</u> DOD CITY FORNIA	REVISION	
24" LG B=1 /0"	Ъ	
-R=1/2"	DESCRIPTION	
0" PREFERRED; 6" MAX FROM TOC TO LG		$\left  + + + \right $
SEE NOTE 1 CLASS 2 AGGREGATE BASE (MIN.)	ON	
F 6" x 6" – #10/#10 WELDED WIRE FABRIC. BE INSTALLED PRIOR TO PAVING, UNLESS ENGINEER	20	
DOWELS, AT EXPANSION JOINTS, AS SHOWN. NTS FULL WIDTH 20' ON CENTER.	) / B. ZARO AFTED BY CORTEZ	SHOWN J 9/2024
OF SUBGRADE SHALL BE COMPACTED TO 95% R.C. DTH 10' ON CENTER, BETWEEN EXPANSION JOINTS.	BY AVED / /DRAFTE M. COR	E AS SHOWN REVISION 7/19/2024
ROLLED GUTTER	CHECKED BY H. JAVED / B DESIGNED/DRAFTED M. CORTE	SCALE LAST REVIS
ROLLED CURB & GUTTER		
AR ///		
AD STRUCTURAL SECTION WITH PHALT CONCRETE SURFACING CURB & GUTTER	AST PALO ALTO OF PUBLIC WORKS	ENGINEEHING DIVISION SAN MATEO COUNTY, CALIFORNIA
INSTRUCTED PRIOR TO ADOPTION OF SPECIFIC STANDARDS. STALLED AFTER OBTAINING AN ENCROACHMENT PERMIT. AT THE SOLE EXPENSE OF APPLICANT.		ENGINEEHING ATEO COUNT
ROAD STANDARD	DEPARTMENT	V TEV
-3B		M M
		SAN
	PREPARED	
ATEO DEPARTMENT		
SCALE:     NONE       DATE:     2-2022		ğ
DOD CITY FORNIA	S AND BMPs	RFACIN
AL NOTES	LS / BN	3UF
TABLE WARNING SURFACE THAT EXTENDS THE HE RAMP. DETECTABLE WARNING SURFACES NTS IN THE STANDARD SPECIFICATIONS. DARK ID AS DETECTABLE WARNING SURFACES UNLESS ED DOMES TO BE USED AT SCHOOL	TYPICAL DETAILS CONSTRUCTION E	STREET RESURFAC DJECT 2024/2025
S R.O.W. S SHALL BE FLUSH AND FREE OF ABRUPT	ICAI NST	AL STREE PROJECT
XPANSION JOINTS.		
DING RETAINING CURB, SHALL BE 4 FEET.		JOB TITLE ANNUAL PF
A TRANSVERSE BROOMED SURFACE TEXTURE DIDEWALK EXCEPT WHEN LOCATED IN CENTER OF	EET TITLE	PROJECT/JOB TITLE
LUSH WITH TOP OF CURB.	SHEET NUMBER	Р. К
I I	<b>I</b>	13.00
ER, AND SIDEWALK.	G-C	JO.UU
ER, AND SIDEWALK. SUBGRADE SHALL BE COMPACTED TO 95%. I SCORE LINE AND INSTALL EXPANSION JOINT.		
SUBGRADE SHALL BE COMPACTED TO 95%.	PROJECT/JOB NUMBER	
SUBGRADE SHALL BE COMPACTED TO 95%. I SCORE LINE AND INSTALL EXPANSION JOINT. JLTS AND ALL OTHER UTILITY FACILITIES WITHIN P WILL BE RELOCATED BY OTHERS PRIOR TO, AP CONSTRUCTION. ACCESS RAMP LESS THAN 6' WIDE	PROJECT/JOB NUMBER	
SUBGRADE SHALL BE COMPACTED TO 95%. I SCORE LINE AND INSTALL EXPANSION JOINT. JLTS AND ALL OTHER UTILITY FACILITIES WITHIN P WILL BE RELOCATED BY OTHERS PRIOR TO, MP CONSTRUCTION.	PROJECT/JOB NUMBER	
SUBGRADE SHALL BE COMPACTED TO 95%. I SCORE LINE AND INSTALL EXPANSION JOINT. ULTS AND ALL OTHER UTILITY FACILITIES WITHIN P WILL BE RELOCATED BY OTHERS PRIOR TO, AP CONSTRUCTION. ACCESS RAMP LESS THAN 6' WIDE 3 OF 3)	PROJECT/JOB NUMBER	



# PAVEMENT TREATMENT LEGEND

SLURRY SEAL

SLURRY SEAL W/ CRACK SEALING

THIN OVERLAY

MULTI-LAYER TREATMENT

MILL & THIN OVERLAY

MILL & THICK OVERLAY

MILL & THICK OVERLAY W/ FABRIC

# SHEET NOTES

1 PROTECT IN PLACE		CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	(31) CONSTRUCT NEW SPEE
2 RAISE STORM DRAIN MANHOLE	12 5	STOP BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32 PAVEMENT LEGENDS "S
3 RAISE COMMUNICATION VAULT		CROSS WALK (PER CALTRANS STANDARD A24F)	23	CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33 GRIND AND REPLACE S
4 RAISE MONUMENT	<u>    (14)</u> A	ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24)	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34) 2" OVERLAY (SEE DET
5 RAISE SANITARY SEWER MANHOLE	[5] F	PROTECT DRAIN INLET IN PLACE	(25)	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	(35) PEDESTRIAN CROSSING
6 RAISE DETECTOR VAULT	<u>    (16)</u> F	REMOVE AND REPLACE VALLEY GUTTER		2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	(36) IN-ROAD PEDESTRIAN
7 REMOVE AND REPLACE TRAFFIC LOOP	(17) F	REPLACE MONUMENT AND FRAME COVER		TYPE II SLURRY SEAL	(37) NO PARKING SIGNS (C
8 REMOVE AND REPLACE SPEED HUMP	(18) 5	5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)		REMOVE THERMOPLASTIC	
9 REMOVE AND REPLACE CURB & GUTTER	[19] E	BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)		CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )	
(10) PAVEMENT LEGENDS "STOP"/"BUMP"	[20] E	BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)		CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)	
	<u> </u>				

# ST-07-25: ANNUAL STREET RESURFACING PPROJECT 2024/2025 GARDENS AND UNIVERSITY SQUARE NEIGHBORHOODS AREA LOCATION MAP AND STREETS LIST

# STREETS LIST

SHEET NO.	STREET NAME	BEGINNING	END	TREATMENT
C-01.01	WISTERIA DRIVE	DAPHNE WAY	CAMELLIA DRIVE	SLURRY SEAL
C-01.01	WISTERIA DRIVE	CAMELLIA DRIVE	GARDENIA WAY	MILL & THICK OVERLAY
C-01.02	DAPHNE WAY	ASTER WAY	END	SLURRY SEAL
C-01.02	DAPHNE COURT	ASTER WAY	END	MILL & THIN OVERLAY
C-01.02	VERBEENA DRIVE	CAMELLIA DRIVE	AZALIA DRIVE	SLURRY SEAL
C-01.03	AZALIA DRIVE	VERBEENA DRIVE	CAMELLIA DRIVE	SLURRY SEAL
C-01.03	CAMELLIA COURT	CAMELLIA WAY	END	MILL & THICK OVERLAY
C-01.04	AZALIA DRIVE	SAGE STREET	O'CONNOR STREET	SLURRY SEAL
C-01.04	LARKSPUR DRIVE	SAGE STREET	O'CONNOR STREET	SLURRY SEAL
C-01.05	TATE STREET	O'CONNOR STREET	BAINES STREET	MILL & THICK OVERLAY
C-01.05	GATES STREET	TATE STREET	WILKS STREET	SLURRY SEAL & CRACK SEALING
C-01.05	TINSLEY STREET	CLARKE AVENUE	TATE STREET	MILL & THICK OVERLAY
C-01.05	PULGAS AVENUE	O'CONNOR STREET	GAILLARDIA WAY	MILL & THICK OVERLAY W/ FABRIC

# Т

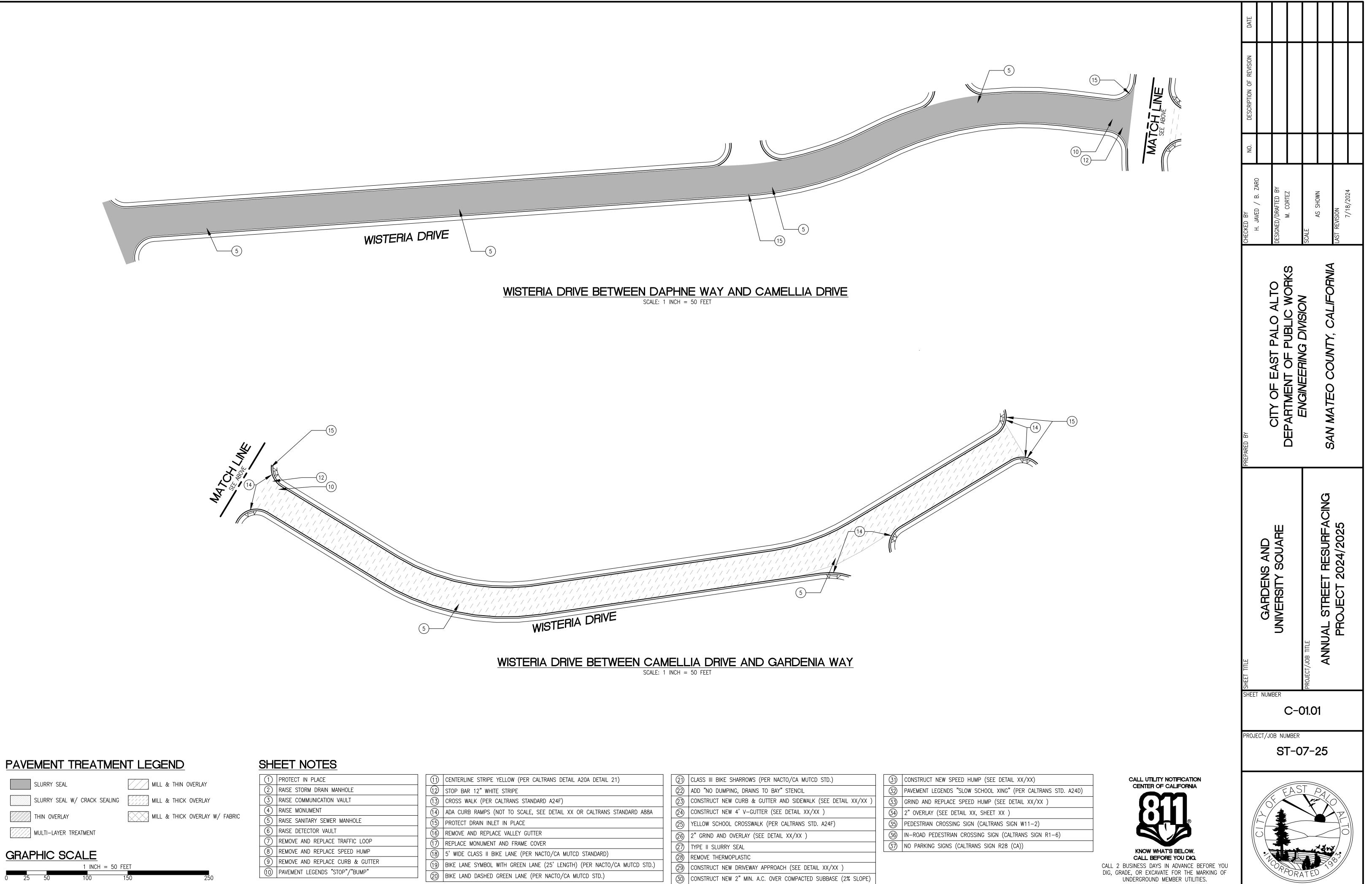
AS SOUARE ETS LIST UNIVERSITY > AND STREE ΪÖ ร ลี 024/ GARDENS AND L LOCATION MAP Z SHEET NUMBER C-01.00 PROJECT/JOB NUMBER ST-07-25

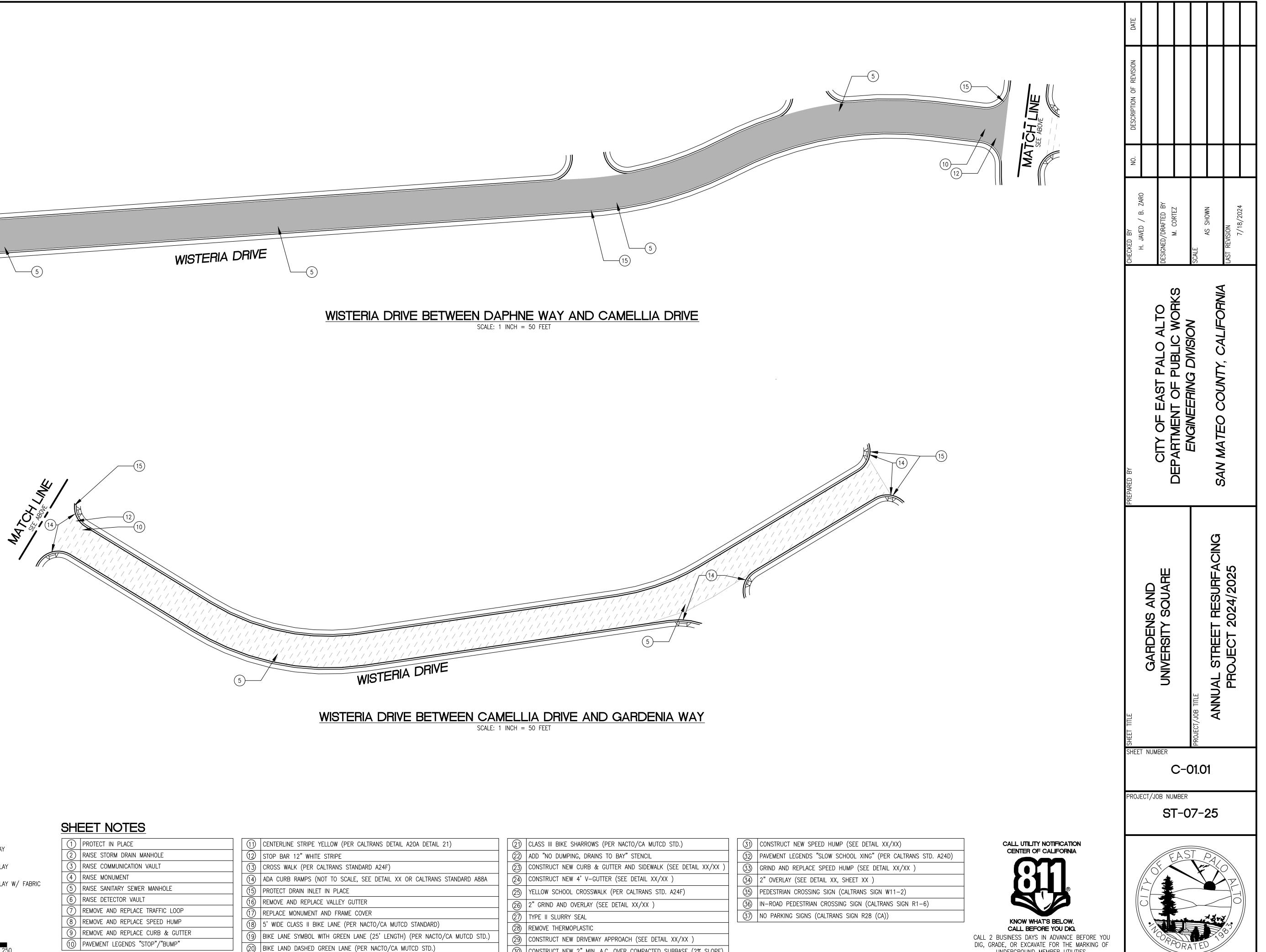
PEED HUMP (SEE DETAIL XX/XX) S "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) CE SPEED HUMP (SEE DETAIL XX/XX ) DETAIL XX, SHEET XX ) FING SIGN (CALTRANS SIGN W11–2) AN CROSSING SIGN (CALTRANS SIGN R1–6) S (CALTRANS SIGN R28 (CA))

CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA



KNOW WHAT'S BELOW. CALL BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.





# PAVEMENT TREATMENT LEGEND

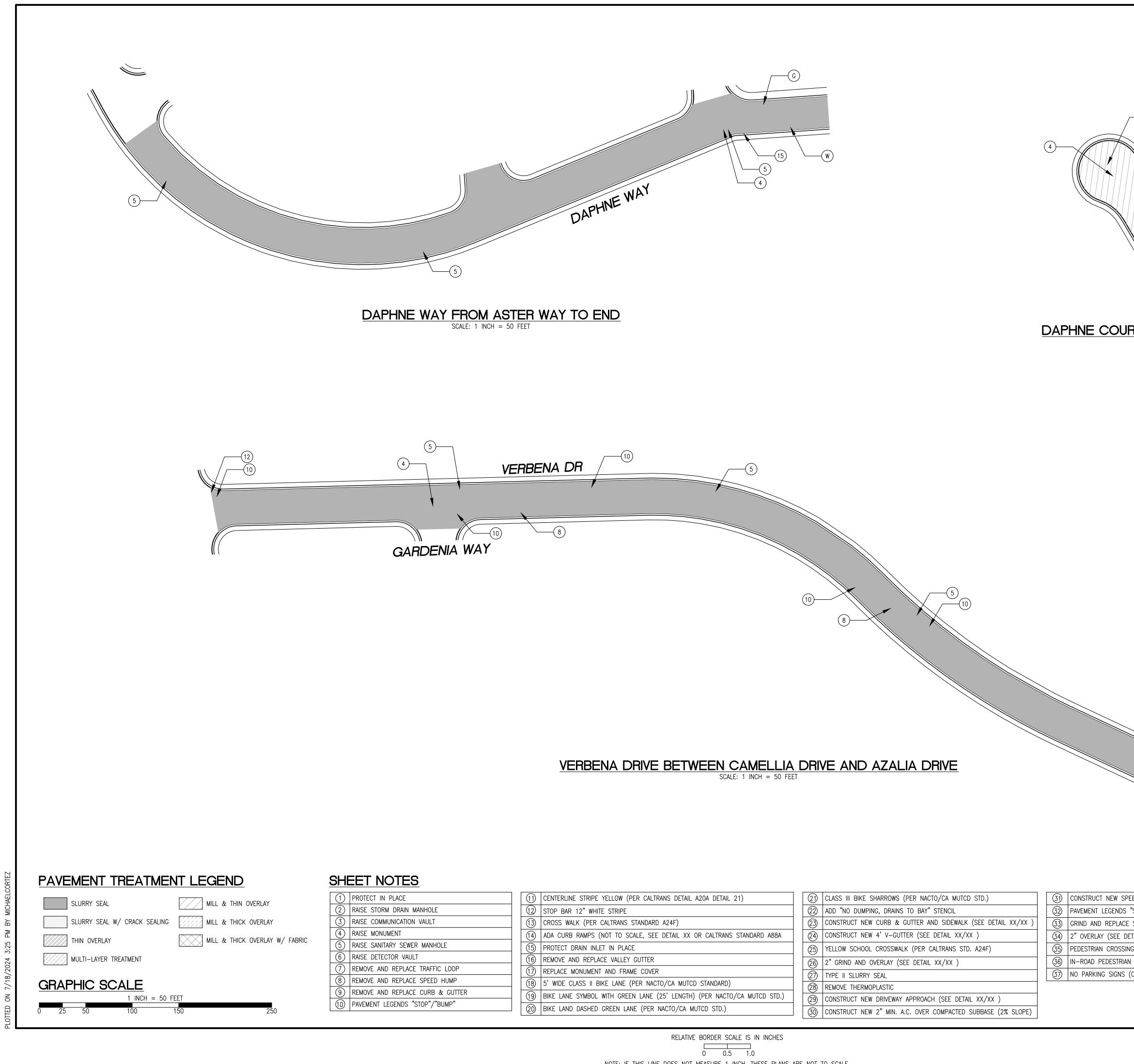
SLURRY SEAL SLURRY SEAL W/ CRACK SEALING THIN OVERLAY MULTI-LAYER TREATMENT

1	PROTECT IN PLACE	(11)	CE
2	RAISE STORM DRAIN MANHOLE	(12)	ST
3	RAISE COMMUNICATION VAULT	(13)	CF
4	RAISE MONUMENT	(14)	AC
5	RAISE SANITARY SEWER MANHOLE	(15)	PF
6	RAISE DETECTOR VAULT	(16)	RE
$\overline{\mathcal{I}}$	REMOVE AND REPLACE TRAFFIC LOOP	(17)	RE
8	REMOVE AND REPLACE SPEED HUMP	(18)	5'
9	REMOVE AND REPLACE CURB & GUTTER	(19)	BI
10	PAVEMENT LEGENDS "STOP"/"BUMP"	$\overline{\bigcirc}$	BI
			1.0.1

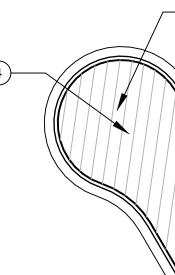
Q

NTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SPE
DP BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS
OSS WALK (PER CALTRANS STANDARD A24F)	23	CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLACE
A CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24)	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34)	2" OVERLAY (SEE DE
OTECT DRAIN INLET IN PLACE	25	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSIN
MOVE AND REPLACE VALLEY GUTTER	(26)	2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN
PLACE MONUMENT AND FRAME COVER	(27)	TYPE II SLURRY SEAL	37	NO PARKING SIGNS (
WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28)	REMOVE THERMOPLASTIC		
E LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29)	CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
E LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	(30)	CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		

CONSTRUCTION FOR NOT I CHECKPRINT 100%



SQ.



GAPHNE WAY		A Characteristics		CHECKED BY NO. DESCRIPTION OF REVISION DATE H. JAVED / B. ZARO DESIGNED/DRAFTED BY M. CORTEZ	SCALE SCALE AS SHOWN LAST REVISION	7/18/2024
VAY TO END		DAPHNE COURT FROM ASTER WAY TO SCALE: 1 INCH = 50 FEET		PREPARED BY CITY OF EAST PALO ALTO DEPARTMENT OF PUBLIC WORKS	ENGINEERING DIVISION SAN MATEO COUNTY, CALIFORNIA	
T T T T T T T T T T T T T T T T T T T				SHEET TITLE CARDENS AND UNIVERSITY SQUARE	PROJECT/JOB TITLE ANNUAL STREET RESURFACING PROJECT 2024/2025	
				PROJECT/JOB NUME	BER -07-25	_
STOP BAR 12" WHITE STRIPE       (2)         CROSS WALK (PER CALTRANS STANDARD A24F)       (2)         ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A       (2)         PROTECT DRAIN INLET IN PLACE       (2)         REMOVE AND REPLACE VALLEY GUTTER       (2)         S' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)       (2)         BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)       (2)	<ul> <li>21 CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)</li> <li>22 ADD "NO DUMPING, DRAINS TO BAY" STENCIL</li> <li>23 CONSTRUCT NEW CURB &amp; GUTTER AND SIDEWALK (SEE DETAIL XX/XX )</li> <li>24 CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )</li> <li>25 YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)</li> <li>26 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )</li> <li>27 TYPE II SLURRY SEAL</li> <li>28 REMOVE THERMOPLASTIC</li> <li>29 CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )</li> <li>30 CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)</li> </ul>	③1CONSTRUCT NEW SPEED HUMP (SEE DETAIL XX/XX)③2PAVEMENT LEGENDS "SLOW SCHOOL XING" (PER CALTRANS STD. A24D)③3GRIND AND REPLACE SPEED HUMP (SEE DETAIL XX/XX )④42" OVERLAY (SEE DETAIL XX, SHEET XX )④5PEDESTRIAN CROSSING SIGN (CALTRANS SIGN W11-2)④6IN-ROAD PEDESTRIAN CROSSING SIGN (CALTRANS SIGN R1-6)④7NO PARKING SIGNS (CALTRANS SIGN R28 (CA))	CALL UTILITY NOTIFICATION CENTER OF CALIFORNIAOPENATOROPENATOROPENATORKNOW WHAT'S BELOW. CALL BEFORE YOU DIG.CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.	L L L L	AST PTO TO TO DRATED	ITO

# SLURRY SEAL SLURRY SEAL W/ CRACK SEALING THIN OVERLAY

MULTI-LAYER TREATMENT

GRAPHIC SCALE						
			1 INCH =	50 FEET		
0	25	50	100	150	250	

MILL & THIN OVERLAY

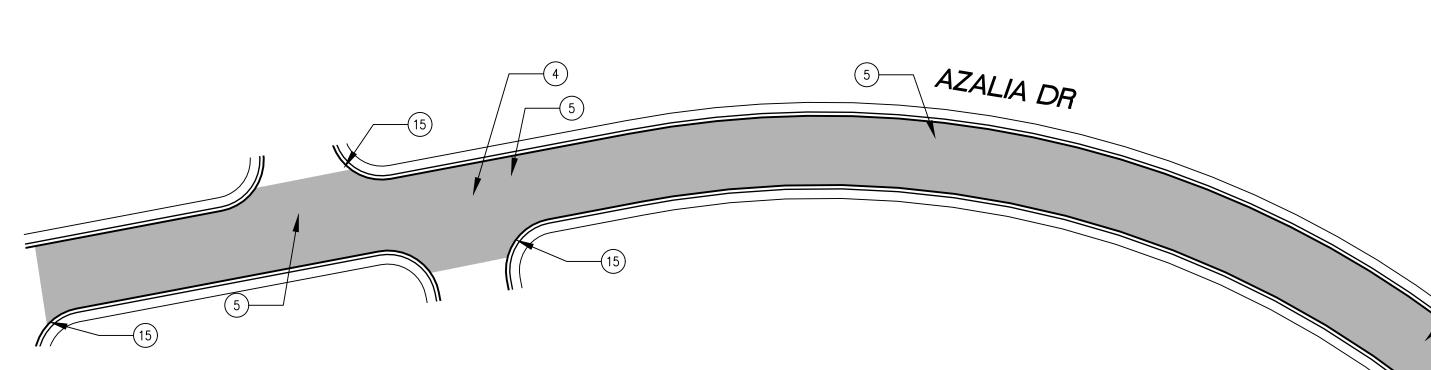
MILL & THICK OVERLAY

MILL & THICK OVERLAY W/ FABRIC

# SHEET NOTES

	PROTECT IN PLACE	(1)	CE
2	RAISE STORM DRAIN MANHOLE	(12)	ST
3	RAISE COMMUNICATION VAULT	(13)	CR
4	RAISE MONUMENT	(14)	AD
5	RAISE SANITARY SEWER MANHOLE	(15)	PR
6	RAISE DETECTOR VAULT	(16)	RE
$\overline{)}$	REMOVE AND REPLACE TRAFFIC LOOP	(17)	RE
8	REMOVE AND REPLACE SPEED HUMP	(18)	5'
9	REMOVE AND REPLACE CURB & GUTTER	(19)	BI
10	PAVEMENT LEGENDS "STOP"/"BUMP"	$\overline{0}$	Blk
•			

Ő

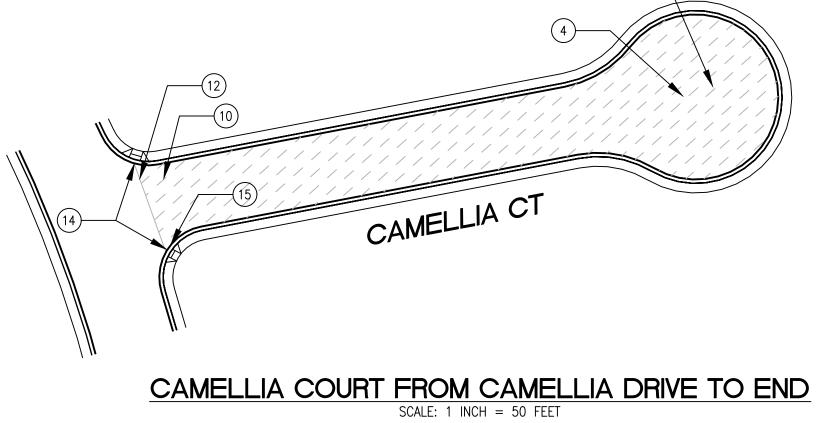


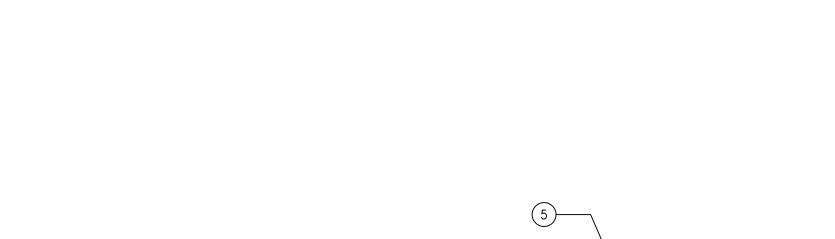


				REI	LATIVE	E BORDER	S	CALE IS	S IN IN	CHES					
						0	0.5	5 1	ב 0.						
NOTE:	IF	THIS	LINE	DOES	NOT	MEASURE	1	INCH,	THESE	PLANS	ARE	NOT	TO	SCALE.	

	_
RELATIVE BORDER SCALE IS IN INCHES	
0 0.5 1.0	
NOTE, IE THIS LINE DOES NOT MEASURE 1 INCH THESE DIANS AD	E NOT TO SCALE

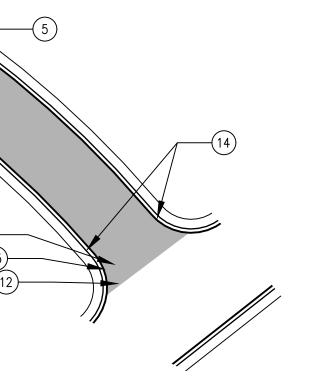
CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	(21) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW S
STOP BAR 12" WHITE STRIPE	(22) ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGEND
CROSS WALK (PER CALTRANS STANDARD A24F)	(23)       CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLA
ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	(24)   CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34)	2" OVERLAY (SEE
PROTECT DRAIN INLET IN PLACE	(25) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSS
REMOVE AND REPLACE VALLEY GUTTER	(26) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTR
REPLACE MONUMENT AND FRAME COVER	(27) TYPE II SLURRY SEAL	(37)	NO PARKING SIGNS
5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28) REMOVE THERMOPLASTIC		1
BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29) CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	(30) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		

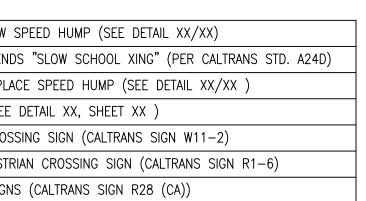




AZALIA DRIVE BETWEEN VERBENA DRIVE AND CAMELLIA DRIVE SCALE: 1 INCH = 50 FEET

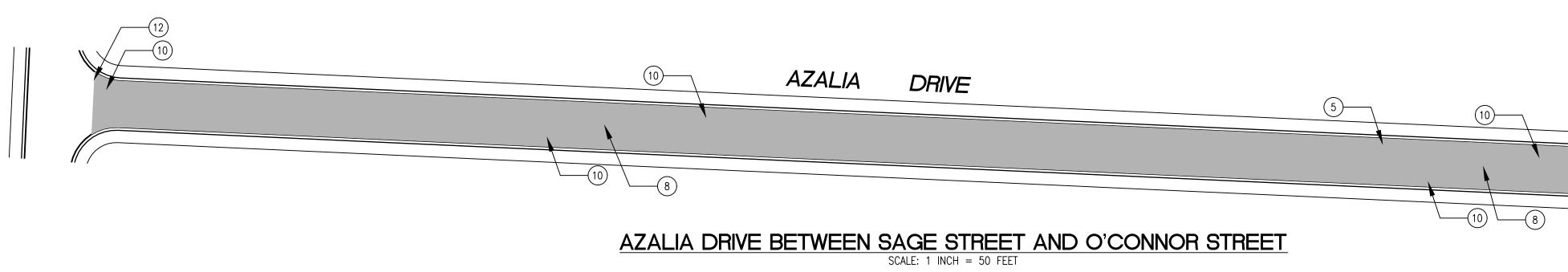
DATE								
DESCRIPTION OF REVISION								
NO.								
CHECKED BY H. JAVED / B. ZARO	DESIGNED/DRAFTED BY M. CORTEZ	SCALE	NMOLIC CH	LAST REVISION 7 /18 /2624	+202/01/1			
Prepared BY	EPAED BY CITY OF EAST PALO ALTO DEPARTMENT OF PUBLIC WORKS BUGINEERING DIVISION SAN MATEO COUNTY, CALIFORNIA							
SHET TITE CARDENS AND UNVERSITY SOUARE PROJECT 2024/2025 PROJECT 2024/2025								
SHEET NUM	SHEET NUMBER							
PROJECT/JOB NUMBER ST-07-25								
DE FAST PHOTO DE								

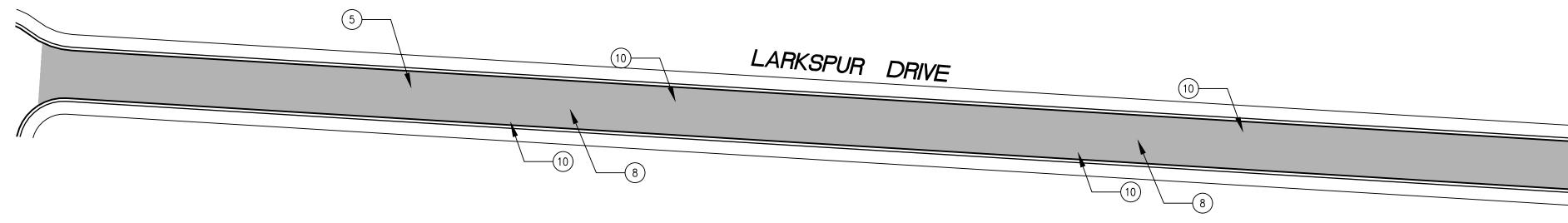




KNOW WHAT'S BELOW. CALL BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA





# PAVEMENT TREATMENT LEGEND

1 INCH = 50 FEET

MILL & THICK OVERLAY W/ FABRIC

SLURRY SEAL	MILL & THIN OVERLAY
SLURRY SEAL W/ CRACK SEALING	MILL & THICK OVERLAY
THIN OVERLAY	MILL & THICK OVERLAY W
MULTI-LAYER TREATMENT	
GRAPHIC SCALE	

# SHEET NOTES

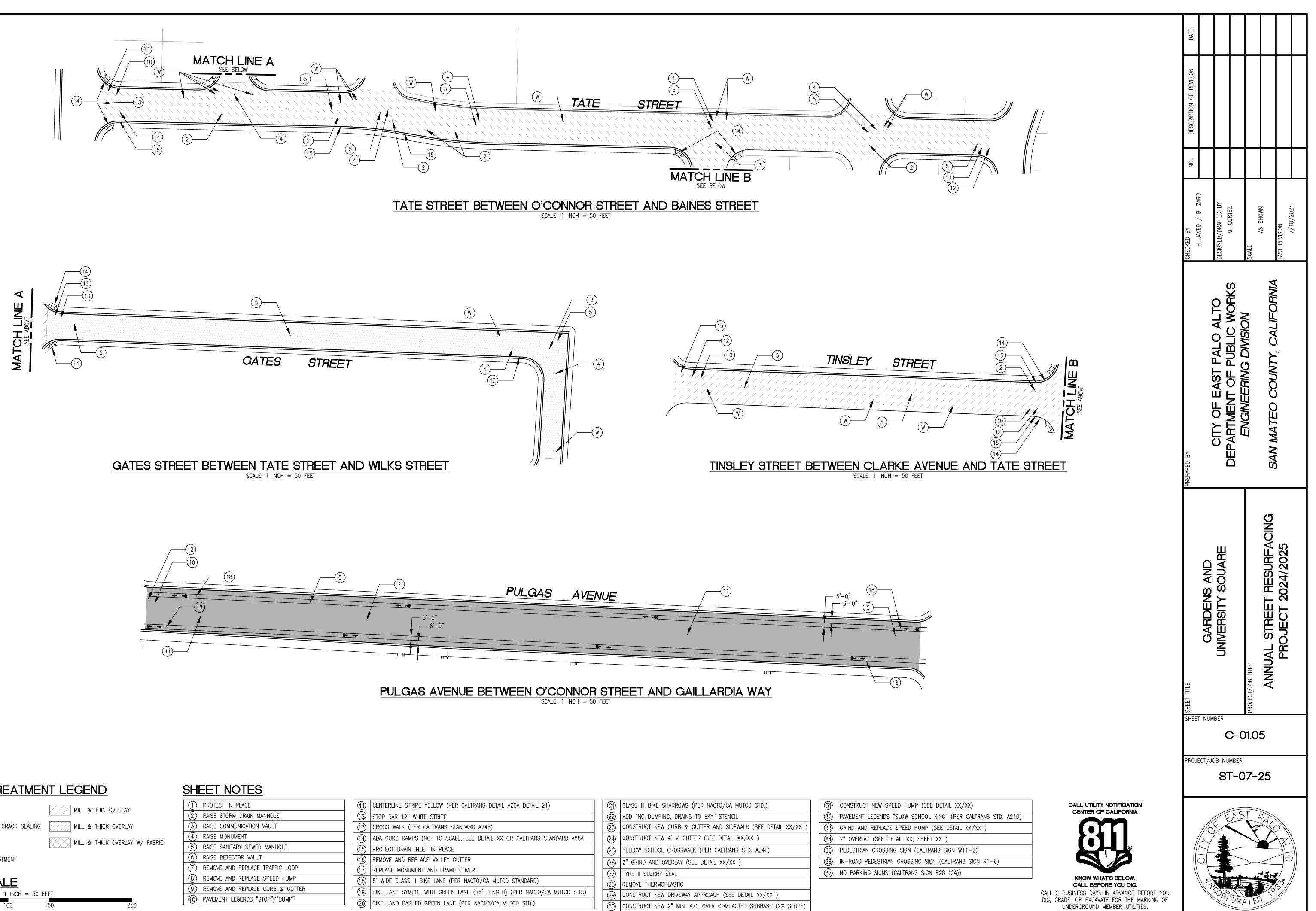
(1)	PROTECT IN PLACE		CE
2	RAISE STORM DRAIN MANHOLE	(12)	ST
3	RAISE COMMUNICATION VAULT	(13)	CF
4	RAISE MONUMENT	(14)	AD
5	RAISE SANITARY SEWER MANHOLE	(15)	PF
6	RAISE DETECTOR VAULT	(16)	RE
$\overline{\mathcal{I}}$	REMOVE AND REPLACE TRAFFIC LOOP	(17)	RE
8	REMOVE AND REPLACE SPEED HUMP	(18)	5'
9	REMOVE AND REPLACE CURB & GUTTER	(19)	BI
10	PAVEMENT LEGENDS "STOP"/"BUMP"		BI

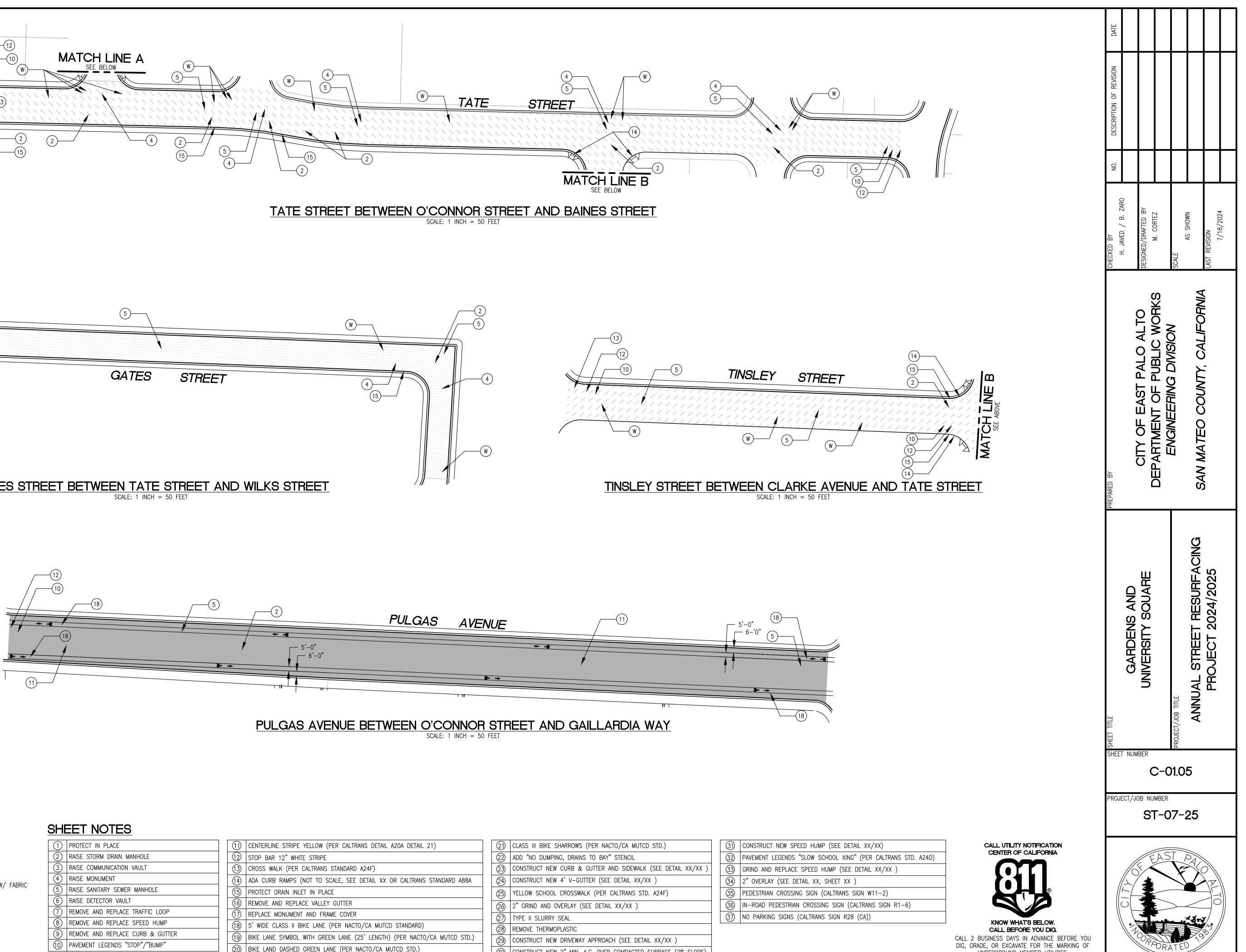
SQ.

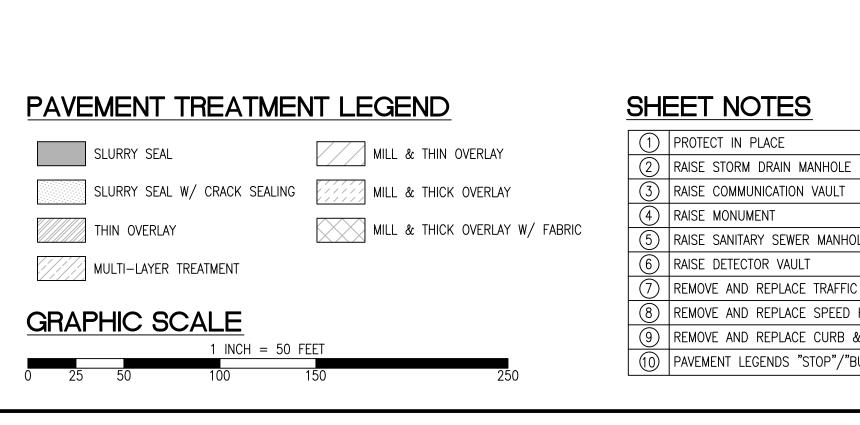
# LARKSPUR DRIVE BETWEEN SAGE STREET AND O'CONNOR STREET SCALE: 1 INCH = 50 FEET

NTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SPE
DP BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS '
OSS WALK (PER CALTRANS STANDARD A24F)	23	CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLACE
A CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34)	2" OVERLAY (SEE DE
OTECT DRAIN INLET IN PLACE	25	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSING
MOVE AND REPLACE VALLEY GUTTER	(26)	2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN
PLACE MONUMENT AND FRAME COVER	(27)	TYPE II SLURRY SEAL	(37)	NO PARKING SIGNS (
WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	$\vdash$	REMOVE THERMOPLASTIC		
E LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	$\vdash$	CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
E LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)		CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		
		1		

					_
		DATE			
		DESCRIPTION OF REVISION			
		ON			
		CHECKED BY H. JAVED / B. ZARO	M. CORTE	SCALE AS SHOWN LAST REVISION 7/18/2024	
		Prepared BY CITY OF FAST PALO ALTO	DEPARTMENT OF PUBLIC WORKS	SAN MATEO COUNTY, CALIFORNIA	
		GARDENS AND		PROJECT/JOB TITE ANNUAL STREET RESURFACING PROJECT 2024/2025	
			C-0	1.04	
		PROJECT/JOB	NUMBER	7-25	
EED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) SPEED HUMP (SEE DETAIL XX/XX ) TAIL XX, SHEET XX ) IG SIGN (CALTRANS SIGN W11-2) I CROSSING SIGN (CALTRANS SIGN R1-6) (CALTRANS SIGN R28 (CA))	CALL UTLITY NOTIFICATION CENTER OF CALIFORNIAOPENATION OPENATIONOPENATION OPENATIONNOW WHAT'S BELOW. CALL BEFORE YOU DIG.CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.	CITY CITY	EAS	P70 P10 TED 1985	



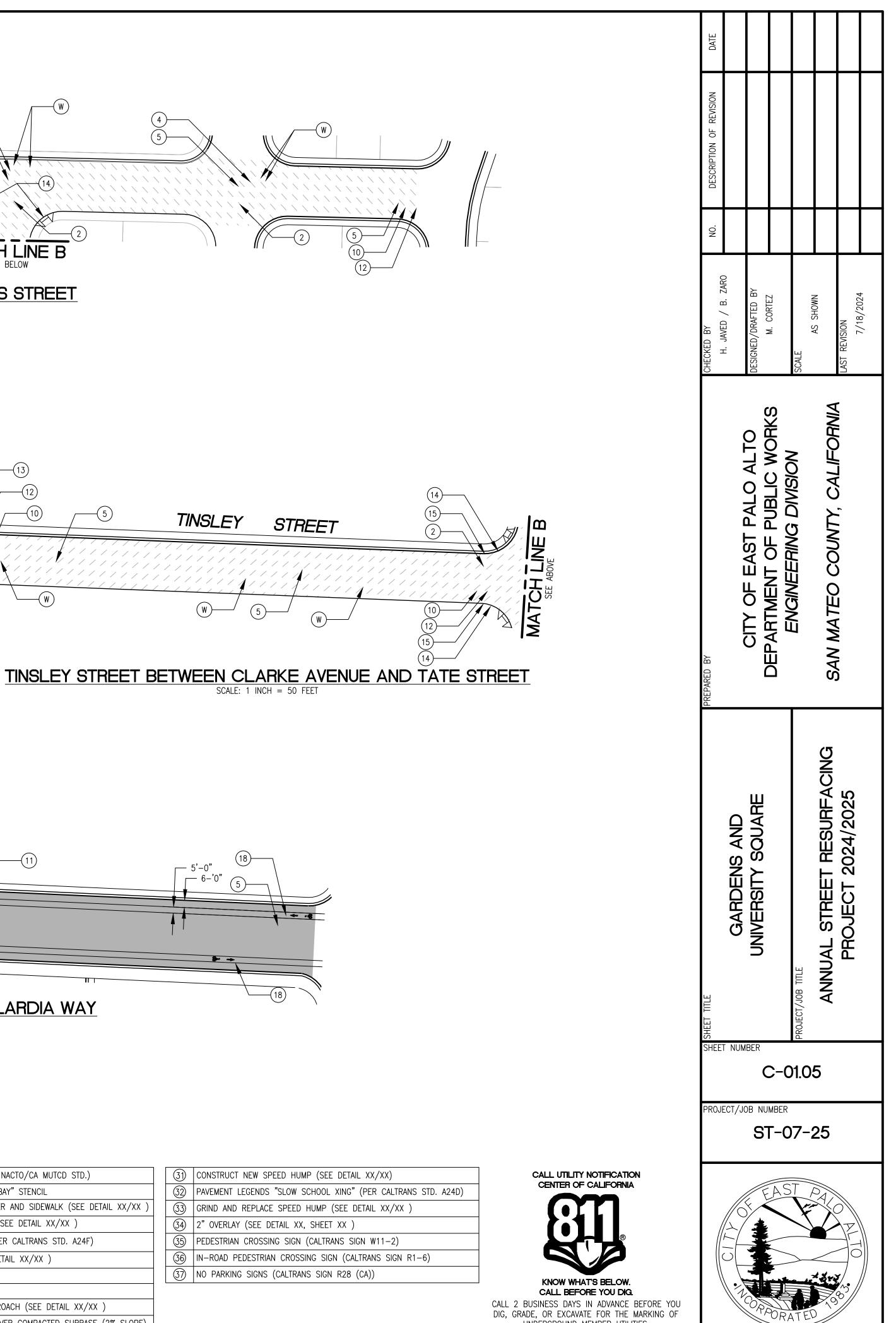




RSIT	
aLTO/DOCUMENTS/PROJECTS/ST-07-25/PLANS/04.1_CIVIL IMPROVEMENT PLANS_GARDENS-UNIVERSIT	
S-U	
ARDENS-UI	
'LANS_GARD	
NS_	
PLAI	
I	
VEMEN	
ROV	
ШМР	
PLANS/04.1_CIVIL IMPR	
1_0	
/04.	
ANS,	
/PL/	
7-25/1	
[-07-	
/ST–	
OJECTS/ST	
OJEC	
/PR	
NTS,	
UMENTS	
1000	
ALTO/DO(	
OAL	
<b>IPAL</b>	
EAST	
YOF	
-CIT	
IVE-	
<b>IEDF</b>	1
RAGE/ONEDH	RTF
RAGE	2 13
STOF	РНЛ
SOUC	, MIK
RTEZ/LIBRARY/CLOUDSTC	Å
ARY,	D
-IBR/	3.0 F
1/Z	7
ORTE	120,
AELCOI	/18
CHAE	2
/WI	0
JSERS/MICHAELCORTEZ/LIBRARY/CLOUDSTORAGE/ONEDRIVE-CITYOFEASTPALOA	TTFL
SU/	PLOTTED ON 7/18/2024 3:25 PM BY MICHAELCORTEZ

SQ





CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31)	CONSTRUCT NEW SPEED
STOP BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS "SI
CROSS WALK (PER CALTRANS STANDARD A24F)	23	) CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLACE SI
ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24	) CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34)	2" OVERLAY (SEE DETA
PROTECT DRAIN INLET IN PLACE	25	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSING
REMOVE AND REPLACE VALLEY GUTTER	(26)	) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN C
REPLACE MONUMENT AND FRAME COVER		) TYPE II SLURRY SEAL	37	NO PARKING SIGNS (CA
5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28)			
BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29)	) CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	30	) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		

CONSTRUCTION FOR NOT I CHECKPRINT 100%



# PAVEMENT TREATMENT LEGEND

SLURRY SEAL

SLURRY SEAL W/ CRACK SEA

THIN OVERLAY

MULTI-LAYER TREATMENT

EALING	MILL & THICK OVERLAY
	MILL & THICK OVERLAY W/ FABRIC

MILL & THIN OVERLAY

# SHEET NOTES

1 PROTECT IN PLACE	(1) CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	(21) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	(31) CONSTRUCT NEW SPEE
2 RAISE STORM DRAIN MANHOLE	12 STOP BAR 12" WHITE STRIPE	(22) ADD "NO DUMPING, DRAINS TO BAY" STENCIL	(32) PAVEMENT LEGENDS "S
3 RAISE COMMUNICATION VAULT	(13)   CROSS WALK (PER CALTRANS STANDARD A24F)	(23) CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX)	(33) GRIND AND REPLACE S
(4) RAISE MONUMENT	14 ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	(24) CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	(34) 2" OVERLAY (SEE DET
5 RAISE SANITARY SEWER MANHOLE	15 PROTECT DRAIN INLET IN PLACE	(25) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	(35) PEDESTRIAN CROSSING
6 RAISE DETECTOR VAULT	16 REMOVE AND REPLACE VALLEY GUTTER	(26) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	(36) IN-ROAD PEDESTRIAN
The matrix         Remove and Replace traffic loop	17 REPLACE MONUMENT AND FRAME COVER	(27) TYPE II SLURRY SEAL	(37) NO PARKING SIGNS (C
8 REMOVE AND REPLACE SPEED HUMP	18 5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28) REMOVE THERMOPLASTIC	
9 REMOVE AND REPLACE CURB & GUTTER	(19) BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29) CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )	
10 PAVEMENT LEGENDS "STOP"/"BUMP"	BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	(30) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)	

# ST-07-25: ANNUAL STREET RESURFACING PROJECT 2024/2025 WEEKS NEIGHBORHOOD AREA LOCATION MAP AND STREETS LIST

# STREETS LIST

SHEET NO.	STREET NAME	BEGINNING	END	TREATMENT		
C-02.01	RUNNYMEDE STREET	PULGAS AVENUE	END	MULTI-LAYER TREATMENT		
C-02.01	BEECH STREET	PULGAS AVENUE	END	MILL & THICK OVERLAY		
C-02.01	TERRA VILLA AVENUE	GARDEN STREET	BEECH STREET	MILL & THICK OVERLAY		
C-02.01	DONOHOE STREEET	SALAS COURT	CLARKE AVENUE	MILL & THIN OVERLAY W/ FABRIC		
C-02.02	GARDEN STREET	CLARKE AVENUE	PULGAS AVENUE	MILL & THICK OVERLAY		
C-02.02	SCHEMBRI LANE	CLARKE AVENUE	COOLEY AVENUE	SLURRY SEAL		
C-02.02	WEEKS STREET	PULGAS AVENUE	END	THIN OVERLAY		
C-02.03	WEEKS STREET	CLARKE AVENUE	COOLEY AVENUE	THIN OVERLAY		
C-02.03	CAROLE COURT	WEEKS STREET	END	SLURRY SEAL		
C-02.03	PAUL ROBESON COURT	WEEKS STREET	END	SLURRY SEAL W/ CRACK SEALING		
C-02.03	AVELAR STREET	RUNNYMEDE STREET	RUNNYMEDE STREET	SLURRY SEAL		
C-02.03	SALAS COURT	DONOHOE STREET	END	MILL & THIN OVERLAY W/ FABRIC		
C-02.04	COOLEY AVENUE	UNIVERSITY AVENUE	RUNNYMEDE STREET	SLURRY SEAL		
C-02.04	COOLEY AVENUE	RUNNYMEDE STREET	BEECH STREET	MILL & THICK OVERLAY		
C-02.04	COOLEY AVENUE	BEECH STREET	DONOHOE STREET	MILL & THICK OVERLAY		

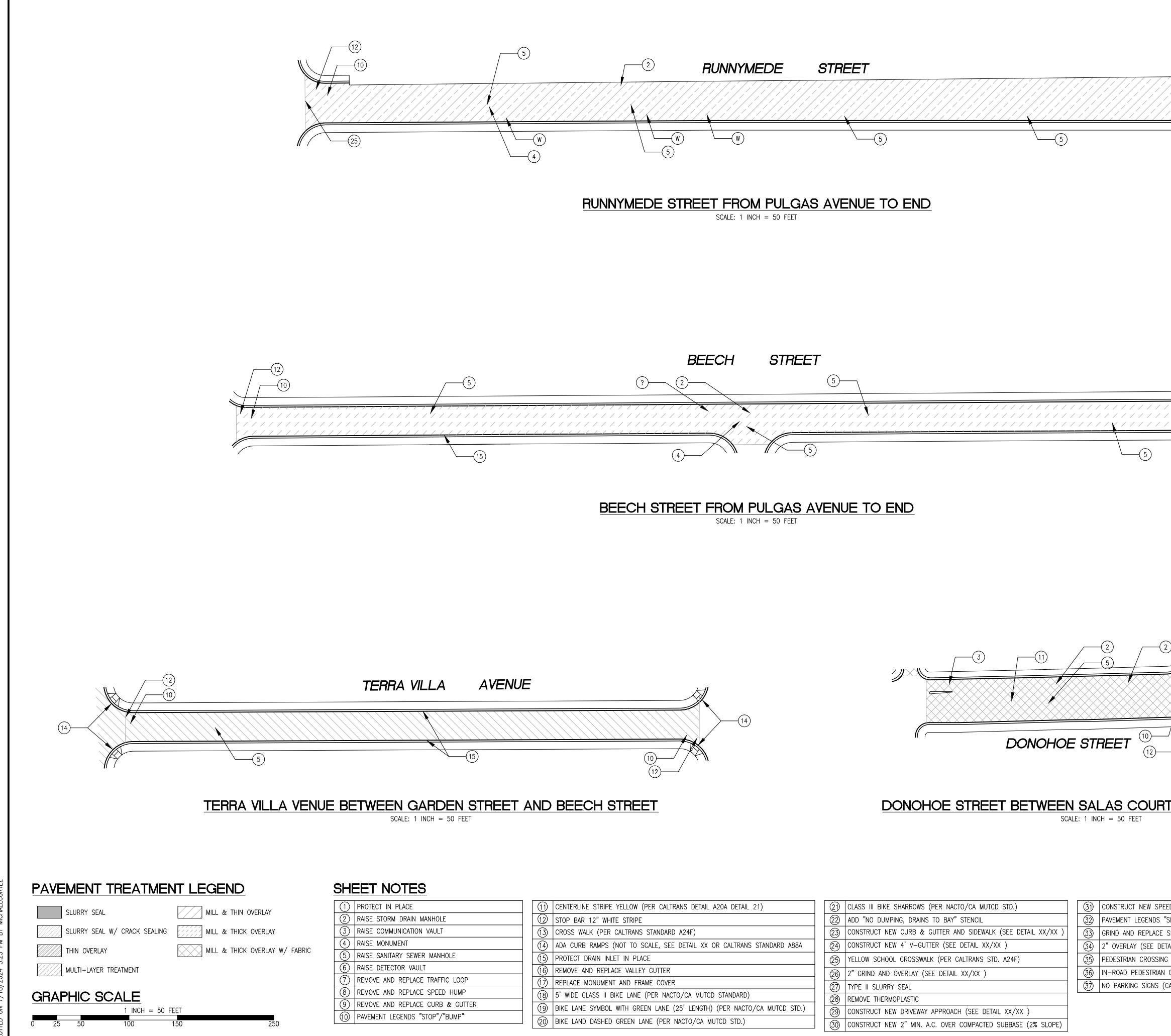
AS MATEC ARTN SAN LIST WEEKS NEIGHBORHOOD ATION MAP AND STREETS Н О О О С ы с 024/ AL 5 SHEET NUMBER C-02.00 PROJECT/JOB NUMBER ST-07-25

PEED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) SPEED HUMP (SEE DETAIL XX/XX ) DETAIL XX, SHEET XX ) ING SIGN (CALTRANS SIGN W11-2) AN CROSSING SIGN (CALTRANS SIGN R1-6) (CALTRANS SIGN R28 (CA))

CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA

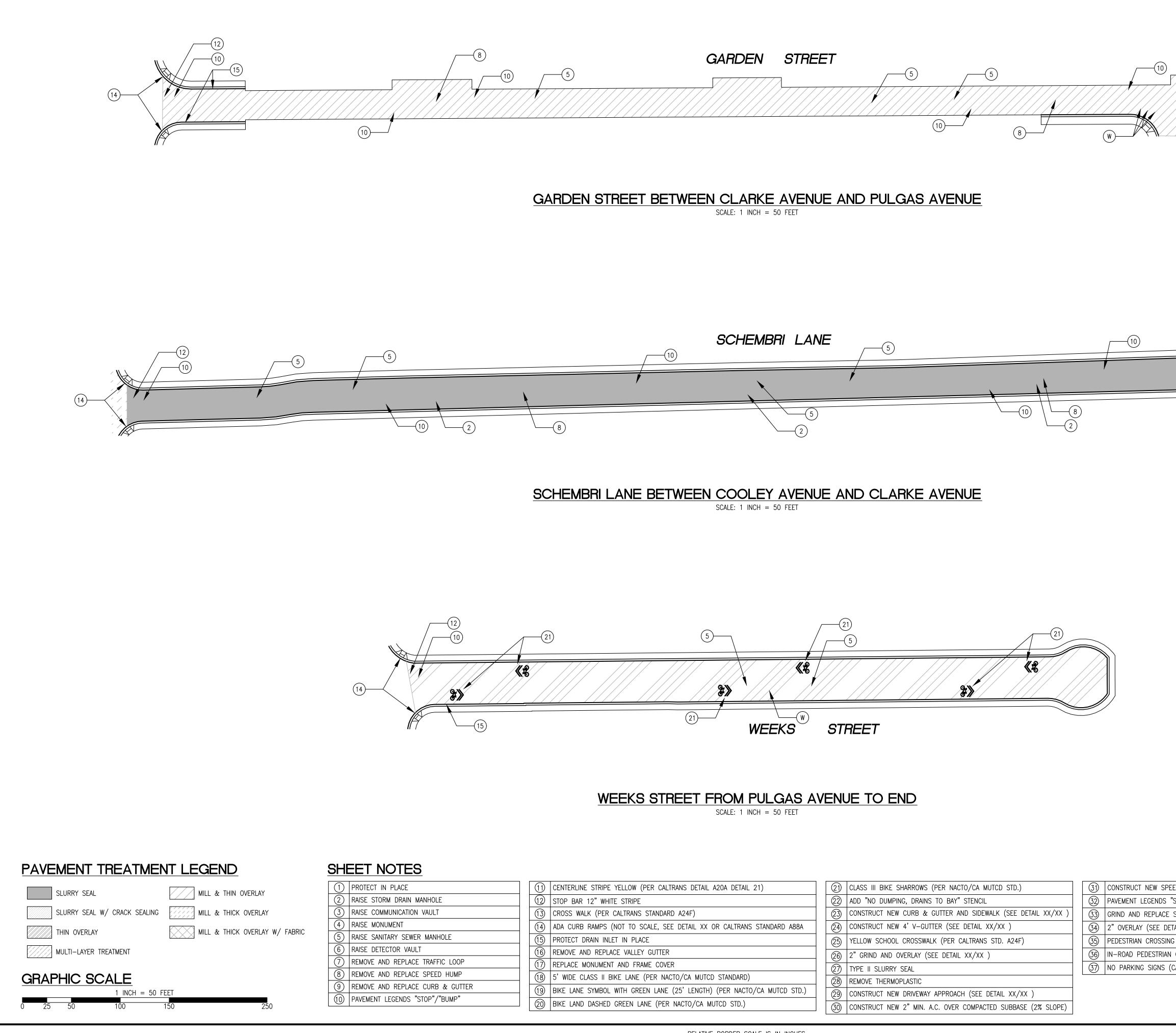


KNOW WHAT'S BELOW. CALL BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



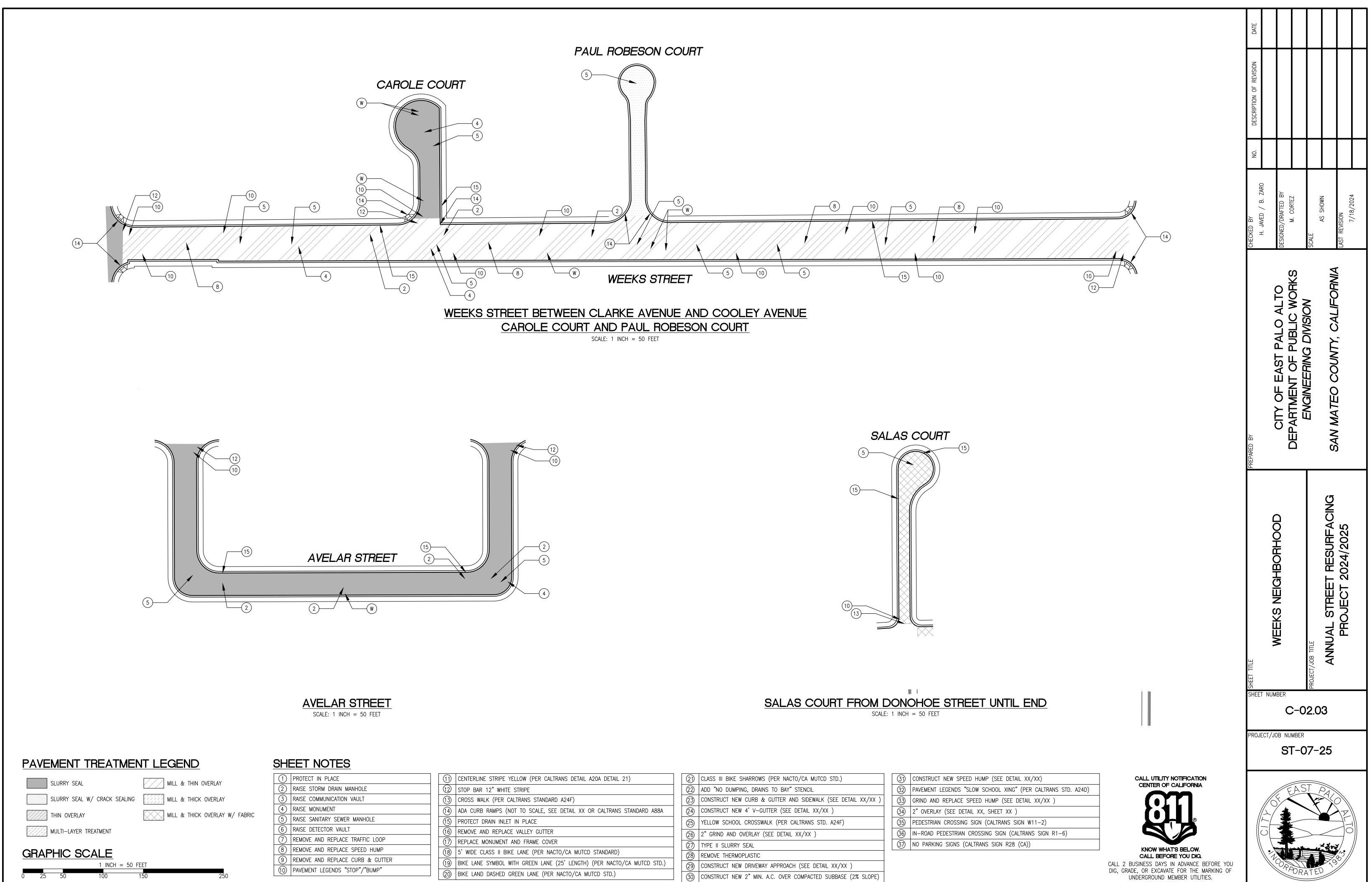
	DATE
	DESCRIPTION OF REVISION
<u>(15</u> )	ġ
	CHECKED BY H. JAVED / B. ZARO DESIGNED/DRAFTED BY M. CORTEZ M. CORTEZ AS SHOWN AS SHOWN LAST REVISION 7/18/2024
	PREPARED BY CITY OF EAST PALO ALTO DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION SAN MATEO COUNTY, CALIFORNIA
T AND CLARKE AVENUE	SHEFT THE MEEKS NEIGHBORHOOD MEEKS NEIGHBORHOOD PROLECT 2024/2025 PROLECT 2024/2025
	C-02.01
	PROJECT/JOB NUMBER ST-07-25
EED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) SPEED HUMP (SEE DETAIL XX/XX ) ETAIL XX, SHEET XX ) IG SIGN (CALTRANS SIGN W11–2) A CROSSING SIGN (CALTRANS SIGN R1–6) (CALTRANS SIGN R28 (CA)) CALTRANS SIGN R28 (CA))	RKING OF

00% CHECKPRINT - NOT FOR CONSTRUCTION



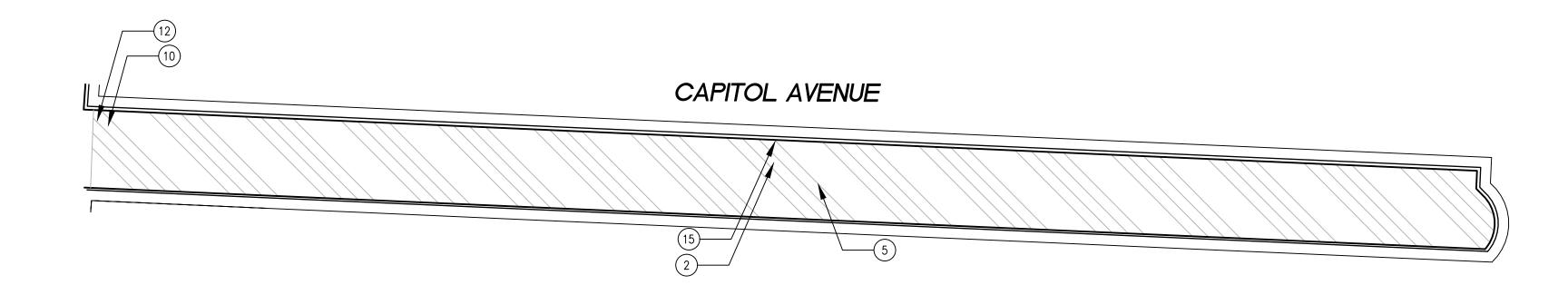
	DATE
	ION OF REVISION
	DESCRIPTION
	ġ
	CHECKED BY H. JAVED / B. ZARO DESIGNED/DRAFTED BY M. CORTEZ M. CORTEZ AS SHOWN SCALE AS SHOWN LAST REVISION 7/18/2024
	PREPARED BY CITY OF EAST PALO ALTO DEPARTMENT OF PUBLIC WORKS BERGINEERING DIVISION SAN MATEO COUNTY, CALIFORNIA
	SHEFT THE WEEKS NEIGHBORHOOD PROJECT 2024/2025 PROJECT 2024/2025
	SHEET NUMBER C-02.02
	PROJECT/JOB NUMBER ST-07-25
EED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) SPEED HUMP (SEE DETAIL XX/XX ) TAIL XX, SHEET XX ) IG SIGN (CALTRANS SIGN W11-2) N CROSSING SIGN (CALTRANS SIGN R1-6) (CALTRANS SIGN R28 (CA)) CALL RANS SIGN R28 (CA)) CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.	COPORATED 300

00% CHECKPRINT - NOT FOR CONSTRUCTION



ENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SPEED
TOP BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS "SL
ROSS WALK (PER CALTRANS STANDARD A24F)	23	CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLACE SF
DA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24)	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34)	2" OVERLAY (SEE DETAI
ROTECT DRAIN INLET IN PLACE	25	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSING
REMOVE AND REPLACE VALLEY GUTTER	(26)	2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN C
EPLACE MONUMENT AND FRAME COVER	(27)	TYPE II SLURRY SEAL	37	NO PARKING SIGNS (CA
" WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	$\vdash$	REMOVE THERMOPLASTIC		
RIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29)	CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
IKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	30	CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		
	-			

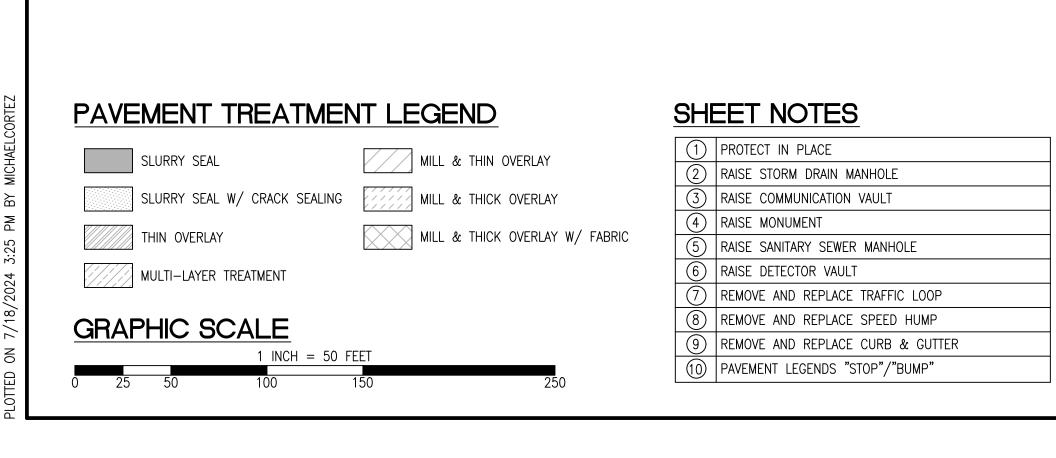
CONSTRUCTION FOR NOT I CHECKPRINT 100%

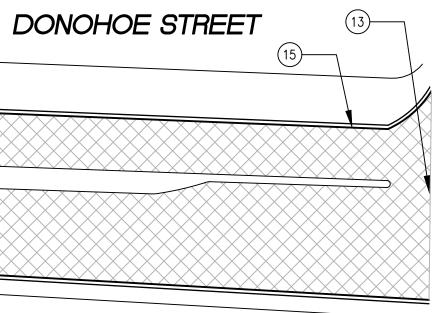


CAPITOL AVENUE FROM BELL STREET TO END SCALE: 1 INCH = 50 FEET

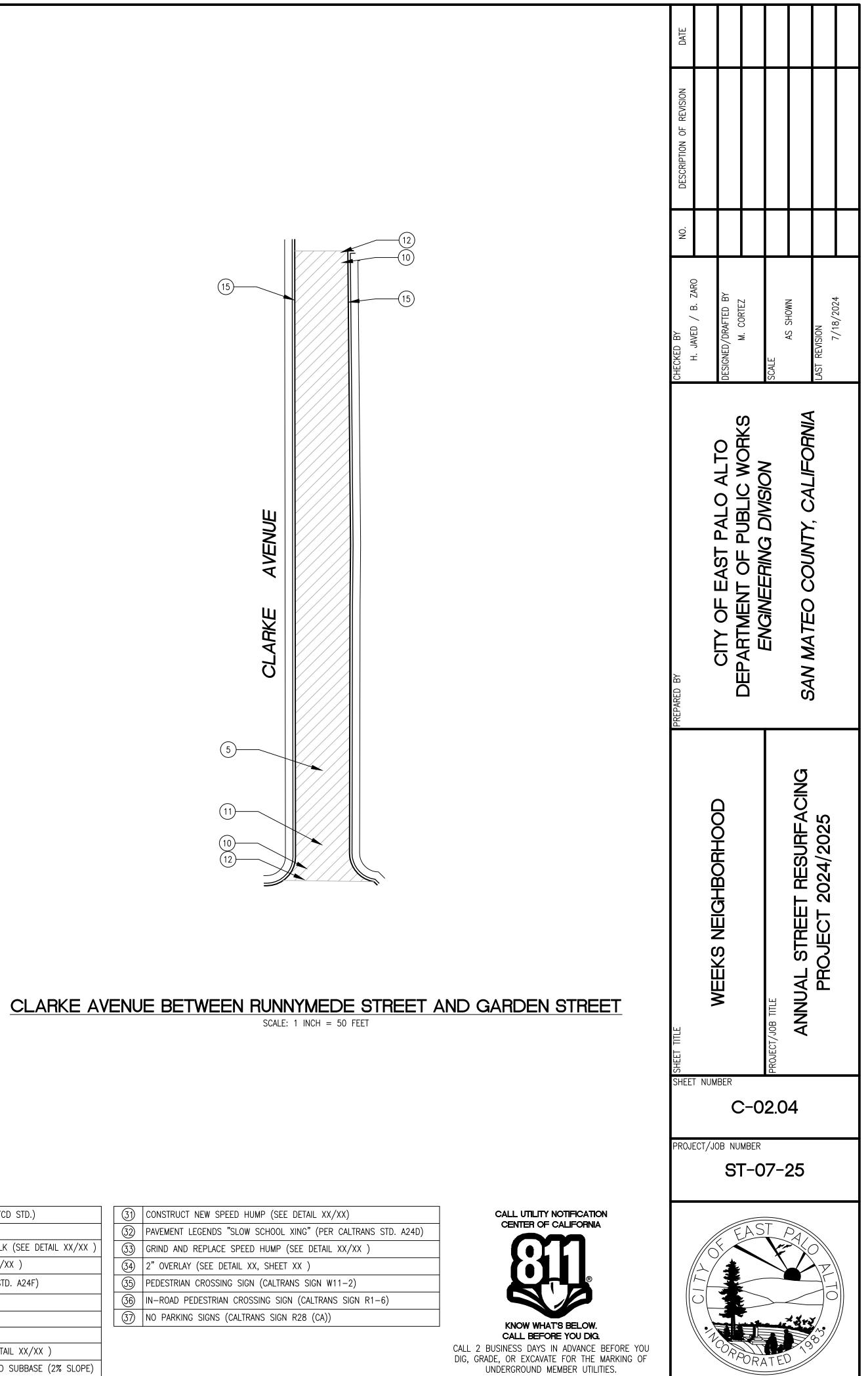
(13)-

DONOHOE STREET BETWEEN UNIVERSITY AVENUE AND COOLEY AVENUE SCALE: 1 INCH = 50 FEET

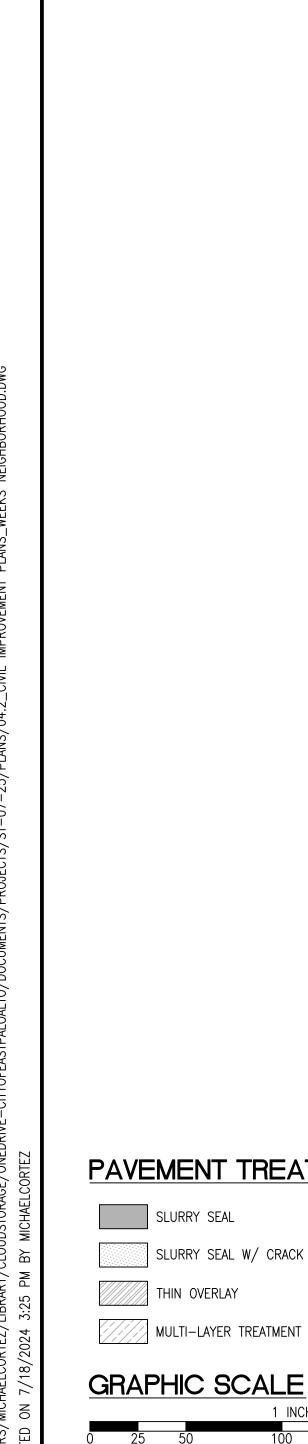


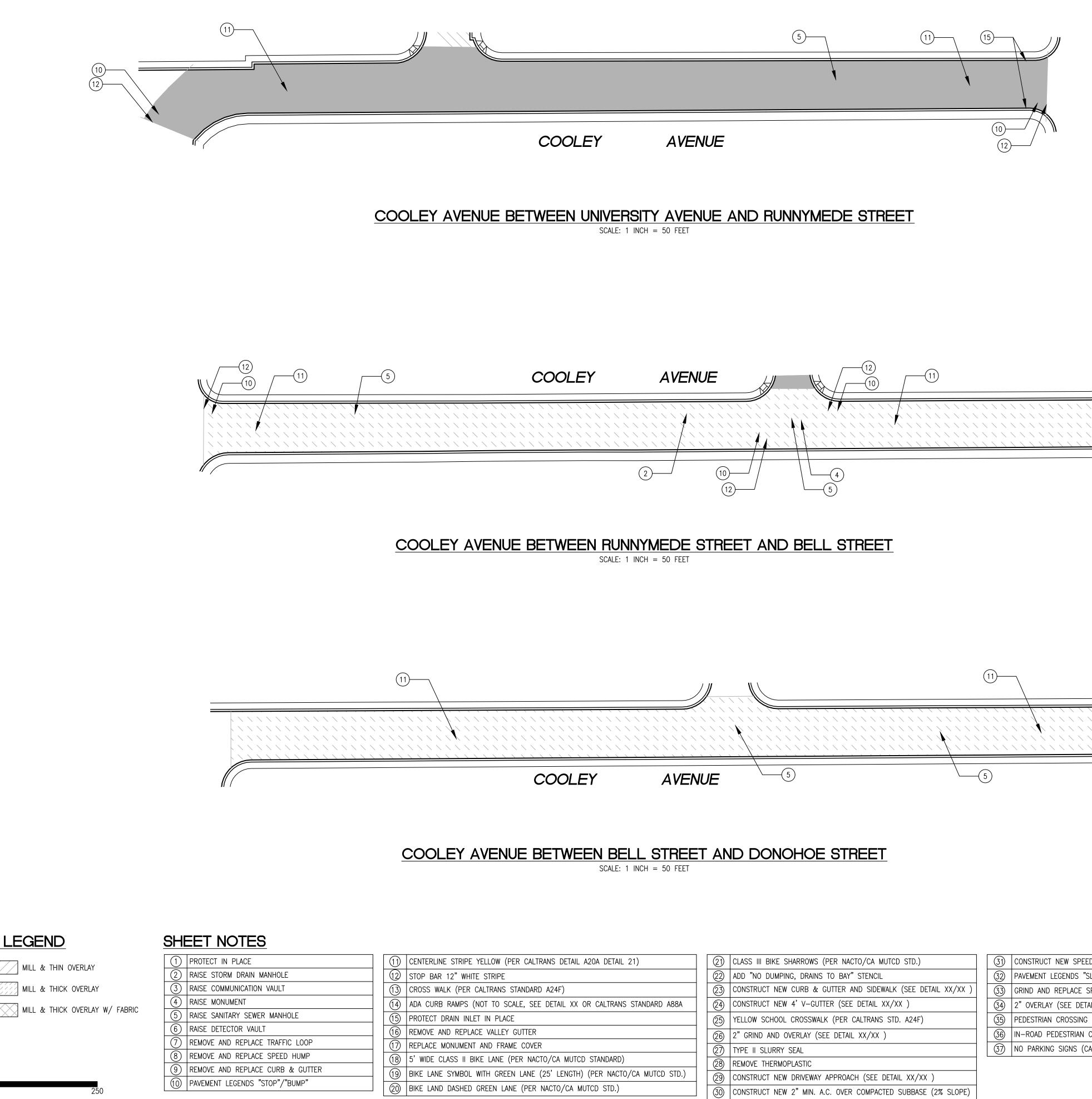


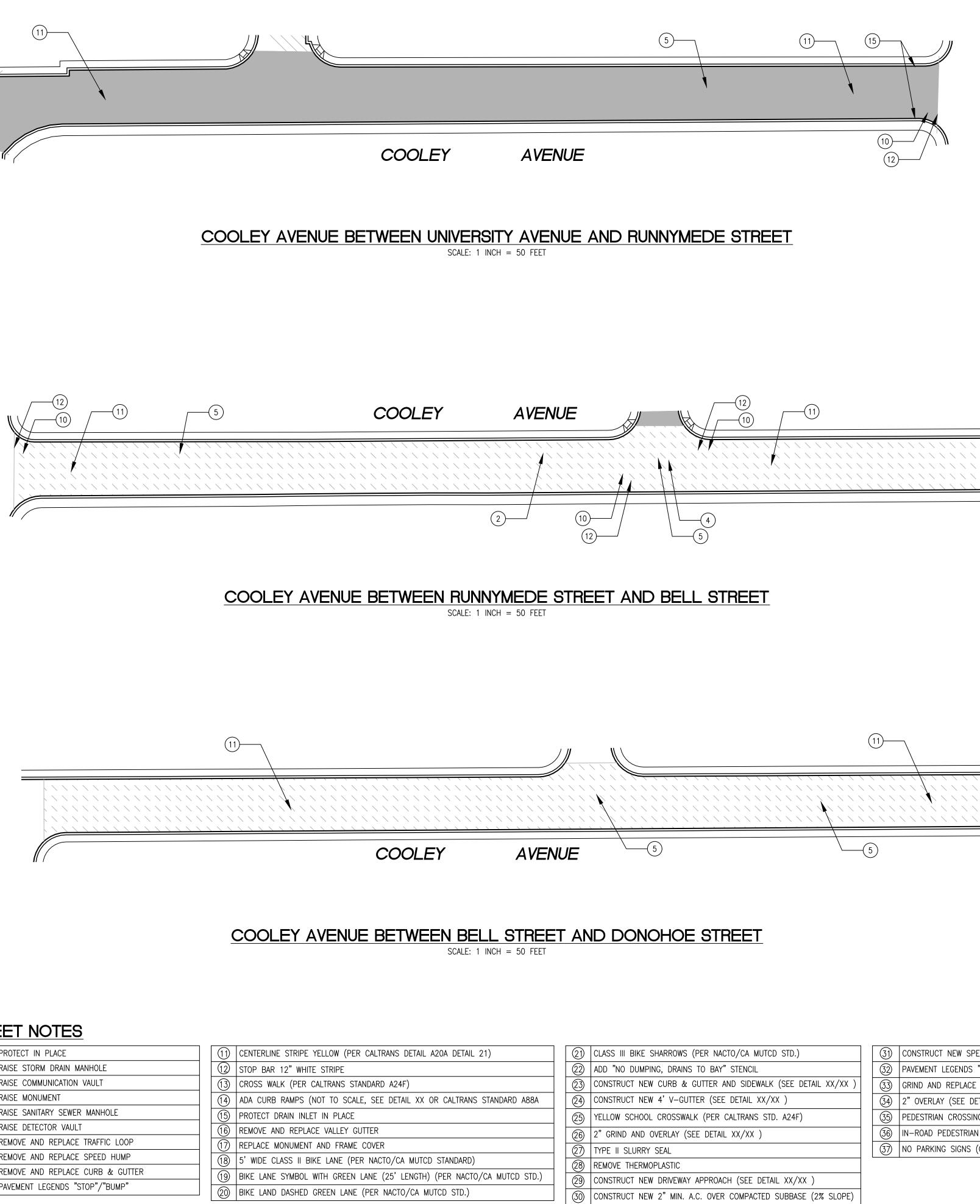
	CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SPEE
12	STOP BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS "S
(13)	CROSS WALK (PER CALTRANS STANDARD A24F)	23	CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLACE S
(14)	ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34	2" OVERLAY (SEE DETA
(15)	PROTECT DRAIN INLET IN PLACE	25	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSING
(16)	REMOVE AND REPLACE VALLEY GUTTER	(26)	2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN
	REPLACE MONUMENT AND FRAME COVER	27)	TYPE II SLURRY SEAL	37	NO PARKING SIGNS (C
(18)	5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)		REMOVE THERMOPLASTIC		4
	BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29)	CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
20	BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	30	CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		

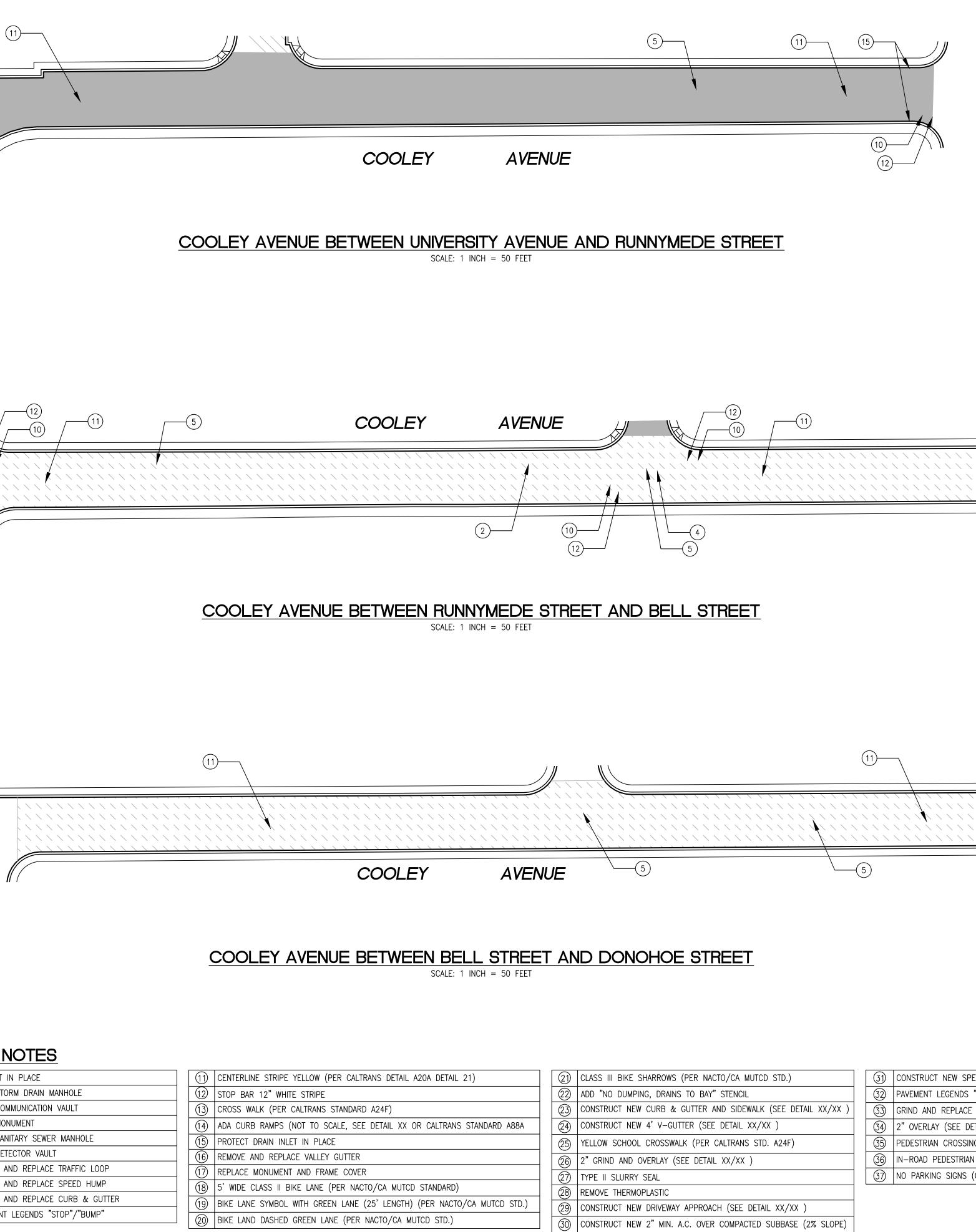


CONSTRUCTION FOR NOT CHECKPRINT 100%









### PAVEMENT TREATMENT LEGEND

SLURRY SEAL SLURRY SEAL W/ CRACK SEALING THIN OVERLAY

MILL & THICK OVERLAY MILL & THICK OVERLAY W/ FABRIC

	PROTECT IN PLACE		CE
2	RAISE STORM DRAIN MANHOLE	12	ST
3	RAISE COMMUNICATION VAULT	(13)	CF
4	RAISE MONUMENT	(14)	A
5	RAISE SANITARY SEWER MANHOLE	(15)	PF
6	RAISE DETECTOR VAULT	(16)	RE
$\overline{7}$	REMOVE AND REPLACE TRAFFIC LOOP	(17)	RE
8	REMOVE AND REPLACE SPEED HUMP	(18)	5'
9	REMOVE AND REPLACE CURB & GUTTER	(19)	BI
10	PAVEMENT LEGENDS "STOP"/"BUMP"	20	BI
		$\square$	

MULTI-LAYER TREATMENT

JAPHIC SCALE						
	1 INCH =	50 FEET				
25 50	100	150				

		DATE			
		DESCRIPTION OF REVISION			
		ARO			
		CHECKED BY H. JAVED / B. ZARO	DESIGNED/DRAFTED BY M. CORTEZ	SCALE AS SHOWN	LAST REVISION 7/18/2024
		PREPARED BY	CITY OF EAST PALO ALTO DEPARTMENT OF PUBLIC WORKS		SAN MALEO COUNTL, CALIFORNIA
		Sheet Title	WEEKS NEIGHBORHOOD	PROJECT/JOB TITLE ANNUAL STREET RESURFACING	<u> </u>
		SHEET 1		02.05	
		PROJEC	T/JOB NUMBEF	)7-25	
EED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) SPEED HUMP (SEE DETAIL XX/XX ) TAIL XX, SHEET XX ) G SIGN (CALTRANS SIGN W11–2) I CROSSING SIGN (CALTRANS SIGN R1–6) (CALTRANS SIGN R28 (CA))	CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA	CLTU	OF EA OF ICORPOR	ATED	D ALTO

# ST-07-25: ANNUAL STREET RESURFACING PROJECT 2024/2025 UNIVERSITY VILLAGE AND RAVENSWOOD BUSINESS DISTRICT AREA LOCATION MAP AND STREETS LIST

AREA LOCATION MAP



THIN OVERLAY

MULTI-LAYER TREATMENT

SLURRY SEAL W/ CRACK SEALING

MILL & THIN OVERLAY

MILL & THICK OVERLAY

MILL & THICK OVERLAY W/ FABRIC

1 PROTECT IN PLACE	(1) CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	(21) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	(31) CONSTRUCT NEW SPEED HUMP (SEE DETAIL XX/XX)
2 RAISE STORM DRAIN MANHOLE	12 STOP BAR 12" WHITE STRIPE	(2) ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32) PAVEMENT LEGENDS "SLOW SCHOOL XING" (PER CALTRANS STD. A24D)
3 RAISE COMMUNICATION VAULT	(13)   CROSS WALK (PER CALTRANS STANDARD A24F)	23 CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	(33) GRIND AND REPLACE SPEED HUMP (SEE DETAIL XX/XX )
(4) RAISE MONUMENT	14 ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	(24) CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	(34) 2" OVERLAY (SEE DETAIL XX, SHEET XX )
5 RAISE SANITARY SEWER MANHOLE	15 PROTECT DRAIN INLET IN PLACE	(25) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	(35) PEDESTRIAN CROSSING SIGN (CALTRANS SIGN W11-2)
6 RAISE DETECTOR VAULT	16 REMOVE AND REPLACE VALLEY GUTTER	(26) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	(36) IN-ROAD PEDESTRIAN CROSSING SIGN (CALTRANS SIGN R1-6)
7 REMOVE AND REPLACE TRAFFIC LOOP	Image: The second secon	(27) TYPE II SLURRY SEAL	(37) NO PARKING SIGNS (CALTRANS SIGN R28 (CA))
8 REMOVE AND REPLACE SPEED HUMP	18 5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28) REMOVE THERMOPLASTIC	
9 REMOVE AND REPLACE CURB & GUTTER	[19] BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	29 CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )	
10 PAVEMENT LEGENDS "STOP"/"BUMP"	BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	(30) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)	

### STREETS LIST

SHEET NO.	STREET NAME	BEGINNING	END	TREATMENT
C-03.01	ILLINOIS STREET	STEVENS AVENUE	FORDHAM AVENUE	SLURRY SEAL W/ CRACK SEALING
C-03.01	FORDHAM STREET	NOTRE DAME AVENUE	PURDUE AVENUE	THIN OVERLAY
C-03.01	GONZAGA COURT	NOTRE DAME AVENUE	END	MILL & THICK OVERLAY
C-03.02	PURDUE AVENUE	FORDHAM STREET	ILLINOIS AVENUE	MILL & THICK OVERLAY
C-03.02	TARA STREET	BAY ROAD	END	MULTI-LAYER TREATMENT
C-03.02	ANNAPOLIS STREET	MICHIGAN AVENUE	NOTRE DAME AVENUE	MULTI-LAYER TREATMENT
C-03.02	BAYLOR STREET	MICHIGAN AVENUE	NOTRE DAME AVENUE	MULTI-LAYER TREATMENT
C-03.03	FORDHAM STREET	RUTGERS AVENUE	END	MILL & THICK OVERLAY
C-03.03	ILLINOIS STREET	MICHIGAN AVENUE	BAY ROAD	SLURRY SEAL W/ CRACK SEALING

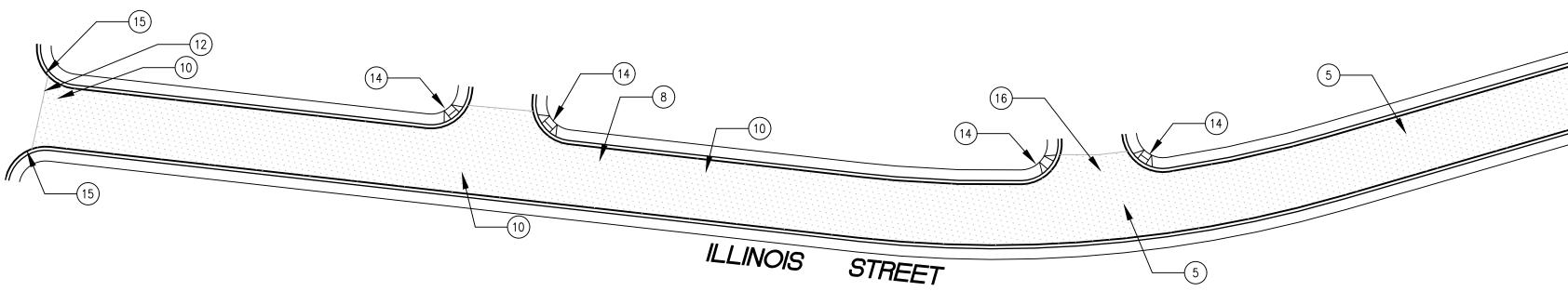
DATE							
DESCRIPTION OF REVISION							
NO.							
CHECKED BY	11. VAVED / D. ZANO	DESIGNED/DRAFTED BY	M. CORIEZ	SCALE AS SUDMIN	NMOLIC CH	LAST REVISION	+202/01//
PREPARED BY					SAN MATEO COUNTY CALIFORNIA		
	UNIVERSITY VILLAGE AND VENSWOOD BUSINESS DISTRICT CATION MAP AND STREETS LIST CATION MAP AND STREETS LIST International Street Resurfacing PROJECT 2024/2025						
		C	C-O	3.0	0		
ΓKUJI	project/job number ST-07-25						
	D D D D D D D D D D D D D D D D D D D						

CONSTRUCTION FOR NOT **CHECKPRINT** 200%

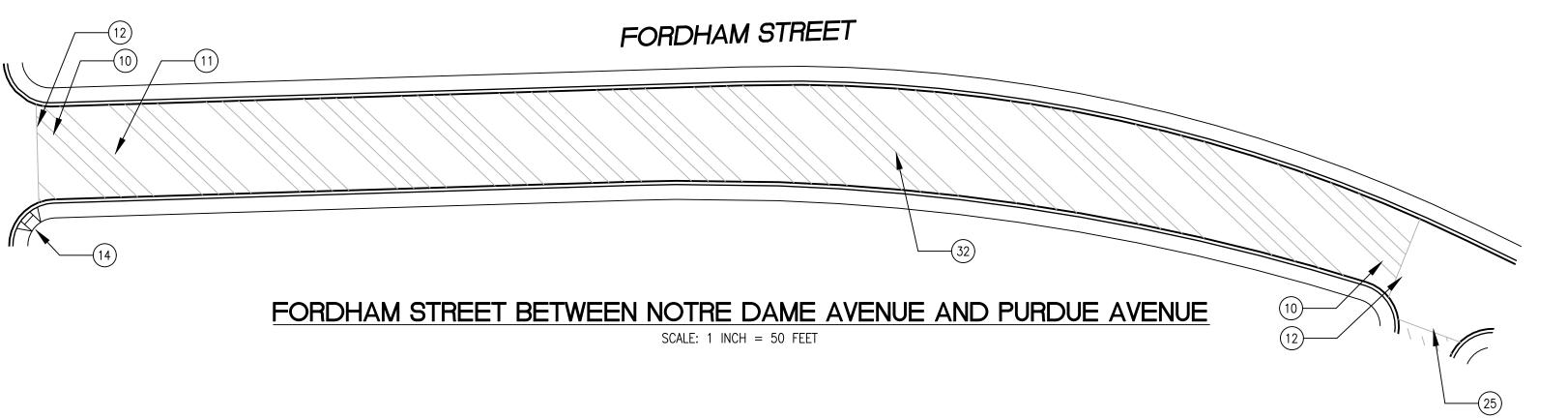
CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA

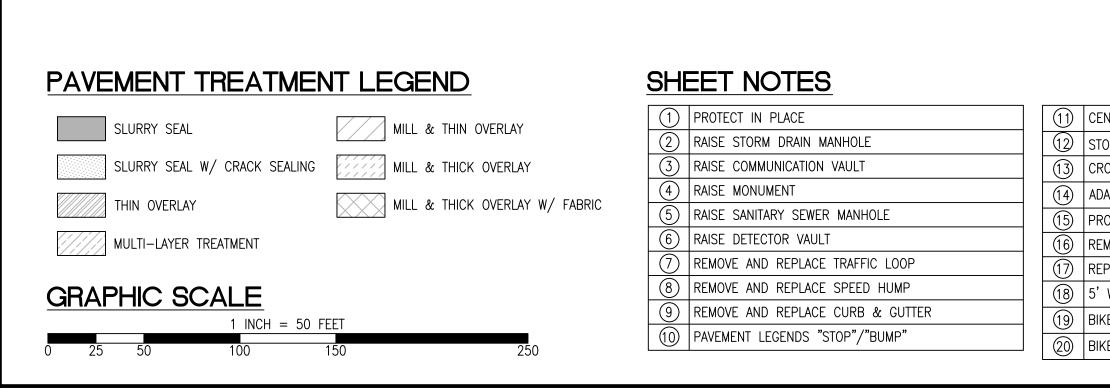


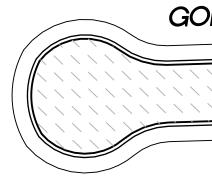
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



ILLINO

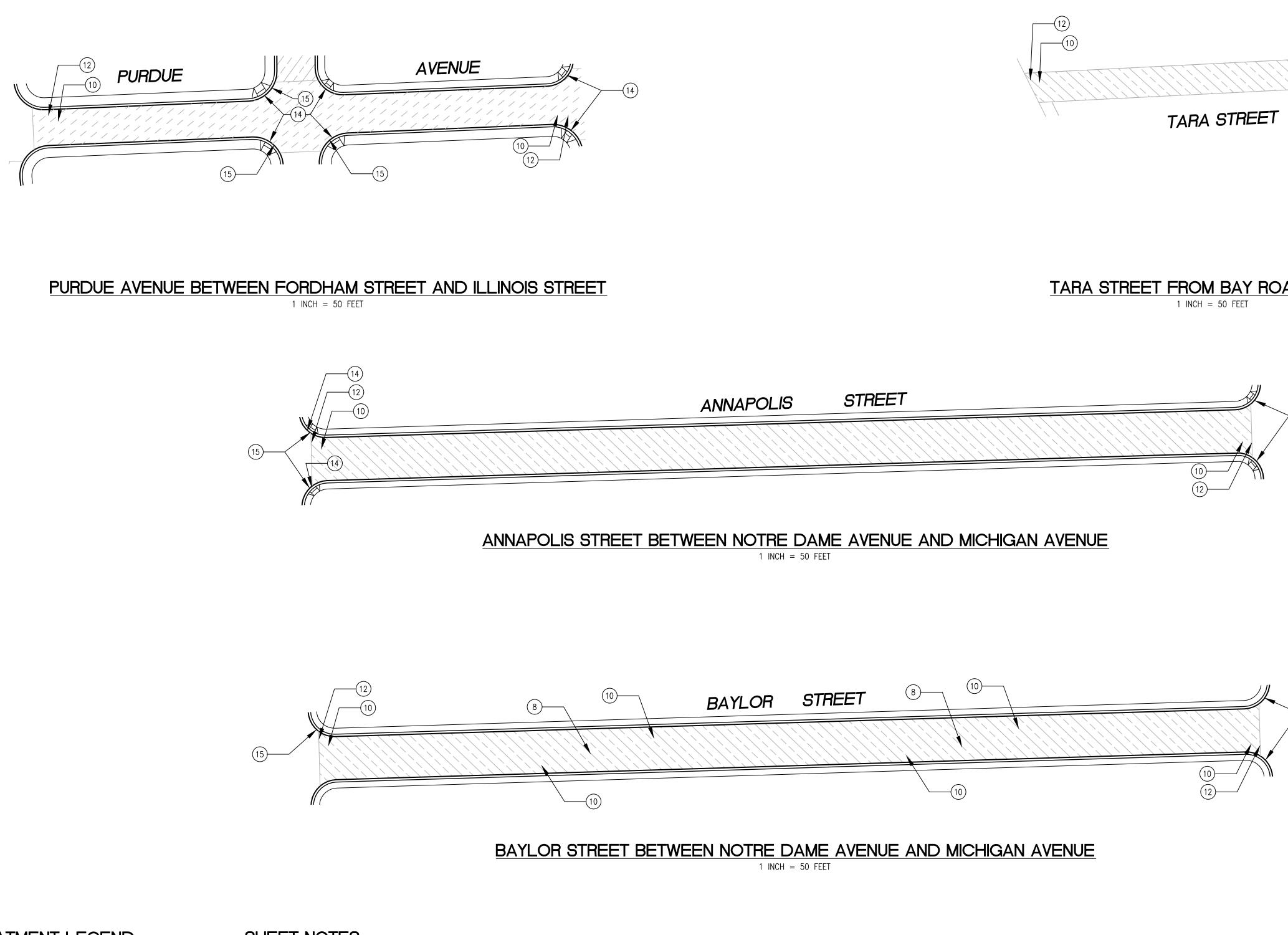


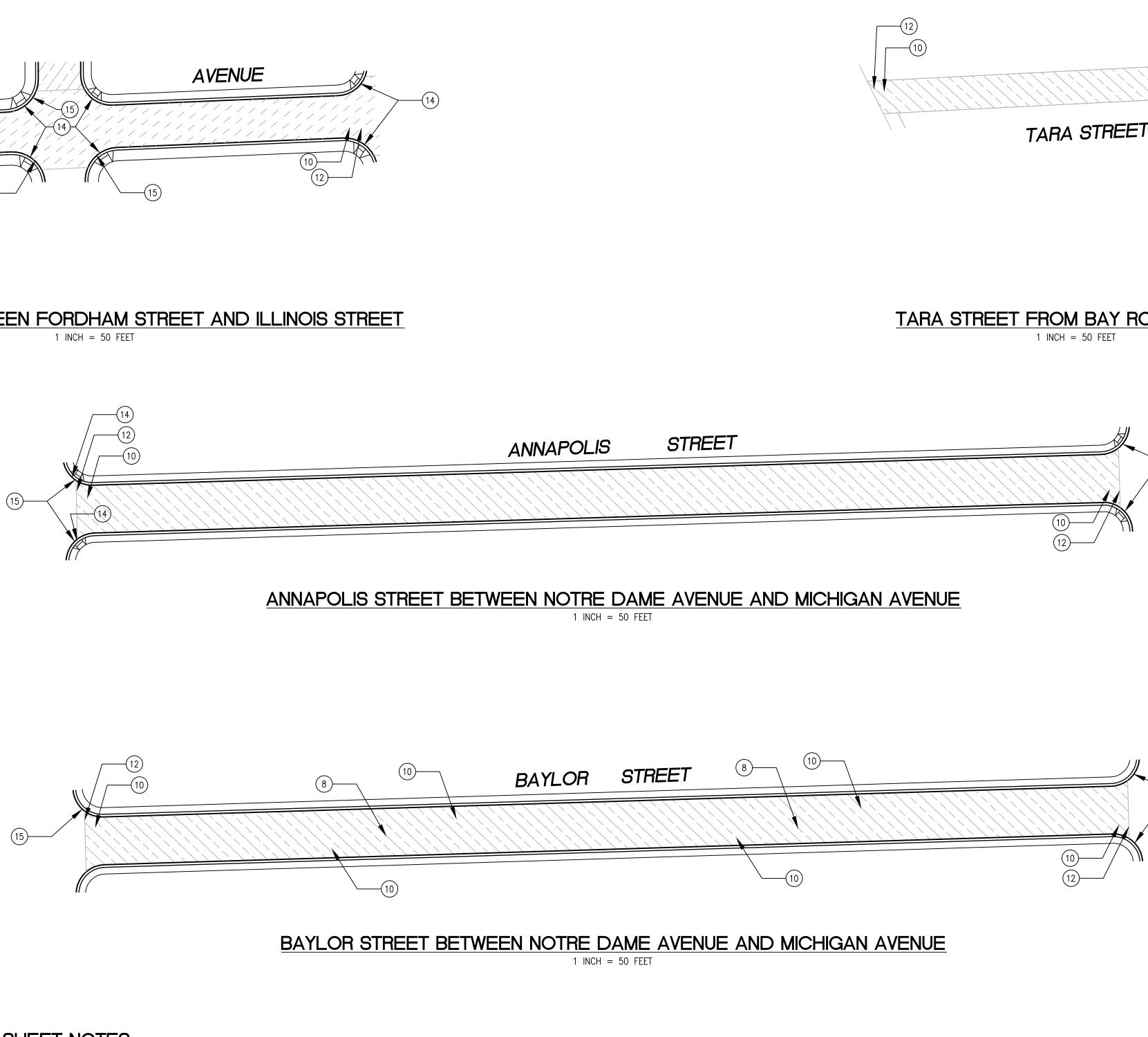


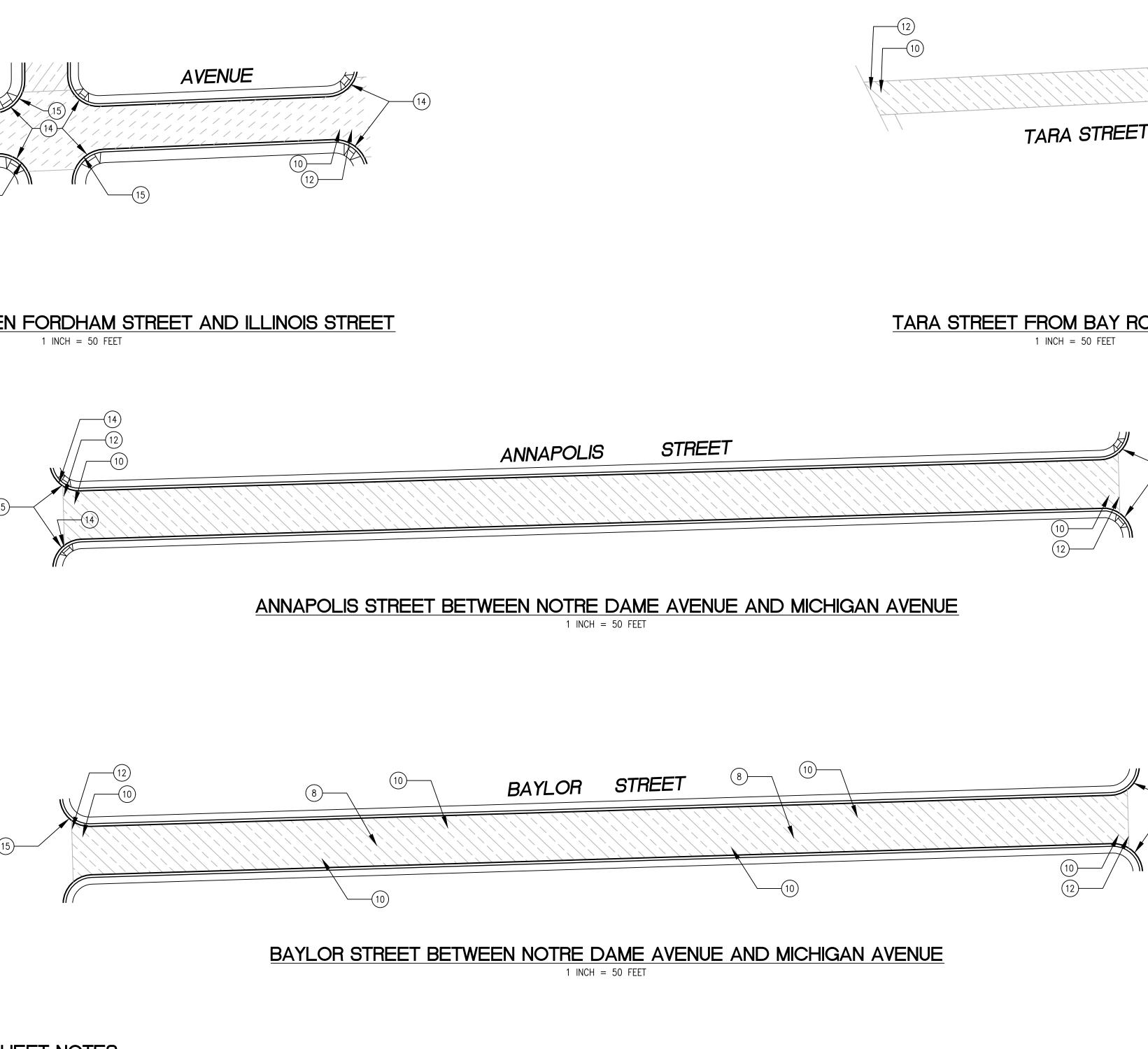


					•
VOIS STREET BETWEEN STEVENS AVENUE SCALE 1 INCH = 50 FET		(1) (1) (2) (1)		EPARED BY       CHECKED BY       OLI       DESCRIPTION OF REVISION       DATE         CITY OF EAST PALO ALTO       H. JAVED / B. ZARO       NO.       DESCRIPTION OF REVISION       DATE         DEPARTMENT OF PUBLIC WORKS       M. CORTEZ       M. CORTEZ       M. CORTEZ       M. CORTEZ       M. CORTEZ	ENGINEEHING DIVISION     SCALE       SAN MATEO COUNTY, CALIFORNIA     AS SHOWN       SAN MATEO COUNTY, CALIFORNIA     IAS TREVISION       1/18/2024     1/18/2024
NUE AND PURDUE AVENUE	GONZAGA	COURT FROM NOTRE DAME AVENUE 1         COURT FROM NOTRE DAME AVENUE 1         CALE 1 INCH = 50 FEE	1	PROJECT/JOB NUMBER	PROJECT 2024/2025
CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21) STOP BAR 12" WHITE STRIPE CROSS WALK (PER CALTRANS STANDARD A24F) ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A PROTECT DRAIN INLET IN PLACE REMOVE AND REPLACE VALLEY GUTTER REPLACE MONUMENT AND FRAME COVER 5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD) BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.) BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	<ul> <li>(2) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)</li> <li>(2) ADD "NO DUMPING, DRAINS TO BAY" STENCIL</li> <li>(2) CONSTRUCT NEW CURB &amp; GUTTER AND SIDEWALK (SEE DETAIL XX/XX )</li> <li>(2) CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )</li> <li>(2) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)</li> <li>(2) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)</li> <li>(2) Z" GRIND AND OVERLAY (SEE DETAIL XX/XX )</li> <li>(2) TYPE II SLURRY SEAL</li> <li>(2) REMOVE THERMOPLASTIC</li> <li>(2) CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )</li> <li>(3) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)</li> </ul>	③CONSTRUCT NEW SPEED HUMP (SEE DETAIL XX/XX)③③③PAVEMENT LEGENDS "SLOW SCHOOL XING" (PER CALTRANS STD. A24D)③③③GRIND AND REPLACE SPEED HUMP (SEE DETAIL XX/XX )③④③2" OVERLAY (SEE DETAIL XX, SHEET XX )⑤PEDESTRIAN CROSSING SIGN (CALTRANS SIGN W11-2)⑤IN-ROAD PEDESTRIAN CROSSING SIGN (CALTRANS SIGN R1-6)③③③NO PARKING SIGNS (CALTRANS SIGN R28 (CA))	<section-header><section-header><section-header><image/><section-header></section-header></section-header></section-header></section-header>	CT FAS	ATED

- NOT FOR CONSTRUCTION CHECKPRINT 100%







### PAVEMENT TREATMENT LEGEND

SLURRY SEAL SLURRY SEAL W/ CRACK SEALING

THIN OVERLAY

MULTI-LAYER TREATMENT

GRAPHIC SCALE 1 INCH = 50 FEET

MILL & THIN OVERLAY

MILL & THICK OVERLAY

MILL & THICK OVERLAY W/ FABRIC

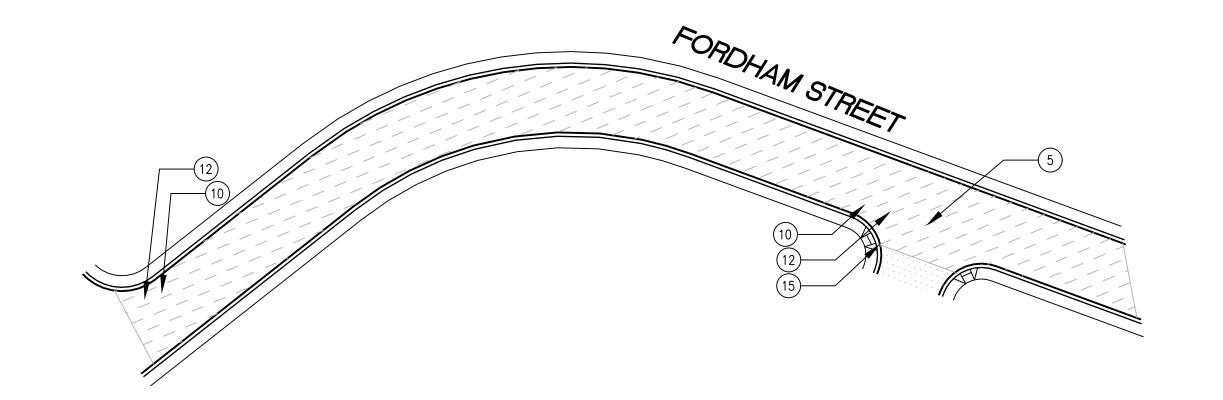
### SHEET NOTES

1	PROTECT IN PLACE	(11)	CEN
2	RAISE STORM DRAIN MANHOLE	12	STC
3	RAISE COMMUNICATION VAULT	(13)	CRO
4	RAISE MONUMENT	(14)	AD/
5	RAISE SANITARY SEWER MANHOLE	(15)	PR
6	RAISE DETECTOR VAULT	(16)	REN
$\overline{\mathcal{I}}$	REMOVE AND REPLACE TRAFFIC LOOP	(17)	REF
8	REMOVE AND REPLACE SPEED HUMP	(18)	5'
9	REMOVE AND REPLACE CURB & GUTTER	(19)	BIK
10	PAVEMENT LEGENDS "STOP"/"BUMP"	20	BIK
		 	1

NTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)		CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SPE
OP BAR 12" WHITE STRIPE	Q	2) ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS
ROSS WALK (PER CALTRANS STANDARD A24F)	2	3 CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLACE
A CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	2	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34	2" OVERLAY (SEE DE
OTECT DRAIN INLET IN PLACE	0	5) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSIN
MOVE AND REPLACE VALLEY GUTTER	2	6) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN
PLACE MONUMENT AND FRAME COVER		7) TYPE II SLURRY SEAL	(37)	NO PARKING SIGNS (
WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)		8) REMOVE THERMOPLASTIC		I
KE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)		9) CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
KE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	G	0) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		

		DATE
		DESCRIPTION OF REVISION
		9.
		CHECKED BY H. JAVED / B. ZARO DESIGNED/DRAFTED BY M. CORTEZ M. CORTEZ SCALE AS SHOWN LAST REVISION 7/18/2024
DAD TO END		CITY OF EAST PALO ALTO CITY OF EAST PALO ALTO DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION SAN MATEO COUNTY, CALIFORNIA
14		PREPARED BY CITY OF EA DEPARTMENT O ENGINEEF SAN MATEO CO
1		SHET THE UNIVERSITY VILLAGE AND BUSINESS DISTRICT RAVENSOOD BUSINESS DISTRICT PROJECT 2024/2025 PROJECT 2024/2025
		C-03.02
		project/job number ST-07-25
EED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) SPEED HUMP (SEE DETAIL XX/XX ) TAIL XX, SHEET XX ) G SIGN (CALTRANS SIGN W11-2) I CROSSING SIGN (CALTRANS SIGN R1-6) (CALTRANS SIGN R28 (CA))	CALL UTLITY NOTIFICATION CENTER OF CALIFORNIAOPENATOROPENATOROPENATORKNOW WHAT'S BELOW. CALL BEFORE YOU DIG.CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.	DE FAST PHO DE FAST PHO DE FORME DE FOR

NOT FOR CONSTRUCTION CHECKPRINT 2001



### PURDUE AVENUE FROM RUTGERS STREET TO END 1 INCH = 50 FEET

### PAVEMENT TREATMENT LEGEND

1 INCH = 50 FEET

MILL & THICK OVERLAY W/ FABRIC

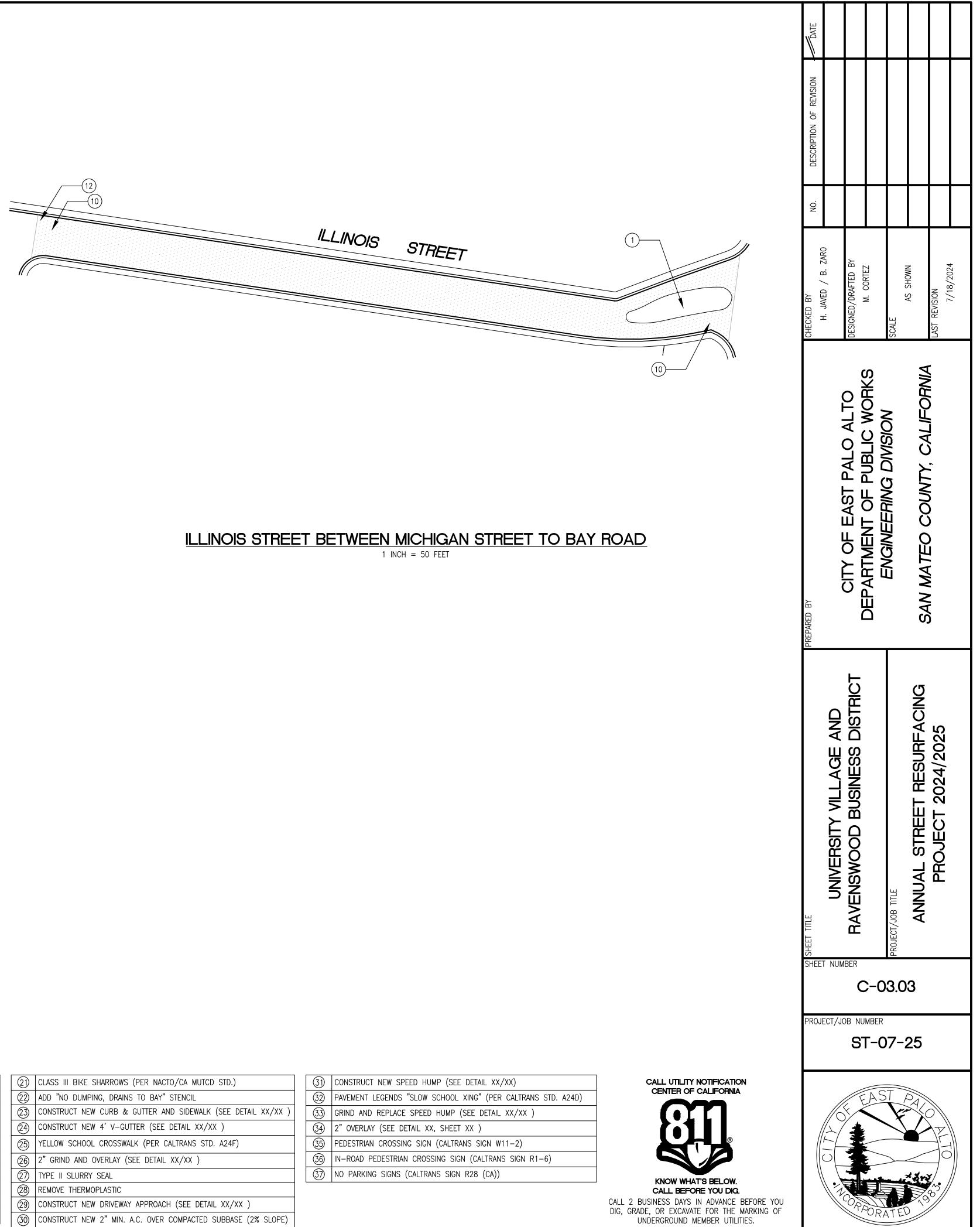
SLURRY SEAL	MILL & THIN OVERLAY
SLURRY SEAL W/ CRACK SEALING	MILL & THICK OVERLAY
THIN OVERLAY	MILL & THICK OVERLAY
MULTI-LAYER TREATMENT	
GRAPHIC SCALE	

25

### <u>SHEET NOTES</u>

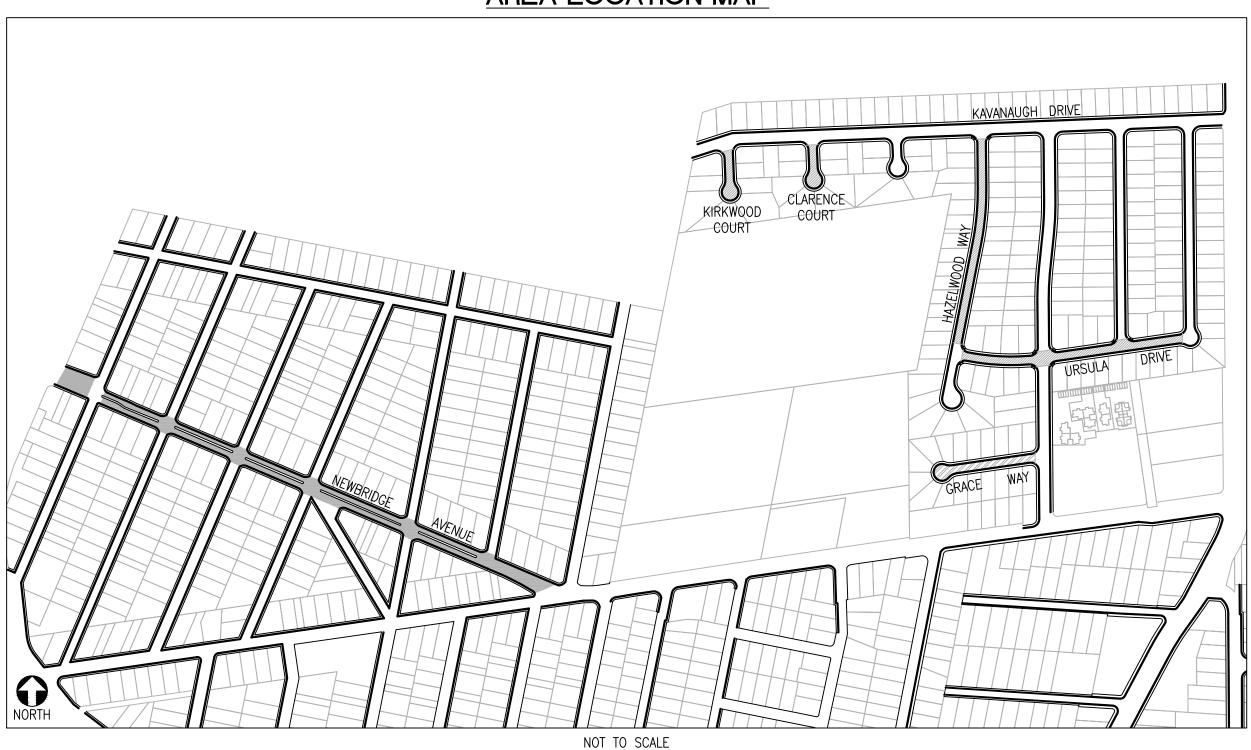
1 PROTECT IN PLACE	(1) CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	(21) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	(31) CONSTRUC
2 RAISE STORM DRAIN MANHOLE	12 STOP BAR 12" WHITE STRIPE	(22) ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32 PAVEMENT
3 RAISE COMMUNICATION VAULT	(13) CROSS WALK (PER CALTRANS STANDARD A24F)	(23) CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX)	(33) GRIND AND
(4) RAISE MONUMENT	(14) ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	(24) CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34) 2" OVERLA
5 RAISE SANITARY SEWER MANHOLE	(15) PROTECT DRAIN INLET IN PLACE	25       YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35 PEDESTRIA
6 RAISE DETECTOR VAULT	(16) REMOVE AND REPLACE VALLEY GUTTER	(26) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	(36) IN-ROAD F
REMOVE AND REPLACE TRAFFIC LOOP	(17) REPLACE MONUMENT AND FRAME COVER	(27) TYPE II SLURRY SEAL	(37) NO PARKIN
8 REMOVE AND REPLACE SPEED HUMP	(18) 5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	<b>)</b>	
9 REMOVE AND REPLACE CURB & GUTTER	(19) BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	28 REMOVE THERMOPLASTIC	
(10) PAVEMENT LEGENDS "STOP"/"BUMP"	(20) BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	(29) CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX)	
		30 CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)	
	RELATIVE BORDER SCALE IS IN INCHES		

0 0.5 1.0 NOTE: IF THIS LINE DOES NOT MEASURE 1 INCH, THESE PLANS ARE NOT TO SCALE.



# ST-07-25: ANNUAL STREET RESURFACING PROJECT 2024/2025 KAVANAUGH NEIGHBORHOOD LOCATION MAP AND STREETS LIST

### AREA LOCATION MAP



### PAVEMENT TREATMENT LEGEND

SLURRY SEAL

SLURRY SEAL W/ CRACK SEALING

THIN OVERLAY

MULTI-LAYER TREATMENT

MILL & THICK OVERLAY

MILL & THIN OVERLAY

MILL & THICK OVERLAY W/ FABRIC

### SHEET NOTES

<u> </u>					
1	PROTECT IN PLACE	(1) CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	(2) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SPEED
2	RAISE STORM DRAIN MANHOLE	① STOP BAR 12" WHITE STRIPE	(22) ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS "SI
3	RAISE COMMUNICATION VAULT	(13) CROSS WALK (PER CALTRANS STANDARD A24F)	(23) CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX)	33	GRIND AND REPLACE S
$\vdash$	RAISE MONUMENT	(14) ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24 CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34)	2" OVERLAY (SEE DETA
(5)	RAISE SANITARY SEWER MANHOLE	15 PROTECT DRAIN INLET IN PLACE	(25) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	(35)	PEDESTRIAN CROSSING
6	RAISE DETECTOR VAULT	16 REMOVE AND REPLACE VALLEY GUTTER	(26) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN C
(7	REMOVE AND REPLACE TRAFFIC LOOP	(17) REPLACE MONUMENT AND FRAME COVER	(27) TYPE II SLURRY SEAL		NO PARKING SIGNS (CA
8	REMOVE AND REPLACE SPEED HUMP	(18) 5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28) REMOVE THERMOPLASTIC		
9	REMOVE AND REPLACE CURB & GUTTER	(19) BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)			
10	PAVEMENT LEGENDS "STOP"/"BUMP"	20) BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	(29) CONSTRUCT NEW DRIVEWAT AFTROACT (SEE DETAIL XX/XX )		
		J CO DIRE DAVID DASITLU GREEN LANE (I ER NACTO/CA MOTOD STU.)	30 CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		

### STREETS LIST

SHEET NO.	STREET NAME	BEGINNING	END	TREATMENT
C-04.01	URSULA WAY	HAZELWOOD WAY	EMMETT WAY	MILL & THICK OVERLAY
C-04.01	HAZELWOOD WAY	KAVANAUGH DRIVE	URSULA WAY	MILL & THICK OVERLAY
C-04.02	KIRKWOOD COURT	KAVANAUGH DRIVE	END	MILL & THICK OVERLAY
C-04.02	CLARENCE COURT	KAVANAUGH DRIVE	END	MILL & THICK OVERLAY
C-04.02	GRACE AVENUE	GLORIA WAY	END	THIN OVERLAY
C-04.02	KAVANAUGH DRIVE	KIRKWOOD COURT	EMMETT WAY	SPEED HUMPS
C-04.03	NEWBRIDGE STREET	CITY LIMIT	SARATOGA AVENUE	SLURRY SEAL W/ CRACK SEALING
C-04.03	NEWBRIDGE STREET	SARATOGA AVENUE	RALMAR AVENUE	SLURRY SEAL W/ CRACK SEALING

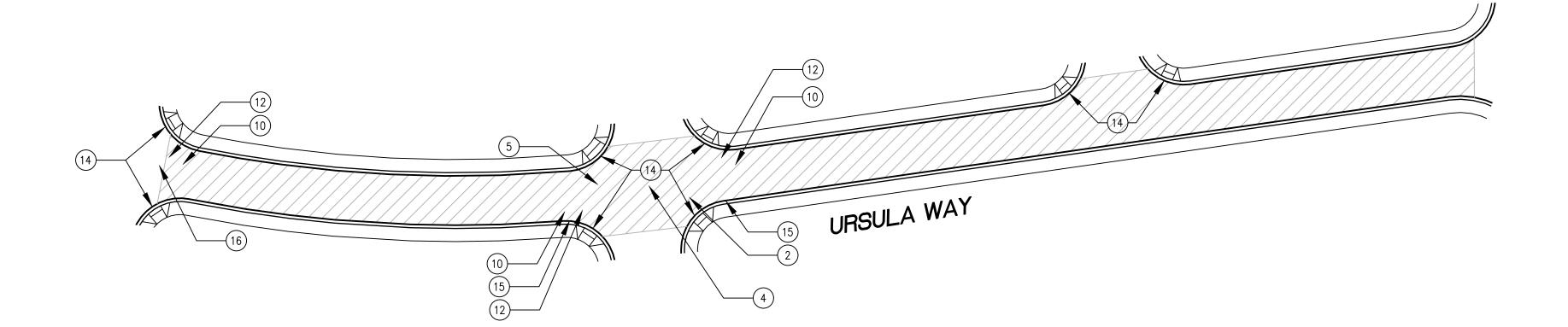
DATE							
DESCRIPTION OF REVISION							
NO.							
CHECKED BY H IAVED / R 7ARO		DESIGNED/DRAFTED BY	M. CORIEZ	SCALE	NMOLIC CA	LAST REVISION	+202/01/1
PREPARED BY					SAN MATEO COUNTY CALIFORNIA		
요 SHEET TITLE 프	KAVANAUGH NEIGHBORHOOD			PROJECT/JOB TITLE	ANNUAL STREET RESURFACING	PROJECT 2024/2025	
				4.0	0		
	ST-07-25						
	THE FAST PHO THE FAST PHO THE THE THE THE THE THE THE THE THE THE						

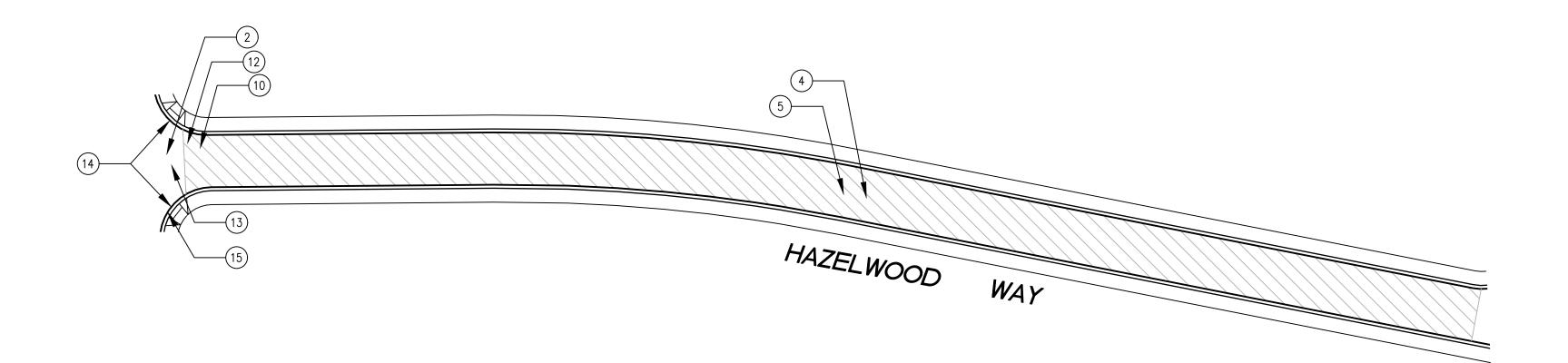
PEED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) SPEED HUMP (SEE DETAIL XX/XX ) ETAIL XX, SHEET XX ) NG SIGN (CALTRANS SIGN W11–2) N CROSSING SIGN (CALTRANS SIGN R1–6) (CALTRANS SIGN R28 (CA))

CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA



KNOW WHAT'S BELOW. CALL BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.







NORTH

### PAVEMENT TREATMENT LEGEND

SLURRY SEAL SLURRY SEAL W/ CRACK SEALING THIN OVERLAY

MULTI-LAYER TREATMENT

GRAPHIC SCALE							
			1 INCH =	50 FEET			
0	25	50	100	150		250	

MILL & THIN OVERLAY

MILL & THICK OVERLAY

MILL & THICK OVERLAY W/ FABRIC

### SHEET NOTES

	PROTECT IN PLACE		CE
2	RAISE STORM DRAIN MANHOLE	(12)	ST
3	RAISE COMMUNICATION VAULT	(13)	CF
4	RAISE MONUMENT	(14)	AD
5	RAISE SANITARY SEWER MANHOLE	(15)	PF
6	RAISE DETECTOR VAULT	(16)	RE
7	REMOVE AND REPLACE TRAFFIC LOOP	(17)	RE
8	REMOVE AND REPLACE SPEED HUMP	(18)	5'
9	REMOVE AND REPLACE CURB & GUTTER	(19)	BI
10	PAVEMENT LEGENDS "STOP"/"BUMP"	$\overline{\bigcirc}$	BI
		L CO	1.00

# URSULA WAY BETWEEN HAZELWOOD WAY AND EMMETT WAY SCALE: 1 INCH = 50 FEET

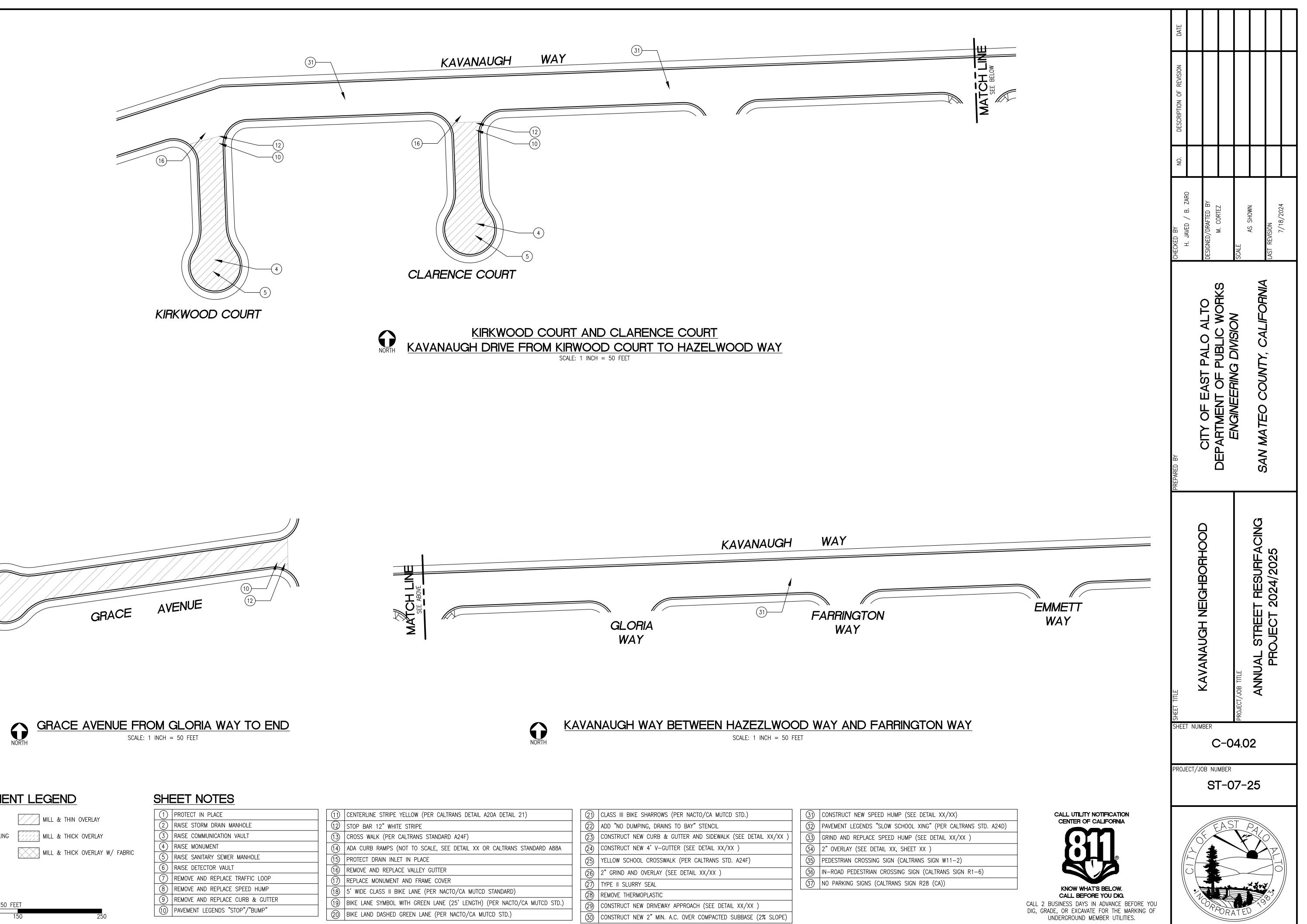
## HAZELWOOD WAY BETWEEN KAVANAUGH DRIVE AND URSULA WAY SCALE: 1 INCH = 50 FEET

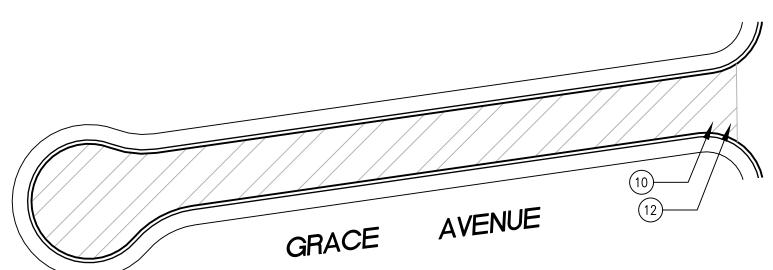
(3) CONSTRUCT NEW SPEED HUMP (SEE DETAIL XX/XX) CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21) (21) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.) (32) PAVEMENT LEGENDS "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) (22) ADD "NO DUMPING, DRAINS TO BAY" STENCIL STOP BAR 12" WHITE STRIPE (23) CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX) CROSS WALK (PER CALTRANS STANDARD A24F) (33) GRIND AND REPLACE SPEED HUMP (SEE DETAIL XX/XX) CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX ) ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A (34) 2" OVERLAY (SEE DETAIL XX, SHEET XX ) (35) PEDESTRIAN CROSSING SIGN (CALTRANS SIGN W11-2) (25) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F) PROTECT DRAIN INLET IN PLACE REMOVE AND REPLACE VALLEY GUTTER (36) IN-ROAD PEDESTRIAN CROSSING SIGN (CALTRANS SIGN R1-6) (26) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX ) REPLACE MONUMENT AND FRAME COVER (37) NO PARKING SIGNS (CALTRANS SIGN R28 (CA)) (27) TYPE II SLURRY SEAL ' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD) REMOVE THERMOPLASTIC 28) BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.) CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX ) (29)BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.) (30) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)

DATE						
DESCRIPTION OF REVISION						
NO.						
CHECKED BY H. JAVED / B. ZARO	DESIGNED/DRAFTED BY M. CORTEZ	SCALE AS SHOWN	LAST REVISION 7/18/2024			
PREPARED BY	DEPARTMENT OF PUBLIC WORKS		SAN MALEO COUNTY, CALIFORNA			
		PROJECT/JOB TITLE ANNUAL STREET RESURFACING	PROJECT 2024/2025			
SHEET NUM		94.01				
project/job number ST-07-25						
CITY CITY	ST-07-25					

KNOW WHAT'S BELOW. CALL BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA



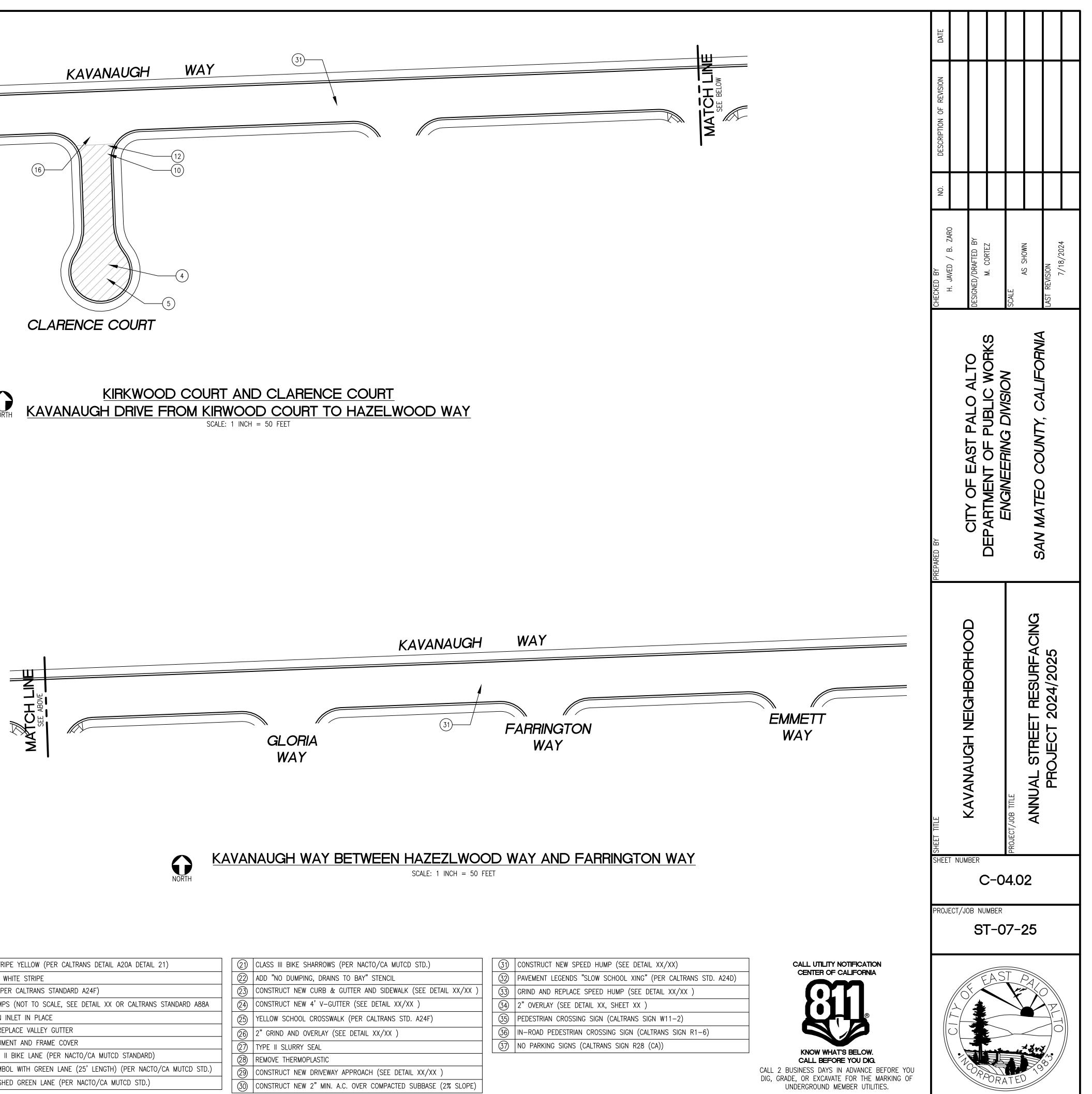




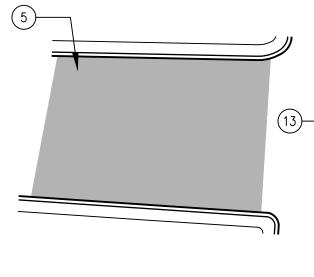
### PAVEMENT TREATMENT LEGEND

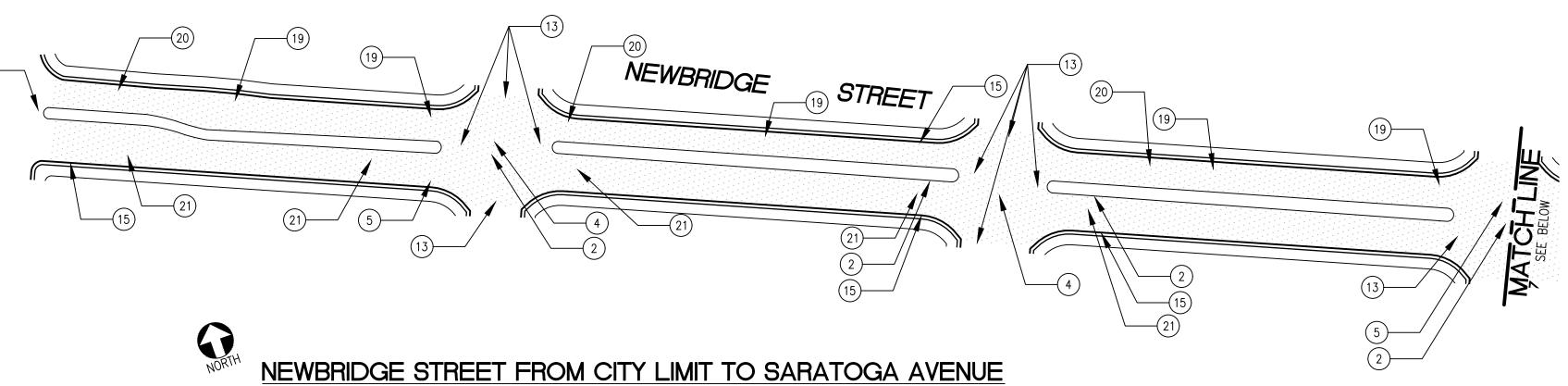
### MILL & THIN OVERLAY SLURRY SEAL SLURRY SEAL W/ CRACK SEALING MILL & THICK OVERLAY THIN OVERLAY MILL & THICK OVERLAY W/ FABRIC MULTI-LAYER TREATMENT **GRAPHIC SCALE** 1 INCH = 50 FEET

SHELT NOTES			
1 PROTECT IN PLACE	(1) CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	(2) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	(31) CONSTRUCT NEW SPEED
2 RAISE STORM DRAIN MANHOLE	12 STOP BAR 12" WHITE STRIPE	22 ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32 PAVEMENT LEGENDS "SL
3 RAISE COMMUNICATION VAULT	(13) CROSS WALK (PER CALTRANS STANDARD A24F)	(23) CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33 GRIND AND REPLACE SF
4 RAISE MONUMENT	(14) ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	(24) CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34) 2" OVERLAY (SEE DETAI
5 RAISE SANITARY SEWER MANHOLE	15 PROTECT DRAIN INLET IN PLACE	(25) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35 PEDESTRIAN CROSSING
6 RAISE DETECTOR VAULT	16 REMOVE AND REPLACE VALLEY GUTTER	(26) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	(36) IN-ROAD PEDESTRIAN C
(7) REMOVE AND REPLACE TRAFFIC LOOP	(17) REPLACE MONUMENT AND FRAME COVER	(27) TYPE II SLURRY SEAL	(37) NO PARKING SIGNS (CA
<ul> <li>(8) REMOVE AND REPLACE SPEED HUMP</li> <li>(9) REMOVE AND REPLACE CURB &amp; GUTTER</li> </ul>		(28) REMOVE THERMOPLASTIC	
(10) PAVEMENT LEGENDS "STOP"/"BUMP"		(29) CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )	
THE FAVENCIAL ELGENDS STOP / BOMP	20 BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	(3) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)	

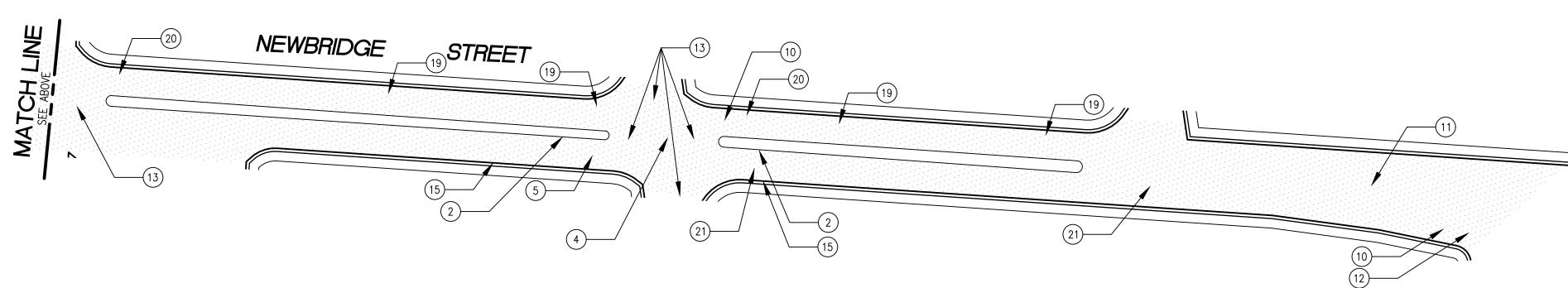


CONSTRUCTION FOR NOT I CHECKPRINT 100%











1 INCH = 50 FEET

## SLURRY SEAL SLURRY SEAL W/ CRACK SEALING THIN OVERLAY MULTI-LAYER TREATMENT

25

GRAPHIC SCALE

		MILL	&	THIN	OVERLAY
ING	(	MILL	&	THICK	OVERLAY

MILL & THICK OVERLAY W/ FABRIC

SHEET NOTES

	PROTECT IN PLACE	(	11	CEI
2	RAISE STORM DRAIN MANHOLE	(	12	STO
3	RAISE COMMUNICATION VAULT	(	13	CR
4	RAISE MONUMENT	(	14)	AD/
5	RAISE SANITARY SEWER MANHOLE	(	<u></u> [15]	PR
6	RAISE DETECTOR VAULT	(	16)	REI
$\overline{)}$	REMOVE AND REPLACE TRAFFIC LOOP	(	17)	REF
8	REMOVE AND REPLACE SPEED HUMP	(	18)	5'
9	REMOVE AND REPLACE CURB & GUTTER		<u></u> 19	BIK
10	PAVEMENT LEGENDS "STOP"/"BUMP"		20)	BIK
			$\sim$	

# NEWBRIDGE STREET FROM SARATOGA AVENUE TO RALMAR AVENUE SCALE: 1 INCH = 50 FEET

NEWBRIDGE STREET FROM SARATOGA AVENUE TO RALMAR AVENUE SCALE: 1 INCH = 50 FEET

NTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	(21) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SPEED HUMP (SEE DETAIL XX/
DP BAR 12" WHITE STRIPE	(22) ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS "SLOW SCHOOL XING" (PER
OSS WALK (PER CALTRANS STANDARD A24F)	(23)       CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLACE SPEED HUMP (SEE DETAIL
A CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24 CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34)	2" OVERLAY (SEE DETAIL XX, SHEET XX )
OTECT DRAIN INLET IN PLACE	(25) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSING SIGN (CALTRANS SIGN W1
MOVE AND REPLACE VALLEY GUTTER	(26) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN CROSSING SIGN (CALTRANS
PLACE MONUMENT AND FRAME COVER	(27) TYPE II SLURRY SEAL	37	NO PARKING SIGNS (CALTRANS SIGN R28 (CA))
WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28) REMOVE THERMOPLASTIC		1
E LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29) CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
E LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	(30) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		

DATE							
DESCRIPTION OF REVISION							
ON							
CHECKED BY H. JAVED / B. ZARO	DESIGNED/DRAFTED BY M. CORTEZ	SCALE AS SHOWN		LAST REVISION			
PREPARED BY	DEPARTMENT OF PUBLIC WORKS		SAN MATEO COUNTY CALIFORNIA				
SHEET TITLE VANALIOU NICIOUDODODODO VANALIOU NICIOUDODODODO		PROJECT/JOB TITLE	ANNUAL STREET RESURFACING	PROJECT 2024/2025			
SHEET NUMBER C-04.03							
PROJECT/JOB NUMBER ST-07-25							
AST PARA DO FAST P							

PEED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) E SPEED HUMP (SEE DETAIL XX/XX ) DETAIL XX, SHEET XX ) NG SIGN (CALTRANS SIGN W11–2) N CROSSING SIGN (CALTRANS SIGN R1–6)

CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA



KNOW WHAT'S BELOW. CALL BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

# ST-07-25: ANNUAL STREET RESURFACING PROJECT 2024/2025 PALO ALTO PARK NEIGHBORHOOD AREA LOCATION MAP AND STREETS LIST

### AREA LOCATION MAP



## SLURRY SEAL SLURRY SEAL W/ CRACK SEALING THIN OVERLAY MULTI-LAYER TREATMENT

## **GRAPHIC SCALE** 1 INCH = 50 FEET

MILL & THIN OVERLAY

MILL & THICK OVERLAY

MILL & THICK OVERLAY W/ FABRIC

### SHEET NOTES

(1) PROTECT IN PLACE	(1) CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	(21) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	(31) CONSTRUCT NEW SPEED
2 RAISE STORM DRAIN MANHOLE	12 STOP BAR 12" WHITE STRIPE	22 ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32 PAVEMENT LEGENDS "SL
3 RAISE COMMUNICATION VAULT	(13)   CROSS WALK (PER CALTRANS STANDARD A24F)	(23) CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX)	(33) GRIND AND REPLACE SF
(4) RAISE MONUMENT	(1) ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	(24) CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	(34) 2" OVERLAY (SEE DETA
(5) RAISE SANITARY SEWER MANHOLE	15 PROTECT DRAIN INLET IN PLACE	(25) YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	(35) PEDESTRIAN CROSSING
(6) RAISE DETECTOR VAULT	16 REMOVE AND REPLACE VALLEY GUTTER	(26) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	(36) IN-ROAD PEDESTRIAN C
(7) REMOVE AND REPLACE TRAFFIC LOOP	17 REPLACE MONUMENT AND FRAME COVER	(27) TYPE II SLURRY SEAL	(37) NO PARKING SIGNS (CA
(8)       REMOVE AND REPLACE SPEED HUMP         (9)       REMOVE AND REPLACE CURB & GUTTER	18 5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	28 REMOVE THERMOPLASTIC	
(10) PAVEMENT LEGENDS "STOP"/"BUMP"	19 BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	29 CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )	
	20 BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	(30) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)	

### STREETS LIST

SHEET NO.	STREET NAME	BEGINNING	END	TREATMENT
C-05.01	LINCOLN STREET	EAST BAYSHORE ROAD	OAKDALE ROAD	MULTI-LAYER TREATMENT
C-05.01	OAKDALE ROAD	LINCOLN STREET	PALO VERDE AVENUE	MILL & THICK OVERLAY
C-05.01	PALO VERDE AVENUE	OAKDALE ROAD	LILAC LANE	SLURRY SEAL
C-05.01	PALO VERDE AVENUE	LILAC LANE	BAY ROAD	SLURRY SEAL
C-05.01	POPLAR AVENUE	EAST BAYSHORE ROAD	GARDEN STREET	SLURRY SEAL
C-05.01	LAUREL AVENUE	HOLLAND STREET	BAY ROAD	MILL & THICK OVERLAY
C-05.01	POPLAR AVENUE	GARDEN STREET	BAY ROAD	MILL & THICK OVERLAY
C-05.02	OAKWOOD DRIVE	BELL STREET	BAY ROAD	SLURRY SEAL
C-05.02	DUMBARTON AVENUE	BELL STREET	PALO VERDE AVENUE	SLURRY SEAL W/ CRACK SEALING
C-05.02	DUMBARTON AVENUE	PALO VERDE AVENUE	BAY ROAD	MILL & THICK OVERLAY
C-05.03	EUCLID AVENUE	EAST BAYSHORE ROAD	BELL STREET	MILL & THICK OVERLAY W/ FABRIC
C-05.03	EUCLID AVENUE	BELL STREET	RUNNYMEDE STREET	SLURRY SEAL W/ CRACK SEALING
C-05.03	LINCOLN STREET	EAST BAYSHORE ROAD	BELL STREET	MULTI-LAYER TREATMENT
C-05.04	WEEKS STREET	UNIVERSITY AVENUE	END	SLURRY SEAL
C-05.04	SACRAMENTO STREET	UNIVERSITY AVENUE	END	SLURRY SEAL
C-05.04	GREEN STREET	LINCOLN STREET	GLEN WAY	THIN OVERLAY
C-05.04	RALMAR AVENUE	EAST BAYSHORE ROAD	GARDEN STREET	MILL & THICK OVERLAY
C-05.04	BELL STREET	LINCOLN STREET	EUCLID AVENUE	MILL & THICK OVERLAY W/ FABRIC
C-05.04	OAKWOOD STREET	EAST BAYSHORE ROAD	BELL STREET	MULTI-LAYER TREATMENT

DATE								
DESCRIPTION OF REVISION								
NO.								
CHECKED BY H. JAVED / B. ZARO	DESIGNED/DRAFTED BY M. CORTEZ	SCALE AS SHOWN LAST REVISION 7/18/2024						
PREPARED BY	DEPARTMENT OF PUBLIC WORKS	SAN MATEO COUNTY, CALIFORNIA						
SHEE	LO ALTO PARK NEIGHBORHOOD CATION MAP AND STREETS LIST ©™ IIII NNUAL STREET RESURFACING PROJECT 2024/2025							
C-05.00 PROJECT/JOB NUMBER								
ST-07-25								
EAST PHO DECEMBER 100 DECEMBER								

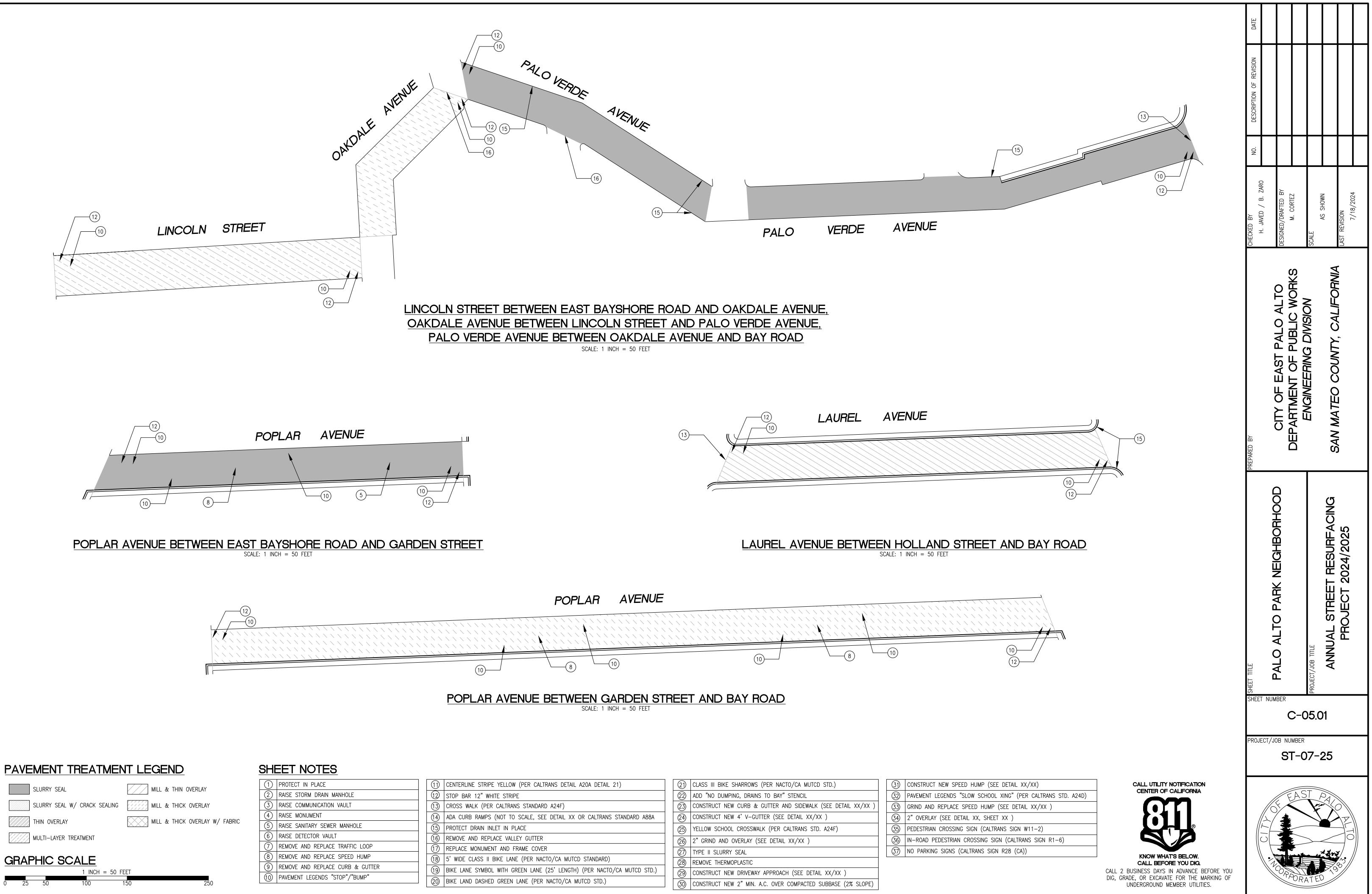
CONSTRUCTION FOR NOT CHECKPRINT 200%

PEED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) SPEED HUMP (SEE DETAIL XX/XX ) ETAIL XX, SHEET XX ) NG SIGN (CALTRANS SIGN W11–2) N CROSSING SIGN (CALTRANS SIGN R1-6) (CALTRANS SIGN R28 (CA))

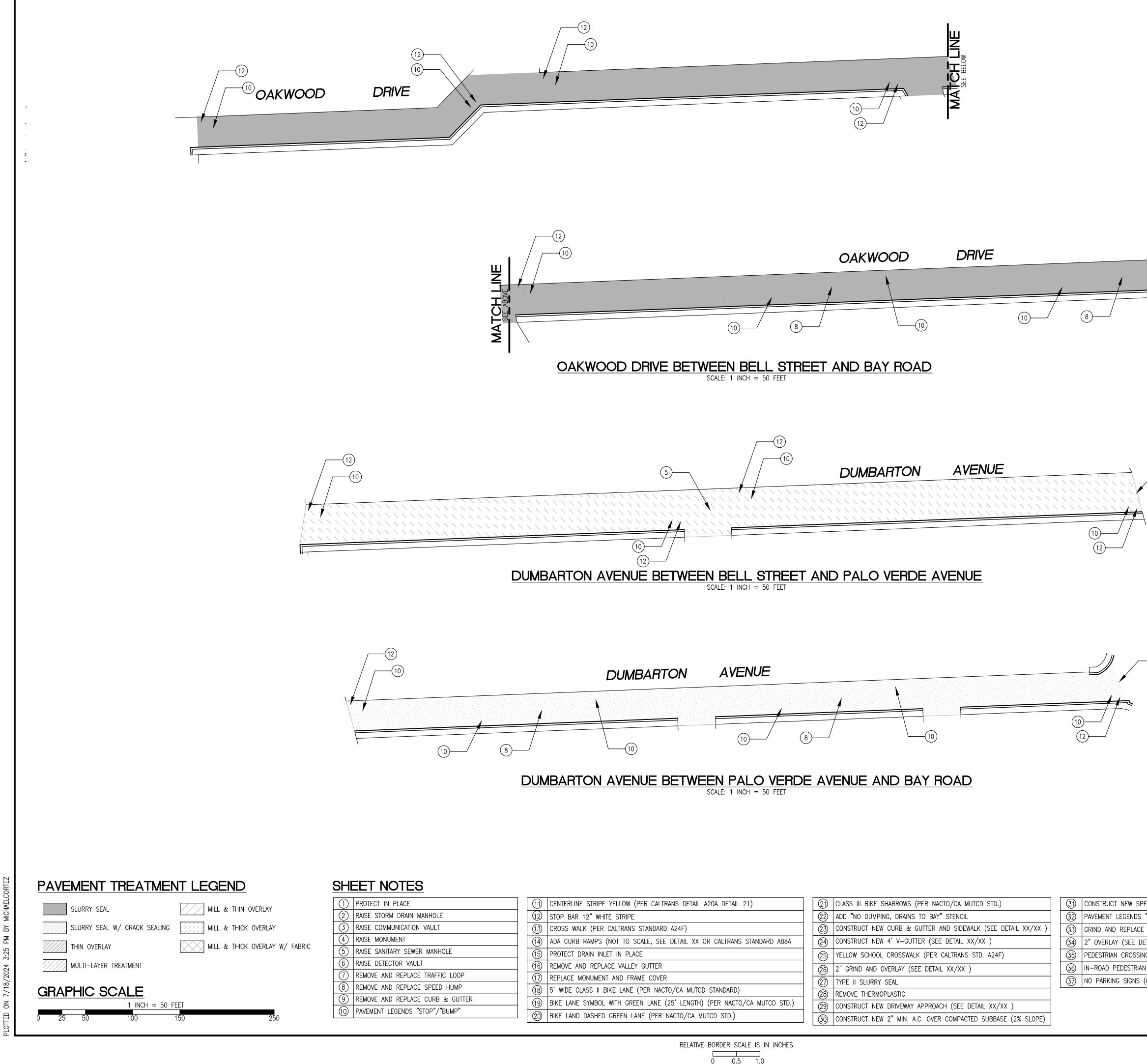
CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA



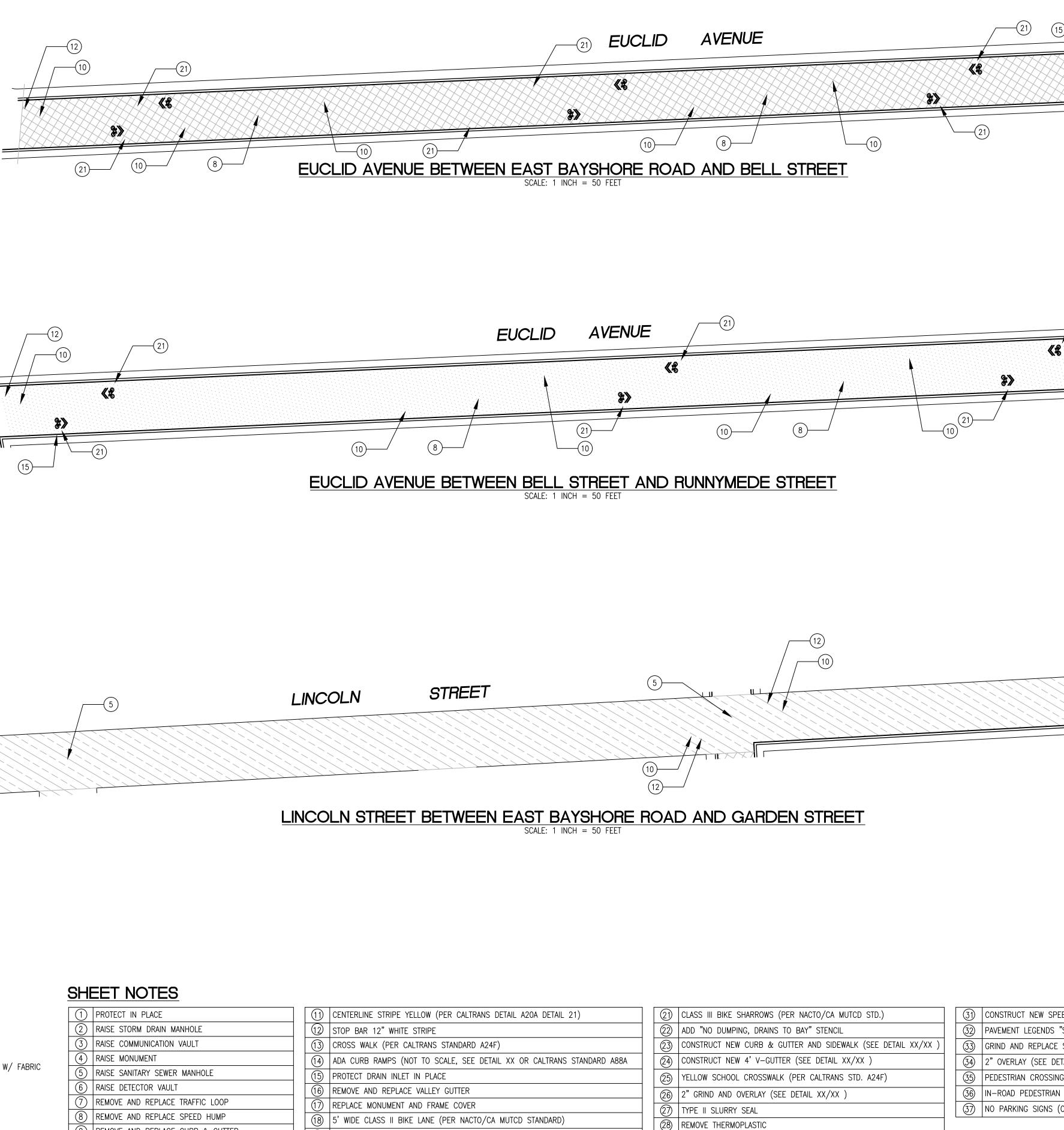
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

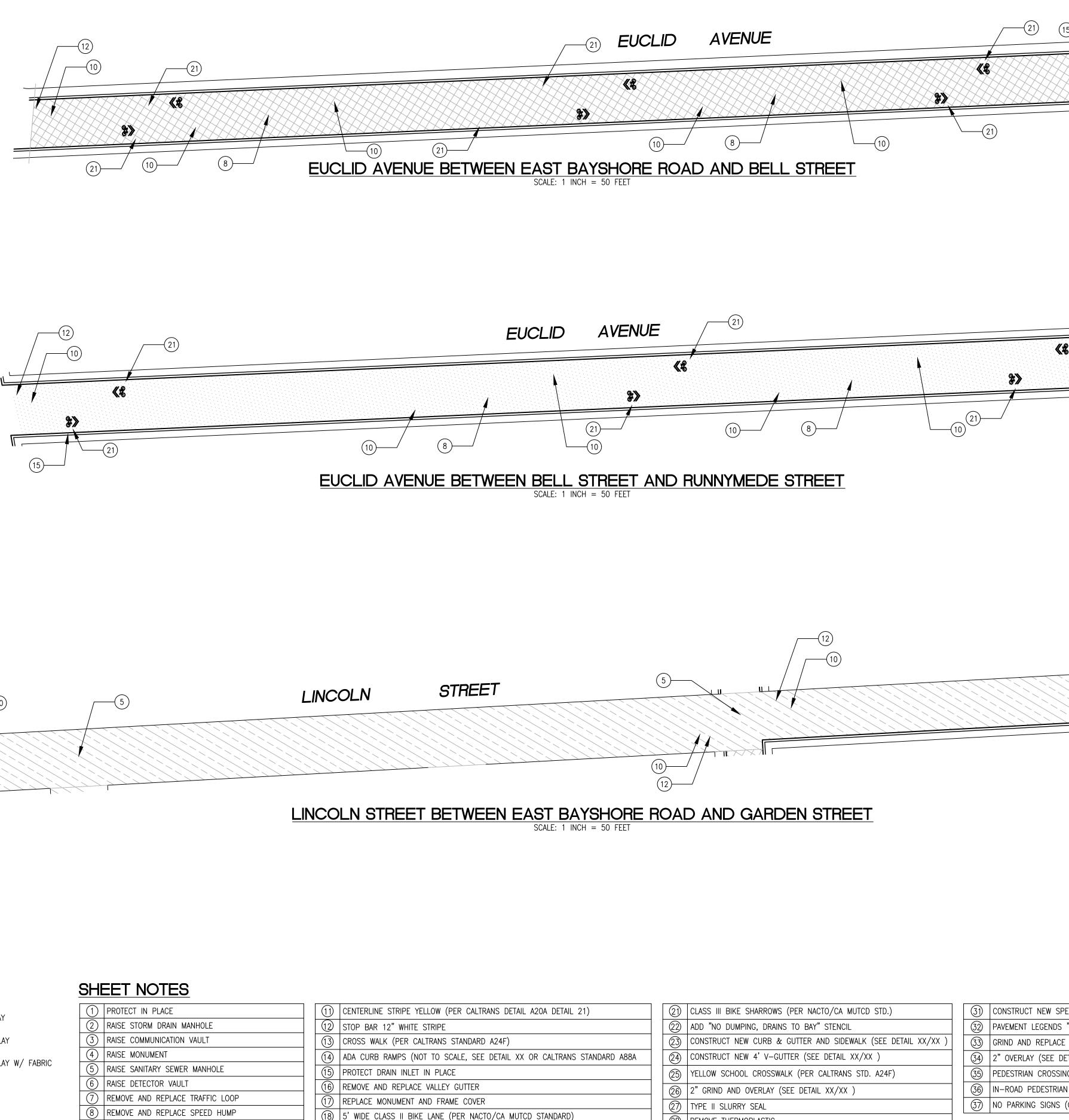


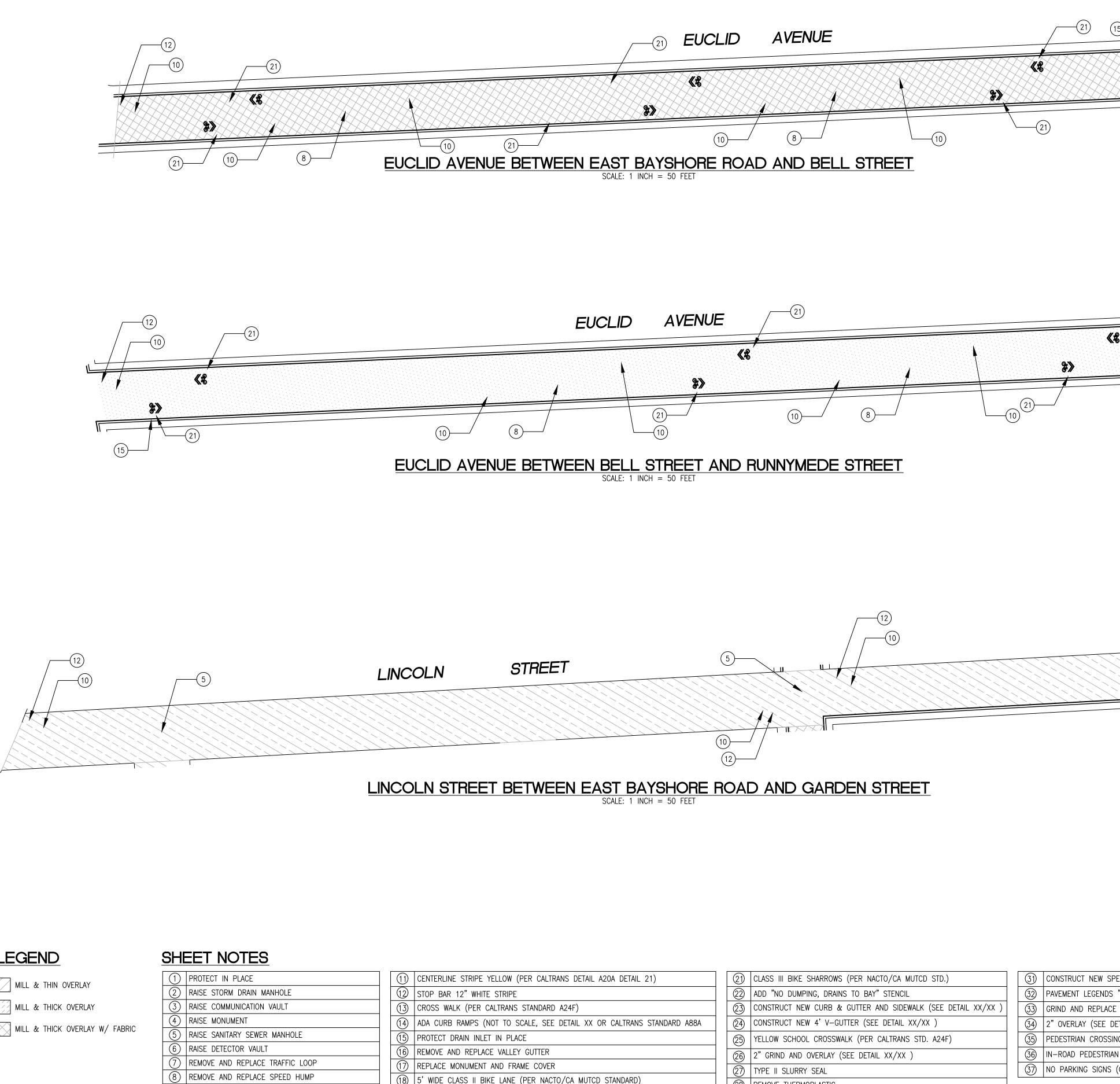
CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SPEED
STOP BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS "SI
CROSS WALK (PER CALTRANS STANDARD A24F)	23	CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLACE SI
ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24)	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34)	2" OVERLAY (SEE DETA
PROTECT DRAIN INLET IN PLACE	25	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSING
REMOVE AND REPLACE VALLEY GUTTER	(26)	2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN C
REPLACE MONUMENT AND FRAME COVER	(27)	TYPE II SLURRY SEAL	(37)	NO PARKING SIGNS (CA
' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28)	REMOVE THERMOPLASTIC		I
BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29)	CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	$\vdash$	CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		
	L			

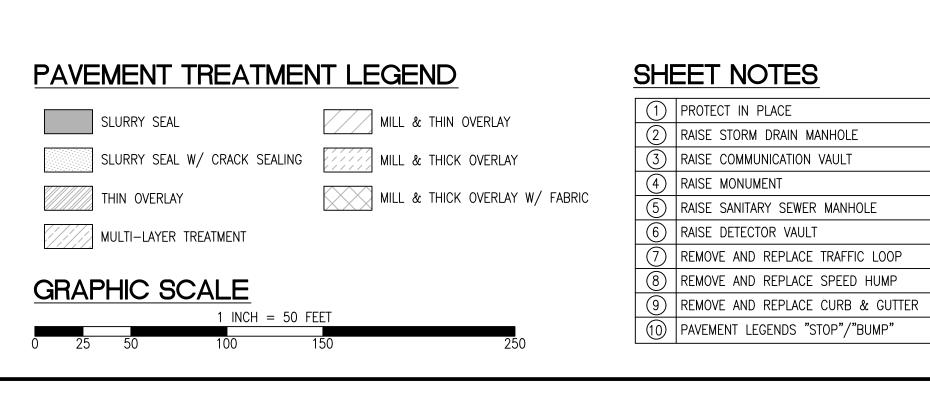


	DESCRIPTION OF REVISION DATE	
	CHECKED BY H. JAVED / B. ZARO DESIGNED/DRAFTED BY M. CORTEZ	SCALE AS SHOWN LAST REVISION 7/18/2024
OAKWOOD DRIVE BETWEEN BELL STREET AND BAY ROAD SOLE I NCH = 50 FET	PREPARED BY CITY OF EAST PALO ALTO DEPARTMENT OF PUBLIC WORKS FNGINFFRING DIVISION	SAN MATEO COUNTY, CALIFORNIA
BARTON AVENUE BETWEEN PALO VERDE AVENUE BARTON AVENUE BARTON AVENUE BARTON AVENUE BARTON AVENUE BETWEEN PALO VERDE AVENUE AND BAY ROAD SALE 1 MOH = 50 FIET	Palo alto Park Neighborhood	PROJECT/JOB TITE ANNAL STREET RESURFACING PROJECT 2024/2025
	SHEET NUMBER C-OS PROJECT/JOB NUMBER ST-OZ	
CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	DE EAST DE EAS	TED 1983









CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX)

(30) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)

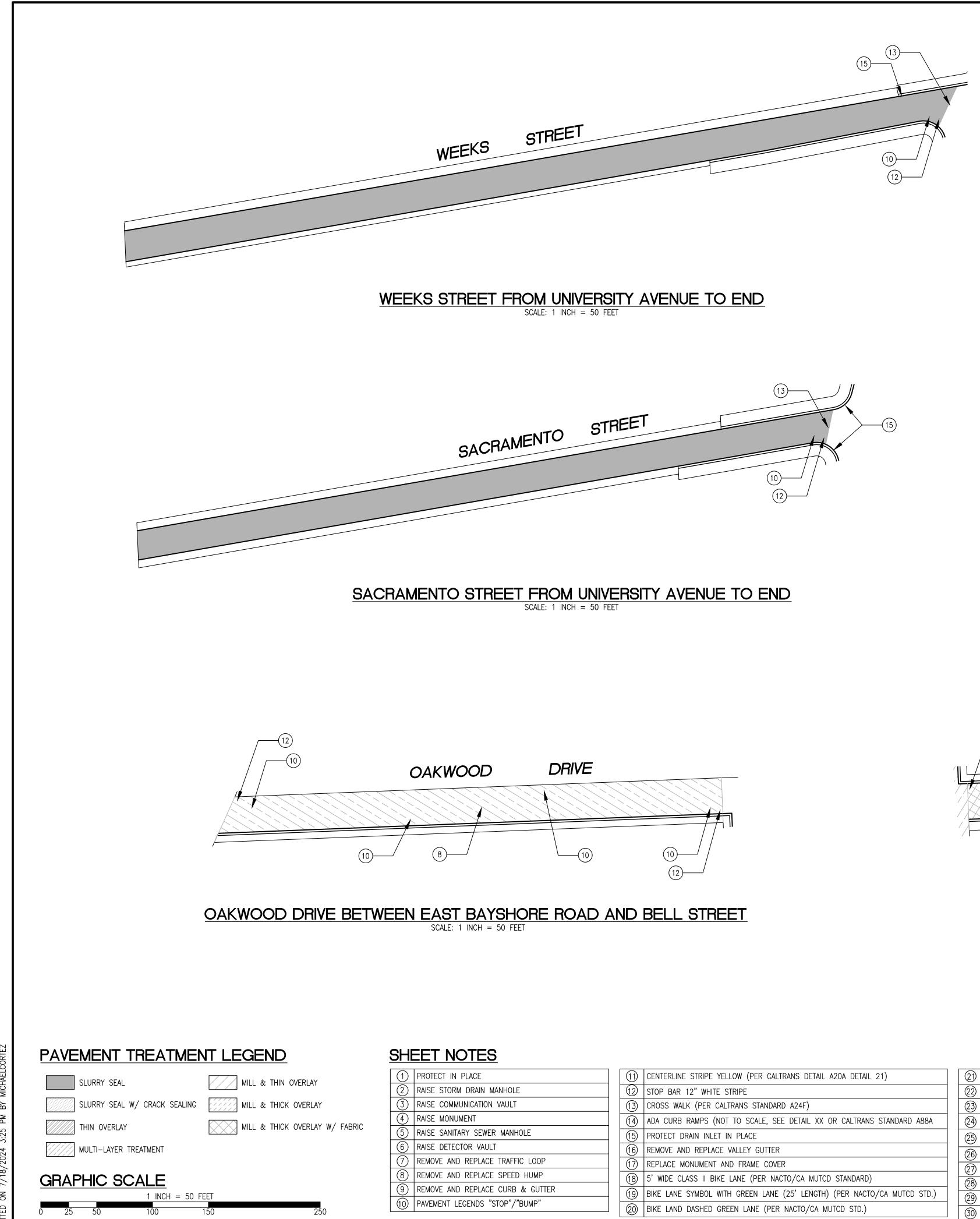
29)

BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)

(20) BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)

		DATE			
		DESCRIPTION OF REVISION			
10		NO.			
		CHECKED BY H. JAVED / B. ZARO	DESIGNED/DRAFTED BY M. CORTEZ	SCALE AS SHOWN	LAST REVISION 7/18/2024
		PREPARED BY	CITY OF EAST PALO ALTO DEPARTMENT OF PUBLIC WORKS	SAN MATEO COLINTY CALIFORNIA	
				PROJECT/JOB TITLE ANNUAL STREET RESURFACING	PROJECT 2024/2025
		SHEET NUN			
		PROJECT/J	OB NUMBER	7-25	
PEED HUMP (SEE DETAIL XX/XX) 5 "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) E SPEED HUMP (SEE DETAIL XX/XX ) DETAIL XX, SHEET XX ) ING SIGN (CALTRANS SIGN W11–2) AN CROSSING SIGN (CALTRANS SIGN R1–6) (CALTRANS SIGN R28 (CA))	CALL UTILITY NOTIFICATION CENTER OF CALIFORNIAOPENATOROPENATORKNOW WHAT'S BELOW CALL BEFORE YOU DIGCALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.		EAS CORPORA	TED	01110

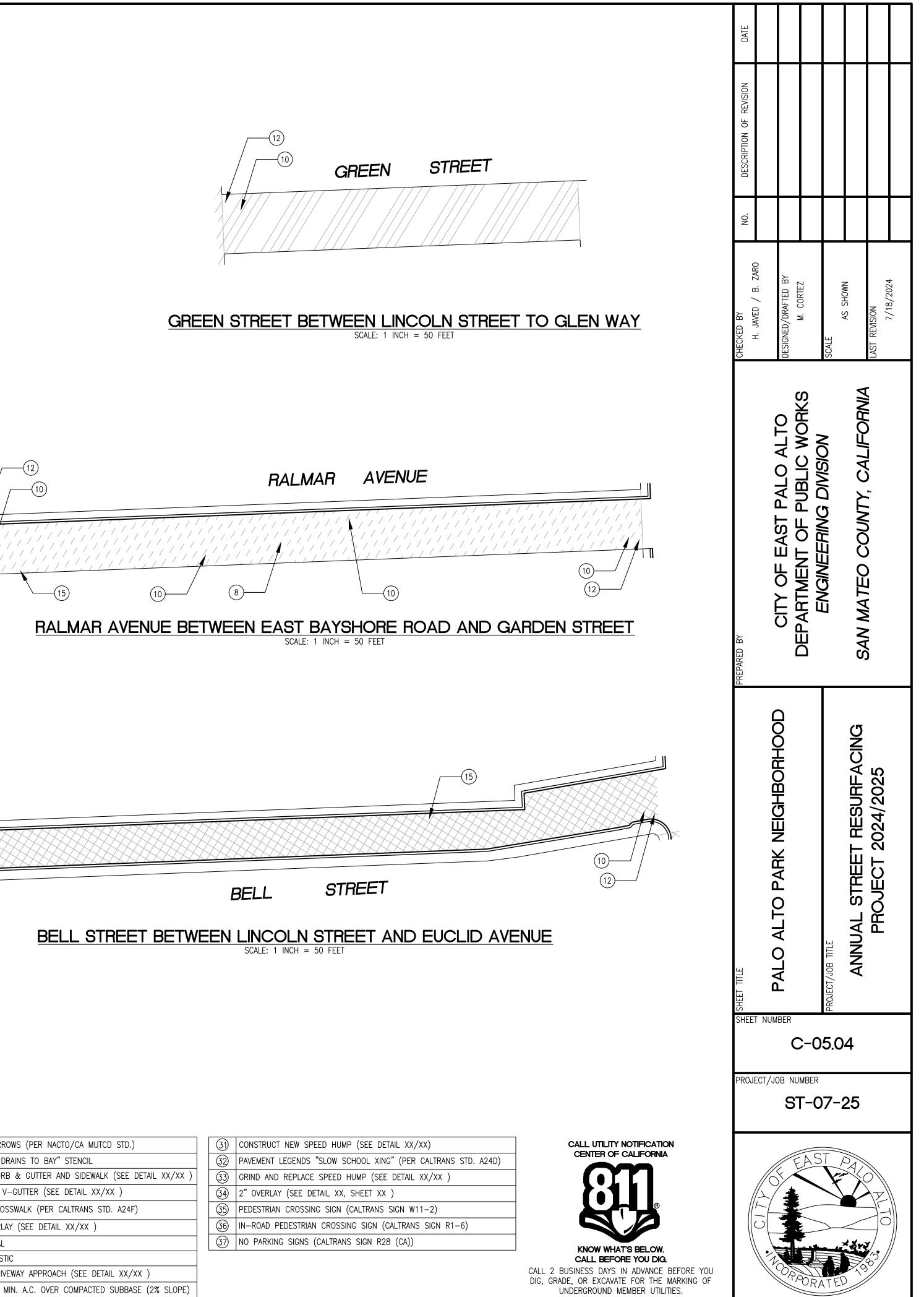
CONSTRUCTION FOR NOT CHECKPRINT 100%

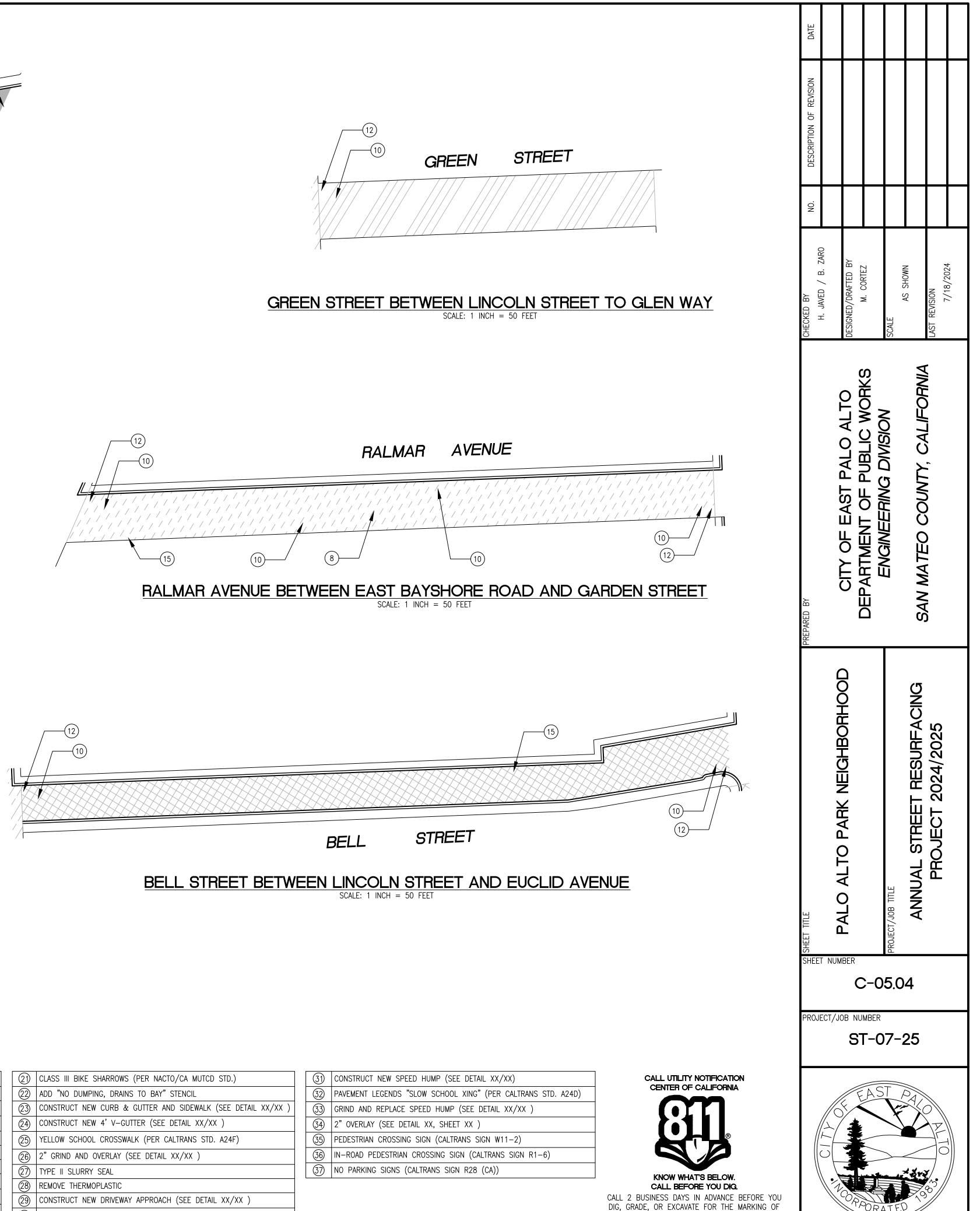


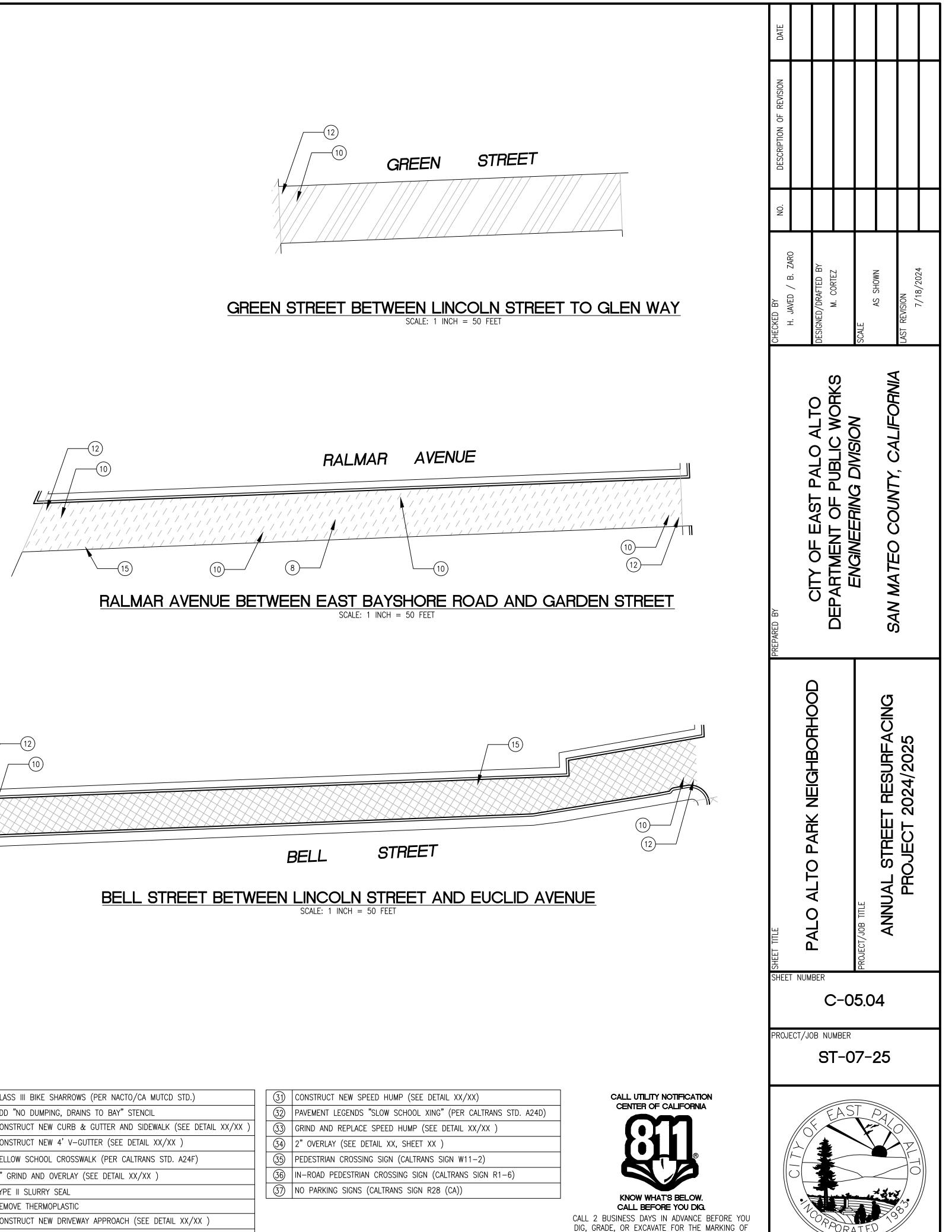
NOTE: IF THIS LINE DOES NOT MEASURE 1 INCH, THESE PLANS ARE NOT TO SCALE.

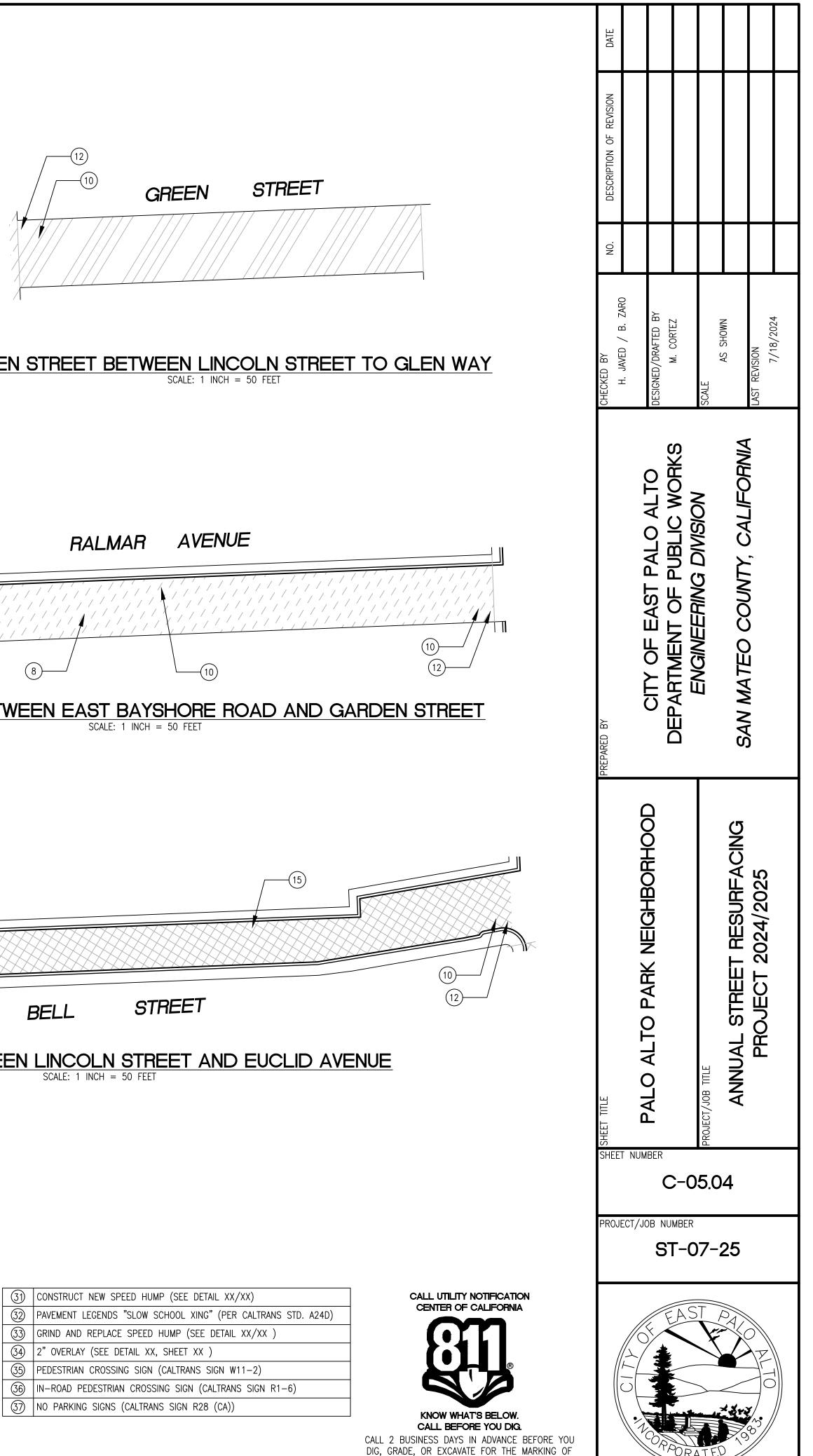
ANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.) AND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	$\vdash$	CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX, CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBB/
RELATIVE BORDER SCALE IS IN INCHES		

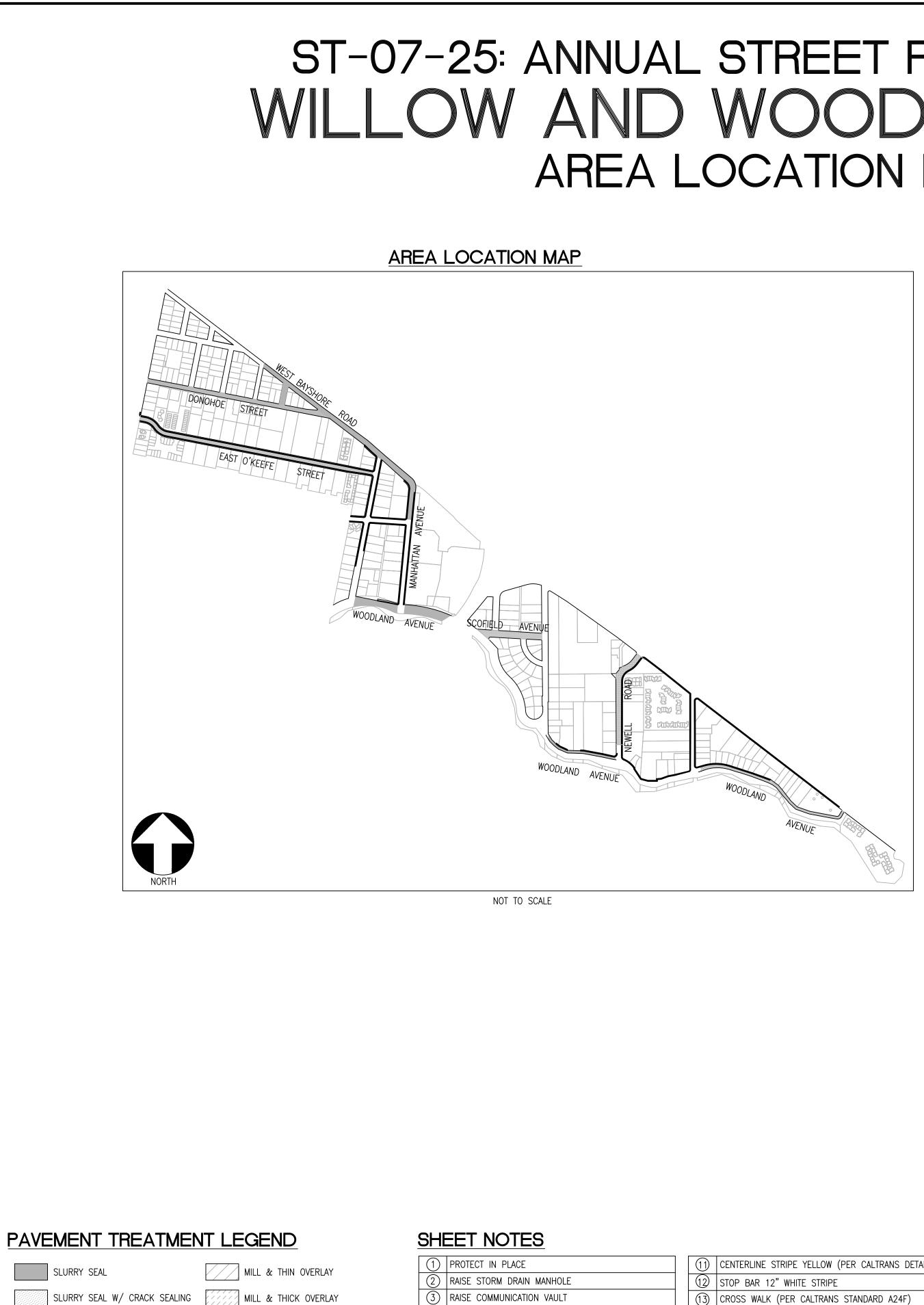
ENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SF
TOP BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS
ROSS WALK (PER CALTRANS STANDARD A24F)	23	CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLAC
DA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34	2" OVERLAY (SEE D
ROTECT DRAIN INLET IN PLACE	25	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSI
EMOVE AND REPLACE VALLEY GUTTER	(26)	2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIA
EPLACE MONUMENT AND FRAME COVER	27)		37)	NO PARKING SIGNS
'WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)		REMOVE THERMOPLASTIC		
IKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)		CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
IKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)		CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		











THIN OVERLAY

MULTI-LAYER TREATMENT

MILL & THICK OVERLAY W/ FABRIC

1 PROTECT IN PLACE	(1) CENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	(21) CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	(31) CONSTRUCT NEW SPEED
2 RAISE STORM DRAIN MANHOLE	12 STOP BAR 12" WHITE STRIPE	(22) ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32 PAVEMENT LEGENDS "SI
3 RAISE COMMUNICATION VAULT	(13)   CROSS WALK (PER CALTRANS STANDARD A24F)	(23) CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX)	(33) GRIND AND REPLACE SI
4 RAISE MONUMENT	(14) ADA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	(24) CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	(34) 2" OVERLAY (SEE DETA
5 RAISE SANITARY SEWER MANHOLE	15 PROTECT DRAIN INLET IN PLACE	25 YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	(35) PEDESTRIAN CROSSING
6 RAISE DETECTOR VAULT	16 REMOVE AND REPLACE VALLEY GUTTER	(26) 2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	(36) IN-ROAD PEDESTRIAN C
7 REMOVE AND REPLACE TRAFFIC LOOP	17 REPLACE MONUMENT AND FRAME COVER	(27) TYPE II SLURRY SEAL	(37) NO PARKING SIGNS (CA
8 REMOVE AND REPLACE SPEED HUMP	18 5' WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28) REMOVE THERMOPLASTIC	
9 REMOVE AND REPLACE CURB & GUTTER	(19) BIKE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29) CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )	
(10) PAVEMENT LEGENDS "STOP"/"BUMP"	20 BIKE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	(30) CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)	

# ST-07-25: ANNUAL STREET RESURFACING PROJECT 2024/2025 WILLOW AND WOODLAND NEIGHBORHOODS AREA LOCATION MAP AND STREETS LIST

### STREETS LIST

SHEET NO.	STREET NAME	BEGINNING	END	TREATMENT
C-06.01	DONOHOE STREET	PULGAS AVENUE	END	MULTI-LAYER TREATMENT
C-06.01	EAST O'KEEFE STREET	CITY LIMIT	EUCLID AVENUE	MILL & THICK OVERLAY
C-06.02	WEST BAYSHORE ROAD	OAKWOOD DRIVE	MANHATTAN AVENUE	SLURRY SEAL W/ CRACK SEALING
C-06.02	DUMBARTON AVENUE	DONOHOE STREET	WEST BAYSHORE ROAD	SLURRY SEAL
C-06.02	MANHATTAN AVENUE	O'CONNOR STREET	WEST BAYSHORE ROAD	SLURRY SEAL
C-06.03	WOODLAND AVENUE	EUCLID AVENUE	MANHATTAN AVENUE	SLURRY SEAL
C-06.03	WOODLAND AVENUE	MANHATTAN AVENUE	UNIVERSITY AVENUE	SLURRY SEAL
C-06.03	SCOFIELD AVENUE	WOODLAND AVENUE	COOLEY AVENUE	MILL & THICK OVERLAY
C-06.03	NEWELL ROAD	WOODLAND AVENUE	WEST BAYSHORE ROAD	MILL & THICK OVERLAY
C-06.04	WOODLAND AVENUE	COOLEY AVENUE	NEWELL ROAD	SLURRY SEAL
C-06.04	WOODLAND AVENUE	CLARKE AVENUE	WEST BAYSHORE ROAD	MILL & THICK OVERLAY

DESCRIPTION OF REVISION DATE							
CHECKED BY H. JAVED / B. ZARO		DESIGNED/DRAFTED BY	M. CONIEZ	SCALE AS SHOWN	NMOLIC CH	AST REVISION	+ 7 07 701 / /
PREPARED BY			DEFARIMENT OF FUBLIC WORKS		SAN MATEO COUNTY CALIFORNIA		
NILLOW AND WILLOW AND WOODSIDE NEIGHBORHOODS LOCATION MAP AND STREET LIST LOCATION MAP AND STREET LIST PROJECT 2024/2025 PROJECT 2024/2025							
SHEET NUMBER C-06.00 PROJECT/JOB NUMBER ST-07-25							
EAST PHO DECEMBER 100 DECEMBER							

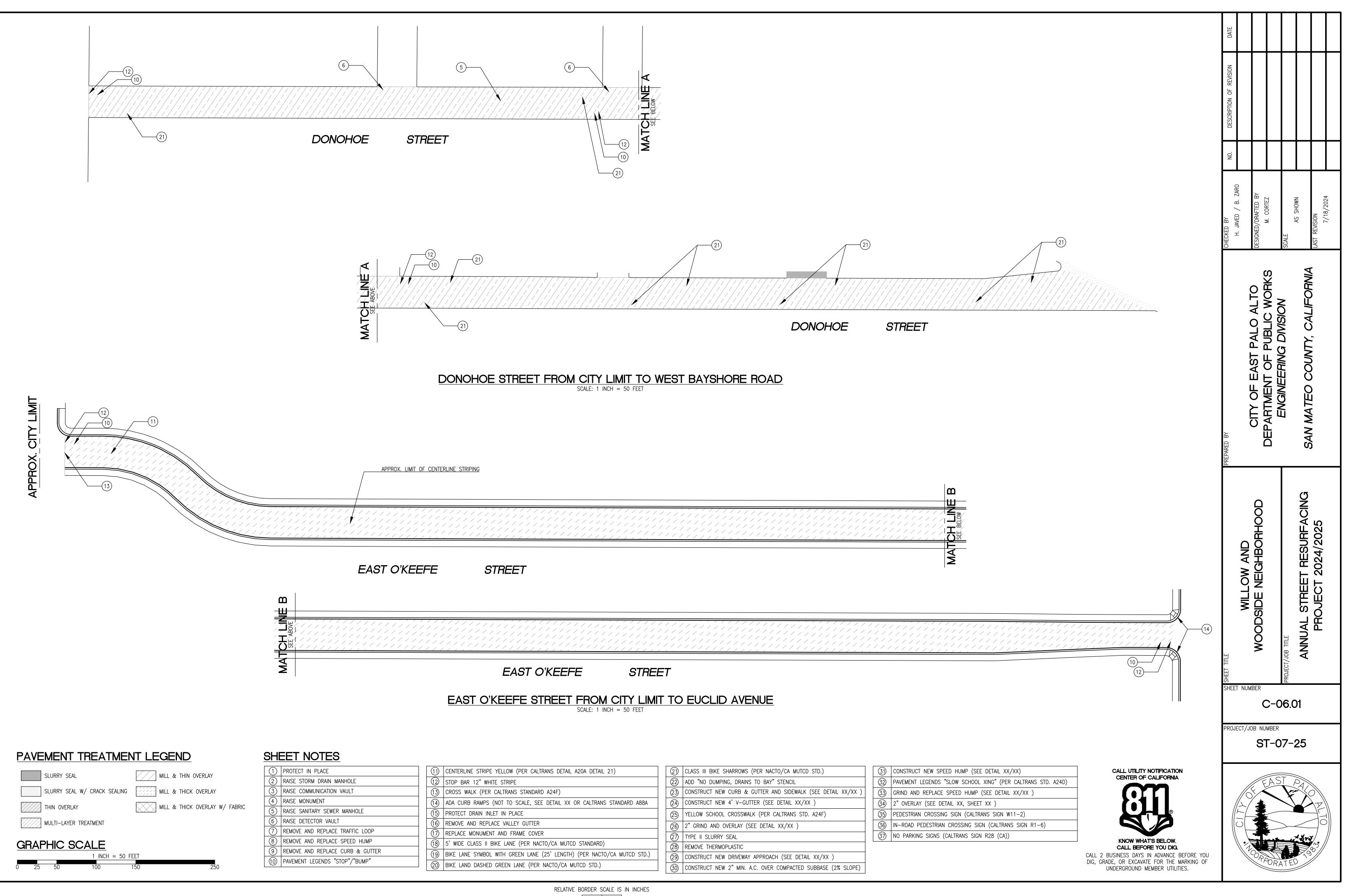
CONSTRUCTION FOR NOT HECKPRINT Ċ 200%

PEED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) SPEED HUMP (SEE DETAIL XX/XX ) ETAIL XX, SHEET XX ) NG SIGN (CALTRANS SIGN W11–2) N CROSSING SIGN (CALTRANS SIGN R1–6) (CALTRANS SIGN R28 (CA))

CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA



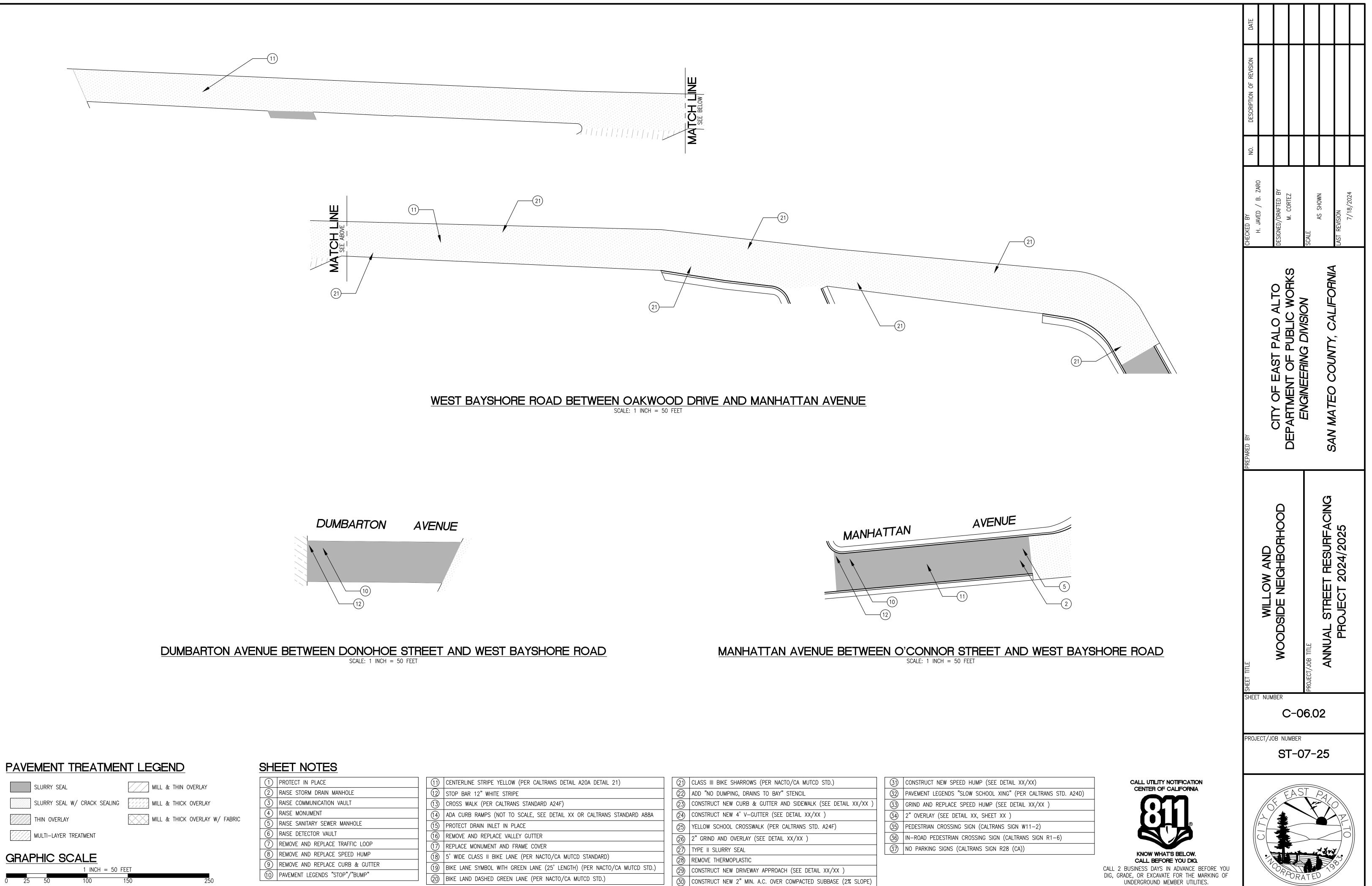
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



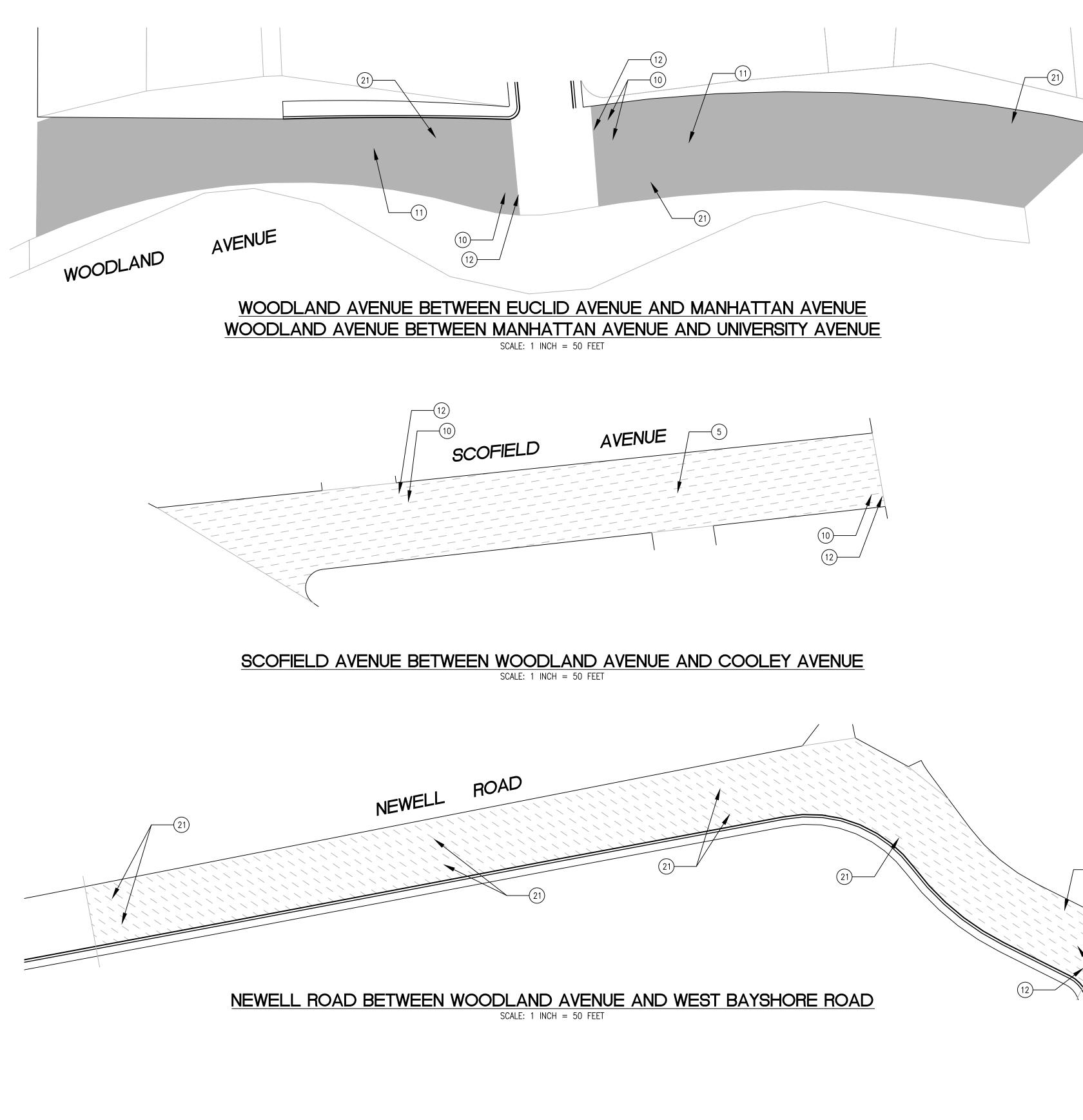
0 0.5 1.0

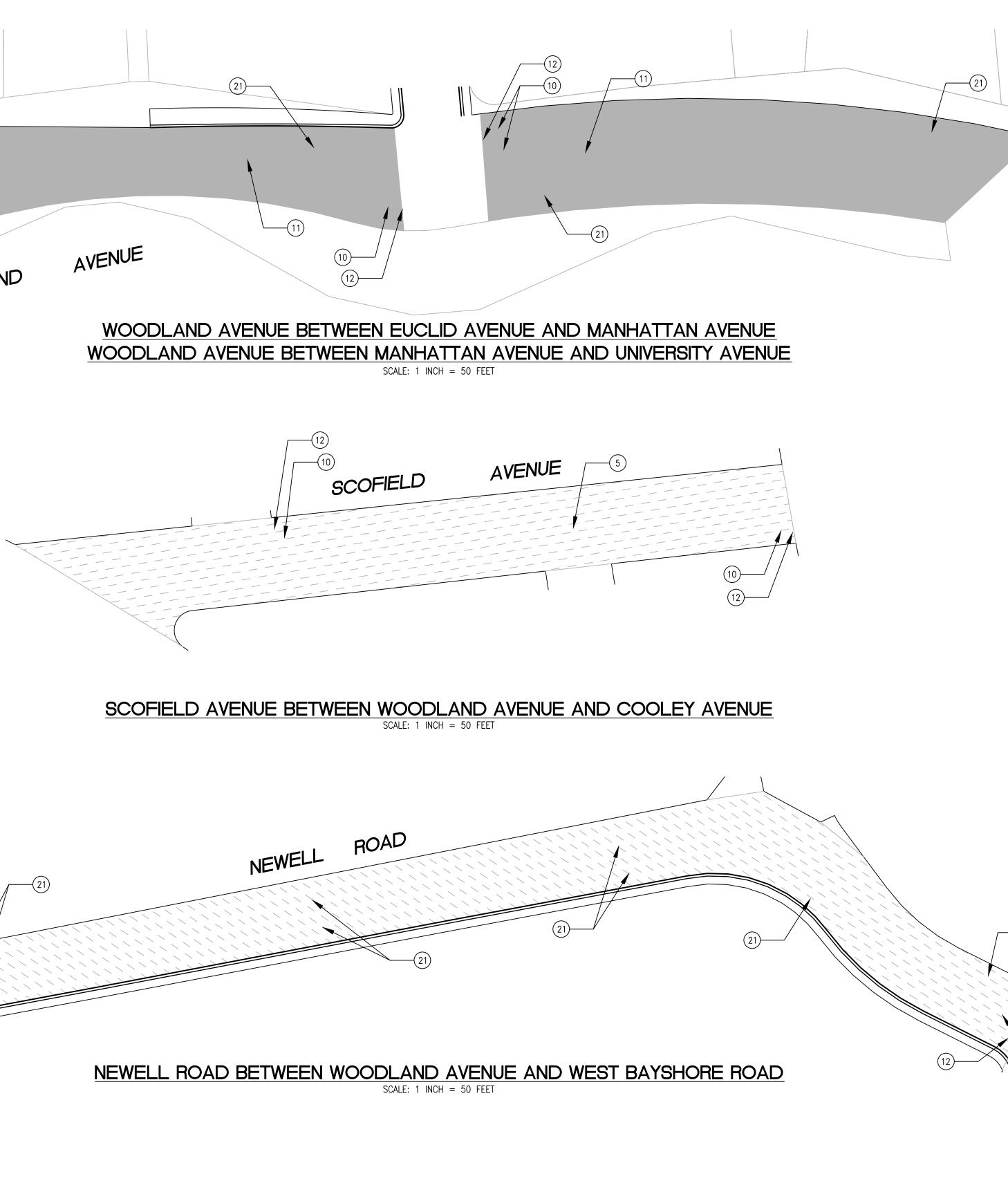
NOTE: IF THIS LINE DOES NOT MEASURE 1 INCH, THESE PLANS ARE NOT TO SCALE.

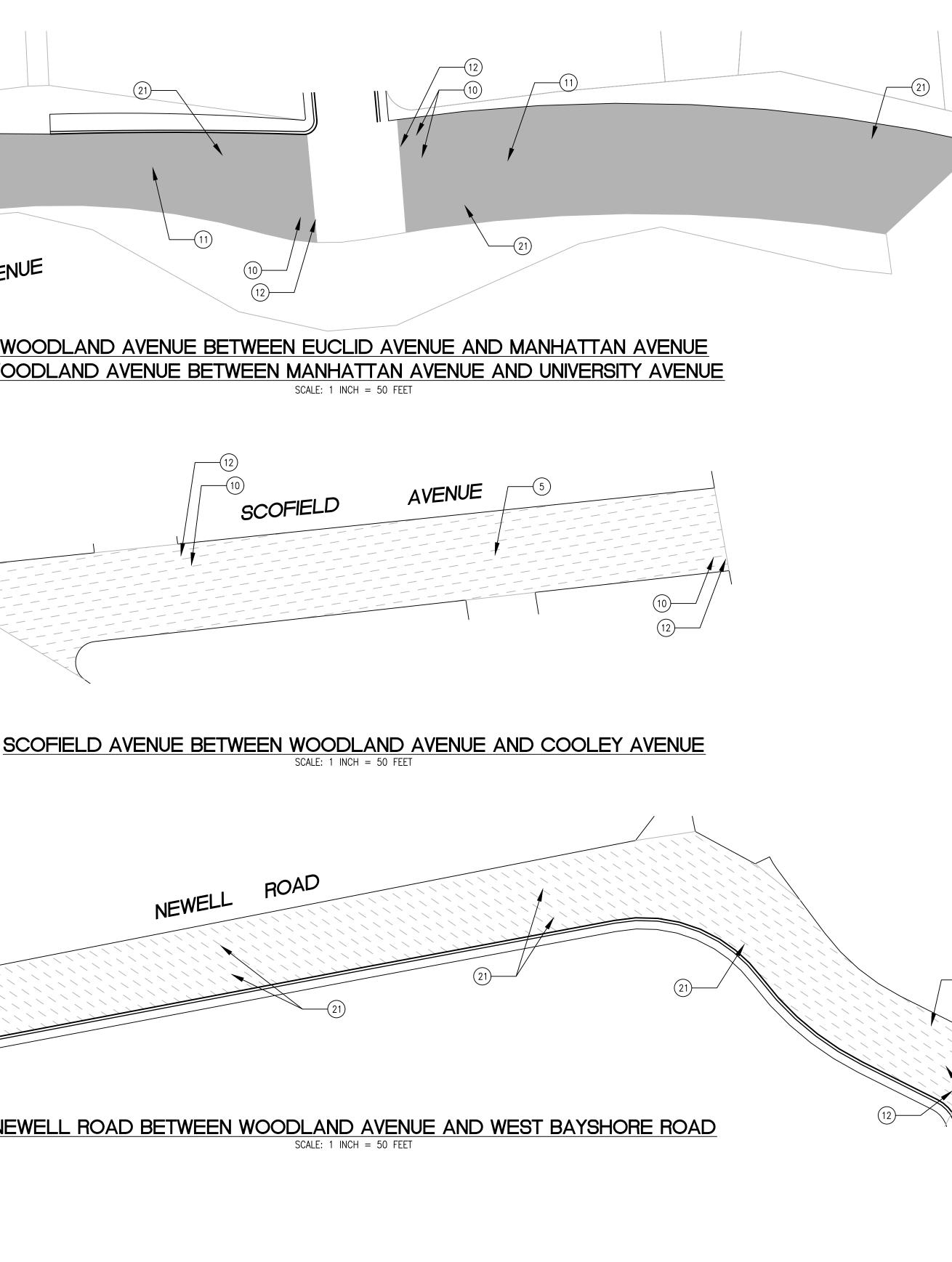
00% CHECKPRINT - NOT FOR CONSTRUCTION

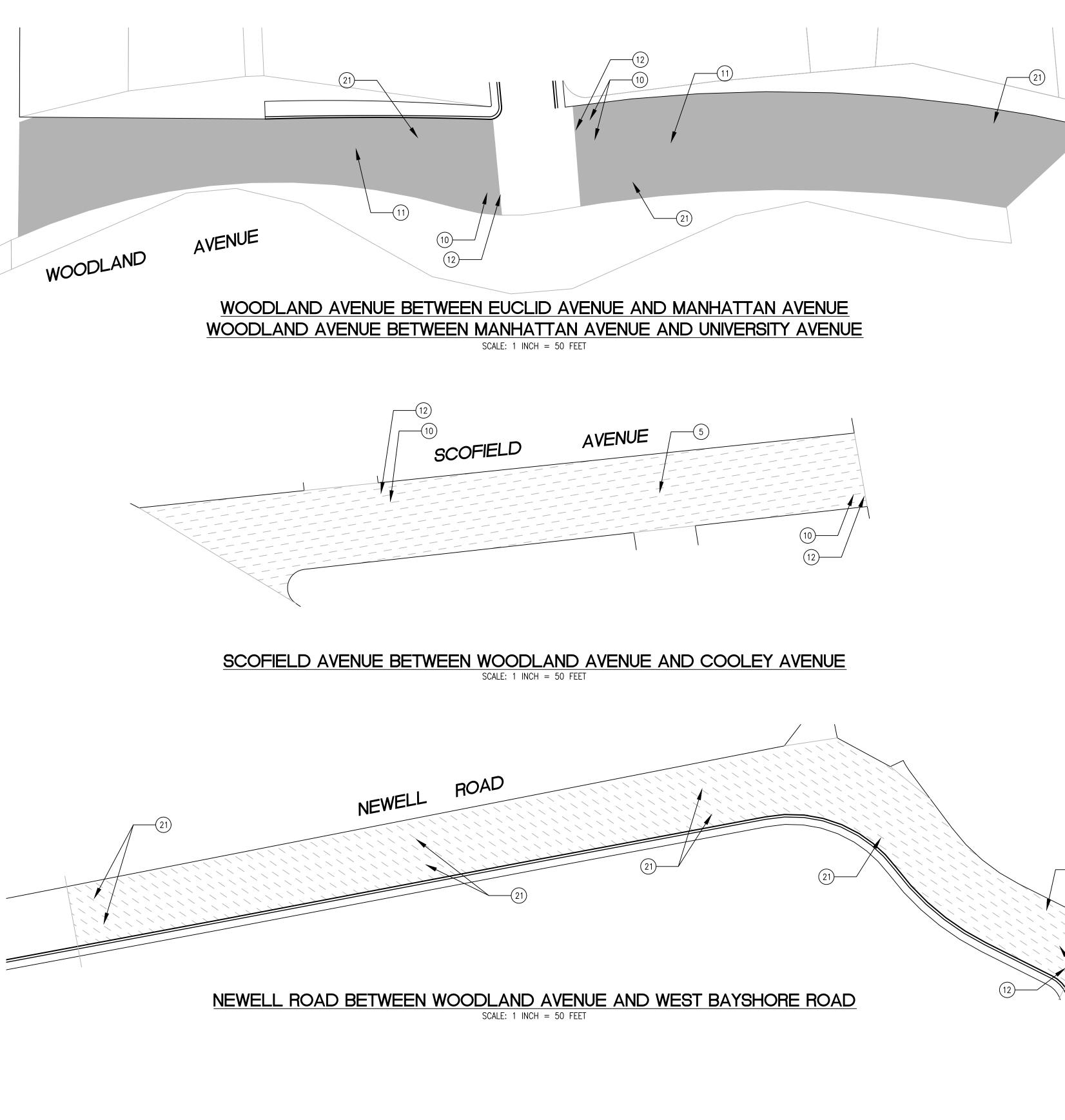


ENTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	3	$\mathfrak{I}$	CONSTRUCT NEW SPEE
OP BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	3	2	PAVEMENT LEGENDS "S
ROSS WALK (PER CALTRANS STANDARD A24F)	23	CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	3	3	GRIND AND REPLACE S
DA CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24)	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	3	4	2" OVERLAY (SEE DET
ROTECT DRAIN INLET IN PLACE	25	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	3	5	PEDESTRIAN CROSSING
MOVE AND REPLACE VALLEY GUTTER	(26)	2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	3	6	IN-ROAD PEDESTRIAN
PLACE MONUMENT AND FRAME COVER	(27)	TYPE II SLURRY SEAL	3	)	NO PARKING SIGNS (C
WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28)	REMOVE THERMOPLASTIC		1	
KE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29)	CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )			
KE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	30	CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)			









### PAVEMENT TREATMENT LEGEND

SLURRY SEAL SLURRY SEAL W/ CRACK SEALING

THIN OVERLAY

MULTI-LAYER TREATMENT

GRAP	HIC S	<u>SCALE</u>		
		1 INCH =	50 FEET	
25	50	100	150	250

MILL & THIN OVERLAY

MILL & THICK OVERLAY

MILL & THICK OVERLAY W/ FABRIC

### SHEET NOTES

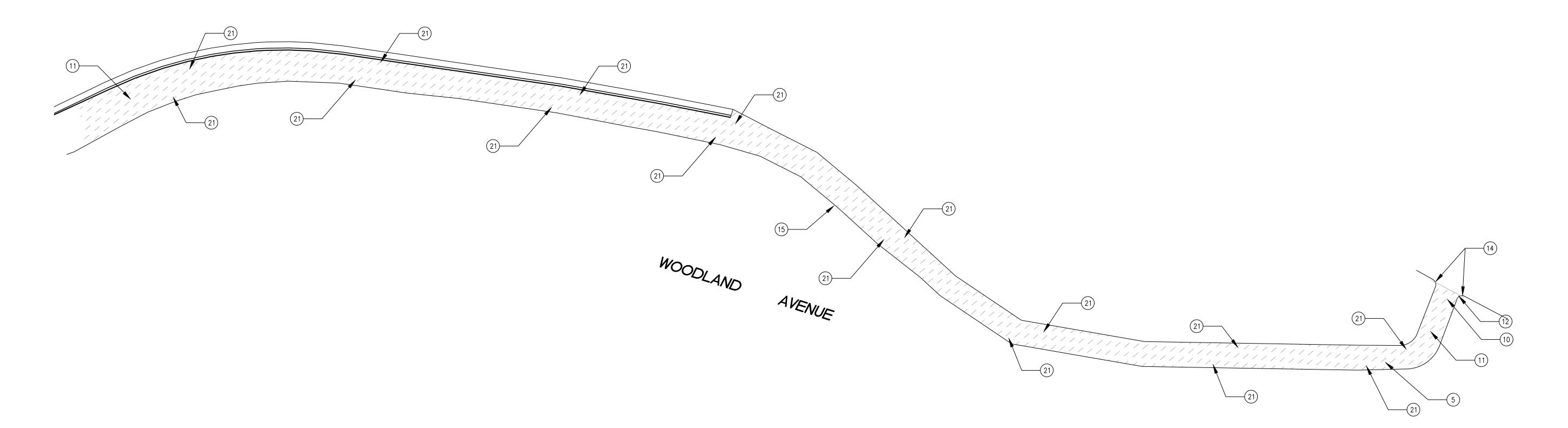
	PROTECT IN PLACE	(1)	CE
2	RAISE STORM DRAIN MANHOLE	(12)	ST
3	RAISE COMMUNICATION VAULT	(13)	CR
4	RAISE MONUMENT	(14)	AD.
5	RAISE SANITARY SEWER MANHOLE	(15)	PR
6	RAISE DETECTOR VAULT	(16)	RE
$\overline{)}$	REMOVE AND REPLACE TRAFFIC LOOP	(17)	RE
8	REMOVE AND REPLACE SPEED HUMP	(18)	5'
9	REMOVE AND REPLACE CURB & GUTTER	(19)	BIK
10	PAVEMENT LEGENDS "STOP"/"BUMP"	 (20)	BIK
		Y	

NTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SPEED HUMP
P BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS "SLOW SC
DSS WALK (PER CALTRANS STANDARD A24F)	23	CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLACE SPEED H
A CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24)	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34)	2" OVERLAY (SEE DETAIL XX,
DTECT DRAIN INLET IN PLACE	25	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSING SIGN (
IOVE AND REPLACE VALLEY GUTTER	(26)	2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN CROSSIN
PLACE MONUMENT AND FRAME COVER	(27)	TYPE II SLURRY SEAL	37)	NO PARKING SIGNS (CALTRANS
WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	(28)			
E LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	(29)	CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
E LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)	30	CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		
	L			

Image: space of the space o	
Image: Second Processer In Control of Contro of Control of Control of Control of Control o	
Bench and Millow	
MILLOW AND     MILLOW AND     MILLOW AND     ODSIDE NEIGHBORHOOD     DEPARTMENT OF FUBLIC WORKS     ENGINEERING DIVISION     AL STREET RESURFACING     SAN MATEO COUNTY, CALIFORNIA     AL     AL STREET RESURFACING     AND	
In the second se	
In the second se	
ANNU SHEET TITE	
SHEET NUMBER	
PROJECT/JOB NUMBER ST-07-25	
PEED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) E SPEED HUMP (SEE DETAIL XX/XX ) ETAIL XX, SHEET XX ) NG SIGN (CALTRANS SIGN W11-2) N CROSSING SIGN (CALTRANS SIGN R1-6) (CALTRANS SIGN R28 (CA)) CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG.	







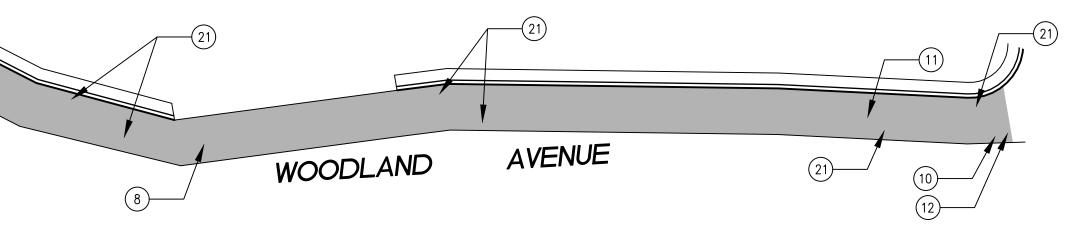
### PAVEMENT TREATMENT LEGEND

25

### SLURRY SEAL MILL & THIN OVERLAY SLURRY SEAL W/ CRACK SEALING MILL & THICK OVERLAY THIN OVERLAY MILL & THICK OVERLAY W/ FABRIC MULTI-LAYER TREATMENT GRAPHIC SCALE 1 INCH = 50 FEET

### <u>SHEET NOTES</u>

	PROTECT IN PLACE		(11)	CEI
2	RAISE STORM DRAIN MANHOLE		(12)	STC
3	RAISE COMMUNICATION VAULT		(13)	CR
4	RAISE MONUMENT		(14)	AD/
5	RAISE SANITARY SEWER MANHOLE		(15)	PR
6	RAISE DETECTOR VAULT		(16)	REN
$\overline{)}$	REMOVE AND REPLACE TRAFFIC LOOP		(17)	REF
8	REMOVE AND REPLACE SPEED HUMP		(18)	5'
9	REMOVE AND REPLACE CURB & GUTTER		(19)	BIK
	PAVEMENT LEGENDS "STOP"/"BUMP"	-	$\overline{\bigcirc}$	BIK
		Ľ	9	1-11



## WOODLAND AVENUE BETWEEN COOLEY AVENUE AND NEWELL ROAD SCALE: 1 INCH = 50 FEET

# WOODLAND AVENUE BETWEEN CLARKE AVENUE AND WEST BAYSHORE ROAD SCALE: 1 INCH = 50 FEET

NTERLINE STRIPE YELLOW (PER CALTRANS DETAIL A20A DETAIL 21)	21	CLASS III BIKE SHARROWS (PER NACTO/CA MUTCD STD.)	31	CONSTRUCT NEW SPE
OP BAR 12" WHITE STRIPE	22	ADD "NO DUMPING, DRAINS TO BAY" STENCIL	32	PAVEMENT LEGENDS
COSS WALK (PER CALTRANS STANDARD A24F)	23	CONSTRUCT NEW CURB & GUTTER AND SIDEWALK (SEE DETAIL XX/XX )	33	GRIND AND REPLACE
A CURB RAMPS (NOT TO SCALE, SEE DETAIL XX OR CALTRANS STANDARD A88A	24	CONSTRUCT NEW 4' V-GUTTER (SEE DETAIL XX/XX )	34	2" OVERLAY (SEE DE
OTECT DRAIN INLET IN PLACE	25	YELLOW SCHOOL CROSSWALK (PER CALTRANS STD. A24F)	35	PEDESTRIAN CROSSIN
MOVE AND REPLACE VALLEY GUTTER	(26)	2" GRIND AND OVERLAY (SEE DETAIL XX/XX )	36	IN-ROAD PEDESTRIAN
PLACE MONUMENT AND FRAME COVER	(27)	TYPE II SLURRY SEAL	(37)	NO PARKING SIGNS (
WIDE CLASS II BIKE LANE (PER NACTO/CA MUTCD STANDARD)	$\vdash$	REMOVE THERMOPLASTIC		
KE LANE SYMBOL WITH GREEN LANE (25' LENGTH) (PER NACTO/CA MUTCD STD.)	$\vdash$	CONSTRUCT NEW DRIVEWAY APPROACH (SEE DETAIL XX/XX )		
KE LAND DASHED GREEN LANE (PER NACTO/CA MUTCD STD.)		CONSTRUCT NEW 2" MIN. A.C. OVER COMPACTED SUBBASE (2% SLOPE)		

RELATIVE BORDER SCALE IS IN INCHES 0 0.5 1.0 NOTE: IF THIS LINE DOES NOT MEASURE 1 INCH, THESE PLANS ARE NOT TO SCALE.

NO. DESCRIPTION OF REVISION DATE							
CHECKED BY U INVED / D 7ADO	11. VAYED / D. ZANN	DESIGNED/DRAFTED BY	M. CURIEZ	SCALE		LAST REVISION	+202/01/1
PREPARED BY					SAN MATEO COUNTY CALIFORNIA		
NILLOW AND WILLOW AND WOODSIDE NEIGHBORHOOD PROJECT NEIGHBORHOOD PROJECT 2024/2025							
SHEET NUMBER C-06.04 PROJECT/JOB NUMBER ST-07-25							
ST-07-25							

PEED HUMP (SEE DETAIL XX/XX) "SLOW SCHOOL XING" (PER CALTRANS STD. A24D) E SPEED HUMP (SEE DETAIL XX/XX ) DETAIL XX, SHEET XX ) NG SIGN (CALTRANS SIGN W11-2) N CROSSING SIGN (CALTRANS SIGN R1–6) (CALTRANS SIGN R28 (CA))

KNOW WHAT'S BELOW. CALL BEFORE YOU DIG. CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

CALL UTILITY NOTIFICATION CENTER OF CALIFORNIA

### TECHNICAL SPECIFICATIONS AUGUST 1, 2024

### ANNUAL STREET RESURFACING PROJECT 2024/2025 CITY PROJECT NO. ST-07-25

### TABLE OF CONTENTS

Section	Title	Page
100	Definition of Bid Items	TS-3
101	General Requirements	TS-9
102	Mobilization	TS-17
103	Traffic Control	TS-19
104	Stormwater Pollution Prevention	TS-25
105	Concrete Improvements	TS-31
106	Asphalt Concrete Grinding	TS-47
107	HMA Paving and Base Repair	TS-49
108	Slurry Seal	TS-55
109	Crack Sealing	TS-59
110	Fiberized Microsurfacing	TS-61
111	Signage and Striping	TS-67
112	Utility Structure Adjustments	TS-73
113	Interagency Contacts	TS-75

### **APPENDIX A – BULBOUT LOCATIONS**

### THIS PAGE INTENTIONALLY LEFT BLANK

### **SECTION 100**

### DEFINITION OF BID ITEMS

### PART 1 – GENERAL

The bid item descriptions listed in the Bid Schedule of the proposal are not intended to be exclusive and comprehensive descriptions of all the work categories and scope necessary to complete the project. As such, the Contractor shall determine, segregate and include in his/her pricing for each bid item the cost for furnishing and installing all labor, materials, tools, equipment and other incidentals necessary to complete all of the contract work involved in the project, as described by the Contract Documents, complete in place.

Unless otherwise noted, estimated quantities on the bid schedule are believed to be accurate, however, the Contractor should self-verify the quantities as it relates to ordering sufficient material and scheduling work. Actual field measured quantities, complete in place, not the quantities listed in the bid schedule, will govern final payment.

### **PART 2 - BID ITEM DESCRIPTIONS**

### A - Mobilization (Bid Item No. 1)

The contract price paid for Mobilization shall include full compensation for performing the scope of work as specified in Technical Specifications Section 102, "Mobilization".

Mobilization shall be measured and paid by **lump sum**. The Contract lump sum price for Mobilization should not exceed five percent (5%) of the total base bid contract price. Any amount bid on the bid schedule in excess of five percent (5%) shall be withheld from payment until the completion of project, to be paid as part of the final payment.

### **B** - Traffic Control (Bid Item No. 2)

The contract price paid for Traffic Control shall include full compensation for performing the scope of work specified in Technical Specifications Section 103, "Traffic Control", including all necessary submittals, materials, implementation and maintenance of the approved traffic control plans for all work in construction zones throughout the duration of the project.

Payment for complying with the provisions for "Traffic Control" shall be paid by **lump sum** and paid on a percentage of completion of other items of work.

### C – Stormwater Pollution Prevention (Bid Item No. 4)

The contract price paid for Stormwater Pollution Prevention shall include full compensation for performing the scope of work as specified in Section 104, "Stormwater Pollution Prevention" of these Technical Specifications. The contract price shall include performing all the work necessary to prepare and implementing the Water Pollution Control Plan, and furnish, install and maintain all best management practices for the duration of the project in accordance with City and State standards, and as directed by the Public Works Director. This work shall include, but is not limited to: furnish, install and maintain temporary drainage inlet protection and fiber rolls, all cleaning activities, such as street sweeping, to prevent construction dust and debris from entering the storm drain system, disposal and removal of materials at the completion of the project.

"Stormwater Pollution Prevention" shall be paid on a **lump sum** basis, determined by percentage complete in the project (e.g. 10% of the work is completed, 10% of Stormwater Pollution Prevention will be paid) and no additional compensation shall be made.

### D – Construction Staking and Surveying (Bid Item No. 3)

The contract price paid for Construction Staking and Surveying shall include full compensation for performing the scope of work specified in Technical Specifications Section 101, "General Requirements", including all necessary submittals.

Payment for complying with the provisions for "Construction Staking and Surveying" shall be paid by **lump sum** and paid on a percentage of completion of other items of work.

### E – Construction Signage (Bid Item No. 5)

The contract price paid for Concrete Improvements shall include full compensation for performing the scope of work specified in Technical Specifications Section 110, "Striping and Signage", including, as appropriate, but not necessarily limited to, fabrication and placement of sign.

### F – Concrete Improvements (Bid Items No. 6-10, 40-42)

The contract price paid for Concrete Improvements shall include full compensation for performing the scope of work specified in Technical Specifications Section 105, "Concrete Improvements", including, as appropriate, but not necessarily limited to, demolition of existing conditions in order to meet parameters of design, sawcutting of existing concrete along and reconstructing up to existing score lines, installation and removal of formwork, construction of concrete improvements, finishing, application of curing compound, restoration of surrounding improvements and asphalt concrete if and where needed for conform, etc., installation of detectable warning surfaces, and ensuring final gradesare ADA compliant, and clean-up.

"Concrete Sidewalk" shall be measured and paid on a per **square foot** basis of concrete and aggregate base installed in place. Cost of installation shall also include any demolition of existing sidewalk. Cost of installation should any retaining curbs and thickened slabs necessary. Cost of concrete sidewalk should include any sidewalk constructed behind driveway approach.

"Concrete Curb Ramps" shall be measured and paid on a per **each** basis of concrete installed in place including sidewalk landing, retaining curbs, detectable warning surface, curb and 24"-wide gutter immediately adjacent to access ramps. See project plans for additional information. Adjustments for excessive conforms at curb ramps - When the work at any single ramp location requires the removal and replacement of sidewalk in excess of 60 square feet, the quantity of sidewalk in excess of 60 square feet shall be measured and paid per square foot under the bid item price for sidewalk. When the work at any single ramp location requires the removal and gutter in excess of 30 linear feet shall be measured and paid per linear foot under the bid item price for sub and gutter in excess of 30 linear feet shall be measured and paid per linear foot under the bid item price for sub and gutter.

"Concrete Curb & Gutter" shall be paid on a **linear foot** basis, measured along the face of curb. Curb and gutter immediately adjacent to access ramps along the sidewalk, or immediately adjacent to bioretention areas along the sidewalk (from begin curves to end curves) shall not be counted as curb and gutter but shall instead be included under the per-each price paid for access ramps or bioretention area.

"Driveway approach" – shall be paid on a **square foot** basis and does not include any concrete sidewalkconstructed directly behind it. See "Concrete sidewalk" for definition of Bid Item.

"Vertical Curb" – shall be paid on a **linear foot** basis and shall include any necessary asphalt conformsrequired to meet appropriate drainage.

"3-Ft Valley Gutter" – shall be paid on a **linear foot** basis and shall include any necessary asphaltconforms required to meet appropriate drainage.

"6-Ft Valley Gutter" – shall be paid on a **linear foot** basis and shall include any necessary asphaltconforms required to meet appropriate drainage.

### G – Pavement Rehabilitation (Bid Items No. 11-15, 23)

"Asphalt Concrete Grinding – 1 Inch Wedge Grint (6' Wide)" shall be measured and paid per **linear foot** of 6 feet wide asphalt pavement length removed.

"Asphalt Concrete Grinding - 2 Inch Full Grind" is measured and paid in **square yard** of road surface. See section 106.

"Earthwork Export" shall be measured and paid per cubic yard removed.

"Hot Mix Asphalt (HMA)" shall be measured and paid per **ton**, over the area and thickness indicated on the plans and specifications. The contract price paid for Hot Mix Asphalt (HMA) shall include full compensation for performing the scope of work specified in Technical Specifications Section 107, "HMA Paving and Base Repair" including but not necessarily limited to cleaning the existing surface as needed, application of asphaltic prime coat and/or binder, placement and compaction of asphalt concrete; testing; repair of poor workmanship or damage, and clean-up. Contractor shall furnish weight tags to the Public Works Director daily and shall indicate on the tags the location (lane and which pass) the material was used. NOTE TO BIDDER: The estimated quantity for this item has been increased by five percent (5%) to allow for unforeseen conditions and deviations due to actual field conditions.

The contract price for "4-Inch Base Failure Repair (Digout)" shall be measured per **square feet.** This includes the grinding and removal of the existing roadway. Furnish and placement of Asphalt Concrete. At roadway sections where current pavement section is less than 4-inch, contractor shall remove any existing materials below the Asphalt Concrete section up to 4-inches from surface. At roadway sections where current pavement section is more than 4-inches, contractor shall replace up to the 5-inches of asphalt concrete.

"Construct Speed Hump" shall be measured per **each**, and shall include the demolition of, materials for, and installation of newly installed speed hump as indicated on the plans.

"Crack Sealing" shall be measured per **square yard** as specified in Technical Specifications Section109 "Crack Sealing".

"Slurry Seal" shall be measured per **square yard**, as specified in Technical Specifications Section 108 "Slurry Seal." Work shall include full compensation for furnishing all labor, supervision, materials, tools, equipment, and incidentals and for doing all work specified in constructing the slurry seal,

complete-in-place, including, but not limited to, testing for and furnishing the mix design; surface preparation; sweeping; protecting utility covers; slurry seal; protecting the seal until it has cured; rolling; sweeping; and all other work as shown on the Plans.

### H – Utility Structure Adjustments (Bid Items No. 18-22)

"Adjust Monument to Finished Grade" shall be measured and paid for per lump

**sum**. The following shall be paid for per **each**:

"Raise to Grade: Stormwater Manhole"

"Raise to Grade: Sanitary Sewer Manhole"

"Raise to Grade: Communication Vault"

"Raise to Grade: Water Valve Covers"

"Raise to Grade: PG&E Gas Cover"

This includes but not necessarily limited to, replacement materials (where applicable), raising/lowering frames and covers, additional AC removal around each structure if required, replacing concrete collars and paving, and clean-up. Work to be performed shall be as specified in Technical Specifications Section 112 "Utility Structure Adjustments".

### I – Striping and Signage (Bid Items No. 16-17, 25-33, 35-39)

The contract price paid for Pavement Striping, Markings and Signage shall include full compensation for performing the scope of work specified in Technical Specifications Section 111, "Striping and Signage", including but not necessarily limited to, pavement preparation, establishing alignment and layout (cat-tracking), placement of new striping in thermoplastic or paint, application of markers, painting curbs, corrective work and clean-up.

"Remove Striping and Pavement Markings" shall be paid per **lump sum**.

"Rectangular Rapid Flashing Beacon System" shall be paid on a per **each** to complete the RRFB system procured from manufacturer.

"Crosswalk and Limit Line Strip" shall be measured and paid for on a per square foot basis.

"Detail 22" (with or without reflectors and consisting of various lines defined in the various details of the Caltrans Standard Plans, including the striping of limit lines and crosswalks) shall be measured and paid for on a per **linear foot** basis.

"Thermoplastic Pavement Markings" consisting of miscellaneous legends and arrows as defined with calculated areas in the Caltrans Standard Plans shall be measured and paid on a per **square foot** basis.

"Project Funding Sign", "Educational Sign", and "Roadside Sign" shall be paid per **each** and shall include applicable posts and sign foundations required to install sign.

"Two-way Reflective Blue Pavement Marker" shall be paid per each.

### END OF SECTION 100

### THIS PAGE INTENTIONALLY LEFT BLANK

### **SECTION 101**

### GENERAL REQUIREMENTS

### PART 1 - GENERAL

### 1.1 WORK INCLUDED

All work shall conform to the applicable provisions of the San Mateo County Standard Specifications and Details, the latest State of California, California Manual on Uniform Traffic Control Devices (MUTCD), Department of Transportation, Standard Plans and Standard Specifications; and the project plans and specifications.

No work shall be performed on Saturdays and Sundays for the duration of this project unless a variance is approved by the City.

Implementation of Construction Best Management Practices (BMPs) will be required for this project.

### 1.2 ROADWAY PREPARATION

The work under this section consists of preparing the roadway prior to resurfacing or reconstruction as specified in the Special Provisions, these Technical Provisions, and as required by the City Engineer. Such work shall include controlling nuisance water; sweeping; watering; removal of all raised pavement markers; removal of all thermoplastic pavement markings; removal of loose and broken concrete, asphalt concrete pavement, and foreign material; and the spraying and removal of weed growth. In addition, the Contractor shall implement a Storm Water Pollution Prevention Program prior to the start of construction, as specified in the Special Provisions. The Storm Water Pollution Prevention Program shall also comply with Section 13 Water Pollution Control of the State Standard Specifications.

### 1.3 PROJECT SITE MAINTENANCE

Throughout all phases of construction until final acceptance, including any periods of work suspension, the site shall be kept clean and free from rubbish and debris. The Contractor shall furnish and operate a self-loading motor sweeper with spray nozzles at least once each working day for the purpose of keeping paved areas acceptably clean wherever construction, including restoration, is incomplete.

Dust control shall consist of applying either water or dust palliative, or both, for the alleviation or prevention of dust nuisance. Dust resulting from the Contractor's performance of the work, either inside or outside the right of way, shall be controlled by the Contractor in conformance with the provisions in Section 7, "Legal Relations and Responsibility to the Public" of the State Standard Specifications. Water shall be applied as provided in Section 17 "Clearing and Grubbing" and dust palliative shall conform to and be applied as provided in Section 18 "Dust Palliative" of the State Standard Standard Specifications.

Excess excavated materials from any source shall be removed from the site immediately. Forms and lumber shall be removed the day of form removal. Materials and equipment shall be removed from the site as soon as they are no longer necessary.

Before the final inspection, the site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. All pavement areas shall be swept with a street sweeper immediately prior to the final inspection. All concrete areas shall be broom cleaned. All topsoil areas shall be raked. All cleanup costs shall be included in the Contractor's bid. In the event that the Contractor fails to perform this final cleanup, the Agency may remove and/or

dispose of the articles or materials at the Contractor's expense. Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.

The Contractor is advised that the disposal of solid waste sewage, industrial waste or other polluted waters into public storm drain system is prohibited under East of Palo Alto Municipal Code and under California State Fish & Game Code Section 5650. Any fines or penalties levied against the Contractor for violation of the above and related regulation are the sole responsibility of the Contractor.

### 1.4 SANITARY FACILITIES

The Contractor shall provide and maintain enclosed, portable restrooms for the use of personnel engaged in the work. These accommodations shall be maintained in a neat and sanitary condition, and shall comply with all applicable laws, ordinances, and regulations pertaining to public health and sanitation.

### 1.5 STAGING & STORING

The Contractor shall store all equipment and materials in a manner which does not interfere with public right of way. No equipment will be allowed to be parked overnight within the limits of the public right-of-way. Contractor may make arrangements with local property owners for temporary staging areas; however, the location shall first be brought to the attention of the Engineer for approval. Contractor will also be required to provide proof in writing from the property owner that the Property is allowed for use as a temporary staging area.

Contractor shall take adequate measures to secure all equipment and materials at the staging area after the completion of work each day. The City will not be responsible for any damage or loss incurred on Contractor's equipment or materials.

### 1.6 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS

The Contractor shall be responsible for the protection of public and private property adjacent to the work and shall exercise due caution to avoid damage to such property.

The Contractor shall repair or replace all existing improvements within the right-of-way or on adjacent private property which are not designated for removal, but that are damaged or removed as a result of its operations. Repairs and replacements shall be at least equal to existing improvements and shall match them in finish and dimension.

### 1.7 PRE-CONSTRUCTION DOCUMENTATION

Contractor shall submit a video on DVD of the construction area prior to beginning work. This video shall be the existing condition record of the job site. The taping shall be done by the Contractor and a copy of the DVD shall be furnished to the Project Inspector at the beginning of the Work. The Project Inspector may participate during the videotaping task. Contractor shall provide a written log noting defects or irregularities in the existing pavement area.

### 1.8 PUBLIC NOTIFICATION AND OUTREACH

Two weeks prior to beginning any work on the project, the Contractor shall deliver written notice to all adjoining residents, businesses, tenants and other applicable parties listed below. Notice shall be given for general construction activity in an area as well as specific activities that will, in anyway, inconvenience residents/property owners/tenants or affect their operations or access to their property. Such notices shall include the expected date for start of construction, a general description of the construction activity to take place, expected duration, and the name, address, and contact number of the Contractor's superintendent and of the City's Project Engineer.

A follow up notice shall be distributed two days prior to the construction activity. Copies of all notices shall be provided to the Engineer for approval five working days prior to the desired distribution date.

The Contractor shall contact and coordinate the work with the following, but not limited to, parties. Two-week notification shall also be given to adjacent properties prior to beginning any work.

### 1.9 COORDINATION WITH OTHER PROJECTS

Contractor shall make arrangements with the Engineer to coordinate construction schedule operations between the City's adjacent projects and this Project to avoid conflict between projects.

### 1.10 CONSTRUCTION STAKING AND SURVEYS

- A. Contractor shall furnish all surveying and construction staking required to complete the construction as shown on the plans. Contractor shall indicate the surveying activities within the required project schedules.
- B. All construction staking shall be done by a Civil Engineer authorized to practice land surveying or a land surveyor registered in the State of California, hired by the Contractor.
- C. Stakes shall be installed at 25' intervals or less, unless otherwise permitted by the Public Works Director.
- D. All stakes shall be clearly marked and copies of cut sheets shall be provided to the City at least two working days in advance of their planned use. This shall in no way relieve the Contractor of the responsibility for assuring final grades, alignments and locations of improvements that conform to the plans.
- E. All official survey monuments or benchmarks shall be carefully preserved. If a monument or benchmark is anticipated to be disturbed, the Contractor shall reference its location and elevation to at least four short ties (set iron pipes) and two copies of the field notes showing the ties shall be presented to the Public Works Director for review and approval prior to disruption. A surveyor registered in the State of California shall remark the monuments after construction is complete and file appropriate paperwork with the County Recorder's office.
- F. In cases of accidental damage or displacement of the monuments where, in the opinion of the Public Works Director, new concrete monuments are required, two copies of the field notes showing new locations, ties and elevations shall be furnished to the Public Works Director. New monuments shall be of a type and quality in accordance with the San Mateo County Standard Drawings and shall be placed in a manner consistent with good and recognized engineering and surveying practices in accordance with State of California and County of San Mateo regulations. Replacement of monuments disturbed by the Contractor shall be paid for at the Contractor's sole expense.
- G. Control points and additional horizontal control data (CAD files) will be provided to the Contractor after award of contract.
- H. Construction staking and surveys for line and grade shall be the responsibility of the Contractor.
- I. All work shall conform to Section 5-1.26 "Construction Surveys" of the State Standard Specification.
- 1.11 TESTING AND SAMPLING

- A. Work shall include the Sampling & Testing of construction methods and installed materials, to determine compliance with contract requirements of installed conditions of base repairs digouts, and hot mix asphalt paving. Sampling and testing shall be performed when required by the specifications.
- B. Sampling & testing shall also be in conformance with Section 39 of the State Standard Specifications.
- C. Testing shall be undertaken by **an independent**, **third party**, **testing laboratory/contractor** qualified to perform sampling and testing required by this contract. Selection of testing laboratory/contractor shall be approved by the Engineer. Sampling and Testing shall be paid for by the Contractor.
- D. Prepare a written record that documents the location, date and time of the sampling and testing for each of the following technical specifications sections and their associated work:
  - Base Repair Digouts
  - Hot Mix Asphalt (HMA) Paving
- E. Testing results shall be provided showing actual results and include a statement that the item tested or analyzed conforms or fails to conform to specified requirements. Test results shall cite applicable specification references and required tests or analytical procedures used. Test results shall be certified by a testing laboratory representative authorized to do so. Report shall have the cover sheet conspicuously stamped in large red letters "CONFORMS" or "DOES NOT CONFORM". If the item(s) fails to conform, the laboratory shall notify the Engineer.

Sampling and testing results shall be submitted daily, within 24 hours of test taking. Tests that require more than 24 hours for processing shall be submitted within 24 hours of completion of test.

Submittal of results 24 hours beyond the completion of lab work shall be subject to \$250 penalty per late submittal.

Complete all required testing identified in Section 39 of the State Standard Specifications for the work related with "4-Inch Base Failure Repair (Digouts)" and "Hot Mix Asphalt (HMA)" Technical Specification sections.

### 1.12 TREE AND ROOT PROTECTION

Due care shall be taken when working near trees, public or private. For all phases of the work, Contractor is responsible for protecting trees and Contractor will replace any trees judged damaged by the City, unless otherwise noted on the Plans.

Trees situated in a tree well or sidewalk planting strip shall be wrapped with 4 layers of orange plastic fencing as padding from the ground to the first branch with 1-inch thick wooden slats bound securely on the outside. During installation of the wood slats, caution shall be used to avoid damaging any bark or branches. Major scaffold limbs may also require protection as directed by the Engineer to a height of 12 feet above the ground. Contractor shall make every effort to keep deleterious materials associated with project construction from contacting any part of the trees.

For all phases of work, Contractor shall not cut any roots greater than 2-inches in diameter. When roots greater than 2-inches in diameter are encountered, Contractor shall notify the Engineer and allow 3 business days to cut the roots. No compensation shall be given to the Contractor for any time for the City root cutting. Contractor shall not scrape, skin, or pull on roots. Any root cutting shall be done with clean and sharp blades/tools.

Should tree, root, and/or bush pruning be required to construct the improvements shown on the plans, specified in these Specifications, and as directed by the Engineer, Contractor shall notify the Engineer and allow 3 business days before pruning. All pruning shall be done as directed by the City Arborist and in the presence of the City Arborist.

Contractor shall make every effort to avoid damaging any City owned property, including (roots, trunk and canopy of) City maintained trees. If damages to trees are found to be as part of Contractor negligence, Contractor shall be responsible for as follows:

- a. Contractor will provide full reparation to include: removal of irreparable tree and replacement with similar approved species. Contractor will perform this work themselves (at Contractor's expense) under supervision of City forestry personnel, and/or,
- b. Contractor will reimburse City for City expenses incurred in the related reparation work, consisting of but not limited to, site inspections, corrective pruning, tree removal, and tree replacement.
- c. Damages shall be graded 1 (minor) through 5 (replacement), as determined by City, with monetary values attached.

### 1.13 SITE CLEANUP

Payment for work required under the General Requirements shall be included in the prices bid for the individual items of work and no additional compensation will be allowed therefore unless specifically noted otherwise.

In the event that the Contractor fails to perform this final cleanup, the Agency may remove and/or dispose of the articles or materials at the Contractor's expense.

Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.

The Contractor is advised that the disposal of solid waste sewage, industrial waste or other polluted waters into public storm drain system is prohibited under East of Palo Alto Municipal Code and under California State Fish & Game Code Section 5650. Any fines or penalties levied against the Contractor for violation of the above and related regulation are the sole responsibility of the Contractor.

### 1.14 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS

The Contractor shall be responsible for the protection of public and private property adjacent to the work and shall exercise due caution to avoid damage to such property.

The Contractor shall repair or replace all existing improvements within the right-of-way or on adjacent private property which are not designated for removal, but that are damaged or removed as a result of its operations. Repairs and replacements shall be at least equal to existing improvements and shall match them in finish and dimension.

### 1.15 POTHOLING PRIOR TO WORK

A. Prior to any demolition work, Contractor must pothole project site to confirm underground utility conflicts. At all times during construction, all operating Underground Facilities shall remain in operation, unless the Contract Documents expressly indicate otherwise. Contractor shall maintain such Underground Facilities in service where appropriate; shall repair any damage to them caused by the Work; and shall incorporate them into the Work, including reasonable adjustments to the design location (including minor relocations) of the existing or new installations. Contractor shall take immediate action to restore any in service installations damaged by Contractor's operations.

- B. Prior to performing Work at the Site, Contractor shall lay out the locations of Underground Facilities that are to remain in service and other significant known underground installations indicated by the Underground Facilities Data. Contractor shall further locate, by carefully excavating with small equipment, potholing and principally by hand, all such utilities or installations that are to remain and that are subject to damage. If additional utilities whose locations are unknown are discovered, Contractor shall immediately report to Owner for disposition of the same.
- C. If during construction, an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated in the materials supplied by Owner for bidding or in information on file at USA or otherwise reasonably available to Contractor, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby (and in no event later than seven Days), and prior to performing any Work in connection therewith (except in an emergency), identify the owner of such Underground Facility and give written notice to that owner and to Owner. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. The cost of all of the following will be included in the Contract Sum and Contractor shall have full responsibility for (a) reviewing and checking all available information and data including, but not limited to, information made available for bidding and information on file at USA; (b) locating all Underground Facilities shown or indicated in the Contract Documents, available information, or indicated by visual observation including, but not limited to, and by way of example only, engaging qualified locating services and all necessary backhoeing and potholing; (c) coordination of the Work with the owners of such Underground Facilities during construction; and (d) the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.
- E. Consistent with California Government Code §4215, as between Owner and Contractor, Owner will be responsible for the timely removal, relocation, or protection of existing main or trunk line utility facilities located on the Site only if such utilities are not identified in the Contract Documents or information made available for bidding. Owner will compensate for the cost of locating and repairing damage not due to Contractor's failure to exercise reasonable care, removing and relocating such main or trunk line utility facilities not indicated in the Contract Documents or information made available for bidding with reasonable accuracy, and equipment on the Project necessarily idled during such Work. Contractor shall not be assessed liquidated damages for delay in completion of the Project, when such delay was caused by the failure of Owner or the utility to provide for removal or relocation of such utility facilities.

### 1.16 ORDER OF WORK

Work Sequence and Specific Considerations shall include but shall not be limited to the following provisions (i.e., although these requirements are not restated under each individual bid item, they shall be deemed included under each bid item as applicable at no additional cost). The following is a list of general sequences and special considerations for the project:

First order of work:

- A. Contractor, except in an emergency, shall contact the appropriate regional notification center, Northern California Underground Service Alert at 811 or 1-800-227-2600 or on-line at www.digalert.org at least three working days prior to commencing any excavation, 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 the City has been given the identification number by the Contractor.
- B. The Contractor shall pothole for utilities sufficiently in advance of construction to permit grade adjustments of the water main to maintain desired clearances. No pipe shall be installed until potholing is complete. Coordinate with the City.

- C. The contractor is responsible for conducting any and all coordination required among impacted utility companies and work with the City Engineer to confirm schedules and performance.
- D. All monumental benchmarks, land corners, and triangulation points, established by other surveys, existing within the construction area shall be preserved. If existing monuments interfere with the work, secure written permission before removing them.

### 1.17 FENCE RELOCATIONS

As noted on project plans, all fences located within City right-of-way will be relocated to right-ofway. All fences shall be salvageable during relocation and shall be coordinated with homeowner. Fences that are not salvageable due to materials or condition of fence shall be documented and brought to the attention of the City prior to removal.

### 1.18 REFERENCES

All references to 'City' in any of the contract documents or referenced standards or publications shall mean the City of East Palo Alto.

All references to 'Engineer' in any of the contract documents or referenced standards or publications shall be the designated representative of the City of East Palo Alto.

### 1.19 MEASUREMENT AND PAYMENT

Payment for work required under the General Requirements shall be included in the prices bid for the individual items of work and no additional compensation will be allowed therefore unless specifically noted otherwise.

### END OF SECTION 101

# THIS PAGE INTENTIONALLY LEFT BLANK

## **SECTION 102**

## MOBILIZATION

## PART 1 - GENERAL

### 1.01 WORK INCLUDED

Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site, and implementation of environmental commitments described on Local Assistance NEPA Permits & Environmental Commitment Record in Appendix C of these Specifications, and for all other work and operations which must be performed or for costs incurred prior to beginning work and in the course of work on various contract items at the project site.

The Contractor is advised that there may be insufficient area within the construction zone to provide parking, staging for material and storage of equipment.

## PART 2 - MATERIAL AND EQUIPMENT

(None)

## PART 3 – EXECUTION

(None)

## PART 4 – MEASUREMENT AND PAYMENT

Included in Section 100 of these Technical Specifications.

# END OF SECTION 102

# THIS PAGE INTENTIONALLY LEFT BLANK

## **SECTION 103**

## TRAFFIC CONTROL

#### PART 1 - GENERAL

#### 1.01 WORK INCLUDED

Work shall consist of providing for safe movement of vehicular, bicycle and pedestrian traffic, including persons with disabilities in accordance with the American's with Disabilities Act (ADA), and traffic control, and construction and equipment staging as described on Local Assistance NEPA Permits and Environmental Commitment Record in Appendix C of these Specifications, through and around construction operations. Traffic control requirements set forth herein are the minimum requirements imposed. The Contractor shall be solely responsible for providing all protective measures necessary.

Should the Contractor fail, in the opinion of the Public Works Director, to provide all the materials, work force and equipment necessary to maintain traffic around the work area as set forth herein, the City, upon the recommendations of the Public Works Director, may take steps necessary to suspend the work. The City may then upon such suspension, perform such work as may be necessary to maintain traffic, and charge all associated costs against the Contractor.

The contractor shall provide two traffic changeable message boards at beginning and end of project limits (2). Placement of boards shall be confirmed with East Palo Alto Police Department and City inspector prior to placement. Location of changeable message boards shall be included in traffic control plan that is to be submitted by contractor as per subsection 1.03 "Submittals" of this section.

Work shall also consist of submitting to the City for review comprehensive traffic control, construction (equipment and material) staging, and construction phasing plans prepared for each phase of construction.

#### 1.02 REFERENCES

The Contractor shall comply with the latest edition of the "Work Area Traffic Control Handbook" published by Building News Inc.; the "California Manual of Uniform Traffic Control Devices (CA MUTCD), Part 6, "Temporary Traffic Control", hereinafter referred to as the Traffic Control Manual; and the State Standard Plans and Specifications, California Department of Transportation, latest edition, for items related to traffic control within the work area.

## 1.03 SUBMITTALS

## A. TRAFFIC CONTROL PLAN

At least 15 working days prior to start of work, the Contractor shall submit a traffic control plan describing how traffic control will be achieved during the life of the project, prepared by a traffic engineer or registered civil engineer for approval prior to commencing work. The plans shall be in accordance with the Standard Plans and Specifications and the CA MUTCD on scaled drawings showing required signs, traffic control devices and flaggers for each situation anticipated to be encountered, i.e., intersections, mid-block, etc. both during working and non-working hours.

The traffic control plan shall provide a detailed approach for controlling traffic through the construction zone and for any proposed detours. The traffic control plan shall designate truck routes, where all vehicles exceeding 12,000 pounds gross weight hauling materials to or from the job site shall follow the established truck route streets to the closest point of the job site. The traffic control plan shall also be directed to the regulation and protection of pedestrian traffic including pedestrians, bicyclists, joggers, skaters, skateboarders, etc.

Once approved, the Contractor may modify the Traffic Control Plan only with permission from the Public Works Director.

CONSTRUCTION (EQUIPMENT AND MATERIAL) STAGING / FACILITIES

Staging of equipment and material shall be proposed and secured by the Contractor and approved by the Public Works Director. Contractor may not occupy any property outside of the right-of-way as shown on the plans.

At least 15 working days prior to start of work, the Contractor shall submit a construction (equipment) staging plan for approval prior to commencing work.

## B. CONSTRUCTION PHASING PLAN

At least 15 working days prior to start of work, the Contractor shall submit a construction phasing plan for approval prior to commencing work. The plans shall be in accordance with the Standard Plans and Specifications and the CA MUTCD on scaled drawings showing required signs, traffic control devices and flaggers for each situation anticipated to be encountered during working and non-working hours.

The construction phasing plan shall provide a detailed approach for controlling traffic through the construction zone for each stage or portion of the work. It shall show traffic control devices and signage necessary for phased construction or modifications to existing lane configurations.

Once approved, the Contractor may modify the Construction Phasing Plan only with permission from the Public Works Director.

Construction phasing plan shall be limited to not more than one block and one side of the road at a time or not more than 1000 feet and one side of the road at a time in order to minimize pedestrian traffic interruption. Contractor shall also practice same measures for concrete work associated to sidewalk construction.

## PART 2 – MATERIAL AND EQUIPMENT

## 2.01 TRAFFIC CONTROL DEVICES

Traffic control devices shall conform to the CA MUTCD. Temporary warning signs in the construction area shall have a black legend and border on an orange background. The color of other signs shall follow the standard for all highway signs.

Cones and delineators shall consist of cylindrical or cone shaped plastic devices, 18 inches to 48 inches in height. Cones or delineators shall have a flexible base of suitable weight, which will ensure stability.

Barricades shall be Type I, Type II or Type III as set forth in the Standard Plans and Specifications, and the CA MUTCD. Barricades used during hours of darkness shall be equipped with flashers.

Traffic control devices shall include a minimum of two (2) "Expect Delays" portable changeable message signs (CMS), to be placed at locations approved by the Public Works Director at least 7 days before the state of construction.

## PART 3 – EXECUTION

## 3.01 PLACEMENT, MAINTENANCE AND REMOVAL OF TRAFFIC CONTROL DEVICES

Proper traffic movement through the work area depends upon the driver controlling and directing his/her vehicle properly under unexpected situations. The Contractor shall advise the public of such conditions through the use of signs, flaggers, pavement markings, barricades, lights, cones and delineators.

Whenever construction operations obstruct the flow of vehicular or pedestrian traffic or present a hazard to vehicles or pedestrians in the vicinity of construction operations, the Contractor shall take appropriate action to warn, detour, protect and separate drivers and pedestrians from the work area and to direct them to alternate routes.

No one standard sequence of signs or control devices will suit all conditions, which may result from construction operations. Even for the same work the conditions may vary from hour to hour, requiring adjustment and revision of the traffic control program in effect. It is the Contractor's responsibility to adjust his /her traffic control based on the location and situation of the street.

No work may begin at any location until traffic control devices have been placed and if required, adjusted, and revised.

The Contractor shall furnish, install, maintain, and remove at his expense all barricades, signs, lights, or other devices in sufficient quantities necessary to adequately warn of any obstructions to the vehicular or pedestrian travel way. Flaggers shall be provided as necessary for the safety of pedestrians and vehicular traffic and to provide access to properties adjacent to the work.

The provisions in this section will not relieve the Contractor from his responsibility to provide such additional devices or take such measures as may be necessary to comply with the provisions of Section 7-1.04, "Public Safety", of the State Standard Specifications. If any component in the traffic control system is displaced or ceases to operate or function as intended, the Contractor shall immediately repair or replace the component and restore it to its original location.

At the end of each workday, the Contractor shall remove all components of the traffic control system, except portable delineators placed along a pavement elevation differential, or as required by the Public Works Director.

Construction area signs shall be furnished, installed, and maintained by the Contractor. The term "Construction Area Signs" shall also include temporary object markers and portable delineators required for the direction of public traffic through or around the work area during construction. After construction area signs are no longer required, they shall be removed.

## 3.02 COORDINATION WITH OTHERS

It is the responsibility of the Contractor to install and coordinate the traffic control plan with other contractors and utility companies working on adjacent roadways, businesses, and homes to avoid delays and conflicts to other projects (if any) and this project.

It is the responsibility of the Contractor to coordinate any and all communications with impacted utility companies prior and during construction.

## 3.03 LIMITATION ON WORKING HOURS

Contractor shall only implement traffic control and restrictions within the area that is estimated to be between 8:00 AM to 5:00 P.M, unless otherwise indicated or authorized by the Public Works Director. If night work is necessary, Contractor shall submit a request in writing to the Public Works Director at least two weeks in advance. Written request must highlight closest intersections that need to be on flashing red, start and end time of flashing red and dates. Notify the residents and businesses at least 48 hours prior to any construction during nighttime if approved by the Public Works Director. No extra pay or premium pay will be allowed for night work.

## 3.04 ACCESS TO PRIVATE PROPERTY

When construction work occurs within the City's right-of-way, provisions shall be made for the safe passage of vehicular and pedestrian traffic around the work area at all times.

Access to private residences and businesses shall be maintained at all times. When private driveways and entrances must be blocked for the completion of work, contractor shall make every effort to minimize the time it takes to complete such work, and shall notify the occupants/business owners and the City of the required access closures in accordance with Section 7-1.03 of the State Standard Specifications.

Before obstructing any private driveway entrance on public streets with equipment or other barriers, for any prolonged period, the Contractor shall notify the occupants of the property to allow for the removal of vehicles in accordance with the Section 3.10, "Parking Restrictions".

Contractor shall provide and maintain pedestrian access to and from the property with blocked access. During non-working hours, no driveway, house, or parking lot shall be denied access to a public roadway.

## 3.05 ROAD CLOSURES AND DETOURS

The contractor is required to keep one lane open in each direction of travel, at all times during construction except at Full-Depth Reclamation segment of roadway. The Contractor will be required to show how this requirement will be adhered to and implemented in the Construction Phasing and Traffic Control Plans required under Section 12-4 "Maintaining Traffic" of the State Standard Specifications.

Street closures will not be permitted.

The Contractor shall establish and maintain detours where applicable and conduct his construction operations in such a manner so as to minimize the hazard, inconvenience and disruption to the public. The Contractor shall direct and detour traffic through, around and adjacent to construction operations, as specified herein or in accordance with approved traffic control plans.

## 3.06 EMERGENCY VEHICLE ACCESS THROUGH DETOURS

During all detours the Contractor shall provide for the movement of emergency vehicles through the work area. When temporary traffic control is provided by flaggers they shall be instructed to give immediate passage to emergency vehicles that have activated their lights or sirens.

## 3.07 FLAGGERS

The Contractor shall employ flaggers as required for each specific detour and at all locations on the construction site where barricades and warning signs cannot control the movement of traffic. Where flaggers are required, they shall be logically placed in relation to the equipment or operation so as to give adequate warning and shall be placed in accordance with the Contract Documents, the CA MUTCD, and the approved Traffic Control Plan.

Flaggers shall utilize high-visibility, reflective safety apparel and hand-paddle signs at all times. Provide flaggers with two-way radios for communication when necessary. Red flags shall only be used for traffic control in emergency situations.

The Contractor shall pay fully the cost of furnishing all flaggers, including transporting flaggers, to provide for passage of public traffic.

## 3.08 NOTICE TO AGENCIES

The Contractor shall be responsible for keeping all affected agencies, businesses and residents informed of restrictions or limitations to either public or private roads caused by his operations, including but not limited to the City Police and Fire Departments, US Postal Service, Transit Services and Garbage Companies.

#### 3.09 TRAFFIC CONTROL DURING NON-WORKING DAYS AND HOURS

The full width on the traveled way shall be open for public use on non-working days and hours, which are to be defined as Saturdays, Sundays, designated City holidays, after 3:00 p.m. on Fridays, the day preceding designated legal holidays, and when construction operations are not actively in progress.

The Contractor shall not be permitted to maintain any lane or road closure during non-working days and hours without first obtaining written approval of the Public Works Director. As necessary, the Contractor shall restore travel lanes to their original alignment and configuration by means of backfilling and placing temporary pavement or bridging with steel plates.

The fact that rain or other causes may force suspension or delay of the work shall not relieve the Contractor of his responsibility for maintaining traffic around the project and providing access as specified herein. The Contractor shall at all times keep on the job such materials and equipment as may be necessary to keep streets and driveways within the project area open to traffic and in good repair.

The work site shall be cleaned each day, to the satisfaction of the Public Works Director, in order to remove all traffic hazards. Daily traffic control shall continue to remain in place until cleanup activities have been satisfactorily completed and all of the Contractor's equipment has been removed from the traveled way.

## 3.10 PARKING RESTRICTIONS

Contractor shall furnish and distribute written notices to area residents and businesses in accordance with Section 7-1.03 "Public Convenience" of the State Standard Specifications.

The Contractor shall furnish and install "No Parking, Tow-Away" signs on the front and back of Type II barricade at least 72-hours prior to starting construction work in that area. Barricades shall be placed at distances along the roadway of no greater than 100-feet.

Should the construction work not occur on the specified day, new "No Parking – Tow Away" signs shall be posted by the Contractor indicating a revised date. The Contractor may schedule work for the following working day, however, the "No Parking, Tow-Away" signs must be dated and reposted 72-hours in advance for the restriction to be enforceable.

## PART 4 – MEASUREMENT AND PAYMENT

Included in Section 100 of these Technical Specifications.

# END OF SECTION 103

# THIS PAGE INTENTIONALLY LEFT BLANK

## **SECTION 104**

## STORMWATER POLLUTION PREVENTION

#### PART 1 – GENERAL

#### 1.01 WORK INCLUDED

- A. Prohibit illicit discharge (non-rainwater) into the storm drain system.
- B. Construct any and all necessary systems to eliminate contaminants from entering the storm water system.
- C. Clean up and control of work site materials, spoils and debris.
- D. Removal of contaminants produced by the project.
- E. The work shall include the provision of all labor, materials, equipment and apparatus not specifically mentioned herein or noted on the plans, but which are incidental and necessary to complete the work specified.

#### 1.02 APPLICABLE PUBLICATIONS

National Pollution Discharge Elimination system (NPDES) Permit No. CAS612008 - latest version

California Storm Water Best Management Practice Handbooks:

- 1. Municipal
- 2. Industrial/Commercial
- 3. Construction Activity

C.3 Stormwater Technical Guidance Ver 5.0, June 2016 or the latest version.

California State Water Resources Control Board, Construction General Permit CAS000002 Order No. 2010-0014 DWQ (for sites greater than one acre).

Section 13 "Water Pollution Control" of the State Standard Specifications.

#### 1.03 QUALITY ASSURANCE

The Contractor shall designate an individual (to be approved by the City) available at all times of sufficient authority to halt work and implement BMPs and source control measures for the Contractor and all sub-contractors, suppliers, and other personnel that may be at the construction site(s), to prevent non-stormwater discharges from the construction site(s). This individual shall be the contact person for all matters of the project regarding non-stormwater discharges.

All work performed under this contract and all contractors and their associates and/or employees are required to comply with all applicable storm water regulations and to implement Best Management Practices (BMP's) at all times.

All employees and subcontractors shall be trained on the storm water pollution prevention requirements contained in these specifications. Training records shall be submitted to the City along with requests for progress payment.

A supply of spill clean-up materials such as rags or absorbents shall be kept readily accessible onsite.

## 1.04 ALLOWABLE DISCHARGES

Under current NPDES regulations, the following discharges to the storm drainage system are permitted, as long as the discharges are not significant pollutants:

- 1. Diverted stream flows, springs and natural drainage courses;
- 2. Rising flood waters;
- 3. Air conditioning condensation; and
- 4. Landscape irrigation.

Groundwater from dewatering and foundation drains will need additional certification that the groundwater has been tested or evaluated for the presence of pollutants subject to non-stormwater discharge regulations. In such a case, a Special Sewer Discharge Permit shall be required for the water to be discharged to the Sanitary Sewer System, as directed.

#### 1.05 SUBMITTALS

The Contractor shall develop and implement a Water Pollution Control Plan (WPCP) which shall contain at a minimum the items included in this section. The WPCP shall show the locations of all storm drains, storm drain pipes, points of entry (catch basins, inlets, outlets), and other features through which stormwater flows. The WPCP shall include a protocol for allowing drainage to flow properly during rainfall events while still preventing non-stormwater discharges from entering the storm drains, creeks, and Bay. Work shall not begin without the Public Works Director completing its review and finding no exceptions taken on the WPCP and finding at Public Works Director' sole discretion that the WPCP meets the intent and goals of the project.

The WPCP shall include descriptions and sketches of all BMPs, show locations and describe protocols for implementing and maintaining the following BMPs for but not limited to material storage, dewatering operations, bypass pumping, saw-cutting operations, pavement operations, concrete operations, grading and excavation operations, spill prevention and control, vehicle and equipment cleaning, vehicle and equipment operation and maintenance, litter control, dust control, pavement cleaning, and construction waste management.

The WPCP shall be updated to meet changing stages of the construction site(s).

#### 1.06 PENALTIES

The Contractor is responsible for penalties assessed or levied on the Contractor or the City as a result of his failure to comply with the provisions in this section including, but not limited to, compliance with the applicable provisions of the Manuals, and Federal, State, and local regulations and requirements as set forth therein. Penalties as used in this section shall include fines, penalties and damages, whether proposed, assessed, or levied against the Contractor or the County, including those levied under the Federal Clean Water Act and the State Water Quality Control Act, by governmental agencies or as a result of citizen suits. Penalties shall also include payments made or costs incurred in settlement for alleged violations of the Manuals, or applicable laws, regulations, or requirements. Costs incurred could include sums spent instead of penalties, in mitigation or to remediate or correct violations.

## PART 2 – PRODUCTS

Materials used shall be in conformance with Caltrans's Construction Site Best Management Practices (BMPs) Manual, latest edition, or the CASQA Construction BMP Handbook, latest edition.

A supply of spill clean-up materials such as drip pans, rags, or absorbents shall be kept readily accessible on-site.

## PART 3 – EXECUTION

#### 3.01 RECYCLING

At the end of each working day, all scrap, debris and waste material shall be collected and materials disposed of properly.

Dry, empty paint cans/buckets, old brushes, rollers, rags and drop cloths shall be disposed of in approved waste collection.

Dumpsters shall be inspected for leaks. As leaks are detected, the trash hauling contractor shall be contacted to replace or repair dumpsters that leak.

Water from cleaning dumpsters shall not be discharged on-site.

Regular waste collection shall be arranged for before dumpsters overflow.

## 3.02 HAZARDOUS MATERIAL/WASTE MANAGEMENT/MATERIALS MANAGEMENT

Designated areas of the project site shall be proposed by the contractor for approval by the Public Works Director suitable for material delivery, storage and waste collection as far from catch basins, gutters, drainage courses and creeks as possible.

All hazardous materials such as pesticides, paints, thinners, solvents and fuels; and all hazardous wastes such as waste oil and antifreeze shall be labeled and stored in accordance with State and Federal regulations.

All hazardous materials and all hazardous wastes shall be stored in accordance with secondary containment regulations, and it is recommended that these materials and wastes be covered as needed, to avoid potential management of collected rain water as a hazardous waste.

The contractor shall dispose of all excess thinners, solvents, chemicals, oil-based and water-based paint as hazardous waste.

Regular hazardous waste collection shall be arranged for to comply with time limits on the storage of hazardous wastes.

Granular materials shall be stored a minimum of ten feet from the closest catch basin and curb return. The contractor shall not allow these granular materials to enter the storm drain or creek.

Warning signs shall be posted in areas containing or treated with chemicals.

An accurate up-to-date inventory, including Material Safety Data Sheets (MSDS) of hazardous wastes stored on site shall be kept and available to assist emergency response personnel in the event of a hazardous materials incident.

Maintenance and fueling of vehicles and equipment shall be performed in a designated, bermed area, or over a drip pan that will not allow run-off of spills. Vehicles and equipment shall be regularly checked and have leaks repaired promptly. Secondary containment, shall be used to catch leaks or spills any time that vehicle or equipment fluids are dispensed, changed or poured.

## 3.03 CHEMICAL USAGE

When rain is forecast within 24 hours, or during wet weather, the Public Works Director may prevent the contractor from applying chemicals in outside areas.

Pesticides or fertilizers shall not be over-applied and material manufacturer's instructions shall be followed regarding uses, protective equipment, ventilation, flammability and mixing of chemicals. Over-application of a pesticide constitutes a "label violation" subject to an enforcement action by

the San Mateo County Agriculture Commissioner.

## 3.04 DUST CONTROL

Use means necessary to control dust on and near the work, and on and near off-site areas, if such dust is caused by the Contractor's operations during performance of the Work, or if resulting from the condition in which the Contractor leaves the site.

Thoroughly moisten surfaces as required to prevent dust being a nuisance to the public, neighbors, and personnel performing other work on the site.

Use dust palliatives or reclaimed water (not potable water).

Reclaimed water shall be used to control dust on a daily basis or as directed by the Public Works Director.

At the end of each working day, or as directed by the Public Works Director, the roadways and onsite paved areas shall be cleaned and swept of all materials attributed to or involved in the work. Streets shall not be washed down into a storm drain or creek in lieu of street sweeping. Water wash may be picked up by a vacuum unit in lieu of sweeping.

## 3.05 SAWCUTTING

The contractor shall cover or barricade catch basins using control measures such as filter fabric, straw bales, sand bags and fine earthen dams to keep slurry out of the storm drain system. The contractor shall ensure that the entire opening is sealed.

Saw cutting debris and spoils be removed by shovel, absorption, vacuum or pick up of waste prior to moving to the next location or at the end of each working day, whichever is sooner.

## 3.06 DEWATERING OPERATIONS

Water shall be routed through a control measure as determined and approved by the Public Works Director such as a sediment trap, sediment basin or Baker tank to remove settleable solids prior to discharge to the storm drain system. Filtration of the water following the control measure may be required on a case-by-case basis.

The filtered water shall be reused for other purposes such as dust control or irrigation to the extent possible.

If the project is within an area of known groundwater contamination, the water from dewatering operations shall be tested prior to discharge. If the water meets the Regional Water Quality Control Board standards, it may be discharged into the storm drain. Otherwise, the water shall be treated and hauled off-site for proper disposal.

## 3.07 CONCRETE GROUT AND MORTAR WASTE MANAGEMENT

Concrete, grout and mortar shall be stored away from the drainage areas and ensure that these materials do not enter the storm drain system.

Concrete trucks shall not be washed out into streets, gutters, storm drains, drainage channels or creeks.

Concrete trucks and equipment shall be washed out off-site or in a designated area on-site where the water will flow onto dirt or into a temporary pit or bermed area. The water shall percolate into the soil and the hardened concrete placed in a waste container for disposal. If a suitable soil or

bermed area is not available on-site, the wash water shall be collected and removed off-site and disposed of properly.

Water created by the washing of exposed aggregate concrete finish shall be collected in a suitable dirt area or filtered through straw bales or equivalent material before entering the storm drain system. Sweepings from exposed aggregate finish shall be collected and disposed of in a waste container or removed off-site and disposed of properly.

## 3.08 PAVING OPERATIONS

No paving while it is raining.

During wet weather store paving equipment indoors or cover with tarp or other waterproof covering.

Place drip pans or absorbent materials under paving equipment when not in use.

Catch basins and manholes shall be covered when paving or applying seal coat, tack coat, slurry seal or fog seal.

The Public Works Director may direct the contractor to protect drainage courses by using control measures such as earth dike, straw bale and sand bag to divert run-off or trap filter sediment.

Excess sand (placed as part of a sand seal or to absorb excess oil) shall not be swept or washed down into gutters, storm drains or creeks. The sand shall be collected and returned to the stockpile or disposed of in a trash container or hauled to an approved dump site. Water shall not be used to wash down fresh asphalt concrete.

#### 3.09 PAINTING

The cleaning of painting equipment and tools shall be performed in a designated area that will not enter the gutters, storm drains or creeks.

Excess paint shall be removed from brushes, rollers and equipment prior to cleanup.

Wash water from aqueous cleaning of water-based paint tools and equipment shall be disposed of in a sanitary sewer or onto a designated dirt area.

Paint thinners and solvents from oil-based paints shall be filtered and re-used when possible. Waste sludge, thinner and solvent from cleaning tools and equipment shall be disposed of as a hazardous waste.

## 3.10 SITE CLEANUP

The cleaning of equipment of materials shall not be performed on-site or in the street using soaps, solvents, degreasers, steam cleaning or equivalent methods.

All cleanup must be performed in a designated area that will not allow the cleaning rinse to flow offsite or into streets, gutters, storm drains, or creeks.

## PART 4 - MEASUREMENT AND PAYMENT

Included in Section 100 of these Technical Specifications.

## END OF SECTION 104

# THIS PAGE INTENTIONALLY LEFT BLANK

#### SECTION 105

#### CONCRETE IMPROVEMENTS

## PART 1 - GENERAL

Existing and new concrete facilities including, but not limited to, curb ramps, sidewalk, bulbouts, curb, gutter, and valley gutter shall be removed and replaced or constructed at the locations indicated on the plans, in Appendix A of this technical specifications, or as directed by the Engineer.

All new curb ramps shall have detectable warning surfaces installed.

#### 1.1 COORDINATION

Contractor shall notify the City 48 hours in advance of concrete removal.

At some locations, concrete repairs are specified to address damage due to tree roots and to comply with ADA guidelines. Contractor shall obtain approval from a licensed arborist prior to cutting, pruning or removing any tree roots while performing concrete repairs. Contractor shall apply root barriers prior to placing new concrete.

#### 1.2 SUBMITTALS

The Contractor shall furnish a concrete mix design to the Engineer at least ten (10) working days prior to the start of the work.

## PART 2 - MATERIAL AND EQUIPMENT

Concrete shall conform to the provisions of Section 90 of the Standard Specifications.

#### 2.1 CONCRETE MIX DESIGN

The Contractor shall furnish a concrete mix design to the Engineer at least ten (10) working days prior to the start of the work, based on the following guidelines:

All concrete facilities shall be constructed with Class B, 5 Sack mix which meets the following requirements:

Compressive Strength: 3000 psi@ 28 daysMaximum Slump:4 inchesLamp Black:1 lb. / cy

In addition, Polypropylene fiber reinforcement shall be added at the following rate:

General Concrete Facilities including curb, gutter, sidewalk, access ramps, etc. - 1.5 lbs/cy (0.01% by volume), 3/4 inch min. length.

Heavy Vehicular Facilities including cross gutters, spandrels, swales, and alley entrances - 3.0 lbs/cy (0.02% by volume), 1-1/2 inches min. length.

The Contractor shall be responsible for all costs associated with the required mix design. The Contractor shall comply with the "lamp black" color requirements.

## 2.2 DETECTABLE WARNING SURFACE

For curb ramp construction, detectable warning surfaces (DWS) shall be a cast in place style of truncated domes. No surface-applied matting systems (i.e. glued and screwed) style of DWS shall be allowed on new curb ramp construction.

For existing curb ramps and island passageways that are ADA compliant but require only a DWS, the DWS shall be cast in place style of truncated domes only. No surface-applied matting systems (i.e. glued and screwed) style of DWS shall be allowed.

The color of the DWS shall be yellow.

# PART 3 - EXECUTION

3.01 GENERAL

All work shall conform to the provisions of Section 90 of the Standard Specifications. All handicap access ramps shall comply with Title 24 and current UBC requirements, as well as County Standard Details included herein.

Concrete removal work shall conform to the provisions in Section 15-1.03B, "Removing Concrete," of the State Standard Specifications and these Technical Specifications. The existing concrete shall be sawcut full depth prior to removal. Any concrete broken due to the Contractor's failure to comply with these requirements shall be removed and replaced at the Contractor's expense. All concrete removed shall become the property of the contractor to be disposed of outside the right of way, each day work occurs.

The line and grade of the replaced facilities shall conform to the existing facilities. In most instances, this will consist of a straight line between existing facilities. In instances where existing sidewalk has been raised by tree roots, the line and grade may be adjusted to avoid tree roots, as directed by the Engineer.

The Contractor shall flow line water test all repaired curbs and gutters, cross gutters, and other repaired drainage facilities in the presence of the City's Inspector.

Access ramps shall be constructed at intersections such that ramp landing falls within the limits of the striped crosswalk or just past the painted stop bar or limit line.

In situations where access ramp is retrofitted into existing sidewalk, removal and replacement for new ramp shall include sidewalk as well as adjacent curb and gutter.

In situations where an existing curb ramp is to remain, but to be retrofitted with detectable warning surface, the scope of work shall include sawcutting existing ramp surface, removing existing concrete, and replacing new concrete with truncated domes material set into new concrete. Surface applied matting systems for truncated domes (i.e. glued and screwed mats) shall not be allowed for retrofitting a detectable warning surface to an existing ramp.

## 3.02 PROTECTION OF EXISTING FACILITIES

The contractor shall protect existing facilities from damage, and discoloration from concrete splash. Adjacent concrete facilities shall be covered during concrete placement to prevent concrete splash and excess concrete from staining the adjacent concrete. After initial placement, strikeoff and finishing, the protection shall be removed and the adjacent concrete cleaned.

Vertical existing facilities such as light poles, walls, etc. shall be protected with plastic extending a minimum of three feet above the concrete surface. After initial placement, strikeoff and finishing, the protection shall be removed and the vertical surfaces cleaned.

Protect existing drain inlet and hood as specified on the plans. If damaged by the construction activities, the Contractor shall replace the drain inlet and hood in kind and no additional cost to the City.

### 3.03 SUBGRADE

After the sub-grade is prepared, moisture conditioned, and compacted to 95% relative compaction at zero to three percent over optimum moisture content, the Contractor shall continuously maintain the sub-grade in a uniform condition at the moisture content obtained during sub-grade compaction until the concrete is placed.

In locations where existing concrete improvements are being replaced, existing base material may be re-compacted and used without over excavation and placement of additional baserock. For new concrete improvements, over excavation and placement of base material in accordance with the City's Standard Details shall be required.

#### 3.04 FORMING

Wooden forming shall be of two-inch nominal thickness staked at two foot intervals. The maximum gap at the bottom of the forms shall be 1-3/4 inches.

## 3.05 TOLERANCES

The maximum variation from design elevation shall not exceed +/- 0.02 feet. In some instances, particularly in critical drainage areas, tolerances may be reduced to zero. Concrete facilities shall be installed to maintain or provide positive drainage. Questions regarding applicable tolerances shall be directed to the Engineer forty-eight hours in advance of the work.

When shown on the drawings, the concrete shall be set at the design elevations. When existing facilities are to be removed and replaced, they shall conform to the existing elevations and grades. Generally, this will be at a straight line between the start and end points of the removal.

## 3.06 ADJUSTING UTILITY BOXES AND MANHOLES IN SIDEWALK AND RAMPS

Contractor shall refer to "Utility Structure Adjustments" Technical Specifications section.

Pull boxes located in ramp construction areas shall be replaced and set to finished grade.

#### 3.07 PLACING AND FINISHING

The concrete shall be deposited on a moist grade in such a manner as to require as little rehandling as possible. Workmen shall not be allowed to walk in the freshly mixed concrete with boots or shoes coated with earth or foreign substances.

In general, adding water to the surface of the concrete to assist in finishing operations shall not be permitted.

Before final finishing is completed and before the concrete has taken its initial set, the edges shall be carefully finished with the radius shown on the plans or a radius to match the existing construction.

Concrete shall be thoroughly consolidated against and along the faces of all forms and adjacent concrete. After the forms are removed, excess concrete below the form surface shall be removed to be flush with the form face.

All new concrete shall match existing facilities in texture, color, and appearance. Surfaces shall be broom finished transversely to the line of pedestrian traffic. The Contractor shall clean at his

expense all discolored concrete. The concrete may be cleaned by abrasive blast cleaning or other methods approved by the Engineer. Repairs shall be made by removing and replacing the entire unit between scoring lines or joints.

#### 3.08 CONCRETE PROTECTION

The Contractor shall always have materials available to protect the surface of the fresh concrete against rain. These materials shall consist of burlap, curing paper, or plastic sheeting. If plastic sheeting is used, it shall not be allowed to contact finished concrete surfaces.

The Contractor shall also protect the concrete against traffic and vandalism. If the concrete is damaged or vandalized, the Contractor shall make the necessary repairs at its own expense. The repair procedure for damaged or vandalized concrete shall be approved in advance by the Engineer.

#### 3.09 CURING

Concrete shall be cured by protecting it against loss of moisture, rapid temperature change, and mechanical injury for at least three days after placement. White or clear liquid membrane compound shall be used. After finishing operations have been completed, the entire surface of the newly placed concrete shall be covered by the curing medium. The edges of the concrete exposed by the removal of forms shall be protected immediately to provide these surfaces with continuous curing treatment.

The concrete shall be allowed to cure for seventy-two hours prior to placing adjacent asphalt concrete.

#### 3.10 JOINTS

Control joints shall be placed at a maximum spacing of ten feet.

Control joints in all PCC facilities, except sidewalks, shall be formed by tooling a deep joint or by using expansion joint material. If expansion joint material is used, a minimum of two 1/2 inch by 18 inch dowels shall be used with additional dowels placed every 24 inches.

Control joints in sidewalks may be made using a tooled joint which shall extend a minimum of 1/4 of the depth of the concrete and shall not be less than 1-1/2 inches in depth.

In sections of new curb and gutter adjacent to an existing tree, a deep joint shall be placed through the curb and gutter, aligned with the center of the tree trunk.

Expansion joints shall be required at a maximum of forty foot intervals on curbs, curbs and gutters, cross gutters, swales, and sidewalks. Expansion joints shall also be required on all corners of curbs, curbs and gutters, sidewalks, at the outside boundary of access ramps, and other locations with discontinuities or reentrant corners which may cause cracking.

### 3.11 CLEANUP AND BACKFILL

After the concrete is placed, cured, and the forms have been removed, the Contractor shall clean the site of all concrete and forming debris. The aggregate base shall be replaced to match the existing base and compacted to 95% relative compaction. The pavement shall be restored in accordance with the "4-inch Base Repair (Digouts)" Technical Specification section. A minimum of two lifts shall be used, none of which shall exceed three inches, and the top lift shall be a minimum of 1-1/2 inches thick. The total thickness of the restored pavement shall match that of the existing pavement.

For pavements to be overlaid or resurfaced, the aggregate base and asphalt concrete may be replaced with cement sand slurry in conformance with applicable County Standard Detail.

After curing has been completed and the forms have been removed from the new curb and gutter or sidewalk, the void between the new concrete and the existing parkway shall be filled with clean native material or imported topsoil and the entire parkway left in a clean and orderly condition.

For concrete removed but not replaced, the resulting void after excavation shall be backfilled with clean native material or topsoil.

#### 3.12 DETECTABLE WARNING SURFACE (DWS)

All curb ramps shall have a detectable warning surface installed in conformance with the latest Caltrans Standards. The color of the DWS installed shall be YELLOW.

Existing curb ramps shall be removed in their entirety and replaced with a new ramp as identified on the project plans. A cast in place DWS product shall be installed at each new ramp, in conformance with these Technical Provisions. Locations for this work are identified on the project plans.

## 3.13 WATER VALVE LOCATING ENGRAVINGS

Contractor shall replace all water valve locating engravings located on the top and face of existing concrete curb that is to be removed and replaced. Engravings shall either be set/stamped into the finished concrete surface prior to curing, or engraved after the curing process.

The purpose of the engravings is to identify the location and offset of the existing water valves from the face of curb.

An arrow is engraved on the top of curb to point in the direction of the water valve being identified. The offset distance in feet from the face of curb shall be engraved in the face of curb in roman numerals. The engravings (arrows and roman numerals) shall be approximately 3" tall and a width of 1-2 inches.

After concrete has cured and engraving is placed, inside the engraving shall be painted blue. The paint shall only be placed within the engraved area and not on the surrounding flush concrete surface.

## PART 4 - QUALITY ASSURANCE

Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of this Section.

Only remove quantities of curb and gutter, sidewalk, and curb ramp that can be fully replaced with new improvements and opened to the public within five (5) calendar days.

Compressive strength and cement content for the class of Portland Cement Concrete herein designated shall be the minimum acceptable.

No concrete for concrete improvements shall be placed until the subgrade, the forms, and reinforcement have been approved.

#### 4.01 CODES AND STANDARDS

Proportioning of Portland Cement concrete shall conform to the applicable provisions of Section 90-1.02F "Proportioning" of the State Standard Specifications.

Mixing and transporting of Portland Cement Concrete shall conform to the applicable provisions of Section 90-1.02G "Mixing and Transporting Concrete" of the State Standard Specifications.

Curing of Portland Cement Concrete shall conform to the applicable provisions of Sections 90-1.03B(3) "Curing Compound Method" of the State Standard Specifications.

Protection of Portland Cement Concrete shall be provided in conformance with the applicable provisions of Section 90-1.03C "Protecting Concrete" of the State Standard Specifications.

Forming of concrete for improvements shall conform to the provisions of Section 73-1.03C "Fixed Form Method" of the State Standard Specifications forming for cast-in-place structures shall conform to Section 51-1.03C(2) "Forms" of the State Standard Specifications.

Placing of concrete improvements shall conform to the provisions of Sections 73-2 "Curbs" and 73-3 "Sidewalks, Gutter Depressions, Island Paving, Curb Ramps, and Driveways" of the State Standard Specifications; placing of concrete for cast-in-place concrete structures shall conform to Section 51-1.03 "Construction" of the State Standard Specifications.

Finishing of cast-in-place concrete structures shall conform to the provisions of Section 51-1.03F "Finishing Concrete" of the State Standard Specifications. Finishing of concrete improvements shall conform to Section 73 of the Standard Specifications. Unless otherwise called for on the plans, all buried surfaces shall have "Ordinary Surface Finish" all exposed surfaces shall have "Class 1 Surface Finish".

Placing and splicing of steel reinforcement shall conform to the requirements of Section 52-1.03D "Placing" of the State Standard Specifications.

## 4.02 CERTIFICATIONS

At the time of delivery provide certificates of compliance signed by both Contractor and Supplier containing the following statements:

- a. Materials supplied comply with the specification in all respects.
- b. Proportioning and mixing is in compliance with a design mix which has been field tested in accordance with the herein requirements and produces the required compressive strength under like conditions.
- c. Statement of type and amount of any admixtures.
- d. All certificates shall include the Material and Supplier's mix design number.

At time of delivery provide certified delivery ticket stating volume of concrete delivered and time of mixing, or time of load-out in case of transit mixers.

## 4.03 JOB CONDITIONS

Admixtures shall not be used except upon the prior written permission of the Engineer and, if permitted, the concrete containing same will be subject to the same compliance testing as herein specified for the various classes of concrete.

Temperature of mixed concrete, immediately prior to placement, shall not be less than 50° F, nor more than 90°F. Aggregates and water shall be heated or cooled at the mixing plant by supplier as necessary to produce concrete within these limits. Neither aggregates nor mixing water shall be heated to exceed 150°F.

No additional mixing water shall be incorporated into the concrete during transport or after arrival at the work site unless such water is specifically authorized by the Engineer. If authorization to add mixing water is obtained and mixing water is added to the mix, the mixer drum shall then be revolved a minimum of thirty (30) revolutions.

Hand mixing of Portland Cement Concrete shall not be allowed except upon prior written approval. Where a portion of existing concrete improvements is to be reconstructed, the section to be removed shall first be a cut with an approved concrete saw to a minimum depth of one-half the depth of the existing concrete at the first score line beyond the area to be replaced.

Where concrete removal is required, it shall be removed to the nearest score line of joints. Prior to placing concrete for concrete structures, Contractor shall first secure approval of the forms and any required reinforcement.

## 4.04 QUALITY CONTROL

Do not commence placement of concrete until mix designs have been reviewed and approved by the Engineer.

## 4.05 SUBMITTALS

Within 14 calendar days after the Contractor has received the Notice to Proceed, the Contractor shall submit the concrete mix design for all items of work.

# PART 5 -- PRODUCTS

## 5.01 AGGREGATE FOR PORTLAND CEMENT CONCRETE

Aggregates for Portland Cement Concrete shall conform to the requirements of Section 90-1.02C "Aggregates" of the State Standard Specification.

Unless otherwise specified or called for on the plans for the work, aggregate size and gradation for Portland Cement Concrete shall conform to the requirements of Section 90-1.02C(4)(d) "Combined Aggregate Gradation" of the State Standard Specifications for one inch (1") maximum combined aggregate.

## 5.02 WATER FOR PORTLAND CEMENT CONCRETE

Water for mixing and curing concrete and for washing aggregates shall conform to the requirements of Section 90-1.02D "Water" of the State Standard Specifications.

## 5.03 CEMENT FOR PORTLAND CEMENT CONCRETE

Cement for Portland Cement Concrete to be placed in roadway improvements such as curbs, gutters, walks, valley gutters, driveways, surface and subsurface pads or slabs shall be Type V or Type II (modified) cement conforming to the requirements of ASTM Designation C150, with the following modifications:

- 1. The cement shall not contain more than 0.60% by weight of alkalies, calculated as the percentage of Na20 plus 0.658 times the percentage of K20 when determined by either direct 4 intensity flame photometry or by the atomic absorption method. The instrument and procedure used shall be qualified as to precision and accuracy in accordance with the requirements of ASTM Designation C114.
- 2. The autoclave expansion shall not exceed 0.50%.

- 3. Mortar, containing the Portland Cement to be used and the sand, when tested in accordance with Test Method No. Calif 527, shall not expand in water more than 0.010% and shall have an air content less than 048%.
- 4. Allowable tri-calcium Aluminate (C3A) by weight shall not exceed 5%. Allowable tetracalcium alumino ferrite plus twice the tricalcium aluminate (C4AF+2C3A) by weight shall not exceed 25%. The sulfate expansion test (ASTM C452) may be used in lieu of the above chemical requirements, provided the sulfate expansion does not exceed 0.040% at 14 days (max).
- 5. The Contractor may substitute pozzolan for Portland Cement in amounts up to 15% of the required mix unless high early strength concrete is specified. Pozzolan shall consist of Class F fly ash meeting the requirements of ASTM C618.

Cement for Portland Cement Concrete to be placed in surface improvements shall contain a coloring compound equivalent to 1/4 pound of lampblack per cubic yard, added to the concrete at the central mixing plant.

Liquiblack, as supplied by Concrete Corporation of Redwood City, California, may be used in lieu of lampblack. One pint of liquiblack shall be considered equal to one pound of lampblack.

## 5.04 CLASSIFICATION OF PORTLAND CEMENT CONCRETE

Portland Cement Concrete shall be minor concrete conforming to the requirements of Section 90-2 "Minor Concrete" of the State Standard Specifications with at least 505 pounds of cementitious material per cubic yard and 1-inch maximum graded coarse aggregate. No bagged mix is permitted.

Portland Cement Concrete not conforming to the above classification or having required minimum compressive strengths other than those set forth above, shall conform to requirements to be set forth for same noted on the plans or detail drawings.

## 5.05 EXPANSION JOINT MATERIAL

Material for expansion joints in Portland cement concrete improvements shall be pre-molded expansion joint fillers of the thickness called for on the plans and conforming to the requirements of ASTM Designation D1751. Expansion joint material shall be shaped to fit the cross section of the concrete prior to being placed. Suppliers certificates showing conformance with this specification shall be delivered with each shipment of materials delivered to the job site.

## 5.06 REINFORCEMENT AND DOWELS

Bar reinforcement for concrete improvements shall be deformed steel bars of the size or sizes called for on the plans conforming to the requirements of ASTM Designation A615 for Grade 60 bars. Size and shape for bar reinforcement shall conform to the details shown or called for on the plans. Slip dowels, where noted or called for on the plans or detail drawings shall be smooth billet-steel bars as designated and conforming to the requirements of ASTM Designation A615 for Grade 60 bars. Ends of bars inserted in new work shall be covered with a cardboard tube sealed with cork; no grease or oil will be used.

Mesh for reinforcement for concrete improvements shall be cold drawn steel wire mesh of the size and spacing called for on the plans conforming to the requirements of ASTM Designation A82 for the material and ASTM Designation A185 for the mesh. Size and extent of mesh reinforcement shall conform to the details shown or called for on the plans.

Tie wire for reinforcement shall be eighteen (18) gauge or heavier black annealed conforming to the requirements of ASTM Designation A82.

Suppliers certificates showing conformance with this specification shall be delivered with each shipment of materials delivered to the job site.

### 5.07 ACCESSORY MATERIALS

Materials for water stops and other items required in the placement of Portland Cement Concrete shall conform to the applicable requirements of Section 51 of the State Standard Specifications unless otherwise specifically noted or called for on the plans or detail drawings.

Curing compound for use on exposed surfaces of Portland Cement Concrete shall be "Non-Pigmented Curing Compound - chlorinated Rubber Base-Clear" conforming to the requirements contained in 90-1.03B(3) "Curing Compound Method" of the State Standard Specifications.

#### 5.08 MATERIAL FOR FORMS

Material for forms for cast-in-place concrete shall conform to the requirements of Section 51-1.03C(2) "Forms" of the State Standard Specifications.

#### 5.09 CONCRETE FOR CURBS/GUTTERS, CURB RAMPS, VALLEY GUTTERS

All concrete shall conform to the applicable County Standard Drawings and Specifications unless otherwise specified herein. In addition, the Concrete mix shall have 1" maximum combined aggregate grading.

Portland cement: ASTM C150 Type I or II. 6-sacks cement minimum per cubic yard, 2 pints of liquid lampblack, per cubic yard.

Water shall be clean, free from injurious amounts of oil, alkali, organic matter or other deleterious material. 6 gallons water maximum per sack cement.

Aggregate: ASTM C33 - clean, hard, durable, uncontaminated, washed, graded, cleaned and screened. Crusher run or bank run gravel will not be permitted.

The concrete mix for the replacement of concrete street slabs and valley gutters shall conform to Section 105.

All concrete shall have a slump of 3" to 4" and shall obtain at least 3500 psi strength at 28 days. Concrete mix shall be such that the new concrete structure can be opened to vehicular traffic within three (3) calendar days from the time of placement without damaging the new concrete.

Lamp black content shall be of an approved quality mixed at the rate of two (2) pints of liquid per cubic yard of concrete for curb & gutter, sidewalks, and curb ramps.

#### 5.10 AGGREGATE BASE

Aggregate Base shall be Class II and conform to the applicable requirements set forth in the San Mateo County Standard Drawings

## 5.11 TOP SOIL

Soil to be used in planter areas between curbs and sidewalks shall be fertile, well-drained, of uniform quality, free from stones over 1" diameter, sticks, oils, chemicals, plaster, concrete, and other deleterious materials.

Top soil shall conform to Caltrans Standard Specifications, Section 20- 2.01.

## 5.12 DETECTABLE WARNING SURFACES (TRUNCATED DOME)

All curb ramps shall have a detectable warning surface installed in conformance with the latest Caltrans Standards. The color of the DWS installed shall be YELLOW.

Existing curb ramps shall be removed in their entirety and replaced with a new ramp as identified on the project plans. A cast in place DWS product shall be installed at each new ramp, in conformance with these Technical Provisions. Locations for this work are identified on the project plans.

## PART 6 -- EXECUTION

#### GENERAL

The demolition of the existing curb and gutter, sidewalk, and curb ramps shall proceed as detailed in Section 105 Concrete Improvements of these Specifications.

The Contractor shall lower or replace any water service lines encountered while excavating or grading for the sidewalk and curb & gutter work as directed by the Engineer. Any gas service lines encountered shall be relocated by the City's Utility Operation Division.

The Contractor shall place a minimum of four (4) inches of Class 2 aggregate base beneath new concrete improvements unless otherwise stated in these Project Specifications. Excavate, re-grade, provide, and install additional base material as necessary to obtain four (4) inches minimum in areas where existing improvements are being removed. Before placing new base or replacing existing material, sub- grade material shall be compacted to minimum of 90% relative compaction. The base material shall be compacted to a minimum of 95% relative compaction as determined by ASTM Tests D1557, D2922 and D3017.

Forms shall be checked and approved by the Engineer or City Inspector before any placement of concrete.

Dowel new concrete into existing concrete with  $\frac{1}{2}$ "-diameter, 12"-long dowels at two feet on center, epoxied and embedded six inches. At expansion joints and at end of pours, use  $\frac{1}{2}$ "-diameter, 12"-long dowels, smooth and capped, to tie into adjacent concrete. Dowel holes shall be drilled into the existing sidewalk or curb without causing damage.

Concrete shall not be placed when air temperature is below 40 IF or during rain or within two hours before sunset. No on-site mixing of concrete shall be allowed.

Concrete shall be placed and compacted in forms without segregation. After placement, the concrete shall be consolidated sufficiently to produce a dense mass, struck off and floated. Final finishing operations shall not proceed until all bleed water has evaporated from the surface. Sprinkling of dry cement to absorb excessive surface moisture shall not be allowed. The surface texture of finished concrete shall conform to adjacent concrete. Forms shall not be removed less than twenty-four hours after the concrete has been placed. In no event shall forms be removed while the concrete is sufficiently plastic to slump.

As soon as the concrete is set, it shall be cured for a period of at least 72 hours by spraying with an accepted pigmented impervious membrane curing compound.

The Contractor shall restore any landscaping, irrigation system, and special surface treatments encountered in the execution of this Work to a condition equivalent or better than that which existed prior to the commencement of this Work. The above shall include but not be limited to:

Brickwork

- Landscaping and irrigation systems
- Painting of curbs if a designated color exists, such as a "red zone"

The Contractor shall notify residents of driveway closures due to concrete construction per Section 103 Traffic Control of these Specifications. After excavation, the Contractor shall provide temporary access to the driveways for residents during weekend or holiday periods if the forms have not been set, by either placing aggregate base or by utilizing steel plates.

The Contractor shall protect all completed Work from damage. All discolored concrete shall be cleaned to a uniform color. Repairs and cleaning of new concrete shall be at the expense of the Contractor.

The Contractor shall compact all new asphalt concrete, base material, and topsoil related to the concrete work described herein according to the Specifications. All costs for furnishing, placing and compacting these materials shall be included in the price for the Work.

The Contractor shall ensure that the site is left in a safe condition from loose lumber, nails, etc.

All sidewalk, curb and gutter, curb ramp, and entrance walks to be removed and replaced are as shown on the Plans.

All concrete shall be placed against existing sawcut concrete or 2" thick wood forms. When pouring new gutters, 12 inches of adjacent pavement shall be removed beyond the lip of gutter to allow for the placement of forms. No concrete shall be placed against asphalt or spalled, chipped or broken concrete.

At locations where new curb ramps are to be installed, 12 inches of adjacent pavement shall be removed at the lip of gutter to allow for the placement of forms.

The Contractor shall temporarily plug the gap between existing pavement and new concrete structures with cut back asphalt or asphalt concrete before opening the concrete structure to the public. Before the final paving, the plug material between existing pavement and new concrete structure shall be removed completely. The subgrade material shall be compacted to 95% relative compaction, then the gap shall be paved back with material in kind.

All existing expansion joints shall be replaced in the valley gutters, curb and gutter. Expansion joints shall be placed at right angles to the curb line and extend through the entire thickness of the concrete. Concrete adjacent to expansion joints shall be finished with an edger tool. Contraction joints, scored a minimum of 1  $\frac{1}{2}$ " shall be constructed at intervals not to exceed 20 feet in the sidewalk, curb and gutter. The width of contraction joints shall not exceed 1/8", and the edges of contraction joints shall be finished with a "T" bar. All joints shall be scored at right angles to the curb line. Score marks shall be uniform with those in the adjacent concrete. All score marks shall be  $\frac{1}{4}$ " in depth, and left in a cleanly rounded condition.

The Contractor shall stamp the name of the street on top of the curb, at the location where the street name was removed as part of the concrete removal and replacement.

The Contractor shall check grades to ensure drainage at every corner return where new curb and gutter and curb ramps are installed. Finished areas with drainage problems shall be removed and replaced at the expense of the Contractor.

Curb ramps shall have a detectable warning surface that extends the full width and 3 feet depth of the curb ramp. The edge of the detectable warning surface nearest the street shall be between 6" and 8" from the gutter flowline. Curb ramps with raised truncated domes shall conform to Caltrans

Standard Plans Curb Ramp Detail No. A88A and Caltrans Standard Specifications. Refer to the County's Standard Drawings for other curb ramp details.

For retrofit curb ramp conditions, the location of the truncated dome panel shall be approved by the Engineer prior to installation. Adhere to the manufacturer's installation instructions. The Contractor shall grind the area to receive the detectable warning surface to make the finished surface flush with the surrounding surface. The area shall be cleaned of dust and debris before installation of the detectable warning surface.

## 6.01 STRUCTURAL EXCAVATION

Structural excavation may be either by hand, or by machine and shall be neat to the line and dimension shown or called for on the plans. Excavation shall be sufficient width to provide adequate space for working therein, and comply with CAL-OSHA requirements.

Where an excavation has been constructed below the design grade, the bottom of the excavation shall be backfilled to grade with approved material and compacted in place to 95% of the maximum dry density.

Surplus excavation material remaining upon completion of the work shall be either removed from job site, or conditioned to optimum moisture content and compacted as fill at the site.

## 6.02 BRACING AND SHORING

The Contractor shall furnish, place and maintain such bracing and shoring as may be required to support the sides of the excavations for the proper protection to workmen; to facilitate the work; to prevent damage to adjacent structures or facilities. Upon completion of the work, all bracing and shoring shall be removed, unless otherwise directed.

The Contractor is solely responsible for all bracing and shoring and shall, if required, submit an application and supporting data for an effective shoring system to the Engineer. The Engineer may forward the application to the California Division of Industrial Safety for design, assumed soils conditions, and the estimation of forces to be resisted, together with plans and specifications of the materials and methods to be used. The application shall be prepared by a Civil Engineer registered in California. No excavation around cast-in-place concrete structures shall proceed until the Contractor has received the return of an approved application, if required.

Contact City Engineer if Shoring in Bay Mud Conditions.

## 6.03 FORMS FOR CONCRETE

Concrete improvements shall be formed with a smooth and true upper edge and the side of the form shall be placed next to concrete with a smooth finish. Forms shall be constructed or made rigid enough to withstand the pressure of the fresh concrete to be placed without any distortion.

All forms shall have been thoroughly cleaned prior to placement and shall be coated with an approved form oil sufficient to prevent adherence of concrete prior to placing.

Forms shall be carefully set to the alignment and grade established and shall conform to the required dimensions. Forms shall be rigidly held in place by stakes set at satisfactory intervals. Sufficient clamps, spreaders and braces shall be installed to insure the rigidity of the forms.

Forms for back and face of curbs, lip of gutters and edge of walks, valley gutters or other surface slabs shall be equal to the full depth of the concrete as shown, noted or called for on the plans or detail drawings. Composite forms made up from benders or thin planks of sufficient ply to ensure rigidity of the form in the shape required may be used on curves and curb returns.

No concrete shall be placed until the Engineer has inspected and approved the forms and subgrade. Concrete is subject to rejection without approval by the Engineer.

# 6.04 PLACING STEEL REINFORCEMENT

Bars shall be free of mortar, oil, dirt, excessive mill scale and scabby rust and other coatings of any character that would destroy or reduce the bond. All bending shall be done cold, to the shapes shown on the plans. The length of lapped splices shall be as follows:

Reinforcing bars No. 8, or smaller, shall be lapped at least 45 bar diameters of the smaller bar joined, and reinforced bars Nos. 9, 10, and 11 shall be lapped at least 60 bar diameters of the smaller bars joined, except when otherwise shown on the plans.

Splice locations shall be made as indicated on the plans.

Reinforcement shall be accurately placed as shown on the plans and shall be firmly and securely held in position by wiring at intersections and splices and by using precast mortar blocks or ferrous metal chairs, spacers, metal hangers, supporting wires, and other approved devices of sufficient strength to resist crushing under applied loads. Supports and ties shall be such as to permit walking on reinforcing without undue displacement.

4"

Reinforcing shall be placed so as to have the following minimum concrete cover:

- Surfaces exposed to water
- Surfaces poured against earth 3"
- Formed surfaces exposed to earth or weather 2"
- Slabs, walls, not exposed to weather or earth 1"

Minimum spacing, center of parallel bars shall be two and one half (2-1/2) times the diameter of the larger sized bar. All reinforcing shall be securely tied in place prior to pouring concrete. Placing of dowels or other reinforcing in the wet concrete is not permitted.

## 6.05 MIXING CONCRETE

All concrete shall be transit mixed in accordance with the requirements of ASTM Designation C94. Transit mixed concrete shall be mixed for not less than ten (10) minutes total, of which not less than three (3) minutes shall be on the site just prior to pouring. Mixing shall be continuous with no interruptions from the time the truck is filled until the time it is emptied. Concrete shall be placed within one hour of the time water is first added.

Hand mixing of concrete for use in concrete structures will not be permitted.

## 6.06 PLACING CONCRETE

Subgrade shall be thoroughly wetted prior to the placing of concrete for all concrete placed directly on soil. All standing water shall be removed prior to placing of concrete.

No concrete shall be placed until the subgrade and the forms have been approved.

Concrete shall be conveyed from mixer to final location as rapidly as possible by methods preventing separation of the ingredients. Deposit concrete as nearly as possible in final position to avoid rehandling.

Concrete shall be placed and compacted in forms without segregation by means of mechanical vibration or by other means as approved by the Engineer. Vibration shall continue until the material is sufficiently consolidated and absent of all voids without causing segregation of material. The use of vibrators for extensive shifting of fresh concrete will not be permitted.

All control and construction joints shall be as shown on the plans.

Concrete in certain locations may be pumped into place upon prior approval. When this procedure requires redesign of the mix, such redesign shall be submitted for approval in the same manner as herein specified for approval of design mixes.

#### 6.07 FORM REMOVAL

Forms shall be removed without damage to concrete. All forms below the ground surface, together with all shores and braces, shall be removed before backfilling.

Backfill against concrete shall not commence until the concrete has developed sufficient strength to prevent damage.

Forms with cast-in-place walls shall remain in place at least 72 hours after pouring.

Forms with suspended slabs shall remain in place at least 28 days after pouring.

Edge forms shall remain in place at least 24 hours after pouring.

## 6.08 EXPANSION JOINTS

Expansion joints incorporating pre-molded joint fillers shall be constructed at twenty (20) foot intervals in all concrete curbs, gutters and sidewalks, and at the ends of curb returns. At each expansion joint, one-half by twelve inch (1/2" x 12") smooth slip dowels shall be installed in the positions shown or noted on the detail drawings.

Slip dowels shall be oriented at right angles to the expansion joint and shall be held firmly in place during the construction process by means of appropriate chairs.

Expansion joints and slip dowels shall be constructed in valley gutters and driveway approaches in the positions indicated or called for on the detail drawings.

# 6.09 CONTROL JOINTS

Control joints shall be constructed in concrete curbs, gutters, walkways and pavements between expansion joints at ten (10) foot intervals throughout, or as shown on the plans. Depth of joint score shall be a minimum of one-fourth (25%) the thickness of the concrete.

#### 6.10 FINISHING

Concrete curb and gutter shall be finished in conformance with the applicable requirements of Section 73-1.04 and 73-1.05A of the State Standard Specifications as modified herein.

Where monolithic curb, gutter and sidewalk is specified, separate concrete pours will not be allowed.

Horizontal surfaces shall receive a medium broom finish unless otherwise shown.

New work shall match existing in finish, score pattern, and color.

## 6.11 ROADWAY ACCESSORY CONSTRUCTION

Concrete walkways, island paving, valley gutters and driveway approaches shall be formed, placed and finished in conformance with the applicable requirements of Sections 73-2 "Curbs" and 73-3

"Sidewalks, Gutter Depressions, Island Paving, Curb Ramps, and Driveways" of the State Standard Specifications as modified herein.

Where new concrete curb and gutter is to be constructed against existing AC remove 12" of the AC to form new gutter lip. Patch pave after gutter form is removed.

## 6.12 CONNECTING TO EXISTING CONCRETE IMPROVEMENTS

Whenever new curb, gutter, or sidewalk is to connect to existing improvements to remain, sawcut to existing sound concrete at the nearest score line or expansion joint. Drill and insert 1/2" diameter by 12" long dowels at 24" on center into existing improvements. Install pre-molded expansion joint filler at the matching joint.

A "cold" joint to the existing curb, gutter or sidewalk is not permitted.

## 6.13 FIELD QUALITY CONTROL

Finish subgrade for concrete improvements shall be subject to approval prior to placement of forms.

No concrete shall be placed prior to approval of forms.

Appearance and finish of all concrete improvements constructed shall not contain "bird baths" or pond water and shall be smooth and ridge free.

Finish grade at top of curb, flow line of gutter, and the finish cross section of concrete improvements shall conform to the design grades and cross sections.

Variation of concrete improvements from design grade and cross section as shown or called for on the plans shall not exceed the tolerances established in Sections 73-1.05 and/or 73-1.06 of the State Standard Specifications, as applicable.

# 6.13 RESTORATION OF EXISTING IMPROVEMENTS

Existing pavement or other improvements removed or damaged due to the installation of concrete improvements shall be replaced in kind.

Existing landscaping or planting removed, damaged or disturbed due to the installation of concrete improvements shall be replaced in kind.

## 6.14 CLEANUP

Surplus material and debris remaining upon completion of the work shall be segregated as to type, and transported from the job site and disposed of in a legal manner.

# END OF SECTION 105

# THIS PAGE INTENTIONALLY LEFT BLANK

## **SECTION 106**

## ASPHALT CONCRETE GRINDING

#### PART 1 - GENERAL

Work covered by this section includes "cold planning" operations of existing pavement. Work shall be in conformance with Section 39-3.04 of the State Specifications and the County Standard Specifications as modified herein.

## PART 2 - MATERIAL AND EQUIPMENT

Grinding shall be performed with abrasive grinding equipment utilizing diamond cutting blades. Except on structures, the entire area of pavement in locations designated shall be ground. Removal by heater planning shall not be allowed.

Due to multiple street segment locations across the City, the Contractor shall have a minimum of one power sweeper with vacuum for each grinder.

#### **PART 3 - EXECUTION**

### 3.01 GENERAL

The depth, width and shape of the cut shall be as indicated on the plans or as directed by the Engineer. All tapered or otherwise non-vertical edges must be saw cut or jack hammered to provide a straight, vertical edge. The final cut shall result in a uniform surface conforming to the plans. The underlying pavement surface to remain in place shall not be damaged in any way.

The material planed from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, shall be immediately removed from the site of the work and disposed of, unless otherwise directed by the Engineer. All material removed by grinding, including pavement fabric (if present), shall be cleaned up and legally disposed of outside of the City limits. Recycling of the material is encouraged in compliance with the City recycling ordinance. Contractor shall place and maintain warning signs and temporary AC patch material to serve as "ramps" at all pedestrian and vehicular crossings over entire length of grinding. Final overlay of milled surfaces shall occur no later than seven (7) calendar days after the completion of grinding operations.

The Contractor shall notify the Engineer immediately upon discovering pavement fabric and anytime that the limits of the fabric are reached so that the Engineer can measure limits properly.

Care shall be taken to avoid damage to adjacent improvements including adjacent asphalt surfacing that is to remain in place. The Contractor shall be responsible for the cost of repairing damage to any facility caused by the grinding operations. Loops and/or wiring intended to be saved but damaged by the Contractor during grinding operations shall be replaced at his expense. The Contractor shall protect all existing valve covers and other existing structures during the grinding operation.

WORKING HOUR RESTRICTIONS - To insure that the roadway will be opened in time so as not to impact peak traffic, all grinding operations shall be shut-down and cleared for traffic by 3:00 pm each day, unless a later time is allowed, at the sole discretion of the Engineer, based upon his assessment of how long clean-up and temporary AC conforms will take. Engineer shall be given two (2) hours notice for request review and approval/disapproval. Any utility covers compromised and in need of replacing, during the grinding operation, shall be brought to the immediate attention of the Engineer.

Contractor shall protect monument markers within the street monument boxes during grinding. Any damage to monument markers within the monument boxes during grinding shall be repaired at the expense of the Contractor with no additional expense to the City.

Contractor shall use sweeper to mitigate dust during grinding operations.

# PART 4 - MEASUREMENT AND PAYMENT

Included in Section 100 of these Technical Specifications.

# **END OF SECTION 106**

## **SECTION 107**

#### HMA PAVING AND BASE REPAIR

## PART 1 – GENERAL

#### 1.01 SUMMARY

This work includes producing and placing hot mix asphalt (HMA) using the STANDARD process, comply with Section 39, "Hot Mix Asphalt," of the latest State Standard Specifications except where modified herein.

Work covered by this section includes digout and repair of failed asphalt concrete pavement.

Submit Job Mix Formulas (JMF) and JMF production testing results.

#### 1.02 SUBMITTALS

Contractor shall submit certificates from materials suppliers stating compliance with the requirements of this Section.

#### 1.03 COORDINATION

At some locations, base repairs are specified to address damage due to tree roots. Contractor shall obtain approval from a licensed arborist prior to cutting, pruning or removing any tree roots while performing base repairs.

#### PART 2 – MATERIALS

#### 2.01 AGGREGATE

Asphalt concrete shall be Type A conforming to the 1/2 inch maximum size aggregate for base courses and 1/2 inch maximum for surface courses as specified in Section 39-1.02E, "Aggregate" of the State Standard Specifications. Paving completed in a single lift placement shall be constructed with 1/2 inch maximum size aggregate for HMA.

Asphalt concrete used for "Leveling Courses" shall be Type A conforming to 3/8 inch maximum, medium surface courses, as specified in Section 39-1.02E, "Aggregate" of the State Standard Specifications.

Asphalt concrete used for base repair shall be Type A, 1/2 inch maximum, medium graded aggregate material conforming to Section 39, State Standard Specifications.

## 2.02 ASPHALT BINDER

Asphalt binder to be mixed with the aggregate shall conform to the provisions of Section 92 of the State Standard Specifications and shall be paving asphalt grade PG 64-10, unless otherwise directed by the Engineer. The amount of asphalt binder to be mixed with the aggregate shall be determined by the supplier in accordance with the requirements of California Test 367. The mix design, job mix formula and certificate of compliance for the asphalt binder shall be submitted for approval at least 10 working days prior to the start of work.

#### 2.03 ASPHALT TACK COAT

Tack coat (paint binder) shall conform to the requirements of Section 94, "Asphaltic Emulsions" of the State Specifications for Grade SS-1h, CSS-1h, QS-1h, or CQS-1h.

# PART 3 - EXECUTION

#### 3.01 GENERAL

The surface of the pavement to receive asphaltic concrete shall be swept clean of all soil, vegetation and debris with a self propelled pick-up street broom machine immediately prior to placement of the asphalt tack coat.

Asphalt concrete shall be spread with an asphaltic paving machine. Paving machine shall be selfpropelled mechanical spreading and finishing equipment provided with an automatic screed control.

Compaction shall be obtained by approved means to obtain the specified density and surface finish to the lines, grades and cross section shown on the plans. Asphalt concrete shall be compacted to a minimum 92 percent of the maximum theoretical density.

Where the total thickness of asphalt concrete to be placed is greater than 3 inches it shall be placed in lifts conforming to Sections 39-1.10 "Spreading and Compacting Equipment" of the State Standard Specifications. Asphalt concrete for base repair shall be placed and compacted in two layers. The final layer shall not be less than one and one-half (1-1/2) inches in compacted thickness nor more than three (3) inches. Spreading and compacting of asphalt concrete shall conform to the applicable provisions of Section 39 of the State Standard Specifications. The width of the compaction equipment should be narrow enough to fit within the repair area.

Installation of leveling course shall be conforming to Section 39-1.11 "Transporting, Spreading, and Compacting" of the State Standard Specifications.

Pavement joints are to be at the lane line locations wherever possible. Pavement joints shall not be placed in travel lanes. The automatic screed control shall include a mobile grade reference (ski type), or equivalent and provision for automatic control of transverse slope. Longitudinal paving joints at the end of paving shifts shall be avoided, unless approved by the Engineer. The Contractor shall schedule his paving operations such that each layer of asphalt concrete is placed on all contiguous lanes of a traveled way each work shift. At the end of each work shift, the distance between the ends of the layers of asphalt concrete on adjacent lanes shall not be greater than 10 feet nor less than 5 feet. Additional asphalt concrete shall be placed along the transverse edge at the end of each lane and along the exposed longitudinal edges between adjacent lanes, hand raked, and compacted to form temporary conforms. Kraft paper, or other approved bond breaker, may be placed under the conform tapers to facilitate the removal of the taper when paving operations resume.

At road connections designated by the Engineer, additional asphalt concrete surfacing material shall be placed and hand raked, if necessary, and compacted to form smooth tapered connections. The Contractor is further advised that it will be his responsibility to assure that the existing drainage patterns are to be maintained at all locations or as directed by the Engineer.

The area to which tack coat has been applied shall be closed to public traffic. Care should be taken to avoid tracking binder material onto existing pavement surfaces beyond the limits of construction.

Asphalt concrete surfacing shall be placed on all existing surfacing shown on the plans, unless otherwise directed by the Engineer.

The locations of failed areas needing digout repair shall be marked in the field by the Contractor, as noted on plans. The City shall approve and/or modify the location of each marked pavement area prior to allowing the Contractor to proceed with pavement digout removal.

Asphalt concrete shall be removed to a total depth as shown on plan from the top of grinded

surface. Digouts shall be completed after the full road width grind operation. If saw-cutting is used to repair failed areas it shall be performed with a diamond saw blade along the dimensions indicated, extending the entire depth of the existing asphalt concrete.

If a cold milling machine (grinder) is used, payment will be made for the actual square footage of base repaired, not exceeding the limits marked by the Engineer. The Contractor shall provide vertical edges on all sides of the digout area prior to placement of HMA. Contractor shall saw cut any grinder rolled edges, if needed, and remove the necessary AC to create the required vertical edges.

The material grindings from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, shall be immediately removed from the site of the work and disposed of, unless otherwise directed by the Engineer. All material removed by grinding, including pavement fabric (if present), shall be cleaned up and legally disposed. Recycling of the material is encouraged in compliance with the City recycling ordinance. All materials removed from repair areas shall be legally disposed of outside the City limits.

Base repair work shall not commence unless the ambient temperature is above 50 degrees F and has not been below 35 degrees F during the previous twelve (12) hours. Prime or tack coats shall not be applied when the surface to be coated is wet or contains an excess of moisture. The temperature of asphalt concrete shall not be less than 250 degrees F during initial spreading.

Any utility covers compromised and in need of replacing, during the paving operation, shall be brought to the immediate attention of the Engineer.

Traffic shall not be allowed on the HMA pavement until final rolling operations are completed, and pavement temp is below 160 F.

## 3.02 TOLERANCE

The finished surface of the asphalt pavement shall conform to the smoothness tolerances as stipulated in Section 39-1.12D "Smoothness Corrections" of the State Standard Specifications. Areas of pavement which fail to meet smoothness tolerances shall be repaired by fine surface grinding at no additional cost to the City. Should the methods and equipment furnished by the Contractor fail to produce a layer of asphalt concrete conforming to the requirements, including straightedge tolerance, of Section 39 of the State Specifications, the paving operations shall be discontinued and the Contractor shall modify his equipment or furnish substitute equipment which will produce the desired results.

At the discretion of the Engineer, the asphalt concrete may be tested for thickness based on the same cores taken for compaction to determine if pavement thickness conforms to the nominal thickness specified in the contract. The allowable deviation for pavement thickness shall be plus or minus ( $\pm$ ) one-eighth (1/8) inch. All core holes shall be filled with mortar with the top two (2) inches compacted with hot asphalt or Hydro mix. Cold asphalt or cutback will not be allowed.

## 3.03 TESTING

Field compaction testing will be provided by the City. Contractor shall be responsible for retesting as required.

All tests identified in Section 39 of the Standard Specifications for the STANDARD construction process of HMA shall be completed by an independent, third party, testing laboratory/contractor.

The independent, third party, testing laboratory determines the percent of maximum theoretical density from density cores taken from the final layer or full layer thickness if placed in single layer, whichever is applicable. Take three (3) density cores for every 500 tons or once per day of

HMA/RHMA placed, whichever is less. The Engineer determines a deduction for percent of maximum theoretical density based on the average of three density cores using the reduced payment factors in the following table:

Reduced Payment Factor for Percent of Maximum Theoretical Density			
HMA Type A and B	Reduced payment	HMA Type A and B	Reduced Payment
and RHMA-G	factor	and RHMA-G	Factor
percent of		percent of maximum	
maximum		theoretical density	
theoretical density			
92.0	0.0000	97.0	0.0000
91.9	0.0125	97.1	0.0125
91.8	0.0250	97.2	0.0250
91.7	0.0375	97.3	0.0375
91.6	0.0500	97.4	0.0500
91.5	0.0625	97.5	0.0625
91.4	0.0750	97.6	0.0750
91.3	0.0875	97.7	0.0875
91.2	0.1000	97.8	0.1000
91.1	0.1125	97.9	0.1125
91.0	0.1250	98.0	0.1250
90.9	0.1375	98.1	0.1375
90.8	0.1500	98.2	0.1500
90.7	0.1625	98.3	0.1625
90.6	0.1750	98.4	0.1750
90.5	0.1875	98.5	0.1875
90.4	0.2000	98.6	0.2000
90.3	0.2125	98.7	0.2125
90.2	0.2250	98.8	0.2250
90.1	0.2375	98.9	0.2375
90.0	0.2500	99.0	0.2500
<90.0	Remove and	>99.0	Remove and
	Replace		Replace

# **Reduced Payment Factor for Percent of Maximum Theoretical Density**

Testing of hot mix asphalt shall comply to the testing requirements identified in the "Hot Mix Asphalt" Technical Specifications section. **Testing for the HMA base repairs shall be measured and paid for by the "4-Inch Base Failure Repair" Bid Item.** 

### 3.04 DAMAGE REPAIR

The Contractor shall be responsible for any damage to existing curbs, gutters, sidewalks and driveways and any asphalt concrete, liquid asphalt or asphaltic emulsion stains occurring during the course of this Contract. Such damage shall be cleaned by a method satisfactory to the Engineer. The cost of repairing this damage shall be considered as included in the unit price paid for asphalt concrete and no additional compensation shall be allowed.

### 3.05 PUBLIC CONVENIENCE AND STAGING

Schedule paving operations such that each layer of asphalt concrete is placed on all contiguous lanes of a traveled way each work shift. At the end of each work shift, the distance between the ends of the layers of asphalt concrete on adjacent lanes shall not be greater than 10 feet nor less than 5 feet.

Place additional asphalt concrete along the transverse edge at the end of each lane and along the

exposed longitudinal edges between adjacent lanes, hand raked, and compacted to form temporary conforms. Kraft paper, or other approved bond breaker, may be placed under the conform tapers to facilitate the removal of the taper when paving operations resume.

A drop-off of more than 0.15-foot will not be allowed at any time between adjacent lanes open to public traffic.

### 3.06 WORKING HOUR RESTRICTIONS

To insure that the roadway will be opened in time so as not to impact peak traffic, all paving operations shall be shut-down by 3:00 pm each day, unless a later time is allowed, at the sole discretion of the Engineer, based upon his assessment of how long the completion of AC plugs and clean-up will take.

### PART 4 - MEASUREMENT AND PAYMENT

Included in Section 100 of these Technical Specifications.

# **END OF SECTION 107**

# THIS PAGE INTENTIONALLY LEFT BLANK

#### **SECTION 108**

### SLURRY SEAL

#### PART 1 - GENERAL

#### 1.01 WORK INCLUDED

Work shall consist of furnishing and placing an application of Slurry Seal.

The work shall include providing aggregate and asphalt binder, spreading and compacting the mixture, to the lines, grades, and dimensions shown in the Contract Documents.

Slurry Seal shall conform to the provisions of Section 37-3, "Slurry Seals and Micro-Surfacings", of the State Standard Specifications and to these Technical Provisions.

#### 1.02 SUBMITTALS

The Contractor shall provide a Certificate of Compliance for Asphalt Binders, Emulsion, and Screenings and other materials used under this Section in conformance with the requirements of the Contract Documents.

The Contractor shall provide a Certificate of Compliance for Slurry Seal Asphalt Emulsion and Aggregate and other materials used under this Section in conformance with the requirements of the Contract Documents.

Contractor shall provide the Public Works Director with certified weight tickets furnished at the time of delivery to the inspector in the field.

Submittals shall conform to the provisions of Section 37-3.01A(3) "Submittals", of the State Standard Specifications.

### PART 2 - MATERIAL AND EQUIPMENT

#### 2.01 AGGREGATE

Aggregate for slurry seals shall be Type II as specified in Section 37-3.01B(2), "Materials", of the State Standard Specifications. Aggregates shall be black in color. The use of gray or light-colored aggregate will not be allowed.

#### 2.02 ASPHALT BINDERS

Asphalt Binder shall conform to the provisions of Section 92, "Asphalt Binders", of the State Standard Specifications and shall be paving asphalt Performance Grade PG 64-10 in conformance to Section 92-1.02(B) of the State Standard Specifications, unless otherwise directed by the Public Works Director.

Asphalt Binder shall be Polymer Modified Asphalt Emulsion Seal coat conforming to Section 37-3.02B (3) of the State Standard Specifications unless otherwise directed by the Public Works Director. The spread rate shall be between 0.55-0.65 gal/SY.

### PART 3 - EXECUTION

#### 3.01 SURFACE PREPARATION

Pavement markers and thermoplastic pavement stripes or markings shall be removed by grinding or other means acceptable to the Public Works Director prior to beginning work.

Complete street closures are not permitted. Contractor must make provisions to allow minimum of one 11-foot-wide lane of traffic open in each direction and provide one driveway access to each affected property at all times during working hours. Contractor must stage accordingly and may not initiate larger areas than can be constructed and reopened in a given day.

#### 3.02 APPLICATION

The contractor is responsible for implementing measures as needed to allow for work to proceed during cold weather, should it occur.

Slurry seal shall be placed in accordance with Section 37-3.02C(4), "Placement", of the State Standard Specifications.

Existing pavement surfaces shall be clean and dry prior to application of the slurry seal. The mixture shall fill all minor cracks, depressions or low areas and leave a uniform surface free from ruts, humps, depressions, or irregularities. Any ridges, indentations, or other objectionable marks left in the surface shall be eliminated by rolling or other means.

Only place slurry seal if both the pavement and the air temperature are at least 50 degrees F and rising. Do not place slurry seal if either the pavement or the air temperature is below 50 degrees F and falling. The expected high temperature must be at least 65 degrees F within 24 hours after placement. Do not place the slurry seal if rain is imminent or the air temperature is expected to be below 36 degrees F within 24 hours after placement.

The mixture shall be of the desired consistency upon leaving the mixer. A sufficient amount of mixture shall be carried in all parts of the spreader at all times so that complete coverage is obtained. No lumping, balling, or unmixed aggregate shall be permitted. No streaks such as caused by oversize aggregate shall be left in the finished pavement.

Longitudinal joints must correspond with lane lines. Longitudinal and transverse joints must shall comply with Section 37-3.01C(5) of the State Standard Specifications. All excess materials shall be removed from surfaces upon completion of each run.

Squeegees shall be used to spread the mixture in areas not accessible to the mixer/spreader. Care shall be taken to leave no unsightly appearance from handwork.

Slurry seal shall be spread uniformly at at rate of ten (10) to fifteen (15) pounds of dry aggregate per square yard, in accordance with the recommendations of the laboratory preparing the mix design. The exact spread rate may be adjusted by the Public Works Director depending on field conditions. The completed spread shall be within ten (10) percent of the specified rate. The spreader box shall be pulled at a rate NOT GREATER THAN 270 FEET PER MINUTE. The mixture must be uniform and homogeneous after spreading, and there must not be separation of the emulsion and aggregate after setting. The finished surface must be smooth.

Spread slurry seal in full lane widths. Do not overlap slurry seal between adjacent lanes more than 3 inches.

At limits of work, start or finish, a straight line cut-off shall be obtained by laying down a strip of building paper or other approved material. Such paper and any excess mixture shall be removed and disposed of by the Contractor after application of the slurry seal.

Existing utility covers shall be protected and covered by building paper or other approved material. Such paper and any excess mixture shall be removed and disposed of by the Contractor after application of the slurry seal.

Edge limits of the work on both sides of the street shall be maintained in a neat, straight, and uniform line. Slurry seal application shall extend to the gutter lip. In the event that the work extends onto the gutter more than one (1) to two (2) inches or is not in a neat, straight, uniform line, it will be the Contractor's responsibility to remove all excess mixture from the gutters using an appropriate method. Any runs or drips that spill onto any concrete surface shall be removed the same day that the spill occurs. All work associated with the removal of mixture from the concrete surfaces shall be conducted at the Contractor's expense.

Following application of the slurry seal, the Contractor shall protect the work from any traffic that may cause damage to the finished surface or result in tracking of the material until such time as the material has sufficiently cured. Within 1 hour after placement, the slurry seal must be set enough to allow traffic. Slurry seal must not exhibit distress from traffic such as bleeding, raveling, separation, or other distress.

Once the slurry seal has cured and is open to traffic, any excessive raveling of the aggregate from the mixture shall be swept up by the Contractor and the surface maintained until such time as the raveling ceases. This requirement for sweeping shall apply to both roadway surfaces and adjacent sidewalks/pedestrian facilities.

A sand blotter shall not be used.

The completed surface shall be thoroughly compacted, smooth, and free from ruts, humps, depressions, or irregularities. Any ridges, indentations or other objectionable marks left in the surface by blading or other equipment shall be eliminated by rolling or other means. The use of any equipment that leaves ridges, indentations, or other objectionable marks in the surface shall be discontinued, and acceptable equipment shall be furnished by the Contractor.

### 3.03 ROLLING

Slurry seal on all streets shall be rolled by a self-propelled, 10-ton pneumatic roller with a tire pressure of 50 PSI, equipped with a water spray system. All tires shall be smooth surfaced and inflated to the same pressure.

The surfaced areas shall be subjected to a minimum of two (2) full coverage passes by the roller or until the material is compacted to a uniform surface.

Rolling shall not commence until the slurry seal has cured enough so that it will not pick up on the tires of the roller, but no more than twenty-four (24) hours after placement.

# 3.04 STREET SWEEPING

The Contractor shall provide all necessary equipment, skill, and manpower to sweep all completed slurry sealed streets to the satisfaction of the Public Works Director, and in accordance with these Technical Specifications. Sweeping shall not begin until a sufficient bond has developed between the emulsion and the aggregate. Sweeping shall not dislodge aggregate or patches of applied surface.

The Contractor shall use a commercial sweeper to sweep each street that is slurry. During the sweeping, the sweeper shall use only the rear broom. The front brooms shall not be used during this sweeping operation. Brooms shall be vertically adjustable so as to avoid excess pressure during sweeping. For slurry seal streets, the initial sweeping shall be performed no sooner than three (3) calendar days after the slurry seal has been applied to the street. The Contractor shall conduct additional sweepings at seven (7) calendar days and again at fourteen (14) calendars days after the slurry seal has been applied. A final sweeping shall be performed no sooner than twenty-eight (28) days and no later than forty-two (42) days following the slurry seal application. The Contractor shall submit a schedule of the dates for sweeping. The sweeping schedule shall be approved in advance by the Public Works Director.

Sidewalks and driveways adjacent to slurry sealed streets shall also be swept and kept clean of aggregates or other materials resulting from the application operation.

### 3.05 TEMPORARY PAVEMENT DELINEATION

Temporary pavement delineation shall be furnished, placed, maintained and removed in accordance with the provisions in Section 12-3.01, "General", of the State Standard Specifications and these Technical Provisions. Nothing in these Technical Provisions shall be construed as to reduce the minimum standards specified in the Manual of Traffic Controls published by the Department of Transportation.

All work necessary, including any required lines or marks, to establish the alignment of temporary pavement delineation shall be performed by the Contractor. Surfaces to receive temporary pavement delineation shall be dry and free of dirt or loose material. Temporary pavement delineation shall not be applied over existing pavement delineation or other temporary pavement delineation. Temporary pavement delineation shall be maintained until superseded or replaced with a new pattern of temporary pavement delineation or permanent pavement delineation.

Temporary pavement markers and removable traffic type tape which conflicts with a new traffic pattern or which is applied to the final layer of surfacing or existing pavement to remain in place shall be removed when no longer required for the direction of public traffic, as determined by the Public Works Director.

Whenever lane lines and centerlines are obliterated, the minimum lane line and centerline delineation to be provided shall be temporary reflective raised pavement markers placed at longitudinal intervals of not more than 24 feet. The temporary reflective raised pavement markers shall be the same color as the lane line or centerline markers replaced.

Temporary reflective raised pavement markers shall be placed in accordance with the manufacturer's instructions and shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used to place pavement markers in areas where removal of the markers will be required.

### 3.06 MIXING AND SPREADING

Mixing and Spreading shall conform to provisions of section 37-3.01C(3) "Mixing and Spreding Equipment", of the State Standard Specifications.

### **PART 4 - MEASUREMENT AND PAYMENT**

Included in Section 100 of these Technical Specifications.

### **END OF SECTION 108**

#### SECTION 109

### **CRACK SEALING**

### PART 1 - GENERAL

#### 1.01 WORK INCLUDED

Work covered by this section includes the cleaning out and sealing of cracks within all areas of the project scope. This includes existing asphalt concrete pavement areas not subject to grinding, removal or repair as well as within pavement sections after the cold planning and digout operations have been completed. Cracks 1/4 inch to 1 inch in width shall be sealed with asphalt rubber crack seal material. Cracks or "pop-outs" of existing asphalt that are greater than 1 inch in width shall be sealed with Type A, 3/8 inch maximum asphalt concrete cement.

#### 1.02 SUBMITTALS

Contractor shall submit certificates from suppliers stating compliance of materials with the requirements of this section.

### PART 2 - MATERIAL AND EQUIPMENT

#### 2.01 HOT APPLIED SEALANT (For cracks less than 1 inch)

Crack seal material shall consist of a single component, hot-applied, elastically modified asphalt composition specifically produced for effective pavement maintenance joint sealing. The asphalt to be used shall have a maximum penetration of 150 when tested in accordance with procedure outlined by the American Association of State Highway Officials.

The granulated crumb rubber (100 percent vulcanized) shall meet the following requirements:

Passing Sieve	Percent
No. 8	100
No. 10	98-100
No. 40	0-100

The sieves shall comply with the requirements of AASHTO 92.

The specific gravity of the granulated crumb rubber shall be 1.15 + 0.02 and shall be free of fabric, wire or other contaminating materials, except that up to four percent of calcium carbonate may be included to prevent particles from sticking together.

The proportions of the two materials by weight shall be 75 percent +2 percent asphalt and 25 percent +2 percent rubber.

The materials shall be packed in approximately 60 pound boxes with a polyethylene liner. The boxes shall be placed on pallets and covered with a weather resistant covering.

2.02 ASPHALT CONCRETE MIX (For cracks larger than 1 inch and not in dig-out area)

The asphalt to be used shall have a maximum penetration of 150 when tested in accordance with procedure outlined by the American Association of State Highway Officials.

Mineral aggregate material for asphalt concrete for sealing cracks larger than 1 inch shall be Type A, 3/8 inch maximum, medium graded aggregate, conforming to Section 39, State Standard Specifications.

## **PART 3 - EXECUTION**

#### 3.01 GENERAL

Prior to crack seal operations the Contractor shall clean the cracks of all organic material within the limits to be crack sealed.

Cracks to be filled shall be completely dry at the time of filling, and in no case shall crack sealing be performed within 24 hours of any precipitation. Sealant shall be applied when the pavement surface temperature exceeds 50°F. Application at lower temperatures may result in reduced adhesion due to possible presence of excess moisture.

Cracks 1/4 inch to 1 inch wide shall be blown clean of all organic materials with a high pressure air nozzle and/or a mechanical cleaning process to a depth of 1/2 inch minimum.

The asphalt-rubber shall be heated to a minimum temperature of  $300^{\circ}$  F but not greater than  $350^{\circ}$  F. The material shall be held in the mixing tank at application temperature until very little separation of the rubber and asphalt occurs when a bead of sealant material is placed on the pavement. Sealant material may be added to the mix as long as the minimum temperature of  $300^{\circ}$  F is maintained.

Asphalt-vulcanized rubber crack sealant material shall be applied to all cracks 1/4 inch or greater so as to be flush with the adjacent pavement surface. Cracks shall be sealed from the bottom up. Excess sealant shall be leveled to less than a 1/8 inch thickness with a squeegee or sealing shoe to produce a band which is 2 to 4 inches wide, centered over the crack.

Contractor shall not overfill cracks, as excess filler will cause bumps in the overlay and may migrate through the paving surface course during compaction.

Traffic shall not be allowed on the material until it has cured or until it has been sanded to prevent tracking.

All crack sealing shall be completed at least one-working day prior to resurfacing. Reinforcing fabric shall not be placed for at least 24 hours after crack sealing.

### 3.02 CRACKS LARGER THAN 1 inch AND NOT IN DIG-OUT AREA

Cracks larger than 1 inch and not in a dig-out area shall be blown clean of all organic materials with a high pressure air nozzle and/or a mechanical cleaning process to a depth of 1/2 inch minimum.

Cracks shall be filled with Type A, 3/8 inch maximum, medium graded aggregate asphalt concrete mix.

### PART 4 - MEASUREMENT AND PAYMENT

Included in Section 100 of these Technical Specifications.

## END OF SECTION 109

# THIS PAGE INTENTIONALLY LEFT BLANK

### **SECTION 110**

### FIBERIZED MICROSURFACING

### PART 1 – GENERAL

#### 1.03 WORK INCLUDED

Work shall consist of furnishing and placing an application of Fiberized Microsurfacing.

The work shall include providing aggregate and asphalt binder, spreading and compacting the mixture, to the lines, grades, and dimensions shown in the Contract Documents.

Slurry Seal shall conform to the provisions of Section 37-3, "Slurry Seals and Micro-Surfacings", of the State Standard Specifications and to these Technical Provisions.

#### 1.04 SUBMITTALS

Contractor shall submit certificates from suppliers stating compliance of materials with the requirements of this section.

### PART 2 - MATERIAL AND EQUIPMENT

#### 2.03 FIBER

Fiber shall also be added to the mix. Fiber used in the fiberized micro surfacing shall be FORTA Surface-EXT fiber, or equivalent alkali and acid resistant fiber, meeting the following specifications. It shall be cut to 1/4 to 1/2 inch in length by an automated fiber cutter system installed on truck prior to adding to the MSE. The fiber shall be added at the rates outlined below. The alkali and acid resistant glass fiber shall meet the following requirements:

TEST	REQUIREMENT	
Linear Weight of Roving (tex.) ISO 1889	4,500 min	
Linear Weight of Strand (tex.) ISO 1889	82 min	
Moisture Content (%) ISO 3344	0.35 max	
Specific Gravity (g/cm3)	2.68	
Softening Point (°C)	860 min	
Tensile Strength (MPa)	1,700 min	

Aggregate shall consist of sound, durable, crushed stone or crushed gravel and approved mineral filler. The material shall be washed, clean and free from vegetable matter and other deleterious substances. Aggregates shall be Type II, 100% crushed with no rounded particles, volcanic in origin and black in color, as supplied by George Reed, Table Mountain Plant, Sonora, CA., or Approved Equal. **The use of white. gray. or light-colored aggregate will not be allowed.** Aggregate shall be in accordance with Section 37-3.03 B (3) and shall be black or dark grey in color.

#### 2.04 MIX DESIGN

At least seven (7) working days before fiberized micro-surfacing placement commences, the Contractor shall submit to the Engineer for approval a laboratory report of tests and proposed mix design covering the specific materials to be used on the project. The mix design shall be proportioned such that the final micro-surfacing is drivable to normal traffic without rutting or shedding within one hour of application. The percentage of asphalt emulsion proposed in the mix design shall be within the percentage range specified in the Proportion Limits table in Section 37.3.03 B (5) "Micro-Surfacing Mix Designs." The tests and mix design shall be performed by a laboratory capable of performing the applicable International Slurry Seal Association (ISSA) tests. The proposed fiberized slurry seal mixture shall conform to the requirements specified when tested in accordance with 37-3.03 B (5), "Micro-Surfacing Mix Designs."

The laboratory that performed the tests and designed the mixture shall sign the laboratory report and shall be AMRL certified and/or participate in the AASHTO Proficiency Program. The report shall show the results of the tests on individual materials and shall compare their values to those required by these special provisions. The report shall clearly show the proportions of aggregate, fiber, filler (minimum and maximum), water (minimum and maximum), set control additive, and PMCQS-1h solids content (minimum and maximum) based on the dry weight of aggregate. The laboratory shall report the quantitative effects of moisture content on the unit weight of the aggregate (bulking effect) in conformance with the requirements of ASTM Designation C 29M. Previous laboratory reports covering the same materials may be accepted provided the material test reports were completed within the previous 12 months.

The component materials used in the mix design shall be representative of the fiberized microsurfacing materials proposed by the Contractor for use on the project.

Once the mix design is approved by the Engineer, no substitution of other material will be permitted unless the materials proposed for substitution are first tested and a laboratory report is submitted for the substituted design in conformance with the provisions of these special provisions. Substituted materials shall not be used until the mix design for those materials has been approved by the Engineer.

The completed mixture, after addition of water and set control agent, if used, shall be such that the fiberized micro-surfacing mixture has proper workability. At the expiration of the road closure hours, in conformance with the provisions in "Maintaining Traffic" of these special provisions, the fiberized micro-surfacing mixture shall be sufficiently cured to support unrestricted traffic.

The percentages of each individual material proposed in the mix design shall be shown in the laboratory report. Individual materials shall be within the following limits:

MATERIALLIMITSResidual Asphalt6.5% to 13.5% by dry weight of aggregateMineral Filler0.5% to 3% by dry weight of aggregateGlass Fiber Top Lift0.15% to 0.30% by dry weight of aggregateGlass Fiber Bottom Lift0.20% to 0.40% by dry weight of aggregateAdditive and WaterAs needed

### 2.05 MIXING AND SPREADING EQUIPMENT

The fiberized micro-surfacing mixture shall be mixed in continuous pug-mill mixers of adequate size and power for the type of fiberized micro-surfacing to be placed. All indicators shall be in conformance with the provisions of these special provisions and shall be in working order prior to commencing mixing and spreading operations.

Mixer-spreader trucks shall be equipped to proportion the PMCQS-1h, water, aggregate, mineral filler, and set-control additives by volume. Rotating and reciprocating equipment on mixer- spreader trucks shall be covered with metal guards.

The mixer-spreader truck shall not be operated unless low-flow and no-flow devices and revolution counters are in good working condition and functioning and metal guards are in place. Indicators required by these special provisions shall be visible while walking alongside the mixer-spreader truck.

Aggregate feeders shall be connected directly to the drive on the emulsion pump. The drive shaft of the aggregate feeder shall be equipped with a revolution counter reading to the nearest one-tenth of a revolution. In addition to the requirements of Section 5-1.33, "Equipment" of the State Standard Specifications, the identifying number of mixer-spreader trucks shall be at least three inches in height, located on the front and rear of the vehicle.

The fiberized micro-surfacing mixture shall be spread by means of a spreader box conforming to the requirements in the "Spreader Box" section of these specifications.

The Engineer or authorized representative shall be present during all equipment calibration or testing

prior to the seal coat application.

#### Spreader Box

For Type II fiberized micro-surfacing the spreader box shall be capable of spreading to a width of one travel lane and equipped with a material such as flexible rubber belting on each side and in contact with the pavement. If the spreader box is less than 7.5 feet wide, it shall be equipped with a means, such as baffles or reversible motor-driven augers, to uniformly apply micro-surfacing mixture on wider areas, superelevated sections, shoulder slopes, etc. The spreader box shall be equipped with rear flexible strike-off blades making close contact with the pavement and adjustable to various crown shapes in order to apply a uniform micro-surfacing mixture. The spreader box shall be equipped with flexible drags attached to the rear and cleaned daily and changed if longitudinal scouring occurs. The spreader box shall be clean and free of excess micro-surfacing mixture and/or PMCQS-1h at the start of each work shift.

### Wheel Path Depression (Rut) Box

The wheel path depression (rut) box shall be designed to have adjustable strike-off devices to regulate the depth and shall have a width of between five feet and six feet. Hydraulic augers, or similar devices, shall be installed and shall be capable of moving the mixed material from the rear to the front of the filling chamber. These devices shall also be capable of guiding the larger aggregate into the center, deeper section of the wheel path depression, and forcing the finer material toward the outer edges of the spreader box.

The fiberized micro-surfacing mixture, to be spread in areas inaccessible to the controlled spreader box, may be spread by other methods upon approval of the Engineer.

### PART 3 - EXECUTION

#### 3.03 PREPARATORY WORK

The Contractor shall remove all existing striping and pavement markers, and the complete street surface shall be power swept from face of curb to face of curb prior to the application of micro-surfacing. The Contractor shall provide cleaning method necessary to remove all dirt, vegetation, and loose materials from the pavement. All material gathered shall be properly disposed of by the Contractor.

Immediately preceding the micro-surfacing application, the Contractor shall cover all grates, slotted manholes, and other appurtenances on the pavement that would allow the entry of slurry; cover all manhole covers, water and gas valve box covers, monuments boxes, etc., with a heavy plastic bag. The Contractor prior to the final set of the micro-surfacing shall uncover all covered grates and manhole. All uncovered items shall be clean and meet the requirement of the Project Inspector.

All valve boxes, manholes, utility covers, and monument covers shall be covered with heavy paper or roofing felt prior to placement of the surfacing and shall be uncovered after the surfacing has set. All drainage inlets shall have adequate protection and coverings to prevent any surfacing materials from entering the storm drain system.

### 3.04 TEST STRIP

The Contractor shall construct a test strip for evaluation by the Engineer. Test strips shall be provided for both the Type III and the Type II micro-surfacing. The test strip shall be 300 feet to 500 feet long and shall consist of the application courses specified. The test strip shall be constructed at the same time of day or night that the full production of fiberized micro-surfacing will be placed and may be constructed in 2 days or nights when multiple course applications are specified. To be considered acceptable, the test strip shall be drivable and opened to traffic within one hour of application of the fiberized micro-surfacing.

The Engineer will evaluate the completed test strip after a minimum of 12 hours of traffic on the completed test strip to determine if the mix design and placement procedure are acceptable. If the mix design or the placement procedure is determined by the Engineer to be unacceptable, the test strip will be rejected, the Contractor shall make modifications, and a new test strip shall be

constructed and evaluated by the Engineer. The cost of materials and placement of the test strips, which have been rejected, shall be borne entirely by Contractor and will not be considered as part of the contract work. If ordered by the Engineer, rejected test strips shall be removed at the Contractors expense. If proposed by the Contractor and approved by the Engineer, the Contractor may continue with production work after placement of the test strip at his own risk. If the test strip is rejected, all production work shall be stopped and evaluated by the Engineer. The production work will be evaluated in the same manner as the placement of the test strip and shall conform to the same requirements for the test strip material.

### 3.05 PLACING

The Type III fiberized micro-surfacing shall be spread at a rate of 20 to 25 pounds of dry aggregate per square yard.

Type II fiberized micro-surfacing shall be spread at a rate of 12 to 15 pounds of dry aggregate per square yard.

The fiberized micro-surfacing mixture shall be uniformly spread on the existing surface within the rate specified without spotting, rehandling, or otherwise shifting of the mixture.

The fiberized micro-surfacing mixture shall not be placed when the ambient temperature is below 50°F, there is any surface moisture on the pavement, or during unsuitable weather. Fiberized micro-surfacing shall not be placed if rain is imminent or if there is the possibility that there will be freezing temperatures within 24 hours.

Wheel path and/or trench depressions shall be repaired prior to micro-surfacing. Depressions less than ½ inch shall be filled with a scratch course. When wheel path depressions have a cross section that is deformed ½ inch or more, the individual wheel paths shall first be filled with fiberized microsurfacing utilizing a wheel path depression (rut) box in conformance with the provisions of the special provisions at the discretion of the Engineer or authorized representative. The depth of the wheel path depression shall be determined after the adjacent ridges have been removed, when applicable. The maximum single application for wheel path depressions shall be one inch. Wheel path depressions of depths greater than one inch shall require multiple applications in each depression.

Wheel path depression repair shall be constructed with a slight crown to allow for initial compaction by traffic on the fiberized micro-surfacing. Freshly filled wheel path depressions shall be compacted by traffic for a minimum of 24 hours before additional lifts of fiberized micro-surfacing material are placed for rut filling purposes or as surface courses.

Longitudinal joints shall correspond with the edges of the traffic lanes. The Engineer may permit other patterns of longitudinal joints if the patterns will not adversely affect the quality of the finished product.

Through traffic lanes shall be spread in full lane widths only. Longitudinal joints common to 2 traffic lanes shall be butt joints with overlaps not to exceed 3 inches. Building paper shall be placed at the transverse joints to avoid double placement of the fiberized slurry seal. Other suitable methods to avoid double placement of the fiberized micro-surfacing will be allowed. Hand tools shall be available to remove spillage.

The mixture shall be uniform and homogeneous after placing on the surfacing and shall not show separation of the PMCQS-1h and aggregate after setting. The completed surface shall be of uniform texture and free from ruts, humps, depressions, or irregularities and shall be drivable within one hour of fiberized micro-surfacing application.

Adequate means shall be provided to protect the fiberized micro-surfacing from damage by traffic until such time that the mixture has cured sufficiently so that the fiberized micro-surfacing will not adhere to or be picked up by the tires of vehicles.

When placing multiple layers of fiberized micro-surfacing (excluding wheel path depressions) the second layer shall not be placed until the following day or later.

Placement of the fiberized micro-surfacing shall cease a minimum of one hour before the expiration

of the road closure hours as specified in Section 18-1 GENERAL of these Technical Specifications, unless the Contractor proves to the satisfaction of the Engineer that the surface will be ready for unrestricted traffic at the expiration of the road closure hours.

After the initial break of the micro surfacing and within a minimum of 2 hours after placement the micro surfacing shall be rolled with a pneumatic tire roller. Surfacing areas shall be rolled with a pneumatic rubber tire roller, not to exceed 7 tons and non-ballasted. Roller shall travel slowly, not more than 5 mph.

## 3.06 POST SWEEPING

Self-propelled power brooms shall be used that are capable of removing loose aggregates generated by the micro-surfacing. Nylon gutter brooms shall be the only brooms used. On the day of the actual seal coat operations, no sweeping shall take place. Three (3) sweepings shall be performed after placement of the slurry seal to remove all loose aggregates. The Contractor must remove all loose aggregates as required by the Engineer. During the sweeping, the sweeper shall use only the rear broom, the front brooms shall not be used during this sweeping operation. The initial sweeping shall be performed no sooner than three (3) and no more than five (5) calendar days after the slurry has been applied to the street. The two (2) remaining sweepings shall be performed no sooner than two (2) weeks and no later than five (5) weeks after the slurry has been applied to the street. The final sweeping on cul-de-sacs shall be performed no sooner than four (4) weeks and no later than six (6) weeks after the slurry has been applied to the street. The self-propelled power broom may not be able to pick up loose aggregates in some locations, thus the Contractor shall remove the loose aggregates in these locations using a vacuum sweeper or other acceptable means, as approved by the Engineer. At the time of each sweeping, all loose materials shall likewise be removed from the sidewalks, driveways, landscaped areas, and properties adjacent to the work area either manually or by any other means acceptable to the Engineer. The Contractor shall use water on these sweepings to achieve dust removal and the aggregates shall be salvaged and removed from the job site.

Up to three (3) additional sweepings shall be performed as directed by the Engineer to remove all loose aggregates from sidewalks, driveways, adjacent private property areas, and the street gutter, and the excess aggregates shall be salvaged and stockpiled at a designated location or removed from the job site.

# 3.07 REPAIR OF EARLY DISTRESS

If bleeding, raveling, delamination, rutting, excessive shedding, or wash-boarding occurs within 60 days after placing the fiberized micro-surfacing, the Contractor shall diligently pursue repairs by any method approved by the Engineer. The Contractor shall not be relieved from maintenance until repairs have been completed to the satisfaction of the Engineer.

# PART 4 - MEASUREMENT AND PAYMENT

Included in Section 100 of these Technical Specifications.

### **END OF SECTION 110**

# THIS PAGE LEFT INTENTIONALLY BLANK

# SECTION 111

### STRIPING AND SIGNAGE

### PART 1 – GENERAL

### 1.01 WORK INCLUDED

The work shall consist of placing pavement striping, markings, and raised pavement markers, placing temporary markers and painting curbs at the locations shown on the project plans and in accordance with the Contract Documents to the dimensions and details shown in the Caltrans Standard Plans, latest edition. Nothing in this Section shall relieve the Contractor from his responsibilities as provided in Section 7-1.04, "Public Safety", of the State Standard Specifications.

Work shall also consist of grinding existing thermoplastic striping and legends where shown on plan, at conform locations.

Construction Signage must be fabricated consistent with the requirements listed in this section and will include placement and updates as needed.

Removal, relocation, and installation of all traffic (vehicular and pedestrian/bicycle), Stormwater Management Educational, and Project Funding signs and RRFB as shown on the plans.

Supplying all labor, materials, equipment, and apparatus not specifically mentioned herewith or noted on the plans, but which are incidental and necessary to complete the work specified.

### 1.02 SUBMITTALS

Contractor shall submit certificates from the suppliers stating compliance of the materials with the requirements of this section.

### PART 2 - MATERIAL AND EQUIPMENT

### 2.01 TEMPORARY PAVEMENT MARKERS (FLOPPIES)

Short term, temporary pavement markers shall be day/night retro reflective raised pavement markers conforming to the requirements of Section 84 of the State Standard Specifications and the CA MUTCD.

### 2.02 THERMOPLASTIC STRIPES AND MARKING

The thermoplastic material shall conform to State Specification PTH-02SPRAY, PTH-02HYDRO or PTH-02ALKYD with a minimum skid friction value of BPN = 35.

Glass beads to be applied to the surface of the molten thermoplastic material shall conform to the requirements of State Specification 8010-22L-22 (Type II), or AASHTO Designation: M 247 (Type 1). Copies of State Specification 8010-22L-22 are available at the State of California Transportation Laboratory, Sacramento, California.

Stencils for pavement markings shall be US customary units (English), in accordance with the State Standard Plans.

### 2.03 PAINT STRIPES AND MARKINGS

Paint material to be used for striping and pavement markings shall conform to Section 84-2 "Traffic Stripes and Pavement Markings" of the State Standard Specifications.

#### 2.04 ADHESIVES

Adhesive for pavement markers shall be either rapid set epoxy or hot melt bituminous adhesive conforming to the requirements of Section 85 of the State Standard Specifications.

#### 2.05 RAISED PAVEMENT MARKERS

Pavement markers shall be of the type called for in the Contract Documents and shall conform to the requirements of Section 84-2 "Traffic Stripes and Pavement Markings" of the State Standard Specifications and the CA MUTCD. All pavement markers shall be plastic. Ceramic markers will not be allowed.

#### 2.06 REFLECTORIZED MARKERS

Retro reflective markers shall be of the size and type designated on the plans and shall conform to the requirements of Section 8 of the State Standard Specifications. Mounting hardware shall conform to the requirements of Section 81-3.02C "Retroreflective Pavement Markers" of the State Standard Specifications.

#### 2.07 CURB PAINTING

Curb paint shall be of a latex base consisting of color in accordance with County Standards.

#### 2.08 SURFACE MOUNTED DELINEATORS

Delineators shall surface mount delineators with multi-hit, omni-directional, and self-righting. The base of the delineator shall not exceed 7-inches. The delineator shall be mounted via anchor bolts or via epoxy.

#### 2.09 TRAFFIC SIGN PANELS

Materials shall be in conformance with Section 82, "Signs and Markers" of the State Standard Specifications and the CA MUTCD, except that all materials will be supplied by the Contractor.

All signs shall be fabricated from high tensile alloy aluminum with reflective smooth finish. Sign panels shall be a minimum of 0.080-inch-thick, cut to size and shape with a tolerance of 1/32 inch. Panels shall be flat and free of buckles, warps, dents, burrs and any other defects resulting from fabrication.

All signs are to be of Diamond grade reflectivity.

Sizes for signs in the street, or signs that serve both bicyclists and vehicles, shall be as required for "Conventional Roads" as defined in Part 2, "Signs," of the CA-MUTCD.

#### 2.10 TRAFFIC SIGN FASTENERS AND POSTS

Posts for signs shall be 1-3/4" Square galvanized 14 Gauge Steel Signposts with perforations.

Fasteners for posts shall be straight bolts for conventional sign installation and square post system corner-bolts for back to back installation.

### 2.11 SIGN FOUNDATION

Post foundations shall use concrete as defined in Section 108 "Concrete Improvements" of these Technical Specifications, where required as shown on plan.

## 2.12 CONSTRUCITON SIGNAGE

Construction signage at the project site shall include the following:

- Minimum size of 48"x96"
- Project name
- City logo
- Grant funding source (if applicable)
- General project timeframe (shall be updated if schedule changes)

• 24-hour project contact phone number

# PART 3 – EXECUTION

Permanent striping and markings shall be completed within fourteen (14) calendar days of each road's paving or paving treatments.

Completed traffic stripes and pavement markings shall have clean and well-defined edges without running or deformation shall be uniform, straight on a tangent alignment, and on a true arc on a curved alignment. The width of completed traffic stripes and pavement markings shall not deviate in dimensions as specified in Section 81-3.02C of the State Standard Specifications.

### 3.01 REMOVAL OF EXISTING MARKING AND MARKERS

Before obliterating any pavement delineation or markings that are to be replaced in the same direction, the Contractor shall document and reference the existing pavement delineation and markings with sufficient control points to reestablish their alignment.

Existing pavement markings, markers, buttons, and striping shall be removed and disposed of as required by the Contract Documents and as directed by the Public Works Director. Removal shall be performed in such a manner so as to leave the existing pavement undamaged. Should the removal process leave a divot of more than 1/4-inch-deep, each divot shall be repaired with an approved bituminous adhesive.

Waste from removal of yellow painted traffic stripe may contain lead chromate. Residue produced when yellow paint is removed may contain heavy metals in concentrations that exceed thresholds established by the California Health and Safety Code and may produce toxic fumes when heated. As such, when grinding or other methods approved by the Public Works Director are used to remove yellow painted traffic stripes, the removed residue, including dust, shall be collected and contained immediately. The Contractor shall submit a written work plan for the removal, storage, and disposal of yellow painted traffic stripe to the Public Works Director for approval not less than 15 days prior to the start of the removal operations. Removal operations shall not be started until the Public Works Director has approved the work plan.

### 3.02 TEMPORARY PAVEMENT MARKERS (FLOPPIES)

If permanent pavement markers cannot be installed immediately after resurfacing, short-term temporary retro reflective pavement markers shall be installed prior to opening the street to traffic. Temporary markers shall be monitored, maintained and replaced by the contractor as necessary until such time that permanent striping can be applied.

Temporary pavement markers shall be placed not more than 12-feet apart on curves nor more than 24-feet apart on straight segments, in the quantity and appropriate colors to delineate centerlines (two yellow markers spaced 3-inches apart) and travel lanes (single white marker). Edge lines, median lines and bike lanes need not be marked.

### 3.03 LAYOUT AND CAT-TRACKING

No permanent striping or application of pavement markers shall occur until after the Contractor has field marked and established a satisfactory alignment and layout for the proposed striping (cattracking) and this alignment has been approved by the Public Works Director.

Cat tracking shall consist of stretching a rope on a straight line between control points on tangent alignment and on a true arc through control points on curved alignment and placing spots of paint along the rope.

The City shall have the right to make changes in the location and alignment of line stripes. Striping and traffic markings shall not be applied until approval is granted by the Public Works Director. The Contractor shall allow a minimum of three working days for review of the layout by the City.

### 3.04 THERMOPLASTIC STRIPES AND MARKING

Thermoplastic stripes and markings shall be hot applied in conformance with the manufacturer's

recommended instructions and the applicable requirements of Section 84-2.03C(2) of the State Standard Specifications.

Thermoplastic material shall be applied only to dry pavement surfaces and only when the pavement surface temperature is above fifty degrees (50°) Fahrenheit. The thermoplastic material shall be applied to the pavement at a temperature between 400 degrees (400°) Fahrenheit and 425 degrees (425°) Fahrenheit.

A primer, of the type recommended by the manufacturer shall be applied to all pavement surfaces over 6-months old. The thermoplastic material may be applied by either spray or extrusion method in a single uniform layer.

Thermoplastic material for both pavement markings and traffic stripes shall be applied at a thickness of 0.100 to 0.150 inch. Glass beads shall be applied immediately to the surface of the molten thermoplastic material at a rate not less than eight pounds per hundred square feet (8 lbs/100 sf).

The contractor shall not place pavement markings and markers on any manhole, valve, anode, detector handhole, or monument rim and cover. For lane striping, placement of markings or markers shall discontinue on the rim and cover and shall continue along the same alignment, as shown in the drawings. Any cover marked during the construction of the project shall be restored to its original condition or replaced, in kind, at the contractor's expense.

### 3.05 PAINT STRIPES AND MARKINGS

Paint is to be applied in conformance with the manufacturer's recommended instructions and the applicable requirements of Section 84-2.03C(3) of the State Standard Specifications.

### 3.06 ADHESIVES

The portion of the street surface, which will receive the pavement markers or delineators, shall be free of dirt, oil, moisture, or any other material that would adversely affect the bonding of the adhesive.

Adhesive shall be placed in sufficient quantity to completely cover the bottom of the marker or delineator with no voids and with slight excess after the marker has been pressed into place. The marker or delineator shall be protected against impact until the adhesive has hardened.

### 3.07 RAISED PAVEMENT MARKERS

Pavement markers shall be installed in conformance with the requirements of Section 84, "Markers" of the State Standard Specifications.

The pavement markers shall be stored indoors and shall be protected from any source of moisture both during shipment and at the job site.

Pavement markers shall not be applied to new asphalt concrete surfacing or seal coats until the street surface has been opened to traffic for a period of not less than 7 days when hot melt bituminous adhesive is used, and not less than 14 days when epoxy adhesive is used.

Markers shall be installed accurately to the dimensions established in the Contract Documents and in an alignment approved in the form of Cat-Tracking by the Public Works Director.

### 3.08 REFLECTORIZED MARKERS AND DELINEATORS

Reflectorized markers and delineators shall be installed in conformance with the requirements of Section 81 "Miscellaneous Traffic Control Devices" of the State Standard Specifications.

Reflectorized markers and delineators shall be installed accurately at the locations called for in the Contract Documents or as required by the CA MUTCD.

The Contractor shall furnish and install a blue reflective marker for every fire hydrant.

# 3.09 CURB PAINTING

The temperature during application shall not be less than 50 degrees Fahrenheit. Curb shall be dry at least two days prior to application. Unless otherwise directed by the Public Works Director, existing curb and median island painting shall be repainted within the project limits, and all curb painting eliminated as a result of new curb and gutter improvements shall be restored.

## 3.10 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS

The Contractor shall protect the newly installed pavement markers and thermoplastic stripes from damage until the material has cured or sufficiently hardened. Contractor shall replace any broken, misaligned or otherwise disturbed markings, prior to opening the roadway to traffic.

Existing signs or other markings removed or damaged due to the installation of roadway striping shall be replaced in kind. Existing landscaping or planting removed damaged or disturbed shall be replaced in kind.

### 3.11 CLEAN-UP

Upon completion of the installation of striping, the Contractor shall thoroughly clean the work site of all waste, rubbish, construction debris, drips, over-spray, improper markings and/or layout paint markings and tracked thermoplastic material; all of which shall be removed immediately from the pavement surface by methods approved by the Public Works Director.

### 3.12 SIGN REMOVAL & RELOCATION

The Contractor shall remove the signs to be relocated from the existing sign posts. All signs to be relocated shall have the posts removed and be disposed of by the Contractor. The Contractor shall install new posts and attach the existing signs to the new posts/poles.

Existing signs that are to be relocated shall become the property of the Contractor. If undamaged (as determined by the Public Works Director), the signs shall be thoroughly cleaned, and may be reused in the work. If not reused, they shall be disposed at the Contractor's expense and new signs shall be furnished by the Contractor and installed in accordance with County Standards.

### 3.13 NEW SIGN

All sign types, locations and offsets shall be approved by the Public Works Director prior to installation and shall be installed as shown on the Drawings, unless otherwise detailed or directed by the Public Works Director. Construction and panel installation shall be per Section 82 of the State Standard Specifications. Sign panels shall be level and sign posts shall be plumb.

Where required, sign posts shall be set at least 30-inches into the ground and encased in concrete poured against undisturbed earth, with a minimum thickness of 6-inches of concrete at any point.

Sign posts for street signage shall be per the State Standard Specifications and the State Standard Plans. Signs shall be placed to have a minimum height of 7-ft as measured from the finished ground elevation to the bottom invert of the sign.

All sign locations shall be field verified by the Public Works Director prior to excavation for the sign foundation.

### PART 4 - MEASUREMENT AND PAYMENT

Included in Section 100 of these Technical Specifications.

# END OF SECTION 111

# THIS PAGE LEFT INTENTIONALLY BLANK

## SECTION 112

### UTILITY STRUCTURE ADJUSTMENTS

### PART 1 - GENERAL

#### 1.01 GENERAL

The work performed in connection with adjusting various existing facilities shall conform to the provisions in Section 15, "Existing Highway Facilities," of the State Standard Specifications and these Technical Specifications. Work covered by this section includes adjusting utility frames, and covers to grade to match new roadway pavement grades.

Work covered by this section also includes:

- Survey (total station or GPS) recording and documenting of all utility cover locations within the pavement rehabilitation limits prior to grinding operations.
- Potholing and coordination with appropriate utility companies
- After paving operations, utilizing survey equipment again to relocate and mark the utility cover locations based on the recordings.

The purpose of the locating and surveying of utility covers is to prevent excess AC patch work during the "Utility Structure Adjustment" operation.

This project requires lowering of existing utilities prior to pavement grinding and adjustment to finished grade after paving.

Contractor shall be responsible for notifying and coordinating with the respective utility regarding any adjustment to affected utility structures within the limits of work. Contractor shall contact affected utilities within seven (7) calendar days from award of contract to allow for adjustment of their impacted utilities.

Any utility covers compromised and in need of replacing shall be brought to the immediate attention of the Engineer.

#### 1.02 LIQUIDATED DAMAGES

Asphalt concrete around the raised utility shall be placed and compacted within twenty four (24) hours of raising the utility. Specific liquidated damages for utility adjustment delays shall be in the sum of one hundred dollars (\$100) per calendar day per location.

### PART 2 - MATERIAL AND EQUIPMENT

Topographic Survey equipment (such as total station equipment) or GPS equipment shall record the location of the utility covers to the accuracy of within 4 inches of the center of the utility cover.

Equipment and methods shall be approved by the Engineer prior to execution.

### PART 3 – EXECUTION

#### 3.01 UNDERGROUND SERVICE ALERT

The Contractor shall notify and coordinate the work of identifying and marking utility facilities with the respective utility companies. The Contractor is required to call Underground Service Alert (USA) at (800) 227-2600 forty-eight (48) hours in advance of any excavation activity so all existing underground facilities can be located and marked. The Contractor shall supply the Engineer with

copies of all USA confirmation numbers including associated documentation.

#### 3.02 SURVEYING

The Contractor shall survey and record the locations of all utility covers and provide the Engineer with records.

After paving operations, the Contractor shall locate the utility covers using the survey equipment and mark the locations of the utility covers prior to "Utility Structure Adjustment" operations.

3.03 CONTROL

All reset frames and covers shall be within 1/4 inch of the bottom of a straight edge when placed across manhole, box or other facility on the finished pavement.

Contractor shall be responsible for locating and referencing all such facilities so that no utility cover is "lost". Refer to the "Locating and Surveying Utilities" Technical Specification section.

For monuments, Contractor shall be responsible for preserving the survey point in its undisturbed position by a method acceptable to the Engineer.

### 3.04 ADJUST FRAMES, COVERS, GRATES, AND MANHOLES

All manholes, grates, valves, cleanouts and survey monuments shall be adjusted to finished grade in accordance with Section 15-2.10 of the State Standard Specifications.

Adjustment of covers shall begin within seven (7) days after paving.

Raising to grade of non-City utilities shall be coordinated with the appropriate utility company. Utility companies shall be notified a minimum of fifteen (15) days prior to the start of work.

In road areas where milling or conform grinding occurs ahead of the pavement overlay, the contractor shall lower the lids, grates and remove boxes prior to grinding, place covers and then raise the lids and grates and restore the boxes to match finished grade following final paving operations.

During initial lowering of utility frame and cover and prior to paving, Contractor shall compact the materials, including cutback if used, within the utility frame.

Contractor shall immediately repair any areas where temporary paving over structures has become loose or uneven.

#### 3.05 CLEANING

All covers shall be completely cleaned of all asphaltic material.

3.06 CORRECTIVE WORK

Any frames, grates, or covers damaged by the Contractor while paving shall be replaced at his expense. Broken boxes shall be replaced by the Contractor and no additional compensation will be allowed.

### PART 4 – MEASUREMENT AND PAYMENT

Included in Section 100 of these Technical Specifications.

### END OF SECTION 112

# THIS PAGE INTENTIONALLY LEFT BLANK

## SECTION 113

# INTER-AGENCY CONTACT INFORMATION

## WEB SITES, ADDRESSES, AND TELEPHONE NUMBERS

### Web Sites, Addresses, and Telephone Numbers

Reference or agency or	Web site	Address	Telephon e no.
Veolia Water	https://www.eastpalo altowater.com/pages /about/about-veolia/	2415 UNIVERSITY AVE., EAST PALO ALTO, CA 94303	(650) 325 6195
California Department of Industrial Relations	www.dir.ca.gov	455 GOLDEN GATE AVENUE SAN FRANCISCO CA 94102	
CalTrans, Traffic Operations, California Manual of Uniform Traffic Control Devices	http://www.dot.ca.gov/ trafficops/camutcd/		
CalTrans, 2018 Standard Plans and	http://dot.ca.gov/des/ oe/construction- contract-		
East Palo Alto Sanitary District	www.epasd.com	901 WEEKS STREET EAST PALO ALTO , CA 94303	(650) 325- 9021
Menlo Park Fire Protection District			
Palo Alto Park Mutual Water Company	www.papmwc.org	2190 Addison Avenue, East Palo Alto, CA 94303	(650) 322-6903
City of East Palo Public Works Engineering	http://www.ci.east	PW-ENGINEERING DIVISION 1960 TATE ST., EAST PALO ALTO, CA 94303	(650) 853- 3189
Underground Service Alert	www.usanorth.org		811 (800) 227- 2600

# END OF SECTION 113

# END OF TECHNICAL SPECIFICATIONS

# **APPENDIX A – BULB-OUT LOCATIONS**

Proposed design of curb bulb-outs are currently being designed by a consultant.

# ATTACHMENT B – STANDARD CONTRACT

# Contract

This public works contract ("Contract") is entered into by and between <\_\_\_\_> ("City") and \_\_\_\_\_\_ ("Contractor"), for work on the <\_\_\_\_\_> Project ("Project").

The parties agree as follows:

- 2. Contract Documents. The Contract Documents incorporated into this Contract include and are comprised of all of the documents listed below. The definitions provided in Article 1 of the General Conditions apply to all of the Contract Documents, including this Contract.
  - **2.1** Notice Inviting Bids;
  - 2.2 Instructions to Bidders;
  - 2.3 Addenda, if any;
  - **2.4** Bid Proposal and attachments thereto;
  - 2.5 Contract;
  - **2.6** Payment and Performance Bonds;
  - 2.7 General Conditions;
  - 2.8 Special Conditions;
  - **2.9** Project Plans and Specifications;
  - 2.10 Change Orders, if any;
  - 2.11 Notice of Potential Award;
  - 2.12 Notice to Proceed; and
  - 2.13 The following:

\_\_\_\_\_. <List additional documents here, if any, including the formal title and document date. If there are no additional documents, write "No other documents" in the space above.>

- 3. Contractor's Obligations. Contractor will perform all of the Work required for the Project, as specified in the Contract Documents. Contractor must provide, furnish, and supply all things necessary and incidental for the timely performance and completion of the Work, including all necessary labor, materials, supplies, tools, equipment, transportation, onsite facilities, and utilities, unless otherwise specified in the Contract Documents. Contractor must use its best efforts to diligently prosecute and complete the Work in a professional and expeditious manner and to meet or exceed the performance standards required by the Contract Documents.
- 4. Payment. As full and complete compensation for Contractor's timely performance and completion of the Work in strict accordance with the terms and conditions of the Contract Documents, City will pay Contractor \$\_\_\_\_\_\_("Contract Price") for all of

Contractor's direct and indirect costs to perform the Work, including all labor, materials, supplies, equipment, taxes, insurance, bonds and all overhead costs, in accordance with the payment provisions in the General Conditions.

- 5. Time for Completion. Contractor will fully complete the Work for the Project, meeting all requirements for Final Completion, within <\_\_\_\_\_> calendar days from the commencement date given in the Notice to Proceed ("Contract Time"). By signing below, Contractor expressly waives any claim for delayed early completion.
- 6. Liquidated Damages. As further specified in Section 5.4 of the General Conditions, if Contractor fails to complete the Work within the Contract Time, City will assess liquidated damages in the amount of \$<\_\_\_\_\_> per day for each day of unexcused delay in achieving Final Completion, and such liquidated damages may be deducted from City's payments due or to become due to Contractor under this Contract.

# 7. Labor Code Compliance.

- **7.1 General.** This Contract is subject to all applicable requirements of Chapter 1 of Part 7 of Division 2 of the Labor Code, including requirements pertaining to wages, working hours and workers' compensation insurance, as further specified in Article 9 of the General Conditions.
- **7.2 Prevailing Wages.** This Project is subject to the prevailing wage requirements applicable to the locality in which the Work is to be performed for each craft, classification or type of worker needed to perform the Work, including employer payments for health and welfare, pension, vacation, apprenticeship and similar purposes. Copies of these prevailing rates are available online at <u>http://www.dir.ca.gov/DLSR</u>.
- **7.3 DIR Registration.** City may not enter into the Contract with a bidder without proof that the bidder and its Subcontractors are registered with the California Department of Industrial Relations to perform public work pursuant to Labor Code § 1725.5, subject to limited legal exceptions.
- 8. Workers' Compensation Certification. Pursuant to Labor Code § 1861, by signing this Contract, Contractor certifies as follows: "I am aware of the provisions of Labor Code § 3700 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 on this Contract."
- **9. Conflicts of Interest.** Contractor, its employees, Subcontractors and agents, may not have, maintain or acquire a conflict of interest in relation to this Contract in violation of any City ordinance or requirement, or in violation of any California law, including Government Code § 1090 et seq., or the Political Reform Act, as set forth in Government Code § 81000 et seq. and its accompanying regulations. Any violation of this Section constitutes a material breach of the Contract.
- **10. Independent Contractor.** Contractor is an independent contractor under this Contract and will have control of the Work and the means and methods by which it is performed. Contractor and its Subcontractors are not employees of City and are not entitled to participate in any health, retirement, or any other employee benefits from City.
- **11. Notice.** Any notice, billing, or payment required by or pursuant to the Contract Documents must be made in writing, signed, dated and sent to the other party by personal delivery,

U.S. Mail, a reliable overnight delivery service, or by email as a PDF file. Notice is deemed effective upon delivery, except that service by U.S. Mail is deemed effective on the second working day after deposit for delivery. Notice for each party must be given as follows:

# City:

<Department or Title> <Address> <City/State/Zip> <Phone (optional)> Attn: <Name/Title> <Email address>

Copy to: <Name/Title> <Email address>

# Contractor:

Name:	
Address:	
City/State/Zip:	
Phone:	
Attn:	
Email:	
Copy to:	

# 12. General Provisions.

- **12.1** Assignment and Successors. Contractor may not assign its rights or obligations under this Contract, in part or in whole, without City's written consent. This Contract is binding on Contractor's and City's lawful heirs, successors and permitted assigns.
- **12.2** Third Party Beneficiaries. There are no intended third party beneficiaries to this Contract.
- **12.3 Governing Law and Venue.** This Contract will be governed by California law and venue will be in the <\_\_\_\_\_> County Superior Court, and no other place. Contractor waives any right it may have pursuant to Code of Civil Procedure § 394, to file a motion to transfer any action arising from or relating to this Contract to a venue outside of <\_\_\_\_\_> County, California.
- **12.4 Amendment.** No amendment or modification of this Contract will be binding unless it is in a writing duly authorized and signed by the parties to this Contract.
- **12.5** Integration. This Contract and the Contract Documents incorporated herein, including authorized amendments or Change Orders thereto, constitute the final, complete, and exclusive terms of the agreement between City and Contractor.
- **12.6 Severability.** If any provision of the Contract Documents is determined to be illegal, invalid, or unenforceable, in whole or in part, the remaining provisions of the Contract Documents will remain in full force and effect.

- **12.7** Iran Contracting Act. If the Contract Price exceeds \$1,000,000, Contractor certifies, by signing below, that it is not identified on a list created under the Iran Contracting Act, Public Contract Code § 2200 et seq. (the "Act"), as a person engaging in investment activities in Iran, as defined in the Act, or is otherwise expressly exempt under the Act.
- **12.8 Authorization.** Each individual signing below warrants that he or she is authorized to do so by the party that he or she represents, and that this Contract is legally binding on that party. If Contractor is a corporation, signatures from two officers of the corporation are required pursuant to California Corporation Code § 313.

[Signatures are on the following page.]

The parties agree to this Contract as witnessed by the signatures below:

CITY:	Approved as to form:
MELVIN E. GAINES, CITY MANAGER	JOHN D. LE, CITY ATTORNEY
Date:	Date:
Attest:	
JAMES COLIN, CITY CLERK	
Date:	
CONTRACTOR:Business Name	
s/	Seal:
Name, Title	
Date:	
Second Signature (See Section 12.8):	
s/	
Name, Title	
Date:	
Contractor's California License Number(s) and	Expiration Date(s)

END OF CONTRACT

# Payment Bond

<	> ("City") and	
("Contractor") have entered into a contr	act for work on the	
<	> Project ("Project"	). The Contract
is incorporated by reference into this Pr		,

is incorporated by reference into this Payment Bond ("Bond").

- 2. Surety's Obligation. If Contractor or any of its Subcontractors fails to pay a person authorized in California Civil Code § 9100 to assert a claim against a payment bond, any amounts due under the Unemployment Insurance Code with respect to work or labor performed under the Contract, or any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of Contractor and its Subcontractors under California Unemployment Insurance Code § 13020 with respect to the work and labor, then Surety will pay the obligation.
- **3. Beneficiaries.** This Bond inures to the benefit of any of the persons named in California Civil Code § 9100, so as to give a right of action to those persons or their assigns in any suit brought upon this Bond. Contractor must promptly provide a copy of this Bond upon request by any person with legal rights under this Bond.
- 4. **Duration.** If Contractor promptly makes payment of all sums for all labor, materials, and equipment furnished for use in the performance of the Work required by the Contract, in conformance with the time requirements set forth in the Contract and as required by California law, Surety's obligations under this Bond will be null and void. Otherwise, Surety's obligations will remain in full force and effect.
- 5. Waivers. Surety waives any requirement to be notified of alterations to the Contract or extensions of time for performance of the Work under the Contract. Surety waives the provisions of Civil Code §§ 2819 and 2845. City waives the requirement of a new bond for any supplemental contract under Civil Code § 9550. Any notice to Surety may be given in the manner specified in the Contract and delivered or transmitted to Surety as follows:

Attn:	 
Address:	
City/State/Zip:	
Phone:	
Email:	

6. Law and Venue. This Bond will be governed by California law, and venue for any dispute pursuant to this Bond will be in the <\_\_\_\_\_> County Superior Court, and no other place. Surety will be responsible for City's attorneys' fees and costs in any action to enforce the provisions of this Bond.

[Signatures are on the following page.]

7. Effective Date; Execution. This Bond is entered into and is effective on \_\_\_\_\_, 20\_\_\_.

# SURETY:

Business Name

s/\_\_\_\_\_

Date

Name, Title

(Attach Acknowledgment with Notary Seal and Power of Attorney)

\_\_\_\_\_

# CONTRACTOR:

Business Name

s/\_\_\_\_\_

Name, Title

# **APPROVED BY CITY:**

s/ \_\_\_\_\_

Date

Date

Name, Title

END OF PAYMENT BOND

# Performance Bond

< \_\_\_\_\_> ("City") and \_\_\_\_\_ ("Contractor") have entered into a contract for work on the < Project ("Project"). The Contract is

incorporated by reference into this Performance Bond ("Bond").

- General. Under this Bond, Contractor as principal and \_\_\_\_\_\_, its surety ("Surety"), are bound to City as obligee for an amount not less than \$\_\_\_\_\_\_\_ to ensure Contractor's faithful performance of its obligations under the Contract. This Bond is binding on the respective successors, assigns, owners, heirs, or executors of Surety and Contractor.
- 2. Surety's Obligations. Surety's obligations are co-extensive with Contractor's obligations under the Contract. If Contractor fully performs its obligations under the Contract, including its warranty obligations under the Contract, Surety's obligations under this Bond will become null and void. Otherwise, Surety's obligations will remain in full force and effect.
- **3. Waiver.** Surety waives any requirement to be notified of and further consents to any alterations to the Contract made under the applicable provisions of the Contract Documents, including changes to the scope of Work or extensions of time for performance of Work under the Contract. Surety waives the provisions of Civil Code §§ 2819 and 2845.
- 4. Application of Contract Balance. Upon making a demand on this Bond for completion of the Work prior to acceptance of the Project, City will make the Contract Balance available to Surety for completion of the Work under the Contract. For purposes of this provision, the Contract Balance is defined as the total amount payable by City to Contractor as the Contract Price minus amounts already paid to Contractor, and minus any liquidated damages, credits, or backcharges to which City is entitled under the terms of the Contract.
- 5. **Contractor Default.** Upon written notification from City of Contractor's termination for default under Article 13 of the Contract General Conditions, time being of the essence, Surety must act within the time specified in Article 13 to remedy the default through one of the following courses of action:
  - **5.1** Arrange for completion of the Work under the Contract by Contractor, with City's consent, but only if Contractor is in default solely due to its financial inability to complete the Work;
  - **5.2** Arrange for completion of the Work under the Contract by a qualified contractor acceptable to City, and secured by performance and payment bonds issued by an admitted surety as required by the Contract Documents, at Surety's expense; or
  - **5.3** Waive its right to complete the Work under the Contract and reimburse City the amount of City's costs to have the remaining Work completed.
- 6. Surety Default. If Surety defaults on its obligations under the Bond, City will be entitled to recover all costs it incurs due to Surety's default, including legal, design professional, or delay costs.
- 7. Notice. Any notice to Surety may be given in the manner specified in the Contract and sent to Surety as follows:

Attn: \_\_\_\_\_

Address:	_
City/State/Zip:	_
Phone:	_
-ax:	_
Email:	_

- 8. Law and Venue. This Bond will be governed by California law, and venue for any dispute pursuant to this Bond will be in the <\_\_\_\_\_> County Superior Court, and no other place. Surety will be responsible for City's attorneys' fees and costs in any action to enforce the provisions of this Bond.
- 9. Effective Date; Execution. This Bond is entered into and effective on \_\_\_\_\_, 20\_\_\_.

SURETY:

Business Name

s/\_\_\_\_\_

Date

Name, Title

(Attach Acknowledgment with Notary Seal and Power of Attorney)

\_\_\_\_\_

Business Name

s/\_\_\_\_\_

Date

Name, Title

#### APPROVED BY CITY:

s/\_\_\_\_\_

Date

Name, Title

END OF PERFORMANCE BOND

### **General Conditions**

#### Article 1 - Definitions

**Definitions.** The following definitions apply to all of the Contract Documents unless otherwise indicated, e.g., additional definitions that apply solely to the Specifications or other technical documents. Defined terms and titles of documents are capitalized in the Contract Documents, with the exception of the following (in any tense or form): "day," "furnish," "including," "install," "work day" or "working day."

**Allowance** means a specific amount that must be included in the Bid Proposal for a specified purpose.

**Article**, as used in these General Conditions, means a numbered Article of the General Conditions, unless otherwise indicated by the context.

**Change Order** means a written document duly approved and executed by City, which changes the scope of Work, the Contract Price, or the Contract Time.

**City** means the municipality which has entered into the Contract with Contractor for performance of the Work, acting through its City Council, officers, employees, City Engineer, and any other authorized representatives.

City Engineer means the City Engineer for City and his or her authorized delegee(s).

**Claim** means a separate demand by Contractor for a change in the Contract Time or Contract Price, that has previously been submitted to City in accordance with the requirements of the Contract Documents, and which has been rejected by City, in whole or in part; or a written demand by Contractor objecting to the amount of Final Payment.

**Contract** means the signed agreement between City and Contractor for performing the Work required for the Project, and all documents expressly incorporated therein.

**Contract Documents** means, collectively, all of the documents listed as such in Section 2 of the Contract, including the Notice Inviting Bids; the Instructions to Bidders; addenda, if any; the Bid Proposal, and attachments thereto; the Contract; the Notice of Potential Award and Notice to Proceed; the payment and performance bonds; the General Conditions; the Special Conditions; the Project Plans and Specifications; any Change Orders; and any other documents which are clearly and unambiguously made part of the Contract Documents. The Contract Documents do not include documents provided "For Reference Only," or documents that are intended solely to provide information regarding existing conditions.

**Contract Price** means the total compensation to be paid to Contractor for performance of the Work, as set forth in the Contract and as may be amended by Change Order or adjusted for an Allowance. The Contract Price is not subject to adjustment due to inflation or due to the increased cost of labor, material, supplies or equipment following submission of the Bid Proposal.

**Contract Time** means the time specified for complete performance of the Work, as set forth in the Contract and as may be amended by Change Order.

**Contractor** means the individual, partnership, corporation, or joint-venture that has signed the Contract with City to perform the Work.

Day means a calendar day unless otherwise specified.

**Design Professional** means the licensed individual(s) or firm(s) retained by City to provide architectural, engineering, or electrical engineering design services for the Project. If no Design Professional has been retained for this Project, any reference to Design Professional is deemed to refer to the Engineer.

**DIR** means the California Department of Industrial Relations.

**Drawings** has the same meaning as Plans.

**Engineer** means the City Engineer for the City of <\_\_\_\_\_> and his or her authorized delegees.

**Excusable Delay** is defined in Section 5.3(B), Excusable Delay.

**Extra Work** means new or unforeseen work added to the Project, as determined by the Engineer in his or her sole discretion, including Work that was not part of or incidental to the scope of the Work when the Contractor's bid was submitted; Work that is substantially different from the Work as described in the Contract Documents at bid time; or Work that results from a substantially differing and unforeseeable condition.

**Final Completion** means Contractor has fully completed all of the Work required by the Contract Documents to the City's satisfaction, including all punch list items and any required commissioning or training, and has provided the City with all required submittals, including the instructions and manuals, product warranties, and as-built drawings.

**Final Payment** means payment to Contractor of the unpaid Contract Price, including release of undisputed retention, less amounts withheld or deducted pursuant to the Contract Documents.

Furnish means to purchase and deliver for the Project.

**Government Code Claim** means a claim submitted pursuant to California Government Code § 900 et seq.

**Hazardous Materials** means any substance or material identified now or in the future as hazardous under any Laws, or any other substance or material that may be considered hazardous or otherwise subject to Laws governing handling, disposal, or cleanup.

**Including**, whether or not capitalized, means "including, but not limited to," unless the context clearly requires otherwise.

**Inspector** means the individual(s) or firm(s) retained or employed by City to inspect the workmanship, materials, and manner of construction of the Project and its components to ensure compliance with the Contract Documents and all Laws.

Install means to fix in place for materials, and to fix in place and connect for equipment.

**Laws** means all applicable local, state, and federal laws, regulations, rules, codes, ordinances, permits, orders, and the like enacted or imposed by or under the auspices of any governmental entity with jurisdiction over any of the Work or any performance of the Work, including health and safety requirements.

**Non-Excusable Delay** is defined in Section 5.3(D), Non-Excusable Delay.

**Plans** means the City-provided plans, drawings, details, or graphical depictions of the Project requirements, but does not include Shop Drawings.

**Project** means the public works project referenced in the Contract, as modified by any Project alternates elected by City, if any.

**Project Manager** means the individual designated by City to oversee and manage the Project on City's behalf and may include his or her authorized delegee(s) when the Project Manager is unavailable. If no Project Manager has been designated for this Project, any reference to Project Manager is deemed to refer to the Engineer.

Recoverable Costs is defined in Section 5.3(F), Recoverable Costs.

**Request for Information** or **RFI** means Contractor's written request for information about the Contract Documents, the Work or the Project, submitted to City in the manner and format specified by City.

**Section**, when capitalized in these General Conditions, means a numbered section or subsection of the General Conditions, unless the context clearly indicates otherwise.

**Shop Drawings** means drawings, plan details or other graphical depictions prepared by or on behalf of Contractor, and subject to City acceptance, which are intended to provide details for fabrication, installation, and the like, of items required by or shown in the Plans or Specifications.

**Specialty Work** means Work that must be performed by a specialized Subcontractor with the specified license or other special certification, and that the Contractor is not qualified to self-perform.

**Specifications** means the technical, text specifications describing the Project requirements, which are prepared for and incorporated into the Contract by or on behalf of City, and does not include the Contract, General Conditions or Special Conditions.

**Subcontractor** means an individual, partnership, corporation, or joint-venture retained by Contractor directly or indirectly through a subcontract to perform a specific portion of the Work. The term Subcontractor applies to subcontractors of all tiers, unless otherwise indicated by the context. A third party such as a utility performing related work on the Project is not a Subcontractor, even if Contractor must coordinate its Work with the third party.

Technical Specifications has the same meaning as Specifications.

**Work** means all of the construction and services necessary for or incidental to completing the Project in conformance with the requirements of the Contract Documents.

**Work Day** or **Working Day**, whether or not capitalized, means a weekday when the City is open for business, and does not include holidays observed by the City.

**Worksite** means the place or places where the Work is performed, which includes, but may extend beyond the Project site, including separate locations for staging, storage, or fabrication.

#### Article 2 - Roles and Responsibilities

2.1 City.

(A) *City Council.* The City Council has final authority in all matters affecting the Project, except to the extent it has delegated authority to the Engineer.

(B) **Engineer.** The Engineer, acting within the authority conferred by the City Council, is responsible for administration of the Project on behalf of City, including

authority to provide directions to the Design Professional and to Contractor to ensure proper and timely completion of the Project. The Engineer's decisions are final and conclusive within the scope of his or her authority, including interpretation of the Contract Documents.

(C) **Project Manager.** The Project Manager assigned to the Project will be the primary point of contact for the Contractor and will serve as City's representative for daily administration of the Project on behalf of City. Unless otherwise specified, all of Contractor's communications to City (in any form) will go to or through the Project Manager. City reserves the right to reassign the Project Manager role at any time or to delegate duties to additional City representatives, without prior notice to or consent of Contractor.

(D) **Design Professional.** The Design Professional is responsible for the overall design of the Project and, to the extent authorized by City, may act on City's behalf to ensure performance of the Work in compliance with the Plans and Specifications, including any design changes authorized by Change Order. The Design Professional's duties may include review of Contractor's submittals, visits to any Worksite, inspecting the Work, evaluating test and inspection results, and participation in Project-related meetings, including any pre-construction conference, weekly meetings, and coordination meetings. The Design Professional's interpretation of the Plans or Specifications is final and conclusive.

# 2.2 Contractor.

(A) **General.** Contractor must provide all labor, materials, supplies, equipment, services, and incidentals necessary to perform and timely complete the Work in strict accordance with the Contract Documents, and in an economical and efficient manner in the best interests of City, and with minimal inconvenience to the public.

(B) **Responsibility for the Work and Risk of Loss.** Contractor is responsible for supervising and directing all aspects of the Work to facilitate the efficient and timely completion of the Work. Contractor is solely responsible for and required to exercise full control over the Work, including the construction means, methods, techniques, sequences, procedures, safety precautions and programs, and coordination of all portions of the Work with that of all other contractors and Subcontractors, except to the extent that the Contract Documents provide other specific instructions. Contractor's responsibilities extend to any plan, method or sequence suggested, but not required by City or specified in the Contract Documents. From the date of commencement of the Work until either the date on which City formally accepts the Project or the effective date of termination of the Contract, whichever is later, Contractor bears all risks of injury or damage to the Work and the materials and equipment delivered to any Worksite, by any cause including fire, earthquake, wind, weather, vandalism or theft.

(C) **Project Administration.** Contractor must provide sufficient and competent administration, staff, and skilled workforce necessary to perform and timely complete the Work in accordance with the Contract Documents. Before starting the Work, Contractor must designate in writing and provide complete contact information, including telephone numbers and email address, for the officer or employee in Contractor's organization who is to serve as Contractor's primary representative for the Project, and who has authority to act on Contractor's behalf. A Subcontractor may not serve as Contractor's primary representative.

(D) **On-Site Superintendent.** Contractor must, at all times during performance of the Work, provide a qualified and competent full-time superintendent acceptable to City, and assistants as necessary, who must be physically present at the Project site while any

aspect of the Work is being performed. The superintendent must have full authority to act and communicate on behalf of Contractor, and Contractor will be bound by the superintendent's communications to City. City's approval of the superintendent is required before the Work commences. If City is not satisfied with the superintendent's performance, City may request a qualified replacement of the superintendent. Failure to comply may result in temporary suspension of the Work, at Contractor's sole expense and with no extension of Contract Time, until an approved superintendent is physically present to supervise the Work. Contractor must provide written notice to City, as soon as practicable, before replacing the superintendent.

(E) **Standards.** Contractor must, at all times, ensure that the Work is performed in an efficient, skillful manner following best practices and in full compliance with the Contract Documents and Laws and applicable manufacturer's recommendations. Contractor has a material and ongoing obligation to provide true and complete information, to the best of its knowledge, with respect to all records, documents, or communications pertaining to the Project, including oral or written reports, statements, certifications, Change Order requests, or Claims.

(F) **Meetings.** Contractor, its project manager, superintendent and any primary Subcontractors requested by City, must attend a pre-construction conference, if requested by City, as well as weekly Project progress meetings scheduled with City. If applicable, Contractor may also be required to participate in coordination meetings with other parties relating to other work being performed on or near the Project site or in relation to the Project, including work or activities performed by City, other contractors, or other utility owners.

(G) **Construction Records.** Contractor will maintain up-to-date, thorough, legible, and dated daily job reports, which document all significant activity on the Project for each day that Work is performed on the Project. The daily report for each day must include the number of workers at the Project site; primary Work activities; major deliveries; problems encountered, including injuries, if any; weather and site conditions; and delays, if any. Contractor will take date and time-stamped photographs to document general progress of the Project, including site conditions prior to construction activities, before and after photographs at offset trench laterals, existing improvements and utilities, damage and restoration. Contractor will maintain copies of all subcontracts, Project-related correspondence with Subcontractors, and records of meetings with Subcontractors. Upon request by the City, Contractor will permit review of and/or provide copies of any of these construction records.

(H) **Responsible Party.** Contractor is solely responsible to City for the acts or omissions of any Subcontractors, or any other party or parties performing portions of the Work or providing equipment, materials or services for or on behalf of Contractor or the Subcontractors. Upon City's written request, Contractor must promptly and permanently remove from the Project, at no cost to City, any employee or Subcontractor or employee of a Subcontractor who the Engineer has determined to be incompetent, intemperate or disorderly, or who has failed or refused to perform the Work as required under the Contract Documents.

(I) **Correction of Defects.** Contractor must promptly correct, at Contractor's sole expense, any Work that is determined by City to be deficient or defective in any way, including workmanship, materials, parts or equipment. Workmanship, materials, parts or equipment that do not conform to the requirements under the Plans, Specifications and every other Contract Document, as determined by City, will be considered defective and subject to rejection. Contractor must also promptly correct, at Contractor's sole expense, any Work performed beyond the lines and grades shown on the Plans or established by City, and any Extra Work performed without City's prior written approval. If Contractor

fails to correct or to take reasonable steps toward correcting defective Work within five days following notice from City, or within the time specified in City's notice to correct, City may elect to have the defective Work corrected by its own forces or by a third party, in which case the cost of correction will be deducted from the Contract Price. If City elects to correct defective Work due to Contractor's failure or refusal to do so, City or its agents will have the right to take possession of and use any equipment, supplies, or materials available at the Project site or any Worksite on City property, in order to effectuate the correction, at no extra cost to City. Contractor's warranty obligations under Section 11.2, Warranty, will not be waived nor limited by City's actions to correct defective Work under these circumstances. Alternatively, City may elect to retain defective Work, and deduct the difference in value, as determined by the Engineer, from payments otherwise due to Contractor. This paragraph applies to any defective Work performed by Contractor during the one-year warranty period under Section 11.2.

(J) **Contractor's Records.** Contractor must maintain all of its records relating to the Project in any form, including paper documents, photos, videos, electronic records, approved samples, and the construction records required pursuant to paragraph (G), above. Project records subject to this provision include complete Project cost records and records relating to preparation of Contractor's bid, including estimates, take-offs, and price quotes or bids.

(1) Contractor's cost records must include all supporting documentation, including original receipts, invoices, and payroll records, evidencing its direct costs to perform the Work, including, but not limited to, costs for labor, materials and equipment. Each cost record should include, at a minimum, a description of the expenditure with references to the applicable requirements of the Contract Documents, the amount actually paid, the date of payment, and whether the expenditure is part of the original Contract Price, related to an executed Change Order, or otherwise categorized by Contractor as Extra Work. Contractor's failure to comply with this provision as to any claimed cost operates as a waiver of any rights to recover the claimed cost.

(2) Contractor must continue to maintain its Project-related records in an organized manner for a period of five years after City's acceptance of the Project or following Contract termination, whichever occurs first. Subject to prior notice to Contractor, City is entitled to inspect or audit any of Contractor's records relating to the Project during Contractor's normal business hours. The record-keeping requirements set forth in this subsection 2.2(J) will survive expiration or termination of the Contract.

(K) **Copies of Project Documents.** Contractor and its Subcontractors must keep copies, at the Project site, of all Work-related documents, including the Contract, permit(s), Plans, Specifications, Addenda, Contract amendments, Change Orders, RFIs and RFI responses, Shop Drawings, as-built drawings, schedules, daily records, testing and inspection reports or results, and any related written interpretations. These documents must be available to City for reference at all times during construction of the Project.

# 2.3 Subcontractors.

(A) **General.** All Work which is not performed by Contractor with its own forces must be performed by Subcontractors. City reserves the right to approve or reject any and all Subcontractors proposed to perform the Work, for reasons including the subcontractor's poor reputation, lack of relevant experience, financial instability, and lack of technical ability or adequate trained workforce. Each Subcontractor must obtain a City business license before performing any Work. (B) **Contractual Obligations.** Contractor must require each Subcontractor to comply with the provisions of the Contract Documents as they apply to the Subcontractor's portion(s) of the Work, including the generally applicable terms of the Contract Documents, and to likewise bind their subcontractors. Contractor will provide that the rights that each Subcontractor may have against any manufacturer or supplier for breach of warranty or guarantee relating to items provided by the Subcontractor for the Project, will be assigned to City. Nothing in these Contract Documents creates a contractual relationship between a Subcontractor and City, but City is deemed to be a third-party beneficiary of the contract between Contractor and each Subcontractor.

(C) **Termination.** If the Contract is terminated, each Subcontractor's agreement must be assigned by Contractor to City, subject to the prior rights of any surety, but only if and to the extent that City accepts, in writing, the assignment by written notification, and assumes all rights and obligations of Contractor pursuant to each such subcontract agreement.

(D) **Substitution of Subcontractor.** If Contractor requests substitution of a listed Subcontractor under Public Contract Code § 4107, Contractor is solely responsible for all costs City incurs in responding to the request, including legal fees and costs to conduct a hearing, and any increased subcontract cost to perform the Work that was to be performed by the listed Subcontractor. If City determines that a Subcontractor is unacceptable to City based on the Subcontractor's failure to satisfactorily perform its Work, or for any of the grounds for substitution listed in Public Contract Code § 4107(a), City may request removal of the Subcontractor pursuant to this paragraph, Contractor will immediately remove the Subcontractor from the Project and, at no further cost to City, will either (1) self-perform the remaining Work to the extent that Contractor is duly licensed and qualified to do so, or (2) substitute a Subcontractor that is acceptable to City, in compliance with Public Contract Code § 4107, as applicable.

#### 2.4 Coordination of Work.

(A) **Concurrent Work.** City reserves the right to perform, have performed, or permit performance of other work on or adjacent to the Project site while the Work is being performed for the Project. Contractor is responsible for coordinating its Work with other work being performed on or adjacent to the Project site, including by any utility companies or agencies, and must avoid hindering, delaying, or interfering with the work of other contractors, individuals, or entities, and must ensure safe and reasonable site access and use as required or authorized by City. To the full extent permitted by law, Contractor must hold harmless and indemnify City against any and all claims arising from or related to Contractor's avoidable, negligent, or willful hindrance of, delay to, or interference with the work of any utility company or agency or another contractor or subcontractor.

(B) **Coordination.** If Contractor's Work will connect or interface with work performed by others, Contractor is responsible for independently measuring and visually inspecting such work to ensure a correct connection and interface. Contractor is responsible for any failure by Contractor or its Subcontractors to confirm measurements before proceeding with connecting Work. Before proceeding with any portion of the Work affected by the construction or operations of others, Contractor must give the Project Manager prompt written notification of any defects Contractor discovers which will prevent the proper execution of the Work. Failure to give notice of any known or reasonably discoverable defects will be deemed acknowledgement by Contractor that the work of others is not defective and will not prevent the proper execution of the Work. Contractor must also promptly notify City if work performed by others, including work or activities performed by

City's own forces, is operating to hinder, delay, or interfere with Contractor's timely performance of the Work. City reserves the right to backcharge Contractor for any additional costs incurred due to Contractor's failure to comply with the requirements in this Section 2.4.

2.5 Submittals. Unless otherwise specified, Contractor must submit to the Engineer for review and acceptance, all schedules, Shop Drawings, samples, product data, and similar submittals required by the Contract Documents, or upon request by the Engineer. Unless otherwise specified, all submittals, including Requests for Information, are subject to the general provisions of this Section, as well as specific submittal requirements that may be included elsewhere in the Contract Documents, including the Special Conditions or Specifications. The Engineer may require submission of a submittal schedule at or before a pre-construction conference, as may be specified in the Notice to Proceed.

(A) **General.** Contractor is responsible for ensuring that its submittals are accurate and conform to the Contract Documents.

(B) **Time and Manner of Submission.** Contractor must ensure that its submittals are prepared and delivered in a manner consistent with the current City-accepted schedule for the Work and within the applicable time specified in the Contract Documents, or if no time is specified, in such time and sequence so as not to delay the performance of the Work or completion of the Project.

(C) **Required Contents.** Each submittal must include the Project name and contract number, Contractor's name and address, the name and address of any Subcontractor or supplier involved with the submittal, the date, and references to applicable Specification section(s) and/or drawing and detail number(s).

(D) **Required Corrections.** If corrections are required, Contractor must promptly make and submit any required corrections as specified in full conformance with the requirements of this Section, or other requirements that apply to that submittal.

(E) **Effect of Review and Acceptance.** Review and acceptance of a submittal by City will not relieve Contractor from complying with the requirements of the Contract Documents. Contractor is responsible for any errors in any submittal, and review or acceptance of a submittal by City is not an assumption of risk or liability by City.

(F) **Enforcement.** Any Work performed or any material furnished, installed, fabricated or used without City's prior acceptance of a required submittal is performed or provided at Contractor's risk, and Contractor may be required to bear the costs incident thereto, including the cost of removing and replacing such Work, repairs to other affected portions of the Work or material, and the cost of additional time or services required of City, including costs for the Design Professional, Project Manager, or Inspector.

(G) **Excessive RFIs.** A RFI will be considered excessive or unnecessary if City determines that the explanation or response to the RFI is clearly and unambiguously discernable from the Contract Documents. City's costs to review and respond to excessive or unnecessary RFIs may be deducted from payments otherwise due to Contractor.

**2.6 Shop Drawings.** When Shop Drawings are required by the Specifications or requested by the Engineer, they must be prepared according to best practices at Contractor's expense. The Shop Drawings must be of a size and scale to clearly show all necessary details. Unless otherwise specified by City, Shop Drawings must be provided to the Engineer for review and acceptance at least 30 days before the Work will be performed. If City requires changes, the corrected Shop Drawings must be resubmitted to the

Engineer for review within the time specified by the Engineer. For all Project components requiring Shop Drawings, Contractor will not furnish materials or perform any Work until the Shop Drawings for those components are accepted by City. Contractor is responsible for any errors or omissions in the Shop Drawings, shop fits and field corrections; any deviations from the Contract Documents; and for the results obtained by the use of Shop Drawings. Acceptance of Shop Drawings by City does not relieve Contractor of Contractor's responsibility.

- 2.7 Access to Work. Contractor must afford prompt and safe access to any Worksite by City and its employees, agents, or consultants authorized by City; and upon request by City, Contractor must promptly arrange for City representatives to visit or inspect manufacturing sites or fabrication facilities for items to be incorporated into the Work.
- 2.8 Personnel. Contractor and its Subcontractors must employ only competent and skillful personnel to perform the Work. Contractor and its Subcontractor's supervisors, security or safety personnel, and employees who have unescorted access to the Project site must possess proficiency in English sufficient to read, understand, receive, and implement oral or written communications or instructions relating to their respective job functions, including safety and security requirements. Upon written notification from the Engineer, Contractor and its Subcontractors must immediately discharge any personnel who are incompetent, disorderly, disruptive, threatening, abusive, or profane, or otherwise refuse or fail to comply with the requirements of the Contract Documents or Laws, including Laws pertaining to health and safety. Any such discharged personnel may not be reemployed or permitted on the Project in any capacity without City's prior written consent.

# **Article 3 - Contract Documents**

### 3.1 Interpretation of Contract Documents.

Plans and Specifications. The Plans and Specifications included in the (A) Contract Documents are complementary. If Work is shown on one but not on the other, Contractor must perform the Work as though fully described on both, consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results. The Plans and Specifications are deemed to include and require everything necessary and reasonably incidental to completion of the Work, whether or not particularly mentioned or shown. Contractor must perform all Work and services and supply all things reasonably related to and inferable from the Contract Documents. In the event of a conflict between the Plans and Specifications, the Specifications will control, unless the drawing(s) at issue are dated later than the Specification(s) at issue. Detailed drawings take precedence over general drawings, and large-scale drawings take precedence over smaller scale drawings. Any arrangement or division of the Plans and Specifications into sections is for convenience and is not intended to limit the Work required by separate trades. A conclusion presented in the Plans or Specifications is only a recommendation. Actual locations and depths must be determined by Contractor's field investigation. Contractor may request access to underlying or background information in City's possession that is necessary for Contractor to form its own conclusions.

(B) **Duty to Notify and Seek Direction.** If Contractor becomes aware of a changed condition in the Project, or of any ambiguity, conflict, inconsistency, discrepancy, omission, or error in the Contract Documents, including the Plans or Specifications, Contractor must promptly submit a Request for Information to the Engineer and wait for a response from City before proceeding further with the related Work. The RFI must notify City of the issue and request clarification, interpretation or direction. The Engineer's clarification, interpretation or director. If Contractor proceeds with the related Work before obtaining City's response, Contractor

will be responsible for any resulting costs, including the cost of correcting any incorrect or defective Work that results. Timely submission of a clear and complete RFI is essential to avoiding delay. Delay resulting from Contractor's failure to submit a timely and complete RFI to the Engineer is Non-Excusable Delay. If Contractor believes that City's response to an RFI justifies a change to the Contract Price or Contract Time, Contractor must perform the Work as directed, but may submit a timely Change Order request in accordance with the Contract Documents. (See Article 5 and 6.)

(C) *Figures and Dimensions.* Figures control over scaled dimensions.

(D) **Technical or Trade Terms.** Any terms that have well-known technical or trade meanings will be interpreted in accordance with those meanings, unless otherwise specifically defined in the Contract Documents.

(E) **Measurements.** Contractor must verify all relevant measurements in the Contract Documents and at the Project site before ordering any material or performing any Work, and will be responsible for the correctness of those measurements or for costs that could have been avoided by independently verifying measurements.

(F) **Compliance with Laws.** The Contract Documents are intended to comply with Laws and will be interpreted to comply with Laws.

- **3.2** Order of Precedence. Information included in one Contract Document but not in another will not be considered a conflict or inconsistency. Unless otherwise specified in the Special Conditions, in case of any conflict or inconsistency among the Contract Documents, the following order of precedence will apply, beginning from highest to lowest, with the most recent version taking precedent over an earlier version:
  - (A) Change Orders;
  - (B) Addenda;
  - (C) Contract;
  - (D) Notice to Proceed;
  - (E) Attachment B Federal Contract Requirements (only if used);
  - (F) Special Conditions;
  - (G) General Conditions;
  - (H) Payment and Performance Bonds;
  - (I) Specifications;
  - (J) Plans;
  - (K) Notice of Potential Award;
  - (L) Notice Inviting Bids;
  - (M) Attachment A Federal Bidding Requirements (only if used);
  - (N) Instructions to Bidders;
  - (O) Contractor's Bid Proposal and attachments;
  - (P) the City's standard specifications, as applicable; and

(Q) Any generic documents prepared by and on behalf of a third party, that were not prepared specifically for this Project, such as the Caltrans Standard Specifications or Caltrans Special Provisions.

**3.3 Caltrans Standard Specifications.** Any reference to or incorporation of the Standard Specifications of the State of California, Department of Transportation ("Caltrans"), including "Standard Specifications," "Caltrans Specifications," "State Specifications," or "CSS," means the most current edition of Caltrans' Standard Specifications, unless otherwise specified ("Caltrans Standard Specifications"), including the most current amendments as of the date that Contractor's bid was submitted for this Project. The following provisions apply to use of or reference to the Caltrans Standard Specifications or Special Provisions:

(A) *Limitations.* The "General Provisions" of the Caltrans Standard Specifications, i.e., sections 1 through 9, do not apply to these Contract Documents with the exception of any specific provisions, if any, which are expressly stated to apply to these Contract Documents.

(B) **Conflicts or Inconsistencies.** If there is a conflict or inconsistency between any provision in the Caltrans Standard Specifications or Special Provisions and a provision of these Contract Documents, as determined by City, the provision in the Contract Documents will govern.

(C) *Meanings.* Terms used in the Caltrans Standard Specifications or Special Provisions are to be interpreted as follows:

(1) Any reference to the "Engineer" is deemed to mean the City Engineer.

(2) Any reference to the "Special Provisions" is deemed to mean the Special Conditions, unless the Caltrans Special Provisions are expressly included in the Contract Documents listed in Section 2 of the Contract.

- (3) Any reference to the "Department" or "State" is deemed to mean City.
- **3.4** For Reference Only. Contractor is responsible for the careful review of any document, study, or report provided by City or appended to the Contract Documents solely for informational purposes and identified as "For Reference Only." Nothing in any document, study, or report so appended and identified is intended to supplement, alter, or void any provision of the Contract Documents. Contractor is advised that City or its representatives may be guided by information or recommendations included in such reference documents, particularly when making determinations as to the acceptability of proposed materials, methods, or changes in the Work. Any record drawings or similar final or accepted drawings or maps that are not part of the Contract Documents are deemed to be For Reference Only. The provisions of the Contract Document are not modified by any perceived or actual conflict with provisions in any document that is provided For Reference Only.
- **3.5 Current Versions.** Unless otherwise specified by City, any reference to standard specifications, technical specifications, or any City or state codes or regulations means the latest specification, code or regulation in effect on the date that bids were due.
- **3.6 Conformed Copies.** If City prepares a conformed set of the Contract Documents following award of the Contract, it will provide Contractor with two hard copy (paper) sets and one copy of the electronic file in PDF format. It is Contractor's responsibility to ensure that all Subcontractors, including fabricators, are provided with the conformed set of the Contract Documents at Contractor's sole expense.
- **3.7 Ownership.** No portion of the Contract Documents may be used for any purpose other than construction of the Project, without prior written consent from City. Contractor is deemed to have conveyed the copyright in any designs, drawings, specifications, Shop Drawings, or other documents (in paper or electronic form) developed by Contractor for the Project, and City will retain all rights to such works, including the right to possession.

#### Article 4 - Bonds, Indemnity, and Insurance

**4.1 Payment and Performance Bonds.** Within ten days following issuance of the Notice of Potential Award, Contractor is required to provide a payment bond and a performance

bond, each in the penal sum of not less than 100% of the Contract Price, and each executed by Contractor and its surety using the bond forms included with the Contract Documents.

(A) **Surety.** Each bond must be issued and executed by a surety admitted in California. If an issuing surety cancels the bond or becomes insolvent, within seven days following written notice from City, Contractor must substitute a surety acceptable to City. If Contractor fails to substitute an acceptable surety within the specified time, City may, at its sole discretion, withhold payment from Contractor until the surety is replaced to City's satisfaction, or terminate the Contract for default.

(B) **Supplemental Bonds for Increase in Contract Price.** If the Contract Price increases during construction by five percent or more over the original Contract Price, Contractor must provide supplemental or replacement bonds within ten days of written notice from City pursuant to this Section, covering 100% of the increased Contract Price and using the bond forms included with the Contract Documents.

- 4.2 Indemnity. To the fullest extent permitted by law, Contractor must indemnify, defend, and hold harmless City, its Council, officers, officials, employees, agents, volunteers, and consultants (individually, an "Indemnitee," and collectively the "Indemnitees") from and against any and all liability, loss, damage, claims, causes of action, demands, charges, fines, costs, and expenses (including, without limitation, attorney fees, expert witness fees, paralegal fees, and fees and costs of litigation or arbitration) (collectively, "Liability") of every nature arising out of or in connection with the acts or omissions of Contractor, its employees, Subcontractors, representatives, or agents, in bidding or performing the Work or in failing to comply with any obligation of Contractor under the Contract, except such Liability caused by the active negligence, sole negligence, or willful misconduct of an Indemnitee. This indemnity requirement applies to any Liability arising from alleged defects in the content or manner of submission of Contractor's bid for the Contract. Contractor's failure or refusal to timely accept a tender of defense pursuant to this Contract will be deemed a material breach of the Contract. City will timely notify Contractor upon receipt of any third-party claim relating to the Contract, as required by Public Contract Code § 9201. Contractor waives any right to express or implied indemnity against any Indemnitee. Contractor's indemnity obligations under this Contract will survive the expiration or any early termination of the Contract.
- 4.3 **Insurance.** No later than ten days following issuance of the Notice of Potential Award, Contractor must procure and provide proof of the insurance coverage required by this Section in the form of certificates and endorsements acceptable to City. The required insurance must cover the activities of Contractor and its Subcontractors relating to or arising from the performance of the Work, and must remain in full force and effect at all times during the period covered by the Contract, through the date of City's acceptance of the Project. All required insurance must be issued by a company licensed to do business in the State of California, and each such insurer must have an A.M. Best's financial strength rating of "A" or better and a financial size rating of "VIII" or better. If Contractor fails to provide any of the required coverage in full compliance with the requirements of the Contract Documents, City may, at its sole discretion, purchase such coverage at Contractor's expense and deduct the cost from payments due to Contractor, or terminate the Contract for default. The procurement of the required insurance will not be construed to limit Contractor's liability under this Contract or to fulfill Contractor's indemnification obligations under this Contract.

(A) **Policies and Limits.** The following insurance policies and limits are required for this Contract, unless otherwise specified in the Special Conditions:

(1) Commercial General Liability ("CGL") Insurance: The CGL insurance policy must be issued on an occurrence basis, written on a comprehensive general liability form, and must include coverage for liability arising from Contractor's or its Subcontractor's acts or omissions in the performance of the Work, including contractor's protected coverage, contractual liability, products and completed operations, and broad form property damage, with limits of at least \$2,000,000 per occurrence and at least \$4,000,000 general aggregate. The CGL insurance coverage may be arranged under a single policy for the full limits required or by a combination of underlying policies with the balance provided by excess or umbrella policies, provided each such policy complies with the requirements set forth in this Section, including required endorsements.

(2) *Automobile Liability Insurance:* The automobile liability insurance policy must provide coverage of at least \$2,000,000 combined single-limit per accident for bodily injury, death, or property damage, including hired and non-owned auto liability.

(3) *Workers' Compensation Insurance and Employer's Liability:* The workers' compensation and employer's liability insurance policy must comply with the requirements of the California Labor Code, providing coverage of at least \$1,000,000 or as otherwise required by the statute. If Contractor is self-insured, Contractor must provide its Certificate of Permission to Self-Insure, duly authorized by the DIR.

(4) *Pollution Liability Insurance:* The pollution liability insurance policy must be issued on an occurrence basis, providing coverage of at least \$2,000,000 for all loss arising out of claims for bodily injury, death, property damage, or environmental damage caused by pollution conditions resulting from the Work.

(5) *Builder's Risk Insurance:* The builder's risk insurance policy must be issued on an occurrence basis, for all-risk or "all perils" coverage on a 100% completed value basis on the insurable portion of the Project for the benefit of City.

(B) **Notice.** Each certificate of insurance must state that the coverage afforded by the policy or policies will not be reduced, cancelled or allowed to expire without at least 30 days written notice to City, unless due to non-payment of premiums, in which case ten days written notice must be made to City.

(C) *Waiver of Subrogation.* Each required policy must include an endorsement providing that the carrier will waive any right of subrogation it may have against City.

(D) **Required Endorsements.** The CGL policy, automobile liability policy, pollution liability policy, and builder's risk policy must include the following specific endorsements:

(1) The City, including its Council, officials, officers, employees, agents, volunteers and consultants (collectively, "Additional Insured") must be named as an additional insured for all liability arising out of the operations by or on behalf of the named insured, and the policy must protect the Additional Insured against any and all liability for personal injury, death or property damage or destruction arising directly or indirectly in the performance of the Contract. The additional insured endorsement must be provided using ISO form CG 20 10 11 85 or an equivalent form approved by the City.

(2) The inclusion of more than one insured will not operate to impair the rights of one insured against another, and the coverages afforded will apply as though separate policies have been issued to each insured.

(3) The insurance provided by Contractor is primary and no insurance held or owned by any Additional Insured may be called upon to contribute to a loss.

(4) This policy does not exclude explosion, collapse, underground excavation hazard, or removal of lateral support.

(E) **Contractor's Responsibilities.** This Section 4.3 establishes the minimum requirements for Contractor's insurance coverage in relation to this Project, but is not intended to limit Contractor's ability to procure additional or greater coverage. Contractor is responsible for its own risk assessment and needs and is encouraged to consult its insurance provider to determine what coverage it may wish to carry beyond the minimum requirements of this Section. Contractor is solely responsible for the cost of its insurance coverage, including premium payments, deductibles, or self-insured retentions, and no Additional Insured will be responsible or liable for any of the cost of Contractor's insurance coverage.

(F) **Deductibles and Self-Insured Retentions**. Any deductibles or self-insured retentions that apply to the required insurance (collectively, "deductibles") in excess of \$100,000 are subject to approval by the City's Risk Manager, acting in his or her sole discretion, and must be declared by Contractor when it submits its certificates of insurance and endorsements pursuant to this Section 4.3. If the City's Risk Manager determines that the deductibles are unacceptably high, at City's option, Contractor must either reduce or eliminate the deductibles as they apply to City and all required Additional Insured; or must provide a financial guarantee, to City's satisfaction, guaranteeing payment of losses and related investigation, claim administration, and legal expenses.

(G) **Subcontractors.** Contractor must ensure that each Subcontractor is required to maintain the same insurance coverage required under this Section 4.3, with respect to its performance of Work on the Project, including those requirements related to the Additional Insureds and waiver of subrogation, but excluding pollution liability or builder's risk insurance unless otherwise specified in the Special Conditions. A Subcontractor may be eligible for reduced insurance coverage or limits, but only to the extent approved in writing in advance by the City's Risk Manager. Contractor must confirm that each Subcontractor has complied with these insurance requirements before the Subcontractor is permitted to begin Work on the Project. Upon request by the City, Contractor must provide certificates and endorsements submitted by each Subcontractor to prove compliance with this requirement. The insurance requirements for Subcontractors do not replace or limit the Contractor's insurance obligations.

#### Article 5 - Contract Time

**5.1 Time is of the Essence.** Time is of the essence in Contractor's performance and completion of the Work, and Contractor must diligently prosecute the Work and complete it within the Contract Time.

(A) **General.** Contractor must commence the Work on the date indicated in the Notice to Proceed and must fully complete the Work in strict compliance with all requirements of the Contract Documents and within the Contract Time. Contractor may not begin performing the Work before the date specified in the Notice to Proceed.

(B) **Authorization.** Contractor is not entitled to compensation or credit for any Work performed before the date specified in the Notice to Proceed, with the exception of any schedules, submittals, or other requirements, if any, that must be provided or performed before issuance of the Notice to Proceed.

(C) **Rate of Progress.** Contractor and its Subcontractors must, at all times, provide workers, materials, and equipment sufficient to maintain the rate of progress necessary to ensure full completion of the Work within the Contract Time. If City determines that Contractor is failing to prosecute the Work at a sufficient rate of progress, City may, in its sole discretion, direct Contractor to provide additional workers, materials, or equipment, or to work additional hours or days without additional cost to City, in order to achieve a rate of progress satisfactory to City. If Contractor fails to comply with City's directive in this regard, City may, at Contractor's expense, separately contract for additional workers, materials, or equipment or use City's own forces to achieve the necessary rate of progress. Alternatively, City may terminate the Contract based on Contractor's default.

**5.2 Schedule Requirements.** Contractor must prepare all schedules using standard, commercial scheduling software acceptable to the Engineer, and must provide the schedules in electronic and paper form as requested by the Engineer. In addition to the general scheduling requirements set forth below, Contractor must also comply with any scheduling requirements included in the Special Conditions or in the Technical Specifications.

(A) **Baseline (As-Planned) Schedule.** Within ten calendar days following City's issuance of the Notice to Proceed (or as otherwise specified in the Notice to Proceed), Contractor must submit to City for review and acceptance a baseline (as-planned) schedule using critical path methodology showing in detail how Contractor plans to perform and fully complete the Work within the Contract Time, including labor, equipment, materials and fabricated items. The baseline schedule must show the order of the major items of Work and the dates of start and completion of each item, including when the materials and equipment will be procured. The schedule must also include the work of all trades, reflecting anticipated labor or crew hours and equipment loading for the construction activities, and must be sufficiently comprehensive and detailed to enable progress to be monitored on a day-by-day basis. For each activity, the baseline schedule must be dated, provided in the format specified in the Contract Documents or as required by City, and must include, at a minimum, a description of the activity, the start and completion dates of the activity, and the duration of the activity.

(1) *Specialized Materials Ordering.* Within five calendar days following issuance of the Notice to Proceed, Contractor must order any specialized material or equipment for the Work that is not readily available from material suppliers. Contractor must also retain documentation of the purchase order date(s).

(B) **City's Review of Schedules.** City will review and may note exceptions to the baseline schedule, and to the progress schedules submitted as required below, to assure completion of the Work within the Contract Time. Contractor is solely responsible for resolving any exceptions noted in a schedule and, within seven days, must correct the schedule to address the exceptions. City's review or acceptance of Contractor's schedules will not operate to waive or limit Contractor's duty to complete the Project within the Contract Time, nor to waive or limit City's right to assess liquidated damages for Contractor's unexcused failure to do so.

(C) **Progress Schedules.** After City accepts the final baseline schedule with no exceptions, Contractor must submit an updated progress schedule and three-week look-ahead schedule, in the format specified by City, for review and acceptance with each application for a progress payment, or when otherwise specified by City, until completion of the Work. The updated progress schedule must: show how the actual progress of the Work as constructed to date compares to the baseline schedule; reflect any proposed changes in the construction schedule or method of operations, including to achieve Project milestones within the Contract Time; and identify any actual or potential impacts

to the critical path. Contractor must also submit periodic reports to City of any changes in the projected material or equipment delivery dates for the Project.

(1) *Float.* The progress schedule must show early and late completion dates for each task. The number of days between those dates will be designated as the "float." Any float belongs to the Project and may be allocated by the Engineer to best serve timely completion of the Project.

(2) Failure to Submit Schedule. Reliable, up-to-date schedules are essential to efficient and cost-effective administration of the Project and timely completion. If Contractor fails to submit a schedule within the time periods specified in this Section, or submits a schedule to which City has noted exceptions that are not corrected, City may withhold up to ten percent from payment(s) otherwise due to Contractor until the exceptions are resolved, the schedule is corrected and resubmitted, and City has accepted the schedule. In addition, Contractor's failure to comply with the schedule requirements in this Section 5.2 will be deemed a material default and a waiver of any claims for Excusable Delay or loss of productivity arising during any period when Contractor is out of compliance, subject only to the limits of Public Contract Code § 7102.

(D) **Recovery Schedule.** If City determines that the Work is more than one week behind schedule, within seven days following written notice of such determination, Contractor must submit a recovery schedule, showing how Contractor intends to perform and complete the Work within the Contract Time, based on actual progress to date.

(E) **Effect of Acceptance.** Contractor and its Subcontractors must perform the Work in accordance with the most current City-accepted schedule unless otherwise directed by City. City's acceptance of a schedule does not operate to extend the time for completion of the Work or any component of the Work, and will not affect City's right to assess liquidated damages for Contractor's unexcused delay in completing the Work within the Contract Time.

(F) **Posting.** Contractor must at all times prominently post a copy of the most current City-accepted progress or recovery schedule in its on-site office.

(G) **Reservation of Rights.** City reserves the right to direct the sequence in which the Work must be performed or to make changes in the sequence of the Work in order to facilitate the performance of work by City or others, or to facilitate City's use of its property. The Contract Time or Contract Price may be adjusted to the extent such changes in sequence actually increase or decrease Contractor's time or cost to perform the Work.

(H) **Authorized Working Days and Times.** Contractor is limited to working Monday through Friday, excluding holidays, during City's normal business hours, except as provided in the Special Conditions or as authorized in writing by City. City reserves the right to charge Contractor for additional costs incurred by City due to Work performed on days or during hours not expressly authorized in the Contract Documents, including reimbursement of costs incurred for inspection, testing, and construction management services.

# 5.3 Delay and Extensions of Contract Time.

(A) **Notice of Delay.** If Contractor becomes aware of any actual or potential delay affecting the critical path, Contractor must promptly notify the Engineer in writing, regardless of the nature or cause of the delay, so that City has a reasonable opportunity to mitigate or avoid the delay.

(B) **Excusable Delay.** The Contract Time may be extended if Contractor encounters "Excusable Delay," which is an unavoidable delay in completing the Work within the Contract Time due to causes completely beyond Contractor's control, and which Contractor could not have avoided or mitigated through reasonable care, planning, foresight, and diligence, provided that Contractor is otherwise fully performing its obligations under the Contract Documents. Grounds for Excusable Delay may include fire, natural disasters including earthquake or unusually severe weather, acts of terror or vandalism, epidemic, unforeseeable adverse government actions, unforeseeable actions of third parties, encountering unforeseeable hazardous materials, unforeseeable site conditions, or suspension for convenience under Article 13. The Contract Time will not be extended based on circumstances which will not unavoidably delay completing the Work within the Contract Time based on critical path analysis.

(C) **Weather Delays.** A "Weather Delay Day" is a Working Day during which Contractor and its forces, including Subcontractors, are unable to perform more than 40% of the critical path Work scheduled for that day due to adverse weather conditions which impair the ability to safely or effectively perform the scheduled critical path Work that day. Adverse weather conditions may include rain, saturated soil, and Project site clean-up required due to adverse weather. Determination of what constitutes critical path Work scheduled for that day will be based on the most current, City-approved schedule. Contractor will be entitled to a non-compensable extension of the Contract Time for each Weather Delay Day in excess of the normal Weather Delay Days within a given month as determined by reliable records, including monthly rainfall averages, for the preceding ten years (or as otherwise specified in the Special Conditions or Specifications).

(1) Contractor must fully comply with the applicable procedures in Articles 5 and 6 of the General Conditions regarding requests to modify the Contract Time.

(2) Contractor will not be entitled to an extension of time for a Weather Delay Day to the extent Contractor is responsible for concurrent delay on that day.

(3) Contractor must take reasonable steps to mitigate the consequences of Weather Delay Days, including prudent workforce management and protecting the Work, Project Site, materials, and equipment.

(D) **Non-Excusable Delay.** Delay which Contractor could have avoided or mitigated through reasonable care, planning, foresight and diligence is "Non-Excusable Delay." Contractor is not entitled to an extension of Contract Time or any compensation for Non-Excusable Delay, or for Excusable Delay that is concurrent with Non-Excusable Delay. Non-Excusable Delay includes delay caused by:

(1) weather conditions which are normal for the location of the Project, as determined by reliable records, including monthly rainfall averages, for the preceding ten years;

(2) Contractor's failure to order equipment and materials sufficiently in advance of the time needed for completion of the Work within the Contract Time;

(3) Contractor's failure to provide adequate notification to utility companies or agencies for connections or services necessary for completion of the Work within the Contract Time;

(4) foreseeable conditions which Contractor could have ascertained from reasonably diligent inspection of the Project site or review of the Contract Documents or other information provided or available to Contractor;

(5) Contractor's failure, refusal, or financial inability to perform the Work within the Contract Time, including insufficient funds to pay its Subcontractors or suppliers;

(6) performance or non-performance by Contractor's Subcontractors or suppliers;

(7) the time required to respond to excessive RFIs (see Section 2.5(G));

(8) delayed submission of required submittals, or the time required for correction and resubmission of defective submittals;

(9) time required for repair of, re-testing, or re-inspection of defective Work;

(10) enforcement of Laws by City, or outside agencies with jurisdiction over the Work; or

(11) City's exercise or enforcement of any of its rights or Contractor's duties pursuant to the Contract Documents, including correction of defective Work, extra inspections or testing due to non-compliance with Contract requirements, safety compliance, environmental compliance, or rejection and return of defective or deficient submittals.

(E) **Compensable Delay.** Pursuant to Public Contract Code § 7102, in addition to entitlement to an extension of Contract Time, Contractor is entitled to compensation for costs incurred due to delay caused solely by City, when that delay is unreasonable under the circumstances involved and not within the contemplation of the parties ("Compensable Delay"). Contractor is not entitled to an extension of Contract Time or recovery of costs for Compensable Delay that is concurrent with Non-Excusable Delay. Delay due to causes that are beyond the control of either City or Contractor, including Weather Delay Days, discovery of Historic or Archeological Items pursuant to Section 7.18, or the actions or inactions of third parties or other agencies, is not Compensable Delay, and will only entitle Contractor to an extension of time commensurate with the time lost due to such delay.

(F) **Recoverable Costs.** Contractor is not entitled to compensation for Excusable Delay unless it is Compensable Delay, as defined above. Contractor is entitled to recover only the actual, direct, reasonable, and substantiated costs ("Recoverable Costs") for each working day that the Compensable Delay prevents Contractor from proceeding with more than 50% of the critical path Work scheduled for that day, based on the most recent progress schedule accepted by City. Recoverable Costs will not include home office overhead or lost profit.

(G) **Request for Extension of Contract Time or Recoverable Costs.** A request for an extension of Contract Time or any associated Recoverable Costs must be submitted in writing to City within ten calendar days of the date the delay is first encountered, even if the duration of the delay is not yet known at that time, or any entitlement to the Contract Time extension or to the Recoverable Costs will be deemed waived. In addition to complying with the requirements of this Article 5, the request must be submitted in compliance with the Change Order request procedures in Article 6 below. Strict compliance with these requirements is necessary to ensure that any delay or consequences of delay may be mitigated as soon as possible, and to facilitate cost-

efficient administration of the Project and timely performance of the Work. Any request for an extension of Contract Time or Recoverable Costs that does not strictly comply with all of the requirements of Article 5 and Article 6 will be deemed waived.

(1) *Required Contents.* The request must include a detailed description of the cause(s) of the delay and must also describe the measures that Contractor has taken to mitigate the delay and/or its effects, including efforts to mitigate the cost impact of the delay, such as by workforce management or by a change in sequencing. If the delay is still ongoing at the time the request is submitted, the request should also include Contractor's plan for continued mitigation of the delay or its effects.

(2) Delay Days and Costs. The request must specify the number of days of Excusable Delay claimed or provide a realistic estimate if the duration of the delay is not yet known. If Contractor believes it is entitled to Recoverable Costs for Compensable Delay, the request must specify the amount and basis for the Recoverable Costs that are claimed or provide a realistic estimate if the amount is not yet known. Any estimate of delay duration or cost must be updated in writing and submitted with all required supporting documentation as soon as the actual time and cost is known. The maximum extension of Contract Time will be the number of days, if any, by which an Excusable Delay or a Compensable Delay exceeds any concurrent Non-Excusable Delay. Contractor is entitled to an extension of Contract Time, or compensation for Recoverable Costs, only if, and only to the extent that, such delay will unavoidably delay Final Completion.

(3) Supporting Documentation. The request must also include any and all supporting documentation necessary to evidence the delay and its actual impacts, including scheduling and cost impacts with a time impact analysis using critical path methodology and demonstrating the unavoidable delay to Final Completion. The time impact analysis must be submitted in a form or format acceptable to City.

(4) *Burden of Proof.* Contractor has the burden of proving that: the delay was an Excusable Delay or Compensable Delay, as defined above; Contractor has fully complied with its scheduling obligations in Section 5.2, Schedule Requirements; Contractor has made reasonable efforts to mitigate the delay and its schedule and cost impacts; the delay will unavoidably result in delaying Final Completion; and any Recoverable Costs claimed by Contractor were actually incurred and were reasonable under the circumstances.

(5) *Legal Compliance.* Nothing in this Section 5.3 is intended to require the waiver, alteration, or limitation of the applicability of Public Contract Code § 7102.

(6) *No Waiver.* Any grant of an extension of Contract Time, or compensation for Recoverable Costs due to Compensable Delay, will not operate as a waiver of City's right to assess liquidated damages for Non-Excusable Delay.

(7) *Dispute Resolution.* In the event of a dispute over entitlement to an extension of Contract Time or compensation for Recoverable Costs, Contractor may not stop Work pending resolution of the dispute, but must continue to comply with its duty to diligently prosecute the performance and timely completion of the Work. Contractor's sole recourse for an unresolved dispute based on City's rejection of a Change Order request for an extension of Contract Time or compensation for Recoverable Costs is to comply with the dispute resolution provisions set forth in Article 12 below.

**5.4** Liquidated Damages. It is expressly understood that if Final Completion is not achieved within the Contract Time, City will suffer damages from the delay that are difficult to determine and accurately specify. Pursuant to Public Contract Code § 7203, if Contractor fails to achieve Final Completion within the Contract Time due to Contractor's Non-Excusable Delay, City will charge Contractor in the amount specified in the Contract for each calendar day that Final Completion is delayed beyond the Contract Time, as liquidated damages and not as a penalty. Any waiver of accrued liquidated damages, in whole or in part, is subject to approval of the City Council or its authorized delegee.

(A) *Liquidated Damages.* Liquidated damages will not be assessed for any Excusable Delay or Compensable Delay, as set forth above.

(B) *Milestones.* Liquidated damages may also be separately assessed for failure to meet milestones specified elsewhere in the Contract Documents.

(C) **Setoff.** City is entitled to deduct the amount of liquidated damages assessed against any payments otherwise due to Contractor, including progress payments, Final Payment, or unreleased retention. If there are insufficient Contract funds remaining to cover the full amount of liquidated damages assessed, City is entitled to recover the balance from Contractor or its performance bond surety.

(D) **Occupancy or Use.** Occupancy or use of the Project in whole or in part prior to Final Completion does not constitute City's acceptance of the Project and will not operate as a waiver of City's right to assess liquidated damages for Contractor's Non-Excusable Delay in achieving Final Completion.

(E) **Other Remedies.** City's right to liquidated damages under this Section applies only to damages arising from Contractor's Non-Excusable Delay or failure to complete the Work within the Contract Time. City retains its right to pursue all other remedies under the Contract for other types of damage, including damage to property or persons, costs or diminution in value from defective materials or workmanship, costs to repair or complete the Work, or other liability caused by Contractor.

#### Article 6 - Contract Modification

6.1 Contract Modification. Subject to the limited exception set forth in subsection (D) below, any change in the Work or the Contract Documents, including the Contract Price or Contract Time, will not be a valid and binding change to the Contract unless it is formalized in a Change Order, including a "no-cost" Change Order or a unilateral Change Order. Changes in the Work pursuant to this Article 6 will not operate to release, limit, or abridge Contractor's warranty obligations pursuant to Article 11 or any obligations of Contractor's bond sureties.

(A) *City-Directed Changes.* City may direct changes in the scope or sequence of Work or the requirements of the Contract Documents, without invalidating the Contract. Such changes may include Extra Work as set forth in subsection (C) below, or deletion or modification of portions of the Work. Contractor must promptly comply with City-directed changes in the Work in accordance with the original Contract Documents, even if Contractor and City have not yet reached agreement as to adjustments to the Contract Price or Contract Time for the change in the Work or for the Extra Work. Contractor is not entitled to extra compensation for cost savings resulting from "value engineering" pursuant to Public Contract Code § 7101, except to the extent authorized in advance by City in writing, and subject to any applicable procedural requirements for submitting a proposal for value engineering cost savings.

Disputes. In the event of a dispute over entitlement to or the amount of a (B) change in Contract Time or a change in Contract Price related to a City-directed change in the Work, Contractor must perform the Work as directed and may not delay its Work or cease Work pending resolution of the dispute, but must continue to comply with its duty to diligently prosecute the performance and timely completion of the Work, including the Work in dispute. Likewise, in the event that City and Contractor dispute whether a portion or portions of the Work are already required by the Contract Documents or constitute Extra Work, or otherwise dispute the interpretation of any portion(s) of the Contract Documents, Contractor must perform the Work as directed and may not delay its Work or cease Work pending resolution of the dispute, but must continue to comply with its duty to diligently prosecute the performance and timely completion of the Work, including the Work in dispute, as directed by City. If Contractor refuses to perform the Work in dispute, City may, acting in its sole discretion, elect to delete the Work from the Contract and reduce the Contract Price accordingly, and self-perform the Work or direct that the Work be performed by others. Alternatively, City may elect to terminate the Contract for convenience or for cause. Contractor's sole recourse for an unresolved dispute related to changes in the Work or performance of any Extra Work is to comply with the dispute resolution provisions set forth in Article 12, below.

(C) Extra Work. City may direct Contractor to perform Extra Work related to the Project. Contractor must promptly perform any Extra Work as directed or authorized by City in accordance with the original Contract Documents, even if Contractor and City have not yet reached agreement on adjustments to the Contract Price or Contract Time for such Extra Work. If Contractor believes it is necessary to perform Extra Work due to changed conditions, Contractor must promptly notify the Engineer in writing, specifically identifying the Extra Work and the reason(s) the Contractor believes it is Extra Work. This notification requirement does not constitute a Change Order request pursuant to Section 6.2, below. Contractor must maintain detailed daily records that itemize the cost of each element of Extra Work, and sufficiently distinguish the direct cost of the Extra Work from the cost of other Work performed. For each day that Contractor performs Extra Work, or Work that Contractor contends is Extra Work, Contractor must submit no later than the following Working Day, a daily report of the Extra Work performed that day and the related costs, together with copies of certified payroll, invoices, and other documentation substantiating the costs ("Extra Work Report"). The Engineer will make any adjustments to Contractor's Extra Work Report(s) based on the Engineer's records of the Work. When an Extra Work Report(s) is agreed on and signed by both City and Contractor, the Extra Work Report(s) will become the basis for payment under a duly authorized and signed Change Order. Failure to submit the required documentation by close of business on the next Working Day is deemed a full and complete waiver for any change in the Contract Price or Contract Time for any Extra Work performed that day.

(D) **Minor Changes and RFIs.** Minor field changes, including RFI replies from City, that do not affect the Contract Price or Contract Time and that are approved by the Engineer acting within his or her scope of authority, do not require a Change Order. By executing an RFI reply from City, Contractor agrees that it will perform the Work as clarified therein, with no change to the Contract Price or Contract Time.

(E) **Remedy for Non-Compliance.** Contractor's failure to promptly comply with a City-directed change is deemed a material breach of the Contract, and in addition to all other remedies available to it, City may, at its sole discretion, hire another contractor or use its own forces to complete the disputed Work at Contractor's sole expense, and may deduct the cost from the Contract Price.

6.2 Contractor Change Order Requests. Contractor must submit a request or proposal for a change in the Work, compensation for Extra Work, or a change in the Contract Price or Contract Time as a written Change Order request or proposal.

(A) **Time for Submission.** Any request for a change in the Contract Price or the Contract Time must be submitted in writing to the Engineer within ten calendar days of the date that Contractor first encounters the circumstances, information or conditions giving rise to the Change Order request, even if the total amount of the requested change in the Contract Price or impact on the Contract Time is not yet known at that time. If City requests that Contractor propose the terms of a Change Order, unless otherwise specified in City's request, Contractor must provide the Engineer with a written proposal for the change in the Contract Price or Contract Time within five working days of receiving City's request, in a form satisfactory to the Engineer.

(B) **Required Contents.** Any Change Order request or proposal submitted by Contractor must include a complete breakdown of actual or estimated costs and credits, and must itemize labor, materials, equipment, taxes, insurance, subcontract amounts, and, if applicable, Extra Work Reports. Any estimated cost must be updated in writing as soon as the actual amount is known.

(C) **Required Documentation.** All claimed costs must be fully documented, and any related request for an extension of time or delay-related costs must be included at that time and in compliance with the requirements of Article 5 of the General Conditions. Upon request, Contractor must permit City to inspect its original and unaltered bidding records, subcontract agreements, subcontract change orders, purchase orders, invoices, or receipts associated with the claimed costs.

(D) **Required Form.** Contractor must use City's form(s) for submitting all Change Order requests or proposals, unless otherwise specified by City.

(E) **Certification.** All Change Order requests must be signed by Contractor and must include the following certification:

"The undersigned Contractor certifies under penalty of perjury that its statements and representations in this Change Order request are true and correct. Contractor warrants that this Change Order request is comprehensive and complete as to the Work or changes referenced herein, and agrees that any known or foreseeable costs, expenses, or time extension requests not included herein, are deemed waived."

**6.3** Adjustments to Contract Price. The amount of any increase or decrease in the Contract Price will be determined based on one of the following methods listed below, in the order listed with unit pricing taking precedence over the other methods. Markup applies only to City-authorized time and material Work, and does not apply to any other payments to Contractor. For Work items or components that are deleted in their entirety, Contractor will only be entitled to compensation for those direct, actual, and documented costs (including restocking fees), reasonably incurred before Contractor was notified of the City's intent to delete the Work, with no markup for overhead, profit, or other indirect costs.

(A) **Unit Pricing.** Amounts previously provided by Contractor in the form of unit prices, either in a bid schedule or in a post-award schedule of values pursuant to Section 8.1, Schedule of Values, will apply to determine the price for the affected Work, to the extent applicable unit prices have been provided for that type of Work. No additional markup for overhead, profit, or other indirect costs will be added to the calculation.

(B) *Lump Sum.* A mutually agreed upon, all-inclusive lump sum price for the affected Work with no additional markup for overhead, profit, or other indirect costs.

(C) **Time and Materials.** On a time and materials basis, if and only to the extent compensation on a time and materials basis is expressly authorized by City in advance of Contractor's performance of the Work and subject to any not-to-exceed limit. Time and materials compensation for increased costs or Extra Work (but not decreased costs or deleted Work), will include allowed markup for overhead, profit, and other indirect costs, calculated as the total of the following sums, the cumulative total of which may not exceed the maximum markup rate of 15%:

(1) All direct labor costs provided by the Contractor, excluding superintendence, project management, or administrative costs, plus 15% markup;

(2) All direct material costs provided by the Contractor, including sales tax, plus 15% markup;

(3) All direct plant and equipment rental costs provided by the Contractor, plus 15% markup;

(4) All direct additional subcontract costs plus 10% markup for Work performed by Subcontractors; and

(5) Increased bond or insurance premium costs computed at 1.5% of total of the previous four sums.

- 6.4 Unilateral Change Order. If the parties dispute the terms of a proposed Change Order, including disputes over the amount of compensation or extension of time that Contractor has requested, the value of deleted or changed Work, what constitutes Extra Work, or quantities used, City may elect to issue a unilateral Change Order, directing performance of the Work, and authorizing a change in the Contract Price or Contract Time for the adjustment to compensation or time that the City believes is merited. Contractor's sole recourse to dispute the terms of a unilateral Change Order is to submit a timely Claim pursuant to Article 12, below.
- 6.5 Non-Compliance Deemed Waiver. Contractor waives its entitlement to any increase in the Contract Price or Contract Time if Contractor fails to fully comply with the provisions of this Article. Contractor will not be paid for unauthorized Extra Work.

#### **Article 7 - General Construction Provisions**

#### 7.1 Permits, Fees, Business License, and Taxes.

(A) **Permits, Fees, and City Business License.** Contractor must obtain and pay for all permits, fees, or licenses required to perform the Work, including a City business license. Contractor must cooperate with and provide notifications to all government agencies with jurisdiction over the Project, as may be required. Contractor must provide City with copies of all records of permits and permit applications, payment of required fees, and any licenses required for the Work.

(B) **Taxes.** Contractor must pay for all taxes on labor, material and equipment, except Federal Excise Tax to the extent that City is exempt from Federal Excise Tax.

**7.2 Temporary Facilities.** Contractor must provide, at Contractor's sole expense, any and all temporary facilities for the Project, including an onsite staging area for materials and equipment, a field office, sanitary facilities, utilities, storage, scaffolds, barricades, walkways, and any other temporary structure required to safely perform the Work along with any incidental utility services. The location of all temporary facilities must be

approved by the City prior to installation. Temporary facilities must be safe and adequate for the intended use and installed and maintained in accordance with Laws and the Contract Documents. Contractor must fence and screen the Project site and, if applicable, any separate Worksites, including the staging area, and its operation must minimize inconvenience to neighboring properties. Additional provisions pertaining to temporary facilities may be included in the Specifications or Special Conditions.

(A) **Utilities.** Contractor must install and maintain the power, water, sewer and all other utilities required for the Project site, including the piping, wiring, internet and wifi connections, and any related equipment necessary to maintain the temporary facilities.

(B) **Removal and Repair.** Contractor must promptly remove all such temporary facilities when they are no longer needed or upon completion of the Work, whichever comes first. Contractor must promptly repair any damage to City's property or to other property caused by the installation, use, or removal of the temporary facilities, and must promptly restore the property to its original or intended condition.

7.3 Noninterference and Site Management. Contractor must avoid interfering with City's use of its property at or adjacent to the Project site, including use of roadways, entrances, parking areas, walkways, and structures. Contractor must also minimize disruption of access to private property in the Project vicinity. Contractor must coordinate with affected property owners, tenants, and businesses, and maintain some vehicle and pedestrian access to their residences or properties at all times. Temporary access ramps, fencing or other measures must be provided as needed. Before blocking access to a private driveway or parking lot, Contractor must provide effective notice to the affected parties at least 48 hours in advance of the pending closure and allow them to remove vehicles. Private driveways, residences and parking lots must have access to a roadway during non-Work hours.

(A) **Offsite Acquisition.** Unless otherwise provided by City, Contractor must acquire, use and dispose of, at its sole expense, any Worksites, licenses, easements, and temporary facilities necessary to access and perform the Work.

(B) **Offsite Staging Area and Field Office.** If additional space beyond the Project site is needed, such as for the staging area or the field office, Contractor may need to make arrangements with the nearby property owner(s) to secure the space. Before using or occupying any property owned by a third party, Contractor must provide City with a copy of the necessary license agreement, easement, or other written authorization from the property owner, together with a written release from the property owner holding City harmless from any related liability, in a form acceptable to the City Attorney.

(C) **Traffic Management.** Contractor must provide traffic management and traffic controls as specified in the Contract Documents, as required by Laws, and as otherwise required to ensure public and worker safety, and to avoid interference with public or private operations or the normal flow of vehicular, bicycle, or pedestrian traffic.

**7.4 Signs.** No signs may be displayed on or about City's property, except signage which is required by Laws or by the Contract Documents, without City's prior written approval as to size, design, and location.

#### 7.5 Project Site and Nearby Property Protections.

(A) **General.** Contractor is responsible at all times, on a 24-hour basis and at its sole cost, for protecting the Work, the Project site, and the materials and equipment to be incorporated into the Work, until the City has accepted the Project, excluding any exceptions to acceptance, if any. Except as specifically authorized by City, Contractor

must confine its operations to the area of the Project site indicated in the Plans and Specifications. Contractor is liable for any damage caused by Contractor or its Subcontractors to the Work, City's property, the property of adjacent or nearby property owners and the work or personal property of other contractors working for City, including damage related to Contractor's failure to adequately secure the Work or any Worksite.

(1) Subject to City's approval, Contractor will provide and install safeguards to protect the Work; any Worksite, including the Project site; City's real or personal property and the real or personal property of adjacent or nearby property owners, including plant and tree protections.

(2) City wastewater systems may not be interrupted. If the Work disrupts existing sewer facilities, Contractor must immediately notify City and establish a plan, subject to City's approval, to convey the sewage in closed conduits back into the sanitary sewer system. Sewage must not be permitted to flow in trenches or be covered by backfill.

(3) Contractor must remove with due care, and store at City's request, any objects or material from the Project site that City will salvage or reuse at another location.

(4) If directed by Engineer, Contractor must promptly repair or replace any property damage, as specified by the Engineer. However, acting in its sole discretion, City may elect to have the property damage remedied otherwise, and may deduct the cost to repair or replace the damaged property from payment otherwise due to Contractor.

(5) Contractor will not permit any structure or infrastructure to be loaded in a manner that will damage or endanger the integrity of the structure or infrastructure.

(B) **Securing Project Site.** After completion of Work each day, Contractor must secure the Project site and, to the extent feasible, make the area reasonably accessible to the public unless City approves otherwise. All excess materials and equipment not protected by approved traffic control devices must be relocated to the staging area or demobilized. Trench spoils must be hauled off the Project site daily and open excavations must be protected with steel plates. Contractor and Subcontractor personnel may not occupy or use the Project site for any purpose during non-Work hours, except as may be provided in the Contract Documents or pursuant to prior written authorization from City.

(C) **Unforeseen Conditions.** If Contractor encounters facilities, utilities, or other unknown conditions not shown on or reasonably inferable from the Plans or apparent from inspection of the Project site, Contractor must immediately notify the City and promptly submit a Request for Information to obtain further directions from the Engineer. Contractor must avoid taking any action which could cause damage to the facilities or utilities pending further direction from the Engineer. The Engineer's written response will be final and binding on Contractor. If the Engineer's subsequent direction to Contractor affects Contractor's cost or time to perform the Work, Contractor may submit a Change Order request as set forth in Article 6 above.

(D) **Support; Adjacent Properties.** Contractor must provide, install, and maintain all shoring, bracing, and underpinning necessary to provide support to City's property and adjacent properties and improvements thereon. Contractor must provide notifications to adjacent property owners as may be required by Laws. See also, Section 7.15, Trenching of Five Feet or More.

(E) **Notification of Property Damage.** Contractor must immediately notify the City of damage to any real or personal property resulting from Work on the Project. Contractor must immediately provide a written report to City of any such property damage in excess of \$500 (based on estimated cost to repair or replace) within 24 hours of the occurrence. The written report must include: (1) the location and nature of the damage, and the owner of the property, if known; (2) the name and address of each employee of Contractor or any Subcontractor involved in the damage; (3) a detailed description of the incident, including precise location, time, and names and contact information for known witnesses; and (4) a police or first responder report, if applicable. If Contractor is required to file an accident report with another government agency, Contractor will provide a copy of the report to City.

### 7.6 Materials and Equipment.

General. Unless otherwise specified, all materials and equipment required for (A) the Work must be new, free from defects, and of the best grade for the intended purpose, and furnished in sufficient quantities to ensure the proper and expeditious performance of the Work. Contractor must employ measures to preserve the specified quality and fitness of the materials and equipment. Unless otherwise specified, all materials and equipment required for the Work are deemed to include all components required for complete installation and intended operation and must be installed in accordance with the manufacturer's recommendations or instructions. Contractor is responsible for all shipping, handling, and storage costs associated with the materials and equipment required for the Work. Contractor is responsible for providing security and protecting the Work and all of the required materials, supplies, tools and equipment at Contractor's sole cost until City has formally accepted the Project as set forth in Section 11.1, Final Completion. Contractor will not assign, sell, mortgage, or hypothecate any materials or equipment for the Project, or remove any materials or equipment that have been installed or delivered.

(B) *City-Provided.* If the Work includes installation of materials or equipment to be provided by City, Contractor is solely responsible for the proper examination, handling, storage, and installation in accordance with the Contract Documents. Contractor must notify City of any defects discovered in City-provided materials or equipment, sufficiently in advance of scheduled use or installation to afford adequate time to procure replacement materials or equipment as needed. Contractor is solely responsible for any loss of or damage to such items which occurs while the items are in Contractor's custody and control, the cost of which may be offset from the Contract Price and deducted from any payment(s) due to Contractor.

(C) **Intellectual Property Rights.** Contractor must, at its sole expense, obtain any authorization or license required for use of patented or copyright-protected materials, equipment, devices or processes that are incorporated into the Work. Contractor's indemnity obligations in Article 4 apply to any claimed violation of intellectual property rights in violation of this provision.

# 7.7 Substitutions.

(A) **"Or Equal."** Any Specification designating a material, product, or thing (collectively, "item") or service by specific brand or trade name, followed by the words "or equal," is intended only to indicate the quality and type of item or service desired, and Contractor may request use of any equal item or service. Unless otherwise stated in the Specifications, any reference to a specific brand or trade name for an item or service that is used solely for the purpose of describing the type of item or service desired, will be deemed to be followed by the words "or equal." A substitution will only be approved if it is a true "equal" item or service in every aspect of design, function, and quality, as

determined by City, including dimensions, weight, maintenance requirements, durability, fit with other elements, and schedule impacts.

(B) **Request for Substitution.** A post-award request for substitution of an item or service must be submitted in writing to the Engineer for approval in advance, within the applicable time period provided in the Contract Documents. If no time period is specified, the substitution request may be submitted any time within 35 days after the date of award of the Contract, or sufficiently in advance of the time needed to avoid delay of the Work, whichever is earlier.

(C) **Substantiation.** Any available data substantiating the proposed substitute as an equal item or service must be submitted with the written request for substitution. Contractor's failure to timely provide all necessary substantiation, including any required test results as soon as they are available, is grounds for rejection of the proposed substitution, without further review.

(D) **Burden of Proving Equality.** Contractor has the burden of proving the equality of the proposed substitution at Contractor's sole cost. City has sole discretion to determine whether a proposed substitution is equal, and City's determination is final.

(E) **Approval or Rejection.** If the proposed substitution is approved, Contractor is solely responsible for any additional costs or time associated with the substituted item or service. If the proposed substitution is rejected, Contractor must, without delay, install the item or use the service as specified by City.

(F) **Contractor's Obligations.** City's approval of a proposed substitution will not relieve Contractor from any of its obligations under the Contract Documents. In the event Contractor makes an unauthorized substitution, Contractor will be solely responsible for all resulting cost impacts, including the cost of removal and replacement and the impact to other design elements.

#### 7.8 Testing and Inspection.

(A) **General.** All materials, equipment, and workmanship used in the Work are subject to inspection and testing by City at all times and at all locations during construction and/or fabrication, including at any Worksite, shops, and yards. All manufacturers' application or installation instructions must be provided to the Inspector at least ten days prior to the first such application or installation. Contractor must, at all times, make the Work available for testing or inspection. Neither City's inspection or testing of Work, nor its failure to do so, operate to waive or limit Contractor's duty to complete the Work in accordance with the Contract Documents.

(B) **Scheduling and Notification.** Contractor must cooperate with City in coordinating the inspections and testing. Contractor must submit samples of materials, at Contractor's expense, and schedule all tests required by the Contract Documents in time to avoid any delay to the progress of the Work. Contractor must notify the Engineer no later than noon of the Working Day before any inspection or testing and must provide timely notice to the other necessary parties as specified in the Contract Documents. If Contractor schedules an inspection or test beyond regular Work hours, or on a Saturday, Sunday, or recognized City holiday, Contractor must notify the Engineer at least two Working Days in advance for approval. If approved, Contractor must reimburse City for the cost of the overtime inspection or testing. Such costs, including the City's hourly costs for required personnel, may be deducted from payments otherwise due to Contractor.

(C) **Responsibility for Costs.** City will bear the initial cost of inspection and testing to be performed by independent testing consultants retained by City, subject to the following exceptions:

(1) Contractor will be responsible for the costs of any subsequent tests which are required to substantiate compliance with the Contract Documents, and any associated remediation costs.

(2) Contractor will be responsible for inspection costs, at City's hourly rates, for inspection time lost because the Work is not ready or Contractor fails to appear for a scheduled inspection.

(3) If any portion of the Work that is subject to inspection or testing is covered or concealed by Contractor prior to the inspection or testing, Contractor will bear the cost of making that portion of the Work available for the inspection or testing required by the Contract Documents, and any associated repair or remediation costs.

(4) Contractor is responsible for properly shoring all compaction test sites deeper than five feet below grade, as required under Section 7.15 below.

(5) Any Work or material that is defective or fails to comply with the requirements of the Contract Documents must be promptly repaired, removed, replaced, or corrected by Contractor, at Contractor's sole expense, even if that Work or material was previously inspected or included in a progress payment.

(D) **Contractor's Obligations.** Contractor is solely responsible for any delay occasioned by remediation of defective or noncompliant Work or material. Inspection of the Work does not in any way relieve Contractor of its obligations to perform the Work as specified. Any Work done without the required inspection(s) will also be subject to rejection by City.

(E) **Distant Locations.** If required off-site testing or inspection must be conducted at a location more than 100 miles from the Project site, Contractor is solely responsible for the additional travel costs required for testing and/or inspection at such locations.

(F) *Final Inspection.* The provisions of this Section 7.8 also apply to final inspection under Article 11, Completion and Warranty Provisions.

7.9 Project Site Conditions and Maintenance. Contractor must at all times, on a 24-hour basis and at its sole cost, maintain the Project site and staging and storage areas in clean, neat, and sanitary condition and in compliance with all Laws pertaining to safety, air quality, and dust control. Adequate toilets must be provided, and properly maintained and serviced for all workers on the Project site, located in a suitably secluded area, subject to City's prior approval. Contractor must also, on a daily basis and at its sole cost, remove and properly dispose of the debris and waste materials from the Project site.

(A) *Air Emissions Control.* Contractor must not discharge smoke or other air contaminants into the atmosphere in violation of any Laws.

(B) **Dust and Debris.** Contractor must minimize and confine dust and debris resulting from the Work. Contractor must abate dust nuisance by cleaning, sweeping, and immediately sprinkling with water excavated areas of dirt or other materials prone to cause dust, and within one hour after the Engineer notifies Contractor that an airborne nuisance exists. The Engineer may direct that Contractor provide an approved water-spraying truck for this purpose. If water is used for dust control, Contractor will only use

the minimum necessary. Contractor must take all necessary steps to keep waste water out of streets, gutters, or storm drains. See Section 7.19, Environmental Control. If City determines that the dust control is not adequate, City may have the work done by others and deduct the cost from the Contract Price. Contractor will immediately remove any excess excavated material from the Project site and any dirt deposited on public streets.

(C) **Clean up.** Before discontinuing Work in an area, Contractor must clean the area and remove all debris and waste along with the construction equipment, tools, machinery, and surplus materials.

(1) Except as otherwise specified, all excess Project materials, and the materials removed from existing improvements on the Project site with no salvage value or intended reuse by City, will be Contractor's property.

(2) Hauling trucks and other vehicles leaving the Project site must be cleaned of exterior mud or dirt before traveling on City streets. Materials and loose debris must be delivered and loaded to prevent dropping materials or debris. Contractor must immediately remove spillage from hauling on any publicly traveled way. Streets affected by Work on the Project must be kept clean by street sweeping.

(D) **Disposal.** Contractor must dispose of all Project debris and waste materials in a safe and legal manner. Contractor may not burn or bury waste materials on the Project site. Contractor will not allow any dirt, refuse, excavated material, surplus concrete or mortar, or any associated washings, to be disposed of onto streets, into manholes or into the storm drain system.

*Completion.* At the completion of the Work, Contractor must remove from the (E) Project site all of its equipment, tools, surplus materials, waste materials and debris, presenting a clean and neat appearance. Before demobilizing from the Project site, Contractor must ensure that all surfaces are cleaned, sealed, waxed, or finished as applicable, and that all marks, stains, paint splatters, and the like have been properly removed from the completed Work and the surrounding areas. Contractor must ensure that all parts of the construction are properly joined with the previously existing and adjacent improvements and conditions. Contractor must provide all cutting, fitting and patching needed to accomplish that requirement. Contractor must also repair or replace all existing improvements that are damaged or removed during the Work, both on and off the Project site, including curbs, sidewalks, driveways, fences, signs, utilities, street surfaces and structures. Repairs and replacements must be at least equal to the previously existing improvements, and the condition, finish and dimensions must match the previously existing improvements. Contractor must restore to original condition all property or items that are not designated for alteration under the Contract Documents and leave each Worksite clean and ready for occupancy or use by City.

(F) **Non-Compliance.** If Contractor fails to comply with its maintenance and cleanup obligations or any City clean up order, City may, acting in its sole discretion, elect to suspend the Work until the condition(s) is corrected with no increase in the Contract Time or Contract Price, or undertake appropriate cleanup measures without further notice and deduct the cost from any amounts due or to become due to Contractor.

**7.10 Instructions and Manuals.** Contractor must provide to City three copies each of all instructions and manuals required by the Contract Documents, unless otherwise specified. These must be complete as to drawings, details, parts lists, performance data, and other information that may be required for City to easily maintain and service the materials and equipment installed for this Project.

(A) **Submittal Requirements.** All manufacturers' application or installation instructions must be provided to City at least ten days prior to the first such application. The instructions and manuals, along with any required guarantees, must be delivered to City for review.

(B) **Training.** Contractor or its Subcontractors must train City's personnel in the operation and maintenance of any complex equipment or systems as a condition precedent to Final Completion, if required in the Contract Documents.

**7.11 As-built Drawings.** Contractor and its Subcontractors must prepare and maintain at the Project site a detailed, complete and accurate as-built set of the Plans which will be used solely for the purpose of recording changes made in any portion of the original Plans in order to create accurate record drawings at the end of the Project.

(A) **Duty to Update.** The as-built drawings must be updated as changes occur, on a daily basis if necessary. City may withhold the estimated cost for City to have the as-built drawings prepared from payments otherwise due to Contractor, until the as-built drawings are brought up to date to the satisfaction of City. Actual locations to scale must be identified on the as-built drawings for all runs of mechanical and electrical work, including all site utilities installed underground, in walls, floors, or otherwise concealed. Deviations from the original Plans must be shown in detail. The exact location of all main runs, whether piping, conduit, ductwork or drain lines, must be shown by dimension and elevation. The location of all buried pipelines, appurtenances, or other improvements must be represented by coordinates and by the horizontal distance from visible above-ground improvements.

(B) **Final Completion.** Contractor must verify that all changes in the Work are depicted in the as-built drawings and must deliver the complete set of as-built drawings to the Engineer for review and acceptance as a condition precedent to Final Completion and Final Payment.

# 7.12 Existing Utilities.

(A) **General.** The Work may be performed in developed, urban areas with existing utilities, both above and below ground, including utilities identified in the Contract Documents or in other informational documents or records. Contractor must take due care to locate identified or reasonably identifiable utilities before proceeding with trenching, excavation, or any other activity that could damage or disrupt existing utilities. This may include excavation with small equipment, potholing, or hand excavation, and, if practical, using white paint or other suitable markings to delineate the area to be excavated. Except as otherwise provided herein, Contractor will be responsible for costs resulting from damage to identified or reasonably identifiable utilities due to Contractor's negligence or failure to comply with the Contract Documents, including the requirements in this Article 7.

(B) **Unidentified Utilities.** Pursuant to Government Code § 4215, if, during the performance of the Work, Contractor discovers utility facilities not identified by City in the Contract Documents, Contractor must immediately provide written notice to City and the utility. City assumes responsibility for the timely removal, relocation, or protection of existing main or trunkline utility facilities located on the Project site if those utilities are not identified in the Contract Documents. Contractor will be compensated in accordance with the provisions of the Contract Documents for the costs of locating, repairing damage not due to Contractor's failure to exercise reasonable care, and removing or relocating utility facilities not indicated in the Plans or Specifications with reasonable accuracy, and for equipment on the Project necessarily idled during such work. Contractor will not be

assessed liquidated damages for delay in completion of the Work, to the extent the delay was caused by City's failure to provide for removal or relocation of the utility facilities.

- 7.13 Notice of Excavation. Contractor must comply with all applicable requirements in Government Code §§ 4216 through 4216.5, which are incorporated by reference herein. Government Code § 4216.2 requires that, except in an emergency, Contractor must contact the appropriate regional notification center, or Underground Services Alert, at least two working days, but not more than 14 calendar days, before starting any excavation if the excavation will be conducted in an area that is known, or reasonably should be known, to contain subsurface installations. Contractor may not begin excavation until it has obtained and submitted to Engineer an inquiry identification number from Underground Services Alert.
- **7.14 Trenching and Excavations of Four Feet or More.** As required by Public Contract Code § 7104, if the Work includes digging trenches or other excavations that extend deeper than four feet below the surface, the provisions in this Section apply to the Work and the Project.

(A) **Duty to Notify.** Contractor must promptly, and before the following conditions are disturbed, provide written notice to City if Contractor finds any of the following conditions:

(1) Material that Contractor believes may be a hazardous waste, as defined in § 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 the provisions of existing Laws;

(2) Subsurface or latent physical conditions at the Project site differing from those indicated by information about the Project site made available to bidders prior to the deadline for submitting bids; or

(3) Unknown physical conditions at the Project site of any unusual nature, materially different from those ordinarily encountered and generally recognized as inherent in work of the character required by the Contract Documents.

(B) **City Investigation.** City will promptly investigate the conditions and if City finds that the conditions materially differ from those indicated, apparent, or reasonably inferred from information about the Project site made available to bidders, or 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, City will issue a Change Order.

(C) **Disputes.** In the event that a dispute arises between City and Contractor regarding any of the conditions specified in subsection (B) above, or the terms of a Change Order issued by City, Contractor will not be excused from completing the Work within the Contract Time, but must proceed with all Work to be performed under the Contract. Contractor will retain any and all rights provided either by the Contract or by Laws which pertain to the resolution of disputes between Contractor and City.

**7.15** Trenching of Five Feet or More. As required by Labor Code § 6705, if the Contract Price exceeds \$25,000 and the Work includes the excavation of any trench or trenches of five feet or more in depth, a detailed plan must be submitted to City for acceptance in advance of the excavation. The detailed plan must show the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation. If the plan varies from the shoring system standards, it must be prepared by a California registered civil or structural engineer. Use of a shoring,

sloping, or protective system less effective than that required by the Construction Safety Orders is prohibited.

- **7.16 New Utility Connections.** Except as otherwise specified, City will pay connection charges and meter costs for new permanent utilities required by the Contract Documents, if any. Contractor must notify City sufficiently in advance of the time needed to request service from each utility provider so that connections and services are initiated in accordance with the Project schedule.
- 7.17 Lines and Grades. Contractor is required to use any benchmark provided by the Engineer. Unless otherwise specified in the Contract Documents, Contractor must provide all lines and grades required to execute the Work. Contractor must also provide, preserve, and replace if necessary, all construction stakes required for the Project. All stakes or marks must be set by a California licensed surveyor or a California registered civil engineer. Contractor must notify the Engineer of any discrepancies found between Contractor's staking and grading and information provided by the Contract Documents. Upon completion, all Work must conform to the lines, elevations, and grades shown in the Plans, including any changes directed by a Change Order.

#### 7.18 Historic or Archeological Items.

(A) **Contractor's Obligations.** Contractor must ensure that all persons performing Work at the Project site are required to immediately notify the Project Manager, upon discovery of any potential historic or archeological items, including historic or prehistoric ruins, a burial ground, archaeological or vertebrate paleontological site, including fossilized footprints or other archeological, paleontological or historical feature on the Project site (collectively, "Historic or Archeological Items").

(B) **Discovery; Cessation of Work.** Upon discovery of any potential Historic or Archeological Items, Work must be stopped within an 85-foot radius of the find and may not resume until authorized in writing by City. If required by City, Contractor must assist in protecting or recovering the Historic or Archeological Items, with any such assistance to be compensated as Extra Work on a time and materials basis under Article 6, Contract Modification. At City's discretion, a suspension of Work required due to discovery of Historic or Archeological Items may be treated as Excusable Delay pursuant to Article 5, or as a suspension for convenience under Article 13.

**7.19** Environmental Control. Contractor must not pollute any drainage course or its tributary inlets with fuels, oils, bitumens, acids, insecticides, herbicides or other harmful materials. Contractor must prevent the release of any hazardous material or hazardous waste into the soil or groundwater, and prevent the unlawful discharge of pollutants into City's storm drain system and watercourses as required below. Contractor and its Subcontractors must at all times in the performance of the Work comply with all Laws concerning pollution of waterways.

(A) **Stormwater Permit.** Contractor must comply with all applicable conditions of the State Water Resources Control Board National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction Activity ("Stormwater Permit").

(B) **Contractor's Obligations.** If required for the Work, a copy of the Stormwater Permit is on file in City's principal administrative offices, and Contractor must comply with it without adjustment of the Contract Price or the Contract Time. Contractor must timely and completely submit required reports and monitoring information required by the conditions of the Stormwater Permit. Contractor also must comply with all other Laws governing discharge of stormwater, including applicable municipal stormwater management programs.

- **7.20** Noise Control. Contractor must comply with all applicable noise control Laws. Noise control requirements apply to all equipment used for the Work or related to the Work, including trucks, transit mixers or transient equipment that may or may not be owned by Contractor.
- **7.21 Mined Materials.** Pursuant to the Surface Mining and Reclamation Act of 1975, Public Resources Code § 2710 et seq., any purchase of mined materials, such as construction aggregate, sand, gravel, crushed stone, road base, fill materials, and any other mineral materials must originate from a surface mining operation included on the AB 3098 List, which may be accessed online at: https://www.conservation.ca.gov/smgb/Pages/AB-3098-List.aspx.

# Article 8 - Payment

8.1 Schedule of Values. Prior to submitting its first application for payment, Contractor must prepare and submit to the Project Manager a schedule of values apportioned to the various divisions and phases of the Work, including mobilization and demobilization. If a Bid Schedule was submitted with Contractor's bid, the amounts in the schedule of values must be consistent with the Bid Schedule. Each line item contained in the schedule of values must be assigned a value such that the total of all items equals the Contract Price. The items must be sufficiently detailed to enable accurate evaluation of the percentage of completion claimed in each application for payment, and the assigned value consistent with any itemized or unit pricing submitted with Contractor's bid.

(A) *Measurements for Unit Price Work.* Materials and items of Work to be paid for on the basis of unit pricing will be measured according to the methods specified in the Contract Documents.

(B) **Deleted or Reduced Work.** Contractor will not be compensated for Work that City has deleted or reduced in scope, except for any labor, material or equipment costs for such Work that Contractor reasonably incurred before Contractor learned that the Work could be deleted or reduced. Contractor will only be compensated for those actual, direct and documented costs incurred, and will not be entitled to any mark up for overhead or lost profits.

8.2 **Progress Payments.** Following the last day of each month, or as otherwise required by the Special Conditions or Specifications, Contractor will submit to the Project Manager a monthly application for payment for Work performed during the preceding month based on the estimated value of the Work performed during that preceding month.

(A) **Application for Payment.** Each application for payment must be itemized to include labor, materials, and equipment incorporated into the Work, and materials and equipment delivered to the Project site, as well as authorized and approved Change Orders. Each payment application must be supported by the unit prices submitted with Contractor's Bid Schedule and/or schedule of values and any other substantiating data required by the Contract Documents.

(B) **Payment of Undisputed Amounts.** City will pay the undisputed amount due within 30 days after Contractor has submitted a complete and accurate payment application, subject to Public Contract Code § 20104.50. City will deduct a percentage from each progress payment as retention, as set forth in Section 8.5, below, and may withhold additional amounts as set forth in Section 8.3, below.

8.3 Adjustment of Payment Application. City may adjust or reject the amount requested in a payment application, including application for Final Payment, in whole or in part, if the amount requested is disputed or unsubstantiated. Contractor will be notified in writing of the basis for the modification to the amount requested. City may also deduct or withhold from payment otherwise due based upon any of the circumstances and amounts listed below. Sums withheld from payment otherwise due will be released when the basis for that withholding has been remedied and no longer exists.

(A) For Contractor's unexcused failure to perform the Work as required by the Contract Documents, including correction or completion of punch list items, City may withhold or deduct an amount based on the City's estimated cost to correct or complete the Work.

(B) For loss or damage caused by Contractor or its Subcontractors arising out of or relating to performance of the Work or any failure to protect the Project site, City may deduct an amount based on the estimated cost to repair or replace.

(C) For Contractor's failure to pay its Subcontractors and suppliers when payment is due, City may withhold an amount equal to the total of past due payments and may opt to pay that amount separately via joint check pursuant to Section 8.6(B), Joint Checks.

(D) For Contractor's failure to timely correct rejected, nonconforming, or defective Work, City may withhold or deduct an amount based on the City's estimated cost to correct or complete the Work.

(E) For any unreleased stop notice, City may withhold 125% of the amount claimed.

(F) For Contractor's failure to submit any required schedule or schedule update in the manner and within the time specified in the Contract Documents, City may withhold an amount equal to five percent of the total amount requested until Contractor complies with its schedule submittal obligations.

(G) For Contractor's failure to maintain or submit as-built documents in the manner and within the time specified in the Contract Documents, City may withhold or deduct an amount based on the City's cost to prepare the as-builts.

(H) For Work performed without Shop Drawings that have been accepted by City, when accepted Shop Drawings are required before proceeding with the Work, City may deduct an amount based on the estimated cost to correct unsatisfactory Work or diminution in value.

(I) For fines, payments, or penalties assessed under the Labor Code, City may deduct from payments due to Contractor as required by Laws and as directed by the Division of Labor Standards Enforcement.

(J) For any other costs or charges that may be withheld or deducted from payments to Contractor, as provided in the Contract Documents, including liquidated damages, City may withhold or deduct such amounts from payment otherwise due to Contractor.

- **8.4 Early Occupancy.** Neither City's payment of progress payments nor its partial or full use or occupancy of the Project constitutes acceptance of any part of the Work.
- **8.5 Retention.** City will retain five percent of the full amount due on each progress payment (i.e., the amount due before any withholding or deductions pursuant to Section 8.3, Adjustment of Payment Application), or the percentage stated in the Notice Inviting Bids, whichever is greater, as retention to ensure full and satisfactory performance of the Work.

Contractor is not entitled to any reduction in the rate of withholding at any time, nor to release of any retention before 35 days following City's acceptance of the Project.

(A) Substitution of Securities. As provided by Public Contract Code § 22300, Contractor may request in writing that it be allowed, at its sole expense, to substitute securities for the retention withheld by City. Any escrow agreement entered into pursuant to this provision must fully comply with Public Contract Code § 22300 and will be subject to approval as to form by City's legal counsel. If City exercises its right to draw upon such securities in the event of default pursuant to section (7) of the statutory Escrow Agreement for Security Deposits in Lieu of Retention, pursuant to subdivision (g) of Public Contract Code § 22300 ("Escrow Agreement"), and if Contractor disputes that it is in default, its sole remedy is to comply with the dispute resolution procedures in Article 12 and the provisions therein. It is agreed that for purposes of this paragraph, an event of default includes City's rights pursuant to these Contract Documents to withhold or deduct sums from retention, including withholding or deduction for liquidated damages, incomplete or defective Work, stop payment notices, or backcharges. It is further agreed that if any individual authorized to give or receive written notice on behalf of a party pursuant to section (10) of the Escrow Agreement are unavailable to give or receive notice on behalf of that party due to separation from employment, retirement, death, or other circumstances, the successor or delegee of the named individual is deemed to be the individual authorized to give or receive notice pursuant to section (10) of the Escrow Agreement.

(B) **Release of Undisputed Retention.** All undisputed retention, less any amounts that may be assessed as liquidated damages, retained for stop notices, or otherwise withheld pursuant to Section 8.3, Adjustment of Payment Application, will be released as Final Payment to Contractor no sooner than 35 days following recordation of the notice of completion, and no later than 60 days following acceptance of the Project by City's governing body or authorized designee pursuant to Section 11.1(C), Acceptance, or, if the Project has not been accepted, no later than 60 days after the Project is otherwise considered complete pursuant to Public Contract Code § 7107(c).

8.6 Payment to Subcontractors and Suppliers. Each month, Contractor must promptly pay each Subcontractor and supplier the value of the portion of labor, materials, and equipment incorporated into the Work or delivered to the Project site by the Subcontractor or supplier during the preceding month. Such payments must be made in accordance with the requirements of Laws pertaining to such payments, and those of the Contract Documents and applicable subcontract or supplier contract.

(A) **Withholding for Stop Notice.** Pursuant to Civil Code § 9358, City will withhold 125% of the amount claimed by an unreleased stop notice, a portion of which may be retained by City for the costs incurred in handling the stop notice claim, including attorneys' fees and costs, as authorized by law.

(B) **Joint Checks.** City reserves the right, acting in its sole discretion, to issue joint checks made payable to Contractor and a Subcontractor or supplier, if City determines this is necessary to ensure fair and timely payment for a Subcontractor or supplier who has provided services or goods for the Project. As a condition to release of payment by a joint check, the joint check payees may be required to execute a joint check agreement in a form provided or approved by the City Attorney's Office. The joint check payees will be jointly and severally responsible for the allocation and disbursement of funds paid by joint check. Payment by joint check will not be construed to create a contractual relationship between City and a Subcontractor or supplier of any tier beyond the scope of the joint check agreement.

- 8.7 Final Payment. Contractor's application for Final Payment must comply with the requirements for submitting an application for a progress payment as stated in Section 8.2, above. Corrections to previous progress payments, including adjustments to estimated quantities for unit priced items, may be included in the Final Payment. If Contractor fails to submit a timely application for Final Payment, City reserves the right to unilaterally process and issue Final Payment without an application from Contractor in order to close out the Project. For the purposes of determining the deadline for Claim submission pursuant to Article 12, the date of Final Payment to Contractor, or otherwise provides written notice to Contractor of Final Payment or that no undisputed funds remain available for Final Payment due to offsetting withholdings or deductions pursuant to Section 8.3, Adjustment of Payment Application. If the amount due from Contractor to City exceeds the amount of Final Payment, City retains the right to recover the balance from Contractor or its sureties.
- **8.8 Release of Claims.** City may, at any time, require that payment of the undisputed portion of any progress payment or Final Payment be contingent upon Contractor furnishing City with a written waiver and release of all claims against City arising from or related to the portion of Work covered by those undisputed amounts subject to the limitations of Public Contract Code § 7100. Any disputed amounts may be specifically excluded from the release.
- **8.9** Warranty of Title. Contractor warrants that title to all work, materials, or equipment incorporated into the Work and included in a request for payment will pass over to City free of any claims, liens, or encumbrances upon payment to Contractor.

## Article 9 - Labor Provisions

**9.1 Discrimination Prohibited.** Discrimination against any prospective or present employee engaged in the Work on grounds of race, color, ancestry, national origin, ethnicity, religion, sex, sexual orientation, age, disability, or marital status is strictly prohibited. Contractor and its Subcontractors are required to comply with all applicable Laws prohibiting discrimination, including the California Fair Employment and Housing Act (Govt. Code § 12900 et seq.), Government Code § 11135, and Labor Code §§ 1735, 1777.5, 1777.6, and 3077.5.

# 9.2 Labor Code Requirements.

(A) *Eight Hour Day.* Pursuant to Labor Code § 1810, eight hours of labor constitute a legal day's work under this Contract.

(B) **Penalty.** Pursuant to Labor Code § 1813, Contractor will forfeit to City as a penalty, the sum of \$25.00 for each day during which a worker employed by Contractor or any Subcontractor is required or permitted to work more than eight hours in any one calendar day or more than 40 hours per calendar week, except if such workers are paid overtime under Labor Code § 1815.

(C) **Apprentices.** Contractor is responsible for compliance with the requirements governing employment and payment of apprentices, as set forth in Labor Code § 1777.5, which is fully incorporated by reference.

(D) **Notices.** Pursuant to Labor Code § 1771.4, Contractor is required to post all job site notices prescribed by Laws.

**9.3 Prevailing Wages.** Each worker performing Work under this Contract that is covered under Labor Code §§ 1720, 1720.3, or 1720.9, including cleanup at the Project site, must be paid at a rate not less than the prevailing wage as defined in §§ 1771 and 1774 of the Labor Code. The prevailing wage rates are on file with the City and available online at <a href="http://www.dir.ca.gov/dlsr">http://www.dir.ca.gov/dlsr</a>. Contractor must post a copy of the applicable prevailing rates at the Project site.

(A) **Penalties.** Pursuant to Labor Code § 1775, Contractor and any Subcontractor will forfeit to City as a penalty up to \$200.00 for each calendar day, or portion thereof, for each worker paid less than the applicable prevailing wage rate. Contractor must also pay each worker the difference between the applicable prevailing wage rate and the amount actually paid to that worker.

(B) **Federal Requirements.** If this Project is subject to federal prevailing wage requirements in addition to California prevailing wage requirements, Contractor and its Subcontractors are required to pay the higher of the currently applicable state or federal prevailing wage rates.

**9.4 Payroll Records.** Contractor must comply with the provisions of Labor Code §§ 1771.4, 1776, and 1812 and all implementing regulations, which are fully incorporated by this reference, including requirements for monthly electronic submission of payroll records to the DIR.

(A) **Contractor and Subcontractor Obligations**. Contractor and each Subcontractor must keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed in connection with the Work. Each payroll record must contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct; and

(2) Contractor or the Subcontractor has complied with the requirements of Labor Code \$ 1771, 1811, and 1815 for any Work performed by its employees on the Project.

(B) **Certified Record.** A certified copy of an employee's payroll record must be made available for inspection or furnished to the employee or his or her authorized representative on request, to City, to the Division of Labor Standards Enforcement, to the Division of Apprenticeship Standards of the DIR, and as further required by the Labor Code.

(C) **Enforcement.** Upon notice of noncompliance with Labor Code § 1776, Contractor or Subcontractor has ten days in which to comply with the requirements of this section. If Contractor or Subcontractor fails to do so within the ten-day period, Contractor or Subcontractor will forfeit a penalty of \$100.00 per day, or portion thereof, for each worker for whom compliance is required, until strict compliance is achieved. Upon request by the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement, these penalties will be withheld from payments then due to Contractor.

**9.5 Labor Compliance.** Pursuant to Labor Code § 1771.4, the Contract for this Project is subject to compliance monitoring and enforcement by the DIR.

### Article 10 - Safety Provisions

**10.1 Safety Precautions and Programs.** Contractor and its Subcontractors are fully responsible for safety precautions and programs, and for the safety of persons and property in the performance of the Work. Contractor and its Subcontractors must at all times comply with all applicable health and safety Laws and seek to avoid injury, loss, or damage to persons or property by taking reasonable steps to protect its employees and other persons at any Worksite, materials and equipment stored on or off site, and property at or adjacent to any Worksite.

(A) Reporting Requirements. Contractor must immediately notify the City of any death, serious injury or illness resulting from Work on the Project. Contractor must immediately provide a written report to City of each recordable accident or injury occurring at any Worksite within 24 hours of the occurrence. The written report must include: (1) the name and address of the injured or deceased person; (2) the name and address of each employee of Contractor or of any Subcontractor involved in the incident; (3) a detailed description of the incident, including precise location, time, and names and contact information for known witnesses; and (4) a police or first responder report, if applicable. If Contractor is required to file an accident report with a government agency, Contractor will provide a copy of the report to City.

(B) **Legal Compliance.** Contractor's safety program must comply with the applicable legal and regulatory requirements. Contractor must provide City with copies of all notices required by Laws.

(C) **Contractor's Obligations.** Any damage or loss caused by Contractor arising from the Work which is not insured under property insurance must be promptly remedied by Contractor.

(D) **Remedies.** If City determines, in its sole discretion, that any part of the Work or Project site is unsafe, City may, without assuming responsibility for Contractor's safety program, require Contractor or its Subcontractor to cease performance of the Work or to take corrective measures to City's satisfaction. If Contractor fails to promptly take the required corrective measures, City may perform them and deduct the cost from the Contract Price. Contractor agrees it is not entitled to submit a Claim for damages, for an increase in Contract Price, or for a change in Contract Time based on Contractor's compliance with City's request for corrective measures pursuant to this provision.

- **10.2 Hazardous Materials.** Unless otherwise specified in the Contract Documents, this Contract does not include the removal, handling, or disturbance of any asbestos or other Hazardous Materials. If Contractor encounters materials on the Project site that Contractor reasonably believes to be asbestos or other Hazardous Materials, and the asbestos or other Hazardous Materials have not been rendered harmless, Contractor may continue Work in unaffected areas reasonably believed to be safe, but must immediately cease work on the area affected and report the condition to City. No asbestos, asbestos-containing products or other Hazardous Materials may be used in performance of the Work.
- **10.3 Material Safety.** Contractor is solely responsible for complying with § 5194 of Title 8 of the California Code of Regulations, including by providing information to Contractor's employees about any hazardous chemicals to which they may be exposed in the course of the Work. A hazard communication program and other forms of warning and training about such exposure must be used. Contractor must also maintain Safety Data Sheets ("SDS") at the Project site, as required by Laws, for materials or substances used or consumed in the performance of the Work. The SDS will be accessible and available to Contractor's employees, Subcontractors, and City.

(A) **Contractor Obligations.** Contractor is solely responsible for the proper delivery, handling, use, storage, removal, and disposal of all materials brought to the Project site and/or used in the performance of the Work. Contractor must notify the Engineer if a specified product or material cannot be used safely.

(B) **Labeling.** Contractor must ensure proper labeling on any material brought onto the Project site so that any persons working with or in the vicinity of the material may be informed as to the identity of the material, any potential hazards, and requirements for proper handling, protections, and disposal.

- **10.4 Hazardous Condition.** Contractor is solely responsible for determining whether a hazardous condition exists or is created during the course of the Work, involving a risk of bodily harm to any person or risk of damage to any property. If a hazardous condition exists or is created, Contractor must take all precautions necessary to address the condition and ensure that the Work progresses safely under the circumstances. Hazardous conditions may result from, but are not limited to, use of specified materials or equipment, the Work location, the Project site condition, the method of construction, or the way any Work must be performed.
- **10.5 Emergencies.** In an emergency affecting the safety or protection of persons, Work, or property at or adjacent to any Worksite, Contractor must take reasonable and prompt actions to prevent damage, injury, or loss, without prior authorization from the City if, under the circumstances, there is inadequate time to seek prior authorization from the City.

## Article 11 - Completion and Warranty Provisions

## 11.1 Final Completion.

(A) Final Inspection and Punch List. When the Work required by this Contract is fully performed, Contractor must provide written notification to City requesting final inspection. The Engineer will schedule the date and time for final inspection, which must include Contractor's primary representative for this Project and its superintendent. Based on that inspection. City will prepare a punch list of any items that are incomplete, missing. defective, incorrectly installed, or otherwise not compliant with the Contract Documents. The punch list to Contractor will specify the time by which all of the punch list items must be completed or corrected. The punch list may include City's estimated cost to complete each punch list item if Contractor fails to do so within the specified time. The omission of any non-compliant item from a punch list will not relieve Contractor from fulfilling all requirements of the Contract Documents. Contractor's failure to complete any punch list item within the time specified in the punch list will not waive or abridge its warranty obligations for any such items that must be completed by the City or by a third party retained by the City due to Contractor's failure to timely complete any such outstanding item.

(B) **Requirements for Final Completion.** Final Completion will be achieved upon completion or correction of all punch list items, as verified by City's further inspection, and upon satisfaction of all other Contract requirements, including any commissioning required under the Contract Documents and submission of all final submittals, including instructions and manuals as required under Section 7.10, and complete, final as-built drawings as required under Section 7.11, all to City's satisfaction.

(C) **Acceptance.** The Project will be considered accepted upon City Council action during a public meeting to accept the Project, unless the Engineer is authorized to accept

the Project, in which case the Project will be considered accepted upon the date of the Engineer's issuance of a written notice of acceptance. In order to avoid delay of Project close out, the City may elect, acting in its sole discretion, to accept the Project as complete subject to exceptions for punch list items that are not completed within the time specified in the punch list.

(D) **Final Payment and Release of Retention.** Final Payment and release of retention, less any sums withheld pursuant to the provisions of the Contract Documents, will not be made sooner than 35 days after recordation of the notice of completion. If Contractor fails to complete all of the punch list items within the specified time, City may withhold up to 150% of City's estimated cost to complete each of the remaining items from Final Payment and may use the withheld retention to pay for the costs to self-perform the outstanding items or to retain a third party to complete any such outstanding punch list item.

## 11.2 Warranty.

(A) **General.** Contractor warrants that all materials and equipment will be new unless otherwise specified, of good quality, in conformance with the Contract Documents, and free from defective workmanship and materials. Contractor further warrants that the Work will be free from material defects not intrinsic in the design or materials required in the Contract Documents. Contractor warrants that materials or items incorporated into the Work comply with the requirements and standards in the Contract Documents, including compliance with Laws, and that any Hazardous Materials encountered or used were handled as required by Laws. At City's request, Contractor must furnish satisfactory evidence of the quality and type of materials and equipment furnished. Contractor's warranty does not extend to damage caused by normal wear and tear, or improper use or maintenance.

(B) **Warranty Period.** Contractor's warranty must guarantee its Work for a period of one year from the date of Project acceptance (the "Warranty Period"), except when a longer guarantee is provided by a supplier or manufacturer or is required by the Specifications or Special Conditions. Contractor must obtain from its Subcontractors, suppliers and manufacturers any special or extended warranties required by the Contract Documents.

(C) *Warranty Documents.* As a condition precedent to Final Completion, Contractor must supply City with all warranty and guarantee documents relevant to equipment and materials incorporated into the Work and guaranteed by their suppliers or manufacturers.

(D) **Subcontractors.** The warranty obligations in the Contract Documents apply to Work performed by Contractor and its Subcontractors, and Contractor agrees to be co-guarantor of such Work.

(E) **Contractor's Obligations.** Upon written notice from City to Contractor of any defect in the Work discovered during the Warranty Period, Contractor or its responsible Subcontractor must promptly correct the defective Work at its own cost. Contractor's obligation to correct defects discovered during the Warranty Period will continue past the expiration of the Warranty Period as to any defects in Work for which Contractor was notified prior to expiration of the Warranty Period. Work performed during the Warranty Period ("Warranty Work") will be subject to the warranty provisions in this Section 11.2 for a one-year period that begins upon completion of such Warranty Work to City's satisfaction.

(F) *City's Remedies.* If Contractor or its responsible Subcontractor fails to correct defective Work within ten days following notice by City, or sooner if required by the circumstances, City may correct the defects to conform with the Contract Documents at Contractor's sole expense. Contractor must reimburse City for its costs in accordance with subsection (H), below.

(G) **Emergency Repairs.** In cases of emergency where any delay in correcting defective Work could cause harm, loss or damage, City may immediately correct the defects to conform with the Contract Documents at Contractor's sole expense. Contractor or its surety must reimburse City for its costs in accordance with subsection (H), below.

(H) **Reimbursement.** Contractor must reimburse City for its costs to repair under subsections (F) or (G), above, within 30 days following City's submission of a demand for payment pursuant to this provision. If City is required to initiate legal action to compel Contractor's compliance with this provision, and City is the prevailing party in such action, Contractor and its surety are solely responsible for all of City's attorney's fees and legal costs expended to enforce Contractor's warranty obligations herein, in addition to any and all costs City incurs to correct the defective Work.

**11.3** Use Prior to Final Completion. City reserves the right to occupy or make use of the Project, or any portions of the Project, prior to Final Completion if City has determined that the Project or portion of it is in a condition suitable for the proposed occupation or use, and that it is in its best interest to occupy or make use of the Project, or any portions of it, prior to Final Completion.

(A) **Non-Waiver.** Occupation or use of the Project, in whole or in part, prior to Final Completion will not operate as acceptance of the Work or any portion of it, nor will it operate as a waiver of any of City's rights or Contractor's duties pursuant to these Contract Documents, and will not affect nor bear on the determination of the time of substantial completion with respect to any statute of repose pertaining to the time for filing an action for construction defect.

(B) *City's Responsibility.* City will be responsible for the cost of maintenance and repairs due to normal wear and tear with respect to those portions of the Project that are being occupied or used before Final Completion. The Contract Price or the Contract Time may be adjusted pursuant to the applicable provisions of these Contract Documents if, and only to the extent that, any occupation or use under this Section actually adds to Contractor's cost or time to complete the Work within the Contract Time.

**11.4 Substantial Completion.** For purposes of determining "substantial completion" with respect to any statute of repose pertaining to the time for filing an action for construction defect, "substantial completion" is deemed to mean the last date that Contractor or any Subcontractor performs Work on the Project prior to City acceptance of the Project, except for warranty work performed under this Article.

# Article 12 - Dispute Resolution

**12.1 Claims.** This Article applies to and provides the exclusive procedures for any Claim arising from or related to the Contract or performance of the Work.

(A) **Definition.** "Claim" means a separate demand by Contractor, submitted in writing by registered or certified mail with return receipt requested, for a change in the Contract Time, including a time extension or relief from liquidated damages, or a change in the Contract Price, when the demand has previously been submitted to City in accordance with the requirements of the Contract Documents, and which has been

rejected or disputed by City, in whole or in part. A Claim may also include that portion of a unilateral Change Order that is disputed by the Contractor.

(B) *Limitations.* A Claim may only include the portion of a previously rejected demand that remains in dispute between Contractor and City. With the exception of any dispute regarding the amount of money actually paid to Contractor as Final Payment, Contractor is not entitled to submit a Claim demanding a change in the Contract Time or the Contract Price, which has not previously been submitted to City in full compliance with Article 5 and Article 6, and subsequently rejected in whole or in part by City.

(C) **Scope of Article.** This Article is intended to provide the exclusive procedures for submission and resolution of Claims of any amount and applies in addition to the provisions of Public Contract Code § 9204 and § 20104 et seq., which are incorporated by reference herein.

(D) **No Work Delay.** Notwithstanding the submission of a Claim or any other dispute between the parties related to the Project or the Contract Documents, Contractor must perform the Work and may not delay or cease Work pending resolution of a Claim or other dispute, but must continue to diligently prosecute the performance and timely completion of the Work, including the Work pertaining to the Claim or other dispute.

(E) **Informal Resolution.** Contractor will make a good faith effort to informally resolve a dispute before initiating a Claim, preferably by face-to-face meeting between authorized representatives of Contractor and City.

**12.2 Claims Submission.** The following requirements apply to any Claim subject to this Article:

(A) Substantiation. The Claim must be submitted to City in writing, clearly identified as a "Claim" submitted pursuant to this Article 12 and must include all of the documents necessary to substantiate the Claim including the Change Order request that was rejected in whole or in part, and a copy of City's written rejection that is in dispute. The Claim must clearly identify and describe the dispute, including relevant references to applicable portions of the Contract Documents, and a chronology of relevant events. Any Claim for additional payment must include a complete, itemized breakdown of all known or estimated labor, materials, taxes, insurance, and subcontract, or other costs. Substantiating documentation such as payroll records, receipts, invoices, or the like, must be submitted in support of each component of claimed cost. Any Claim for an extension of time or delay costs must be substantiated with a schedule analysis and narrative depicting and explaining claimed time impacts.

(B) *Claim Format and Content.* A Claim must be submitted in the following format:

(1) Provide a cover letter, specifically identifying the submission as a "Claim" submitted under this Article 12 and specifying the requested remedy (e.g., amount of proposed change to Contract Price and/or change to Contract Time).

(2) Provide a summary of each Claim, including underlying facts and the basis for entitlement, and identify each specific demand at issue, including the specific Change Order request (by number and submittal date), and the date of City's rejection of that demand, in whole or in part.

(3) Provide a detailed explanation of each issue in dispute. For multiple issues included within a single Claim or for multiple Claims submitted concurrently, separately number and identify each individual issue or Claim, and include the following for <u>each</u> separate issue or Claim:

a. A succinct statement of the matter in dispute, including Contractor's position and the basis for that position;

b. Identify and attach all documents that substantiate the Claim, including relevant provisions of the Contract Documents, RFIs, calculations, and schedule analysis (see subsection (A), Substantiation, above);

c. A chronology of relevant events; and

d. Analysis and basis for claimed changes to Contract Price, Contract Time, or any other remedy requested.

(4) Provide a summary of issues and corresponding claimed damages. If, by the time of the Claim submission deadline (below), the precise amount of the requested change in the Contract Price or Contract Time is not yet known, Contractor must provide a good faith estimate, including the basis for that estimate, and must identify the date by which it is anticipated that the Claim will be updated to provide final amounts.

(5) Include the following certification, executed by Contractor's authorized representative:

"The undersigned Contractor certifies under penalty of perjury that its statements and representations in this Claim submittal are true and correct. Contractor warrants that this Claim submittal is comprehensive and complete as to the matters in dispute, and agrees that any costs, expenses, or delay not included herein are deemed waived."

#### (C) Submission Deadlines.

(1) A Claim disputing rejection of a request for a change in the Contract Time or Contract Price must be submitted within 15 days following the date that City notified Contractor in writing that a request for a change in the Contract Time or Contract Price, duly submitted in compliance with Article 5 and Article 6, has been rejected in whole or in part. A Claim disputing the terms of a unilateral Change Order must be submitted within 15 days following the date of issuance of the unilateral Change Order. These Claim deadlines apply even if Contractor cannot yet quantify the total amount of any requested change in the Contract Time or Contract Price. If the Contractor cannot quantify those amounts, it must submit an estimate of the amounts claimed pending final determination of the requested remedy by Contractor.

(2) With the exception of any dispute regarding the amount of Final Payment, any Claim must be filed on or before the date of Final Payment or will be deemed waived.

(3) A Claim disputing the amount of Final Payment must be submitted within 15 days of the effective date of Final Payment, under Section 8.7, Final Payment.

(4) Strict compliance with these Claim submission deadlines is necessary to ensure that any dispute may be mitigated as soon as possible, and to facilitate cost-efficient administration of the Project. *Any Claim that is not submitted within the specified deadlines will be deemed waived by Contractor.* 

**12.3 City's Response.** City will respond within 45 days of receipt of the Claim with a written statement identifying which portion(s) of the Claim are disputed, unless the 45-day period is extended by mutual agreement of City and Contractor or as otherwise allowed under Public Contract Code § 9204. However, if City determines that the Claim is not adequately substantiated pursuant to Section 12.2(A), Substantiation, City may first request in writing, within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to defenses to the Claim that City may have against the Claim.

(A) **Additional Information.** If additional information is thereafter required, it may be requested and provided upon mutual agreement of City and Contractor. If Contractor's Claim is based on estimated amounts, Contractor has a continuing duty to update its Claim as soon as possible with information on actual amounts in order to facilitate prompt and fair resolution of the Claim.

(B) **Non-Waiver.** Any failure by City to respond within the times specified above will not be construed as acceptance of the Claim, in whole or in part, or as a waiver of any provision of these Contract Documents.

**12.4 Meet and Confer.** If Contractor disputes City's written response, or City fails to respond within the specified time, within 15 days of receipt of City's response or within 15 days of City's failure to respond within the applicable 45-day time period under Section 12.3, respectively, Contractor may notify City of the dispute in writing sent by registered or certified mail, return receipt requested, and demand an informal conference to meet and confer for settlement of the issues in dispute. If Contractor fails to notify City of the dispute and demand an informal conference to meet and confer in writing within the specified time, Contractor's Claim will be deemed waived.

(A) **Schedule Meet and Confer.** Upon receipt of the demand to meet and confer, City will schedule the meet and confer conference to be held within 30 days, or later if needed to ensure the mutual availability of each of the individuals that each party requires to represent its interests at the meet and confer conference.

(B) **Location for Meet and Confer.** The meet and confer conference will be scheduled at a location at or near City's principal office.

(C) *Written Statement After Meet and Confer.* Within ten working days after the meet and confer has concluded, City will issue a written statement identifying which portion(s) of the Claim remain in dispute, if any.

(D) **Submission to Mediation.** If the Claim or any portion remains in dispute following the meet and confer conference, within ten working days after the City issues the written statement identifying any portion(s) of the Claim remaining in dispute, the Contractor may identify in writing disputed portion(s) of the Claim, which will be submitted for mediation, as set forth below.

## 12.5 Mediation and Government Code Claims.

(A) **Mediation.** Within ten working days after the City issues the written statement identifying any portion(s) of the Claim remaining in dispute following the meet and confer, City and Contractor will mutually agree to a mediator, as provided under Public Contract Code § 9204. Mediation will be scheduled to ensure the mutual availability of the selected mediator and all of the individuals that each party requires to represent its interests. If there are multiple Claims in dispute, the parties may agree to schedule the mediation to address all outstanding Claims at the same time. The parties will share the costs of the mediator and mediation fees equally, but each party is otherwise solely and separately

responsible for its own costs to prepare for and participate in the mediation, including costs for its legal counsel or any other consultants.

## (B) Government Code Claims.

(1) Timely presentation of a Government Code Claim is a condition precedent to filing any legal action based on or arising from the Contract. Compliance with the Claim submission requirements in this Article 12 is a condition precedent to filing a Government Code Claim.

(2) The time for filing a Government Code Claim will be tolled from the time Contractor submits its written Claim pursuant to Section 12.2, above, until the time that Claim is denied in whole or in part at the conclusion of the meet and confer process, including any period of time used by the meet and confer process. However, if the Claim is submitted to mediation, the time for filing a Government Code Claim will be tolled until conclusion of the mediation, including any continuations, if the Claim is not fully resolved by mutual agreement of the parties during the mediation or any continuation of the mediation.

- **12.6 Tort Claims.** This Article does not apply to tort claims and nothing in this Article is intended nor will be construed to change the time periods for filing tort-based Government Code Claims.
- **12.7 Arbitration.** It is expressly agreed, under Code of Civil Procedure § 1296, that in any arbitration to resolve a dispute relating to this Contract, the arbitrator's award must be supported by law and substantial evidence.
- **12.8 Burden of Proof and Limitations.** Contractor bears the burden of proving entitlement to and the amount of any claimed damages. Contractor is not entitled to damages calculated on a total cost basis, but must prove actual damages. Contractor is not entitled to speculative, special, or consequential damages, including home office overhead or any form of overhead not directly incurred at the Project site or any other Worksite; lost profits; loss of productivity; lost opportunity to work on other projects; diminished bonding capacity; increased cost of financing for the Project; extended capital costs; non-availability of labor, material or equipment due to delays; or any other indirect loss arising from the Contract. The Eichleay Formula or similar formula will not be used for any recovery under the Contract. The City will not be directly liable to any Subcontractor or supplier.
- **12.9** Legal Proceedings. In any legal proceeding that involves enforcement of any requirements of the Contract Documents, the finder of fact will receive detailed instructions on the meaning and operation of the Contract Documents, including conditions, limitations of liability, remedies, claim procedures, and other provisions bearing on the defenses and theories of liability. Detailed findings of fact will be requested to verify enforcement of the Contract Documents. All of the City's remedies under the Contract Documents will be construed as cumulative, and not exclusive, and the City reserves all rights to all remedies available under law or equity as to any dispute arising from or relating to the Contract Documents or performance of the Work.
- **12.10 Other Disputes.** The procedures in this Article 12 will apply to any and all disputes or legal actions, in addition to Claims, arising from or related to this Contract, including disputes regarding suspension or early termination of the Contract, unless and only to the extent that compliance with a procedural requirement is expressly and specifically waived by City. Nothing in this Article is intended to delay suspension or termination under Article 13.

#### Article 13 - Suspension and Termination

**13.1 Suspension for Cause.** In addition to all other remedies available to City, if Contractor fails to perform or correct Work in accordance with the Contract Documents, including non-compliance with applicable environmental or health and safety Laws, City may immediately order the Work, or any portion of it, suspended until the circumstances giving rise to the suspension have been eliminated to City's satisfaction.

(A) **Notice of Suspension.** Upon receipt of City's written notice to suspend the Work, in whole or in part, except as otherwise specified in the notice of suspension, Contractor and its Subcontractors must promptly stop Work as specified in the notice of suspension; comply with directions for cleaning and securing the Worksite; and protect the completed and in-progress Work and materials. Contractor is solely responsible for any damages or loss resulting from its failure to adequately secure and protect the Project.

(B) **Resumption of Work.** Upon receipt of the City's written notice to resume the suspended Work, in whole or in part, except as otherwise specified in the notice to resume, Contractor and its Subcontractors must promptly re-mobilize and resume the Work as specified; and within ten days from the date of the notice to resume, Contractor must submit a recovery schedule, prepared in accordance with the Contract Documents, showing how Contractor will complete the Work within the Contract Time.

(C) *Failure to Comply.* Contractor will not be entitled to an increase in the Contract Time or Contract Price for a suspension occasioned by Contractor's failure to comply with the Contract Documents.

(D) **No Duty to Suspend.** City's right to suspend the Work will not give rise to a duty to suspend the Work, and City's failure to suspend the Work will not constitute a defense to Contractor's failure to comply with the requirements of the Contract Documents.

- 13.2 Suspension for Convenience. City reserves the right to suspend, delay, or interrupt the performance of the Work in whole or in part, for a period of time determined to be appropriate for City's convenience. Upon notice by City pursuant to this provision, Contractor must immediately suspend, delay, or interrupt the Work and secure the Project site as directed by City except for taking measures to protect completed or inprogress Work as directed in the suspension notice, and subject to the provisions of Section 13.1(A) and (B), above. If Contractor submits a timely request for a Change Order in compliance with Articles 5 and 6, the Contract Price and the Contract Time will be equitably adjusted by Change Order pursuant to the terms of Articles 5 and 6 to reflect the cost and delay impact occasioned by such suspension for convenience, except to the extent that any such impacts were caused by Contractor's failure to comply with the Contract Documents or the terms of the suspension notice or notice to resume. However, the Contract Time will only be extended if the suspension causes or will cause unavoidable delay in Final Completion. If Contractor disputes the terms of a Change Order issued for such equitable adjustment due to suspension for convenience, its sole recourse is to comply with the Claim procedures in Article 12.
- **13.3 Termination for Default.** City may declare that Contractor is in default of the Contract for a material breach of or inability to fully, promptly, or satisfactorily perform its obligations under the Contract.

(A) **Default.** Events giving rise to a declaration of default include Contractor's refusal or failure to supply sufficient skilled workers, proper materials, or equipment to perform the Work within the Contract Time; Contractor's refusal or failure to make prompt

payment to its employees, Subcontractors, or suppliers or to correct defective Work or damage; Contractor's failure to comply with Laws, or orders of any public agency with jurisdiction over the Project; evidence of Contractor's bankruptcy, insolvency, or lack of financial capacity to complete the Work as required within the Contract Time; suspension, revocation, or expiration and nonrenewal of Contractor's license or DIR registration; dissolution, liquidation, reorganization, or other major change in Contractor's organization, ownership, structure, or existence as a business entity; unauthorized assignment of Contractor's rights or duties under the Contract; or any material breach of the Contract requirements.

(B) **Notice of Default and Opportunity to Cure.** Upon City's declaration that Contractor is in default due to a material breach of the Contract Documents, if City determines that the default is curable, City will afford Contractor the opportunity to cure the default within ten days of City's notice of default, or within a period of time reasonably necessary for such cure, including a shorter period of time if applicable.

(C) **Termination.** If Contractor fails to cure the default or fails to expediently take steps reasonably calculated to cure the default within the time period specified in the notice of default, City may issue written notice to Contractor and its performance bond surety of City's termination of the Contract for default.

(D) **Waiver.** Time being of the essence in the performance of the Work, if Contractor's surety fails to arrange for completion of the Work in accordance with the Performance Bond within seven calendar days from the date of the notice of termination pursuant to paragraph (C), City may immediately make arrangements for the completion of the Work through use of its own forces, by hiring a replacement contractor, or by any other means that City determines advisable under the circumstances. Contractor and its surety will be jointly and severally liable for any additional cost incurred by City to complete the Work following termination, where "additional cost" means all cost in excess of the cost City would have incurred if Contactor had timely completed Work without the default and termination. In addition, City will have the right to immediate possession and use of any materials, supplies, and equipment procured for the Project and located at the Project site or any Worksite on City property for the purposes of completing the remaining Work.

(E) **Compensation.** Within 30 days of receipt of updated as-builts, all warranties, manuals, instructions, or other required documents for Work installed to date, and delivery to City of all equipment and materials for the Project for which Contractor has already been compensated, Contractor will be compensated for the Work satisfactorily performed in compliance with the Contract Documents up to the effective date of the termination pursuant to the terms of Article 8, Payment, subject to City's rights to withhold or deduct sums from payment otherwise due pursuant to Section 8.3, and excluding any costs Contractor incurs as a result of the termination, including any cancellation or restocking charges or fees due to third parties. If Contractor disputes the amount of compensation determined by City, its sole recourse is to comply with the Claim Procedures in Article 12, by submitting a Claim no later than 30 days following notice from City of the total compensation to be paid by City.

(F) **Wrongful Termination.** If Contractor disputes the termination, its sole recourse is to comply with the Claim procedures in Article 12. If a court of competent jurisdiction or an arbitrator later determines that the termination for default was wrongful, the termination will be deemed to be a termination for convenience, and Contractor's damages will be strictly limited to the compensation provided for termination for convenience under Section 13.4, below. Contractor waives any claim for any other damages for wrongful termination including special or consequential damages, lost opportunity costs, or lost profits, and any award of damages is subject to Section 12.8, Burden of Proof and Limitations.

**13.4 Termination for Convenience.** City reserves the right, acting in its sole discretion, to terminate all or part of the Contract for convenience upon written notice to Contractor.

(A) **Compensation to Contractor.** In the event of City's termination for convenience, Contractor waives any claim for damages, including for loss of anticipated profits from the Project. The following will constitute full and fair compensation to Contractor, and Contractor will not be entitled to any additional claim or compensation:

(1) *Completed Work.* The value of its Work satisfactorily performed as of the date notice of termination is received, based on Contractor's schedule of values and unpaid costs for items delivered to the Project site that were fabricated for incorporation in the Work;

(2) *Demobilization.* Demobilization costs specified in the schedule of values, or if demobilization costs were not provided in a schedule of values pursuant to Section 8.1, then based on actual, reasonable, and fully documented demobilization costs; and

(3) *Termination Markup.* Five percent of the total value of the Work performed as of the date of notice of termination, including reasonable, actual, and documented costs to comply with the direction in the notice of termination for convenience, and demobilization costs, which is deemed to cover all overhead and profit to date.

(B) **Disputes.** If Contractor disputes the amount of compensation determined by City pursuant to paragraph (A), above, its sole recourse is to comply with the Claim procedures in Article 12, by submitting a Claim no later than 30 days following notice from City of total compensation to be paid by City.

**13.5** Actions Upon Termination for Default or Convenience. The following provisions apply to any termination under this Article, whether for default or convenience, and whether in whole or in part.

(A) **General.** Upon termination, City may immediately enter upon and take possession of the Project and the Work and all tools, equipment, appliances, materials, and supplies procured or fabricated for the Project. Contractor will transfer title to and deliver all completed Work and all Work in progress to City.

(B) **Submittals.** Unless otherwise specified in the notice of termination, Contractor must immediately submit to City all designs, drawings, as-built drawings, Project records, contracts with vendors and Subcontractors, manufacturer warranties, manuals, and other such submittals or Work-related documents required under the terms of the Contract Documents, including incomplete documents or drafts.

(C) **Close Out Requirements.** Except as otherwise specified in the notice of termination, Contractor must comply with all of the following:

(1) Immediately stop the Work, except for any Work that must be completed pursuant to the notice of termination and comply with City's instructions for cessation of labor and securing the Project and any other Worksite(s).

(2) Comply with City's instructions to protect the completed Work and materials, using best efforts to minimize further costs.

(3) Contractor must not place further orders or enter into new subcontracts for materials, equipment, services or facilities, except as may be necessary to complete any portion of the Work that is not terminated.

(4) As directed in the notice, Contractor must assign to City or cancel existing subcontracts that relate to performance of the terminated Work, subject to any prior rights, if any, of the surety for Contractor's performance bond, and settle all outstanding liabilities and claims, subject to City's approval.

(5) As directed in the notice, Contractor must use its best efforts to sell any materials, supplies, or equipment intended solely for the terminated Work in a manner and at market rate prices acceptable to City.

(D) **Payment Upon Termination.** Upon completion of all termination obligations, as specified herein and in the notice of termination, Contractor will submit its request for Final Payment, including any amounts due following termination pursuant to this Article 13. Payment will be made in accordance with the provisions of Article 8, based on the portion of the Work satisfactorily completed, including the close out requirements, and consistent with the previously submitted schedule of values and unit pricing, including demobilization costs. Adjustments to Final Payment may include deductions for the cost of materials, supplies, or equipment retained by Contractor; payments received for sale of any such materials, supplies, or equipment, less re-stocking fees charged; and as otherwise specified in Section 8.3, Adjustment of Payment Application.

(E) **Continuing Obligations.** Regardless of any Contract termination, Contractor's obligations for portions of the Work already performed will continue and the provisions of the Contract Documents will remain in effect as to any claim, indemnity obligation, warranties, guarantees, submittals of as-built drawings, instructions, or manuals, record maintenance, or other such rights and obligations arising prior to the termination date.

## Article 14 - Miscellaneous Provisions

- 14.1 Assignment of Unfair Business Practice Claims. Under Public Contract Code § 7103.5, Contractor and its Subcontractors agree 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. § 15) or under the Cartwright Act (Chapter 2 (commencing with § 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the Contract or any subcontract. This assignment will be effective at the time City tenders Final Payment to Contractor, without further acknowledgement by the parties.
- **14.2 Provisions Deemed Inserted.** Every provision of law required to be inserted in the Contract Documents is deemed to be inserted, and the Contract Documents will be construed and enforced as though such provision has been included. If it is discovered that through mistake or otherwise that any required provision was not inserted, or not correctly inserted, the Contract Documents will be deemed amended accordingly.
- **14.3** Waiver. City's waiver of a breach, failure of any condition, or any right or remedy contained in or granted by the provisions of the Contract Documents will not be effective unless it is in writing and signed by City. City's waiver of any breach, failure, right, or remedy will not be deemed a waiver of any other breach, failure, right, or remedy, whether or not similar, nor will any waiver constitute a continuing waiver unless specified in writing by City.

- **14.4 Titles, Headings, and Groupings.** The titles and headings used and the groupings of provisions in the Contract Documents are for convenience only and may not be used in the construction or interpretation of the Contract Documents or relied upon for any other purpose.
- **14.5 Statutory and Regulatory References.** With respect to any amendments to any statutes or regulations referenced in these Contract Documents, the reference is deemed to be the version in effect on the date that bids were due.
- **14.6 Survival.** The provisions that survive termination or expiration of this Contract include Contract Section 11, Notice, and subsections 12.1, 12.2, 12.3, 12.4, 12.5, and 12.6 of Section 12, General Provisions; and the following provisions in these General Conditions: Section 2.2(J), Contractor's Records, Section 2.3(C), Termination, Section 3.7, Ownership, Section 4.2, Indemnity, Article 12, Dispute Resolution, and Section 11.2, Warranty.

END OF GENERAL CONDITIONS

## **Special Conditions**

[Insert Project Special Conditions here, and, if applicable, add any of the optional special conditions provided below.]

### **Optional Special Conditions**

#### Instructions for Use of Optional Special Conditions:

The following provisions are a <u>limited</u> menu of generic <u>optional</u> provisions for the Special Conditions, each of which may or may not be used, as applicable, <u>in addition</u> to any other Project-specific or City-specific provisions that should be included in the Special Conditions.

A brief explanation of each provision is included in *italics* before the provision itself. The explanation is strictly for internal use and should not be reproduced in the Special Conditions included with the Contract Documents. Only the provision itself should be copied and pasted into the Special Conditions. **Delete the explanations and notes (***in italics***) and any unused provisions**.

Since the ultimate numbering of these provisions will depend on which provisions are selected for use in the Special Conditions, blanks are provided as placeholders for the section numbers in the final document.

The following provision should be completed as indicated, and used to specify the days and times during which the Contractor is permitted to perform the Work. Cross-reference: General Conditions Section 5.2.

#### \_\_\_. Authorized Work Days and Hours.

- \_\_.1 Authorized Work Days. Except as expressly authorized in writing by City, Contractor is limited to performing Work on the Project on the following days of the week, excluding holidays observed by City:
- \_.2 Authorized Work Hours. Except as expressly authorized in writing by City, Contractor is limited to performing Work on the Project during the following hours:

The following provision may be used to require a pre-construction conference, and should be adapted for the particular project.

\_\_\_\_. **Pre-Construction Conference.** City will designate a date and time for a preconstruction conference with Contractor following Contract execution. Project administration procedures and coordination between City and Contractor will be discussed, and Contractor must present City with the following information or documents at the meeting for City's review and acceptance before the Work commences:

- \_\_\_.1 Name, 24-hour contact information, and qualifications of the proposed on-site superintendent;
- **\_\_\_.2** List of all key Project personnel and their complete contact information, including email addresses and telephone numbers during regular hours and after hours;
- **\_\_\_.3** Staging plans that identify the sequence of the Work, including any phases and alternative sequences or phases, with the goal of minimizing the impacts on residents, businesses and other operations in the Project vicinity;
- \_\_\_.4 If required, traffic control plans associated with the staging plans that are signed and stamped by a licensed traffic engineer;
- \_\_.5 Draft baseline schedule for the Work as required under Section 5.2, to be finalized within ten days after City issues the Notice to Proceed;
- **\_\_\_.6** Breakdown of lump sum bid items, to be used for determining the value of Work completed for future progress payments to Contractor;
- **\_\_\_7** Schedule with list of Project submittals that require City review, and list of the proposed material suppliers;
- **\_\_\_.8** Plan for coordination with affected utility owner(s) and compliance with any related permit requirements;
- **\_\_\_.9** Videotape and photographs recording the conditions throughout the preconstruction Project site, showing the existing improvements and current condition of the curbs, gutters, sidewalks, signs, landscaping, streetlights, structures near the Project such as building faces, canopies, shades and fences, and any other features within the Project area limits;
- \_\_\_.10 If requested by City, Contractor's cash flow projections; and
- \_\_\_.11 Any other documents specified in the Special Conditions or Notice of Potential Award.

This optional provision is intended for modifying the default insurance requirements under Section 4.3 of the General Conditions by modifying the CGL limits, waiving the pollution liability insurance, and/or waiving the builder's risk, as indicated in the separate sub-provisions.

\_\_\_\_\_. **Insurance Requirements.** The insurance requirements under Section 4.3 of the General Conditions are modified for this Contract, as set forth below. Except as expressly stated below, all other provisions in Section 4.3 are unchanged and remain in full force and effect.

The following optional sub-provision may be used to adjust the default insurance limits for CGL coverage in Section 4.3 of the General Conditions, subject to prior consultation with and direction from the City's Risk Manager.

\_\_\_\_\_ Commercial General Liability ("CGL") Insurance. The CGL insurance policy limits set forth in subsection 4.3(A)(1) of the General Conditions are modified for this Contract to require at least \$<\_\_\_\_\_> per occurrence and at least \$<\_\_\_\_\_> general aggregate.

The following optional sub-provision may be used if pollution liability insurance is not necessary for the project. Consult with the City's Risk Manager to confirm whether pollution liability insurance is needed for a project.

\_\_\_\_ Pollution Liability Insurance Waived. The pollution liability insurance policy requirement set forth in subsection 4.3(A)(4) of the General Conditions is hereby waived and does not apply to this Contract.

The following optional sub-provision should only be used if builder's risk insurance is <u>not</u> applicable, such as for horizontal projects. Consult with the City's Risk Manager to confirm whether builder's risk insurance is required for a project.

\_\_\_\_\_ Builders Risk Insurance Waived. The builder's risk insurance policy requirement set forth in subsection 4.3(A)(5) of the General Conditions is hereby waived and does not apply to this Contract.

The following provision may be most useful for longer projects which may extend into the rainy season. As stated, it is intended to supplement Sections 5.2 and 5.3 of the General Conditions. Using reliable data for the Project location, based on normal rainfall patterns over an extended period, e.g., 5-10 years, complete as indicated.

\_\_\_\_\_\_. Normal Weather Delay Days. This provision is intended to supplement the requirements of General Conditions Section 5.2 on Schedule Requirements and Section 5.3 on Delays and Extensions of Contract Time. Based on historic records for the Project location, Contractor's schedule should assume the following number of normal Weather Delay Days for each month:

Month	# Normal Weather
	Delay Days

January

February \_\_\_\_ March \_\_\_\_ April \_\_\_\_ May \_\_\_\_ June \_\_\_\_ July \_\_\_\_ August \_\_\_\_ September \_\_\_\_ October \_\_\_\_ November \_\_\_\_ December \_\_\_\_

Weather Delay Days which do not occur during a given month based on the number of days allocated for that month (above) do not carry over to another month.

The following provision may be used when the Project is to be coordinated by a Construction Manager. <u>The language should be tailored to align with the contract</u> <u>between the City and the Construction Manager, and also to reflect Project-</u> <u>specific procedures and requirements.</u>

\_\_\_\_\_\_> is the Construction Manager Role and Authority. <\_\_\_\_\_\_\_> is the Construction Manager for this Project. The Construction Manager will assist City in the management of the construction of the Project. The Construction Manager may perform services in the areas of supervision and coordination of the work of Contractor and/or other contractors, scheduling the Work, monitoring the progress of the Work, providing City with evaluations and recommendations concerning the quality of the Work, recommending the approval of progress payments to Contractor, or other services for the Project in accordance with the Construction Manager's contract with City.

\_\_\_.1 **Communications.** Contractor must submit all notices and communications relating to the Work directly to the Construction Manager in writing, as follows:

<insert contact information>

With a copy to the Engineer:

<insert contact information>

- **\_\_\_\_.2** On-Site Management and Communication Procedures. The Construction Manager will provide and maintain a management team on the Project site to provide contract administration as an agent of City, and will establish and implement coordination and communication procedures among City, the Design Professional, Contractor, and others.
- **\_\_\_.3** Contract Administration Procedures. The Construction Manager will establish and implement procedures for reviewing and processing requests for clarifications and interpretations of the Contract Documents, Shop Drawings, samples, other submittals, schedule adjustments, Change Order proposals, written proposals for substitutions, payment applications, and maintenance of logs.

- **\_\_\_\_.4 Pre-Construction Conference.** Contractor will attend the pre-construction conference, during which the Construction Manager will review the Contract administration procedures and Project requirements.
- \_\_.5 Contractor's Construction Schedule. The Construction Manager will review Contractor's construction schedules and will verify that each schedule is prepared in accordance with the requirements of the Contract Documents.

The following should be used for federally funded projects, as applicable. It contains those provisions required under Appendix II to Part 200 of Title 2 of the Code of Federal Regulations (as of 4/11/23) which are not already addressed elsewhere in the Contract Documents. Specific federal funding requirements may vary between federal agencies and may be revised from time to time. **These provisions should be used as needed to comply with applicable federal funding requirements.** Delete provisions that are <u>not</u> applicable. Consult the funding agency representative for further information and direction.

\_\_\_\_\_. Federally Funded Projects. This Project is funded in whole or in part by federal funds and subject to the following federal requirements under the terms of the funding agreement(s) between City and the federal agency or agencies providing federal funds, which are fully incorporated by this reference and made part of the Contract Documents. Copies of any funding agreement between City and a funding agency will be made available upon request.

**Equal Opportunity.** During the performance of this Contract, the Contractor agrees as follows:

(A) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action will include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(B) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(C) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision will not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in

furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

(D) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the labor union or workers' representatives of the Contractor's commitments under this section, and will post copies of the notice in conspicuous places available to employees and applicants for employment.

(E) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the United States Secretary of Labor.

(F) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the United States Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the United States Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(G) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further federal government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the United States Secretary of Labor, or as otherwise provided by law.

(H) The Contractor will include the portion of the sentence immediately preceding paragraph (A) and the provisions of paragraphs (A) through (H) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the United States Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each Subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the City or funding agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided*, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction by the City or funding agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**Davis-Bacon Act.** Contractor will pay wages to laborers and mechanics, not less than once a week, and at a rate not less than the current federal prevailing wages specified in the Davis-Bacon Act Wage Determination attached hereto and incorporated herein. By entering into this Contract, Contractor accepts the attached Wage Determination. <a href="https://sam.gov/content/wage-determinations"></a>, which may be accessed at <a href="https://sam.gov/content/wage-determinations">https://sam.gov/content/wage-determinations</a>, must be printed and included with the Contract Documents.>

- Copeland "Anti-Kickback" Act. Contractor will comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 CFR Part 3 as may be applicable, which are incorporated by reference into this Contract. Contractor and Subcontractors must insert this requirement into subcontracts of any tier. Contractor is responsible for compliance with these requirements by each Subcontractor of any tier.
  - Contract Work Hours and Safety Standards Act. In addition to the California state law requirements in Article 9 of the General Conditions, Contractor and each Subcontractor must comply with the requirements of the federal Contract Work Hours and Safety Standards Act, as set forth in 40 U.S.C. 3701-3708, as supplemented by the regulations set forth in 29 CFR Part 5, as may be amended from time to time, which are fully incorporated herein, including:

(A) No Contractor or Subcontractor will require or permit any laborer or mechanic performing Work for the Project to work in excess of 40 hours in a work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours during that work week.

(B) If Contractor or a Subcontractor violates this requirement, the Contractor and any responsible Subcontractor will be liable for the unpaid wages. In addition, the Contractor and Subcontractor will be liable to the United States for liquidated damages. The liquidated damages will be computed with respect to each individual worker as specified under federal law.

(C) Contractor and Subcontractors must insert this requirement into subcontracts of any tier. Contractor is responsible for compliance with these requirements by each Subcontractor of any tier.

**Rights to Inventions.** If the federal funding for this Contract meets the definition of "funding agreement" under 37 CFR § 401.2(a) and constitutes an agreement between the City and a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency, will apply to this Contract and are fully incorporated into the Contract Documents by this reference.

\_\_\_\_\_ Clean Air Act. If the Contract is for an amount in excess of \$150,000, Contractor and each Subcontractor must comply with the requirements of the Clean Air Act, as amended, (42 U.S.C. §§ 7401-7671q), which are fully incorporated into the Contract Documents by this reference, including requirements for reporting violations to the awarding agency and the applicable Regional Office for the Environmental Protection Agency. Contractor and Subcontractors must insert this requirement into subcontracts of any tier in excess of \$150,000.

\_\_\_\_\_ Federal Water Pollution Control Act. If the Contract is for an amount in excess of \$150,000, the requirements of the Federal Water Pollution Control Act (33 U.S.C. §§ 1251-1387) apply to this Contract and are fully incorporated into the Contract Documents by this reference, including requirements for reporting violations to the awarding agency and the applicable Regional Office for the

Environmental Protection Agency. Contractor and Subcontractors must insert this requirement into subcontracts of any tier in excess of \$150,000.

- Suspension and Debarment. Contractor is required to verify that neither it, nor its principals, as defined at 2 CFR § 180.995, or its affiliates, as defined at 2 CFR § 180.905, are excluded or disqualified, as defined at 2 CFR §§ 180.935 and 180.940. Contractor must comply with 2 CFR Part 180, subpart C and 2 CFR Part 3000, subpart C, and must include a provision requiring compliance with these regulations in any subcontract of any tier. If it is later determined that the Contractor did not comply with the applicable subparts, the Federal Government may pursue available remedies, including, but not limited to, suspension and/or debarment. By submitting a bid and entering into this Contract, Contractor agrees to comply with these requirements.
  - Byrd Anti-Lobbying Amendment. If the Contract is for an amount in excess of \$100,000, Contractor must comply with the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1352) and file the certification provided at 44 CFR Part 18, Appendix A, and any disclosures, with the applicable federal agency. Each tier certifies to the tier above that it will not and has not used federal-appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier will also disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures will be forwarded from tier to tier up to the recipient.
    - **Procurement of Recovered Materials**. The requirements of § 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act at 42 U.S.C. § 6962, apply to this Contract and are fully incorporated into the Contract Documents by this reference. For individual purchases of \$10,000 or more, Contractor will make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired (A) competitively within the Contract schedule, (B) in conformance with Contract performance requirements, or (C) at a reasonable price. Information on this requirement, including a list of EPA-designated items, is available at the EPA's Comprehensive Procurement Guidelines website:

https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.

Prohibition on Covered Telecommunications. Federal loan or grant funds must not be obligated or expended to procure or obtain, extend or renew a contract to procure or obtain, or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, as further specified in 2 CFR § 200.216, which is fully incorporated into the Contract Documents by this reference. Covered telecommunications equipment or services includes equipment produced by, services provided by, or services using equipment produced by: Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities); Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities); or an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

**Domestic Preferences for Procurements.** As appropriate and to the extent consistent with Laws, the City should, to the greatest extent practicable under a federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States, as further specified in 2 CFR § 200.322, which is fully incorporated into the Contract Documents by this reference, including, but not limited to, iron, aluminum, steel, cement, and other manufactured products, as specified therein. The requirements of 2 CFR § 200.322 must be included in all subcontracts and purchase orders for work or products under the federal award.

The following optional provision may be used to attach and incorporate federal contract requirements for projects administered under Caltrans' Local Assistance Procedures Manual ("LAPM"), as specified in Chapter 12 of the LAPM and exhibits thereto, including "Appendix E" to the Standard Title VI/Non-Discrimination Assurances (DOT Order No. 1050.2A), effective September 17, 2020, which may be downloaded from https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/title-vi/appendix-e-of-the-title-v-i-assurances.pdf. Federal law and LAPM requirements are frequently amended. **DELETE ATTACHMENT B IF NOT APPLICABLE.** Be sure to use the most current version of the LAPM, which may be downloaded from: https://dot.ca.gov/programs/local-assistance/guidelines-and-procedures/local-assistance-guidelines-and-procedures/local-assistance-procedures-manual-lapm.

\_\_\_\_. Federal Contract Requirements. This Project is funded in whole or in part by federal funds administered under Caltrans' Local Assistance Procedures Manual ("LAPM"). LAPM contract requirements are provided in Attachment B - Federal Contract Requirements. Contractor must comply with the requirements set forth in Attachment B.

The following provision may be used to provide more detail on the Contractor's post-construction restoration requirements. This provision may be adapted by adding Project-Specific requirements or deleting requirements that are not applicable. Cross-reference: General Conditions Section 7.9(E).

\_\_\_. Close Out Requirements. Contractor's close out requirements include the following, if applicable:

- \_.1 Contractor must replace, with thermoplastic, any existing striping within and adjacent to the Project site that is damaged during the Work. Partially damaged striping must be replaced in its entirety.
- \_\_.2 Contractor must replace any survey monuments that are damaged or removed during the Work, with a Record of Survey filed by a licensed land surveyor as required by California law.
- \_\_.3 Before removing any traffic control or street signs on the Project site, Contractor must take photographs showing their original locations. Upon completion of each phase of construction, Contractor must temporarily reset the signs at those locations. Contractor must then replace the signs permanently upon completion

of the Work and the cost of their removal and replacement must be included in the Bid Proposal.

\_\_.4 Contractor must maintain any rural mail boxes on the Project site and relocate them to their permanent locations as soon as possible in the course of the Work, to the satisfaction of the affected property owners and the postal service.

The following provision may be used to expressly limit circumstances under which a contractor may be entitled to share in the cost savings from value engineering proposed by the Contractor. Reference Public Contract Code § 7107.

\_\_\_\_\_\_. Value Engineering. The Contractor may be entitled to additional compensation for cost reduction changes made pursuant to a value engineering proposal submitted by the Contractor, subject to the limitations of Public Contract Code § 7107, and in strict compliance with this Section \_\_\_\_\_. Contractor will not be entitled to any such additional compensation unless all of the following requirements have been met:

\_\_\_.1 The Contractor must submit a written proposal for changes to the Plans or Specifications for the Project, in which it:

(A) Identifies the written proposal as a proposal for cost reduction changes with reference to this section;

(B) Clearly and specifically identifies the proposed cost reduction changes by describing in detail each of the changes proposed with specific references to each of the Specifications and Plans involved in the proposed changes, and providing proposed revised Specifications and Plans as applicable; and

(C) Estimates the net amount of the cost reduction and provides the basis for that estimate.

- **\_\_\_.2** The proposed changes have been identified and developed solely by the Contractor, and not, in whole or in part, by the City.
- **\_\_\_.3** The City accepts the proposed changes in whole or in part in a writing signed by the Engineer. The Contractor will only be entitled to additional compensation for those changes specifically accepted by the City. The Engineer will determine the net savings in construction costs from any such changes that are both accepted and implemented by the City. Contractor will not be entitled to more than 50% of the net savings as determined by the Engineer, acting in his or her sole discretion.

END OF SPECIAL CONDITIONS

## Attachment A – Federal Bidding Requirements

<insert applicable LAPM requirements or delete Attachment A if not applicable>

# END ATTACHMENT A – FEDERAL BIDDING REQUIREMENTS

## Attachment B – Federal Contract Requirements

<insert applicable LAPM requirements or delete Attachment B if not applicable>

# END ATTACHMENT B – FEDERAL CONTRACT REQUIREMENTS

# **GENERAL PROVISIONS**

# TABLE OF CONTENTS

SECTION <sup>2</sup>	1 – TERMS AND DEFINITIONS	5
1.01	Terms	5
1.02	Definitions	5

SECTION 2	2 – Bid REQUIREMENTS AND CONDITIONS	9
	General	
2.02	Bid Prices to Cover Entire Work	9
2.03	Listing of Proposed Subcontractors	9
2.04	Proposal Guarantee	9
2.05	Withdrawal of Bids	9
2.06	Rejection of Bids	9

<b>SECTION 3</b>	B – SCOPE AND CONTROL OF WORK	10
3.01	Work to be Done	10
3.02	Plans and Specifications	10
3.03	References to Standards and Codes	10
3.04	Authority of the Engineer	10
3.05	Contract Documents and Precedence	11
3.06	Record Documents	11
3.07	Record Drawings	11
3.08	Reuse of Documents	12
3.09	Subsurface Data	12
3.10	Right-of-Way	12
3.11	Removal of Defective Work	12
3.12	Acceptance of Defective Work	12
	Submittals	
3.14	Substitutions	14
	Survey	
3.16	Construction Staking Lines and Grades	16
	City's Construction Inspector's Work Hours	
3.18	Inspection of the Work	16
3.19	Special Inspections	17
	Sampling and Testing	

SECTION 4 – CHANGES IN WORK	18
4.01 Limited City Authority to Approve Change Orders	
4.02 Contractor Liability for Unapproved Change Orders	
4.03 Non-Material Change Requests by the Contractor	
4.04 Directives	
4.05 Requests for Information, Inconsistencies and Changed Conditions	
4.06 Extra Work	
4.07 Change Orders	
4.08 Resolution of Disputes	
4.09 Resolution of Claims Under Public Contract Code Section 20104	
4.10 Resolution of Claims under Public Contract Code Section 9204	

SECTION	5 – CONTROL OF MATERIALS	27
	Materials and Workmanship	
	Protection of Work and Materials	
5.03	Trade Names or Approved Equals	27
5.04	Inspection of Materials by City	28
5.05	Inspection of Materials by Others	28
5.06	Certification	28
5.07	Weighing and Metering Equipment	28
	Calibration of Testing Equipment	

SECTION 6	6 – UTILITIES	30
6.01	Contractor's Obligation to Identify and Protect Subsurface Infrastructure	30
	Location	
6.03	Protection	30
6.04	Shut Down Notification	31
6.05	Removal	31
6.06	Relocation	31
6.07	Delays	32
6.08	Cooperation	32

SECTION 7	- PROSECUTION AND PROGRESS	33
7.01	Notice to Proceed	33
7.02	Commencement of Work	33
7.03	Administrative Duties	33
7.04	Construction Schedule	33
7.05	Three Week Look Ahead Schedule	34
	Construction Sequence	
7.07	Recording Existing Conditions	34
7.08	Preconstruction Conference	34
7.09	Progress Meeting	35
7.10	Hours of Construction	35
7.11	Prosecution of Work	36
7.12	Suspension of Work	36
7.13	Default by the Contractor and Termination of Control	36
	City's Right to Terminate Contract	
7.15	Time of Completion and Days Charged	38
	Liquidated Damages	
7.17	Delays and Extensions of Time	39
7.18	Substantial Completion	40
7.19	Project Completion and Closeout	41
7.20	Acceptance	41
7.21	Protection and Cleanup	41
7.22	Risk of Loss	41
7.23	Use of Improvements During Construction	41
	-	

SECTION 8 – RESPONSIBILITIES OF THE CONTRACTOR	43
8.01 Contractor's Responsibility for the Work	43
8.02 Contractor's Responsibility for Subcontracted Work	
8.03 Superintendent	
8.04 Character of Employees	

Laws to be Observed	. 44
Construction Staging and Field Office	. 47
Construction Water	. 47
Project Site Maintenance	. 47
Climate Preservation	. 51
Preservation of Property	. 51
Protection of Traffic Signal Facilities	. 51
Restoration of Adjacent and Existing Improvements	. 51
Safety	. 55
Patent Fees or Royalties	. 56
Web-Based Construction Document Management	. 56
	Laws to be Observed Special Permits, Licenses and Fees Coordination and Cooperation Use of Premises Construction Staging and Field Office Site Security Construction Water Project Site Maintenance Climate Preservation Preservation of Property Protection of Traffic Signal Facilities Restoration of Adjacent and Existing Improvements Archeological Remains Access to Private Property Notification and Relations with Property Owners Traffic Control and Public Convenience Safety Patent Fees or Royalties Advertising Antitrust Claims Audit and Examination of Records Web-Based Construction Document Management

SECTION 9 – MEASUREMENT AND PAYMENT	
9.01 Measurement of Quantities for Unit Price Work.	
9.02 Bid Items	
9.03 Bid Quantities	
9.04 Progress Payments	
9.05 Final Payment	
9.06 Claims	
9.07 Time Limit on Potential Claims	
9.08 City Response to Potential Claims	
9.09 Appeal of Engineer's Decision	

<b>SECTION 1</b>	) – GUARANTEE	63
	Warranties	
	Contractor's Guarantee	
	Correction of Defective Work During the Guarantee Period	
	9 ··· · · · · · · · · · · · · · · · · ·	

APPENDIX A -	<b>GENERAL PROVISION</b>	I FORMS	64
--------------	--------------------------	---------	----

# THIS PAGE INTENTIONALLY LEFT BLANK

# **SECTION 1 – TERMS AND DEFINITIONS**

#### 1.01 Terms

Unless otherwise stated, the words directed, required, permitted, ordered, instructed, designated, considered necessary, prescribed, approved, acceptable, satisfactory, or words of like meaning, refer to actions, expressions, and prerogatives of the Engineer.

#### 1.02 Definitions

Except as amended or supplemented, whenever in the Contract Documents the following terms are used, the intent and meaning shall be interpreted as follows:

<u>ASTM</u> – American Society for Testing and Materials specifications.

<u>AWWA</u> – American Water Works Association and its Standard Specifications.

<u>Addenda</u> – Written or graphic instruments issued prior to the opening of bids which clarify, correct or change the bidding documents or the Contract Documents.

<u>Bid</u> – The offer or proposal of the bidder submitted on the prescribed forms setting forth the prices for the work to be performed.

<u>Bid Forms</u> – Includes the Bid Schedule, Designation of Subcontractors, Bidders Statement of Responsibility, Bidder's Non-Collusion Affidavit, Bid Security, and all other information requested by the Bid Proposal Documents.

<u>Bidder</u> – Any individual, firm, partnership, corporation, or other legal entity submitting a bid for the work, acting directly or through a duly authorized representative. After the City awards the Contract, the term "Bidder" shall be equivalent to the term "Contractor" for the purpose of identifying the Contractor's rights and obligations under the Contract Documents.

<u>Bidding Documents</u> – The Notice Inviting Bids, Instruction to Bidders, Bid Proposal forms and Bidders Bond.

Bonds - Bid, performance, labor and material, and warrantee bonds and other instruments of security.

Calendar Day – A 24-hour period beginning at 12:00 AM and ending at 11:59 PM.

<u>Change Order</u> – A document recommended by the Engineer which is signed by the Contractor and City authorizing an addition, deletion or revision in the work, with possible adjustment in the contract price or the contract time, issued on or after the effective date of the Agreement.

<u>City</u> – City of East Palo Alto, California, as City,; a political subdivision of the State of California, acting through the City Council as the Governing Body or duly authorized agents.

<u>City's Representative</u> – The Director of Public Works or the Director's authorized representative, acting on behalf of the City, designated by the City to act as its agent on specified matters relating to this contract.

<u>City Regulations</u> – All written laws, rules, and policies established by the City, including those set forth in the General Plan, East Palo Alto Municipal Code, ordinances, resolutions, policies, procedures, and City Design Documents (including the Standard Plan, Standard Specifications, Design Standards, and relevant Public Facility Master Plans).

<u>Code</u> – The terms Government Code, Labor Code, etc, refer to codes of the State of California.

<u>Completion</u> – The point at which work has been completed in accordance with the contract plans and specifications to the satisfaction of the Engineer and there are no items of work remaining to be completed. See General Provisions, Section 7.19, "Project Completion and Closeout".

<u>Consulting Engineer/Architect</u> – One of several consulting firms or their designated representatives having a contractual relationship with the City to perform certain duties.

<u>Contract</u> – The entire written agreement covering the performance of the work as more fully described in Section 3.05: "Contract Documents and Precedence".

<u>Contract Time</u> – Number of days, calendar or working, stated in the contract as the duration for the completion of the various parts of the Work (defined as Milestones) and the whole of the Work.

<u>Contract Unit Price</u> – The Contractor's original bid for a single unit of an item of work in the bid.

<u>Contractor</u> – An individual, partnership, corporation or other legal entity entering into a contract with the City to perform the work. After the City awards the Contract, the term "Contractor" shall be equivalent to the term "Bidder" for the purpose of identifying the Contractor's rights and obligations under the Contract Documents.

<u>Council</u> – The City Council of the City of East Palo Alto.

<u>Days</u> – Days shall mean calendar days unless otherwise specified.

<u>Defective Work</u> – Work that is unsatisfactory, faulty, omitted, incomplete, deficient, or does not conform to the requirements of the Contract Documents, directives of the Engineer, or requirements of any inspection, reference standard, test, or approval specified in the Contract Documents, or has been damaged prior to the Engineer's recommendation of final acceptance.

<u>Directive</u> – Any written instruction to the Contractor pertaining to the completion of a project objective including, but not limited to Field Orders, responses to Requests for Information, Clarifications and the Notice to Proceed.

Engineer – The City Engineer or his/her designee.

<u>Final Acceptance</u> – Determination by the Director of Public Works that the entire contract has been completed in all respects in accordance with the Contract Documents and any modifications previously approved, evidenced by a Certificate of Final Acceptance signed by the Director of Public Works.

<u>Float</u> – The number of days between early and late completion. The float will be assigned to the project and will be available to both the City and the Contractor as needed to complete the work in accordance with the agreement.

<u>Greenbook</u> – The Standard Specifications promulgated by Public Works Standards, Inc., entitled "Standard Specifications for Public Works Construction" (SSPWC), and current editions.

Laboratory – The laboratory approved by the Engineer to test materials and work involved in the contract.

<u>Liquidated Damages</u> – The amount prescribed in the contract documents to be paid to the City or to be deducted from any payments due or to become due to the Contractor for each contract day's delay in completing the whole of the Work and/or any of the Milestones.

Losses – Any and all losses, costs, liabilities, claims, damages, and expenses, including reasonable attorneys' fees and expenses.

<u>Milestone</u> – An event specified in the Contract Documents relating to an intermediate completion date or time prior to completion of all the work.

<u>Notice of Intent to Award</u> – Indicates the intent of the City to present a contract to Council for award at the council meeting indicated.

<u>Notice to Proceed</u> – A written notice by the City to the Contractor authorizing the start of work and fixing the date on which the contract time will start.

<u>Owner</u> – The City of East Palo Alto.

<u>Plans</u> – The contract drawings approved by the Engineer which show the location, character, dimensions and details of the work.

Project – The work performed under the Contract Documents.

<u>Punchlist</u> – A list generated by the City or the City's Representative of any work to be completed or corrected by the Contractor before the contract work will be recommended for acceptance by the Director of Public Works.

<u>Record Documents</u> - Contract drawings, Contractor shop drawings, and equipment manuals revised by the Contractor to reflect actual installation where it deviates from the original document, or to show features constructed or found that do not show on the original document.

<u>Reference Specifications</u> – Those standards, rules, method of tests or analysis, codes, and specifications of other agencies, engineering societies, or industrial associations referred to in the Contract Documents. These refer to the current edition or amendments in effect at the time of advertising the project unless specifically referred to by edition, volume or date.

<u>Revocable Bid Items</u> – Bid items noted as "revocable items" may be deleted entirely or in part from the Work at the option of the City. The provisions in Section 4.07(b) and 4.07(c), "Unit Price Adjustments", shall not apply to such deletion, and no compensation will be allowed the Contractor by reason of such deletion.

<u>Shop Drawings</u> – All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for the Contractor to illustrate some portion of the work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a supplier and submitted by the Contractor to illustrate material or equipment for some portion of the work.

Special Provisions – Any provisions which supplement or modify these General Provisions.

<u>Specifications</u> – General Provisions, Special Provisions, Technical Specifications and Standard Specifications incorporated by reference.

<u>Standard Details</u> – The City of East Palo Alto Standard Details for Public Works Construction, 2006 Edition and subsequent updates.

<u>Standard Specifications</u> – The City of East Palo Alto Standard Specifications for Public Works Construction, current edition.

State - State of California.

<u>State Standard Plans</u> – The Standard Plans of the Department of Transportation of the State of California (Caltrans), entitled "Standard Plans", current edition.

<u>State Standard Specifications</u> – The Standard Specifications of the Department of Transportation of the State of California (Caltrans), entitled "Standard Specifications", current edition. Also, Revised Standard Specifications.

<u>Subcontractor</u> – Any individual, firm or corporation having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the work at the site.

<u>Submittal</u> – Any document or material required to be submitted to the City for the City's review or information.

<u>Substantial Completion</u> – When the work (or a specified part thereof) has progressed to the point where it is sufficiently complete and in accordance with the Contract Documents.

<u>Surety</u> – Any individual, firm or corporation, bound with and for the Contractor for the acceptable performance and completion of the work, and the satisfaction of all obligations incurred.

Surveyor – A land surveyor licensed in the State of California.

Work - The construction services required by the Contract Documents.

Working Day – Any day except Saturday, Sunday or Holidays observed by the City.

# **SECTION 2 – Bid REQUIREMENTS AND CONDITIONS**

# 2.01 General

Bidders may obtain complete sets of the Contract Documents, including the bid forms to be used for bidding, at the location designated in the Notice to Bidders. Bidders shall use complete sets of Contract Documents in the preparation of bids. The City makes copies of the Contract Documents available, on the above terms, for the sole purpose of obtaining Bids for the work and does not confer a license or grant permission for any other use of the Contract Documents.

### 2.02 Bid Prices to Cover Entire Work

The quantities listed in the Bid Schedule do not govern final payment, as payments to the Contractor will only be made for the actual quantities constructed in accordance with the plans and specifications as measured by the appropriate unit of measurement indicated in the Bid Schedule, complete in place to the satisfaction of the Engineer. Such payment shall constitute the full compensation for furnishing all materials, labor, tools and equipment for performing the work, and for all other incidentals necessary to complete the work as shown on the plans and described in these specifications.

No separate payment will be made for incidentals or any items delineated on the plans or called for in the specifications to be supplied or installed which are not specifically listed as bid items but are required to complete the project. Full compensation for such items shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed.

### 2.03 Listing of Proposed Subcontractors

The Bidder shall not list any Subcontractor who is ineligible pursuant to Labor Code, Sections 1777.1 and 1777.7, and Public Contract Code, Section 6109.

If, after the execution of the Agreement, the successful Bidder subcontracts except as provided for in the Subcontracting Act, or if the Bidder lists in his bid another Contractor who will in turn sublet portions constituting the majority of work covered by the prime contract, the Contractor shall be subject to the penalties set forth in the Subcontracting Act. If the Contractor violates any provisions of the Subcontracting Act, the Contractor violates the Agreement and the City may either terminate the Agreement or assess a penalty to the Contractor in accordance with the terms of the Subcontracting Act.

### 2.04 Proposal Guarantee

In accordance with the Public Contract Code, Section 20170, each Bid shall be accompanied by a Bid Security, in the amount of ten percent (10%) of the Bid Amount.

### 2.05 Withdrawal of Bids

After the time fixed in the Notice to Bidders for the opening of bids, no bid may be withdrawn for a period of at least ninety (90) calendar days without consent of the awarding authority that the Bidder has established all of the following occurrences identified in California Public Contract Code, Section 5103.

#### 2.06 Rejection of Bids

More than one proposal from an individual, firm, partnership, corporation, or combination thereof under the same or different names will not be considered. Reasonable grounds for believing that any individual, firm, partnership, corporation or combination thereof is interested in more than one proposal for the work contemplated may cause the rejection of all proposals in which that individual, firm, partnership, corporation or combination thereof is interested. If there is reason for believing that collusion exists among the bidders, any or all proposals may be rejected.

# SECTION 3 – SCOPE AND CONTROL OF WORK

### 3.01 Work to be Done

It is the intent of this contract to obtain a finished, workmanlike job, complete and in place, with all equipment properly installed and operating. The work to be done consists of furnishing all labor, materials, tools, equipment and services necessary to complete the project, as further described in these Specifications, and as necessary to leave the site in a neat and finished condition with all equipment properly installed and working.

While the City has endeavored to accurately represent in the plans and specifications the physical conditions which may affect the cost of the proposed work, the City does not warrant the completeness or accuracy of such information. It is the Contractor's responsibility to ascertain the existence of any such conditions affecting the cost of the work, which would have been disclosed by reasonable examination of the site.

Conclusions pertaining to any test, investigation, statement or estimate of fact incorporated in the plans and specifications shall be considered by the Contractor to be a recommendation only. The Contractor may request equal access to the underlying or background information to arrive at his own opinion thereon, including his determination of how reliable might be any conclusion appearing in (or inferred from) the information. The Contractor may not rely upon "record drawings" or similar final or accepted drawings or maps constructed on public or private property. Such information may be used for reference only. Actual locations and depths shall be determined by field investigations by the Contractor.

No oral or telephonic agreement or conversation with any officer, agent, or employee of the City or the Engineer, either before or after execution of the contract, shall affect or modify any of the terms or obligations contained in any of the contract documents.

### 3.02 Plans and Specifications

It is the intent of the Plans and Specifications to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. For convenience, the Specifications are arranged in several sections, but such separation shall not be considered as the limits of the work required by any separate trade. The terms and conditions of such limitations are wholly between the Contractor and his subcontractors. In general, the Special Provisions, General Provisions, and other sections of the specifications indicate the responsibilities of the Contractor and the quality of material and methods of workmanship. The plans indicate dimensions, quantities, positions, and various other details of construction.

Any work, materials or equipment that may be reasonably inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. When words, which have a well-known technical or trade meaning, are used to describe the work, materials or equipment, such words shall be interpreted in accordance with that meaning.

### 3.03 References to Standards and Codes

Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect at the time of the opening of bids except as may be otherwise specifically stated.

# 3.04 Authority of the Engineer

The City has the final authority in all matters affecting the work. Within the scope of the Agreement, the Engineer has the authority to enforce compliance with the Plans and Specifications and the Contractor shall promptly comply with instructions from the Engineer. The decision of the Engineer is final and binding on all questions relating to: quantities; acceptability of materials furnished and work performed; equipment; work execution, rate of progress or sequence of work; and interpretation of the Plans, Specifications, or other drawings. This shall be precedent to any payment under the Agreement, unless otherwise ordered by the City.

### 3.05 Contract Documents and Precedence

The Contract Documents consist of the documents listed below, in order of precedence. If there is a conflict between component parts of the Contract Documents, the document highest in precedence controls.

- a. Change Orders.
- b. Directives.
- c. Permits in the following order: those issued by other agencies, those issued by the City.
- d. Project Specifications, in the following order Supplemental Agreements, Addenda, General Construction Contract, Instructions to Bidders, Notice Inviting Bids, Special Provisions, General Provisions and Technical Specifications.
- e. Project Plans and Drawings. Figure dimensions on drawings shall govern over scale dimensions. Details shall govern over general arrangements.
- f. County of San Mateo Standard Specifications.
- g. County of San Mateo Standard Plans and Details.

All of the individual components of the Contract Documents are intended to be complementary and what is required by one shall be binding as if required by all. Interpretation of a disputed meaning or intent of the plans and specifications shall be made initially by the Engineer in accordance with the application of the order of precedence. Any final decision required regarding precedence and the clarification of discrepancies in the Contract Documents shall be made by the Engineer.

### 3.06 Record Documents

The Contractor shall keep at the worksite a record copy of all Drawings, Specifications, Addenda, Change Orders, Work Directives, Field Orders and written interpretations and clarifications. These record documents together with all approved submittals, samples and shop drawings will be available to the Engineer as a reference at all times.

### 3.07 Record Drawings

- a. The Contractor shall maintain a "job site" print of contract drawings and favorably reviewed shop drawings and "design/build" design drawings on the construction site at all times. These "job site" drawings are to be marked up daily with red ink or pencil to record:
  - 1. where actual installation differs from that shown on the original drawings,
  - 2. where underground or concealed features are uncovered during the work, whether unforeseen or not,
  - 3. field changes or deletions to the work,
  - 4. additional work, whether by Contract Change Order or not.

Underground features and features that are concealed during construction, or work that is added or changed, shall be recorded by both scaling and dimensioning. Elevation shall be recorded accurately to 0.1' and plan dimensions to 0.25'.

Maintaining "job site" record drawings up to date on a daily basis will be subject to specific inspection by the City. Progress payment requests will not be processed unless appropriately certified as to the currency of record drawing updating.

Each "job site" record drawing print shall be stamped "Contractor's Record Drawing" and signed and dated by the Contractor's Representative.

When a portion of the work is "design/build," the Contractor shall transfer all changes to the original (or a reproducible) of the design drawings. Drafting standards shall be in accordance with currently acceptable engineering standards, and they shall be clearly marked "RECORD DRAWINGS".

b. Record Drawings Submittal - Organize record drawing sheets into a manageable set, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover. Upon completion of work, submit the "job site" record drawings for City's review.

### 3.08 Reuse of Documents

Neither the Contractor nor any Subcontractor or supplier or other person or organization performing or furnishing any of the work under a direct or indirect agreement with the City shall have any title or rights to any of the Drawings, Specifications or other documents (or copies thereof) which bear the seal of the design engineer. Such documents shall not be reused on extensions of the project or for any other project without written consent of the City and the design engineer.

### 3.09 Subsurface Data

All soil and soil test data, water table elevations, and soil analyses included or referred to in the Contract Documents apply only at the location of the test holes and to the depths indicated. Soil test reports for test holes which have been drilled are available for inspection at the office of the Engineer. Any additional subsurface exploration shall be done by the Contractor at their own expense.

The elevation of the water table indicated by soil test reports is that which existed on the date the test hole was drilled. It is the Contractor's responsibility to determine and allow for the possibility of differing ground water elevations on the date of the project's construction. A difference in elevation between ground water shown in soil boring logs and ground water actually encountered during construction will not be considered as a basis for extra work.

### 3.10 Right-of-Way

Acquisition of right-of-way or permanent easements necessary for the improvements as shown on the plans will be provided by the City. Unless otherwise provided, the Contractor shall make his own arrangements, pay for, and assume all responsibility for acquiring, using, and disposing of additional work areas, easements, and temporary facilities required. Contractor shall identify and hold the City harmless from all claims for damages resulting from such actions.

# 3.11 Removal of Defective Work

The Contractor's Quality Control Manager shall be responsible for certifying that all materials and all work is installed in accordance with the Contract Documents. The Contractor's Quality Control Manager must inspect all work for compliance with the project documents and shall review and sign all test results. Additionally the Contractor's Quality Control Manager shall notify the Owner of any non-compliant work within 24 hours, plus provide a proposal for corrective measures within 48 hours. As part of the monthly progress pay applications, the Contractor's Quality Control Manager shall also sign certification that all work included in the progress pay application is in compliance with the contract documents.

Any work which does not conform to the requirements of these specifications shall be considered as defective, and all such work or materials, whether in place or not, shall be rejected by the Owner and, unless otherwise permitted by the Owner, shall be rectified/removed immediately from the site of the work. Rejected work shall be rectified/replaced by the Contractor at the Contractor's expense. No rejected work, the defects of which have been subsequently corrected, shall be used until accepted in writing by the Owner.

### 3.12 Acceptance of Defective Work

The City shall have the option, at its sole discretion and by notice to the Contractor, to accept defective work instead of requiring its removal or correction, in which case the contract sum shall be reduced by an amount equal to the difference between the value to the City such work would have were it complete, correct, and in conformity with the Contract Documents and the value to the City of such defective work. Such option shall be exercised solely by notice to the Contractor and shall not be implied from any act or omission by the City or the Engineer. If the remaining payments and retention are insufficient to cover the amount of the reduction of the contract sum, the Contractor shall promptly pay to the City the amount of any such deficiency.

### 3.13 Submittals

Within ten (10) working days following the Notice to Proceed, the Contractor shall provide a detailed list of all individual submittals required to be submitted under the contract. The list shall reference the specification section and paragraph that requires the submittal along with the date the Contractor plans to transmit the submittal to the City for review.

Unless otherwise requested by the Engineer, submittals shall be provided electronically in .pdf format at least 28 calendar days prior to the approval being necessary for the work. Submittals shall be transmitted via e-Builder submittal module. Large submittals consisting of reports, oversized or colored pages, full sized shop drawings, manuals contained in binders, or submittals in other forms not easily reproduced shall be provided in hard copy format.

When requested by the Engineer, the Contractor shall provide hard copy submittals for items included in the Special Provisions.

For items requiring shop drawings, no materials shall be furnished, and no work shall be performed, until the drawings have been favorably reviewed. Shop drawings shall be of a size and scale to clearly show all necessary details.

After review by the City of each of the Contractor's submittals, submittals will be marked with actions defined as follows:

- a. NO EXCEPTIONS TAKEN Accepted subject to its compatibility with future submissions and additional partial submissions for portions of the work not covered in this submission. Does not constitute acceptance of deletion of specified or required items not shown in a partial submission.
- b. MAKE CORRECTIONS NOTED The same as item (a), except that minor corrections as noted by the City shall be made by the Contractor. No resubmission is required.
- c. AMEND AND RESUBMIT Rejected because of major inconsistencies or errors which shall be resolved or corrected by the Contractor prior to subsequent review by the City.
- d. REJECTED Submitted material does not conform to plans and Specifications in major respects. This material is not expected to be resubmitted.
- e. ACCEPTED FOR RECORD Submittals not reviewed by the City but accepted for record purposes.
- f. All submittals (shop drawings and supporting data, catalogs, schedules, etc.), shall be submitted as the instruments of the Contractor, who shall be responsible for their accuracy and completeness. These submittals may be prepared by the Contractor, subcontractors, or suppliers, but the Contractor shall ascertain that submittals meet all of the requirements of the Contract Documents, while conforming to structural, space, and access conditions at the point of installation. The Contractor shall check all submittals before submitting them to the City.
- g. By submitting the bid, the Contractor agrees that the City has no duty to the Contractor or any of its subcontractors or suppliers for the accuracy, completeness, or sufficiency of the City's review of submittals. The Contractor further agrees to incorporate this requirement in all of its subcontracts or purchase agreements.
- h. Each submittal shall relate only to one item or groups of items logically related.
- i. Allow the number of days stated in the Special Provisions for the City's review of submittals and resubmittals. Note that there are some different requirements for Construction Schedule submittals. No extension of time will be allowed through failure of the Contractor to either transmit submittals sufficiently in advance of the work or on account of resubmittals.
- j. Incomplete submittals will not be accepted.
- k. If the City's review of a submittal requires cross reference to, or coordination with, another submittal not yet transmitted to the City for review, it will be returned to the Contractor for resubmittal at a more appropriate time.

Alternatively, and at the City's discretion, the City may elect to advise the Contractor that the submittal review will be deferred for review. In such circumstances the City's review time will correspondingly be increased so the effective review time allowed is not reduced.

I. If the City's review of a submittal reveals that supplemental information is necessary to complete the review, it will be returned to the Contractor for augmentation and resubmittal.

Alternatively, and at the City's discretion the Contractor may be requested to provide supplemental information to enable a review to be completed, in which case the City's review time will correspondingly be increased so the effective review time allowed is not reduced.

- m. The City shall review schedules, shop drawings, etc., submitted by the Contractor only for general design conformance with the concept of the project and compliance with the information given in the Contract Documents. Acceptance by the City of any drawings, method of work, or any information regarding materials and equipment the Contractor proposes to furnish shall not relieve the Contractor of its responsibility for any errors therein and shall not be regarded as an assumption of risks or liability by the City, or any officer or employee thereof, and the Contractor shall have no claim under the Contract on account of the failure or partial failure or inefficiency or insufficiency of any plan or method of work or material and equipment so accepted. Such acceptance shall be considered to mean merely that the City has no objection to the Contractor using, upon its own full responsibility, the plan or method of work proposed, or furnishing the materials and equipment proposed.
- n. Submittals shall be reviewed as a complete package and will not be returned marked with more than one of the actions noted above. Any submittal that requires further review shall be resubmitted in its entirety until the full submittal has been favorably reviewed.
- o. The Contractor shall not proceed with the fabrication, delivery, construction or installation of items requiring a submittal without favorable review of the submittal by the City. No site construction shall commence without a favorable review of the Baseline Construction Schedule, and the Submittal List. Items (a) and (b) above (no resubmittal required) are considered "favorable review". Items (c) and (d) above (correction and resubmittal required) are considered "unfavorable review". Favorable review shall not relieve the Contractor of its obligation to meet safety requirements and all other requirements of Law, nor constitute a Contract Change Order.

Favorable review of the shop drawings by the Engineer is interpreted to mean that there is substantial and acceptable conformance with the contract plans, but details of design may not necessarily be checked for adequacy or accuracy. Such acceptance shall not relieve the Contractor from the responsibility for errors or omissions in the shop drawings or from deviations from the contract documents unless such errors, omissions, or deviations were specifically called to the attention of the Engineer in writing. The Contractor shall be responsible for the correctness of the shop drawings, for shop fits and field corrections, and for the results obtained by the use of such plans.

Neither review nor approval of Contractor's submittal shall relieve the Contractor of its obligations with respect to the performance under the contract.

### 3.14 Substitutions

A request for substitution will be considered if received within 20 calendar days from the date of Award, or within 15 days from the date the Notice to Proceed is issued, whichever is the later. Within 10 calendar days of receipt of the request for substitution, the City may request additional information necessary for evaluation. Within 21 calendar days from receipt of the request for substitution, or 14 calendar days from receipt of additional information, whichever is later, the City will respond to the request for substitution. If a decision on use of a substitute cannot be made within these time limits, the product specified shall be used.

Proposed requests by the Contractor for changes in products, materials, equipment, and methods of construction required under the Contract Documents after the award of contract are considered "requests for substitutions". For proposed "or equal" substitutions, attention is directed to Section 5.03, "Trade Names or Approved Equals" of these General Provisions. The following are not considered substitutions:

- a. Revisions to Contract Documents requested by the City.
- b. Specified options of products and construction methods included in Contract Documents.
- c. Compliance with governing regulations and orders issued by governing authorities.

Each request for substitution shall be prepared and presented to the City in accordance with the procedures for submittals, except that the following additional information shall be provided.

- a. An explanation of the advantages to the City for accepting the substitution.
- b. A comparison of significant qualities of the proposed substitution with those specified.
- c. A list of changes or modifications needed to other parts of the work and to construction performed by the City and separate Contractors that will be necessary to accommodate the proposed substitution.
- d. A statement indicating the substitution's effect on the Construction Schedule compared to the Construction Schedule without acceptance of the substitution. Indicate the effect of the proposed substitution on overall contract time.
- e. Cost information, including a proposal of the net change, if any, in the Contract Sum.
- f. Certification that the substitution is equal to or better in every respect to that required by Contract Documents, and that it will perform adequately in application indicated. Include Contractor's waiver of rights to additional payment or time extensions that may be necessary because of the substitution's failure to perform adequately.

The Contractor's substitution request will be considered by the City when the following conditions are satisfied, as determined by the City; otherwise, requests will be returned without action except to record noncompliance with these requirements:

- a. Extensive revisions to Contract Documents are not required.
- b. Proposed changes are in keeping with the general intent of Contract Documents.
- c. The request is timely, fully documented and properly submitted.
- d. The specified product or method of construction cannot be provided within the Contract Time. The request may not be considered if the product or method cannot be provided as a result of failure of the Contractor to pursue the work promptly or coordinate activities properly, unless the product proposed is at least equal or better.
- e. A substantial advantage is offered the City, in terms of cost, time, energy conservation or other considerations of merit, after deducting offsetting responsibilities the City may be required to bear. Additional responsibilities for the City may include additional compensation to the Consulting Engineer/Architect for redesign and evaluation services, increased cost of other construction by the City or separate contractors, and similar considerations.
- f. The specified product or method of construction cannot receive necessary approval by a regulatory agency, and the requested substitution can be approved.
- g. The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Contractor certifies that the substitution will overcome the compatibility.
- h. The specified product or method of construction cannot be coordinated with other materials, and where the Contractor certifies that the proposed substitution can be coordinated.

i. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution can provide the required warranty.

The Contractor's submittal and City's acceptance of Shop Drawings, Product Data or Samples that do not comply with the Contract Documents does not constitute a valid request for substitution, nor does it constitute acceptance of a substitution.

The City will notify the Contractor of acceptance or rejection of the proposed substitution within the time limits stated in the Special Provisions. If a decision on use of a substitute cannot be made within these time limits the product specified shall be used.

No extension of time will be allowed through failure of the Contractor to either transmit requests for substitution sufficiently in advance of the work, or on account of processing time outside the time limits noted.

# 3.15 Survey

The Contractor shall provide all survey required by an independent land surveyor licensed in the State of California.

### 3.16 Construction Staking Lines and Grades

Unless otherwise stated in the Special Provisions, the Contractor shall provide, preserve, and replace if necessary, all of the necessary construction stakes required for the construction of the project. Grades for underground conduits will be set on the ground surface and shall then be transferred to the bottom of the trench by the Contractor.

Stakes or marks will be set by a California Licensed Surveyor or a California Registered Civil Engineer to establish the lines and grades required for the completion of the work as specified in the Contract Documents. It shall be the Contractor's responsibility to notify the Engineer of any discrepancies found between field grades and notes shown within the Contract Documents.

Contractor shall furnish horizontal control and cut sheets to the Engineer immediately upon the setting of construction or boundary markers. Upon completion, all work shall conform to the lines, elevations, and grades shown on the plans. All staking including staking notes and notations on survey stakes shall be in accordance with the Caltrans Staking Manual. All staking notes shall be provided within 24 hours after survey staking.

### 3.17 City's Construction Inspector's Work Hours

The Contractor shall give the City one working day's notice before beginning work so the City's inspection of the work can be arranged. Regular working hours for City Construction Inspectors are between 8:00 a.m. and 4:00 p.m., Monday through Friday, excluding City holidays. If the Contractor works outside these times, the Contractor may be charged for additional inspection.

### 3.18 Inspection of the Work

All work is subject to inspection and approval of the Engineer. Unless otherwise stated in the specifications, the City shall perform all required inspections. The Contractor shall notify the Engineer before noon of the working day before inspection is required. Unless otherwise authorized, work shall be done only in the presence of the Engineer. Any work done without proper inspection will be subject to rejection. The Engineer shall at all times have access to the work during its construction at shops and yards as well as the project site. The Contractor shall provide every reasonable facility for ascertaining that the materials and workmanship are in accordance with the Contract Documents. Inspection of the work shall not relieve the Contractor of the obligation to fulfill all conditions of the contract.

If a portion of the work is covered contrary to the Engineer's request or direction, or contrary to the requirements of the Contract Documents, it must, if required in writing by the Engineer, be uncovered for

the Engineer's observation and be replaced at Contractor's expense without adjustment of the contract time or the contract sum.

If a portion of the work has been covered, which is not required by the Contract Documents to be observed or inspected prior to it being covered and which the Engineer has not specifically requested to observe prior to its being covered, the Engineer may request to see such work and it shall be uncovered and replaced by Contractor. If such work is in accordance with the Contract Documents, the costs of uncovering and replacing the work shall be added to the contract sum by change order; and if the uncovering and replacing of the work extends the contract time, an appropriate adjustment of the contract time shall be made by change order. If such work is not in accordance with the Contract Documents, the Contractor shall pay such costs and shall not be entitled to an adjustment of the contract time or the contract sum.

# 3.19 Special Inspections

Unless otherwise indicated in the Contract Documents, all special inspections are required to be provided by an independent company, properly certified, coordinated and paid for by the Contractor.

# 3.20 Sampling and Testing

All sampling and testing is to be performed by the Contractor in order to meet the standard expressly described in the specification and in the City's Quality Assurance Program. Unless otherwise stated in the Contract Documents, all required sampling and testing will be performed directly by an independent laboratory, coordinated and paid for by the Contractor. Contractor shall cooperate with the City in coordinating the necessary testing. The coordination of testing is the responsibility of Contractor. The coordination of testing shall be the responsibility of the contractor. The frequency and location of tests shall be as indicated in the Special Provisions and the Technical Specifications. All compaction test sites deeper than five (5') feet below grade shall be properly shored by the Contractor to protect testing personnel.

The cost for performing re-tests due to failures, or additional call-outs if work is not ready to test, will be paid for by the Contractor. The City shall require retesting until all required tests are successfully passed.

# **SECTION 4 – CHANGES IN WORK**

### 4.01 Limited City Authority to Approve Change Orders

The Contractor recognizes that the City is a public agency and that it can only act through its duly authorized agents. In this regard, the Contractor agrees that only written change orders, executed by the City, shall be valid.

### 4.02 Contractor Liability for Unapproved Change Orders

Unless a valid change order is issued, all changes in the work performed by the Contractor shall be at the Contractor's own risk, and shall not be entitled to any additional compensation. Furthermore, the Contractor may be required to make the work conform to the plans and specifications. No act or series of acts by the City during the course of the contract shall be deemed to constitute a waiver of the City's rights to rely upon this provision.

### 4.03 Non-Material Change Requests by the Contractor

Changes in the plans and specifications requested in writing by the Contractor, which do not materially affect the work and which are not detrimental to the work or to the interests of the City, may be granted to facilitate the work, when approved in writing by the Engineer. If such changes are granted, they shall be made at a reduction in cost or at no additional cost to the City. Nothing herein shall be construed as granting a right to the Contractor to demand acceptance of such changes or to increase the contract sum or contract time as a result of the proposed change.

### 4.04 Directives

The Engineer may issue Directives in the form of Field Orders, Clarifications, responses to Requests for Information, or any other document which makes interpretations or clarifications to the Contract Documents. Directives shall be binding upon the Contractor, and the Contractor shall promptly carry out the requirements of such Directives.

#### 4.05 Requests for Information, Inconsistencies and Changed Conditions

Before undertaking each part of the work, the Contractor shall carefully study all pertinent figures shown in the Contract Documents and verify that all applicable field measurements are free of conflicts, errors, discrepancies, inconsistencies and omissions. If such conditions are discovered, the Contractor shall notify the Engineer by writing a Request for Information, and await direction from the Engineer before proceeding.

The means of seeking this clarification shall be via e-Builder Request for Information process.

If the Contractor encounters a changed condition, as defined by one or more of the conditions below, the Contractor shall notify the Engineer by submitting a Request for Information before proceeding.

- a. Material differing from that represented in the Contract which the Contractor believes may be hazardous waste, as defined by Health and Safety Code, Section 25117 that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provision of existing law; and
- b. Subsurface or latent physical conditions at the site differing materially from those represented in the Contract Documents; and
- c. Unknown physical conditions at the site of any unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in the work and of the character provided for in the Contract Documents.

No extension of Contract time shall be made by the City due to the Contractor's failure to provide a timely written notice of any inconsistency or changed condition requiring direction. The Engineer will respond to the Contractor's Request for Information, providing an interpretation, clarification or change order for an appropriate adjustment in contract time and cost pursuant to General Provisions, Section 4.07, "Change

Orders". Contractor shall wait for the Engineer's written response to a Request for Information before proceeding with any work.

The Contractor shall not be liable to the City for failure to report any conflict, error, or discrepancy in the Contract Documents, unless the Contractor had actual knowledge or could foresee such conditions as may be discovered by a reasonable examination of the work site or materials. If the Contractor performs any construction activity in which he knows or should know involves an error, inconsistency, ambiguity, or omission referred to in this Section, without notifying and obtaining the written consent of the Engineer, Contractor shall be responsible for the resultant costs, including, without limitation, the costs of correcting defective work. However, in an emergency affecting the safety of persons or property, the Contractor shall take all reasonably necessary precautions to prevent or minimize damage, injury, or loss.

### 4.06 Extra Work

New or unforeseen work may be classified as "Extra Work" when the Engineer determines that the work is not covered by contract unit prices, not stipulated in the scope of work, represents work that is substantially different from what the Contractor bid upon, or falls under the category of a changed condition. The General and Special Provisions shall apply to all of the work, including extra work authorized. Payment for extra work will be made on the basis of General Provisions, Section 4.07, "Change Orders".

The Contractor shall maintain records sufficient to distinguish the direct cost of extra work from the cost of other operations. The Engineer will compare his records with the Contractor's reports, to make the necessary adjustments and compile the costs associated with the extra work.

When extra work reports are agreed upon and signed by both parties, they shall become the basis of payment. When extra work is still under negotiation or has not been agreed upon, the Contractor shall keep daily detailed and accurate records itemizing each element of cost and shall provide certified payroll, invoices, and other substantiating records and documentation.

When extra work is to be paid on a force account basis, the labor, materials and equipment used in the performance of that work shall be paid in accordance with the following. To the total of the direct costs computed, there will be an added markup of 35% to the cost of labor, 15% to the cost of materials and 15% to the cost of equipment. These markups shall constitute full compensation for any and all overhead costs, profit, or other costs not specifically designated as a cost of labor, material or equipment. When subcontractors perform force account work, an additional 5% markup shall be added to the total cost of the extra work to reimburse the Contractor for additional administrative costs. No markup for any subcontractor beyond the first tier shall be paid.

During the performance of extra work by force account, and as a condition to the Contractor's right to an adjustment of the contract sum, the Contractor shall prepare daily reports itemizing all costs for labor, materials, and equipment rental. For labor costs, the reports shall include names, job classifications, hours worked and rates of pay. For equipment costs, the reports shall include size, type, identification number and hours of operation. All records and reports shall be submitted to the Engineer for approval on a daily basis. Reports shall be made on the City of East Palo Alto Daily Extra Work Report form.

### 4.07 Change Orders

At any time during the progress of the work, and without in any way rendering void the Contract, the City may order alterations, additions or deductions from the work by change order, without notice to sureties. When so ordered in writing, the Contractor shall proceed with work as directed by the change order.

The change order shall describe the change in the work, the adjustment of the contract sum (if any), and the adjustment of the contract time (if any). The Contractor shall not be entitled to any extension of time for the completion of the work by virtue of any change order unless the change order specifically affects the controlling operation and provides for this. If, after receiving a change order, the Contractor feels that they are entitled to an extension of time, the Contractor may, within five (5) working days file a written request for consideration by the Engineer.

The process of submitting a proposed change, a cost proposal, negotiating an agreed upon change order, or any failure to reach an agreement as to an adjustment in the contract sum or the contract time, shall not relieve the Contractor of their obligation to perform in accordance with the Contract Documents.

Change orders may be Unilateral Change Orders or Agreed Upon Change Orders. Upon the receipt of either form of change order, the Contractor shall proceed promptly and diligently with the extra work.

- a. Unilateral Change Orders A Unilateral Change Order may be issued by the City without the Contractor's signature where the City determines that it is in the City's best interest to proceed with the work, and the change does not materially alter the character of the work. The Contractor shall be deemed to have accepted the terms of any Unilateral Change Order unless the Contractor submits a written protest with respect to the change order, no later than ten (10) working days following the Contractor's receipt of the change order. See General Provisions, Section 4.08, "Disputed Work".
- b. Agreed Upon Change Orders Within five (5) working days after receiving a request from the City for a written proposal for an Agreed Upon Change Order, the Contractor shall provide the Engineer with a cost proposal in a form satisfactory to the Engineer, setting forth the Contractor's proposed adjustments to the contract sum and contract time for performing the extra work.

Compensation for Agreed Upon Change Orders shall be calculated based upon the bid item unit prices stated in the Bid Schedule and no additional markup for overhead or profit will be provided. If there are no unit prices for the extra work, the Contractor and the City may agree upon unit prices or lump sum prices, which shall be used to increase or decrease the contract sum. When extra work changes the scope of bid item work, payment can be made by paying an agreed upon unit price adjustment or lump sum price adjustment of compensation. In the absence of price agreement, the contract sum shall be adjusted by force account.

The City pays for change order work based on one or a combination of the following:

- 1. Bid item unit prices
- Agreed upon unit prices
   Agreed upon lump sum price
- 4. Force account
- 5. Adjustment of compensation

**Changed Quantity Payment Adjustments:** 

- Increases of More Than 25 Percent If the total bid item quantity exceeds 125 percent of the а quantity shown on the Bid Item List and if no approved Change Order addresses payment for the quantity exceeding 125 percent, the Engineer may adjust the unit price for the excess quantity under the 2010 State Standard Specification, Section 9-1.04 (force account) or the following:
  - 1. The adjustment is the difference between the unit price and the unit cost of the total item pay quantity.
  - 2. In determining the unit cost, the Engineer excludes the item's fixed costs. You have recovered the fixed costs in the payment for 125 percent shown on the Bid Item List.
  - 3. After excluding fixed costs, the Engineer determines the item unit cost under the 2010 State Standard Specification, Section 9-1.04 (force account).
  - 4. If the payment for the number of units of a bid item in excess of 125 percent of the Bid Item List is less than \$5,000 at the unit price, the Engineer may not adjust the unit price unless you request it.
- b. Decreases of More Than 25 Percent If the total item pay quantity is less than 75 percent of the quantity shown on the Bid Item List and if no approved Change Order addresses payment for the quantity less than 75 percent, you may request a unit price adjustment. The Engineer may adjust the unit price for the decreased quantity under the 2010 State Standard Specification, Section 9-1.04 (force account) or the following:
  - 1. The adjustment is the difference between the unit price and the unit cost of the total pay

quantity.

- 2. In determining the unit cost, the Engineer includes the item's fixed costs.
- 3. After including fixed costs, the Engineer determines the item unit cost under the 2010 State Standard Specification, Section 9-1.04 (force account).
- 4. The City does not pay more than 75 percent of the item total in the Bid Item List.
- c. Eliminated Items
  - 1. If the Engineer eliminates an item, the City pays your costs incurred before the Engineer's elimination notification date.
  - 2. If you order authorized material for an eliminated item before the notification date and the order cannot be canceled, either of the following occurs:
  - 3. If the material is returnable to the vendor, the Engineer orders you to return the material and the Department pays your handling costs and vendor charges.
  - 4. The City pays your cost for the material and its handling and becomes the material owner.
  - 5. The Engineer determines the payment for the eliminated bid item under the 2010 State Standard Specification, Section 9-1.04 (force account).

Agreed Upon Price Adjustments – If there are no unit prices for proposed extra work, the Contractor and the City may agree upon unit prices or lump sum costs, by written change order, prior to commencing work. In the absence of any such agreement, the contract sum shall be adjusted by force account.

Force Account – When extra work is to be paid on a force account basis, the labor, materials and equipment used in the performance of that work shall be paid in accordance with the 2010 State Standard Specification, Section 9-1.04 (force account) and as provided for below. To the total of the direct costs computed, there will be an added markup of 35% to the cost of labor, 15% to the cost of materials and 15% to the cost of equipment. These markups shall constitute full compensation for any and all overhead costs, profit, or other costs not specifically designated as a cost of labor, material or equipment. When subcontractors perform force account work, an additional 5% markup shall be added to the total cost of the extra work to reimburse the Contractor for additional administrative costs. No markup for any subcontractor beyond the first tier shall be paid.

- a. *Labor* Labor costs shall be based on the prevailing wage scale for each craft or type of work. Employer payments for payroll taxes and insurance, health and welfare, pension, vacation, and other direct labor costs shall be included and will be calculated as the Labor Surcharge stipulated in the State of California, Labor Surcharge and Equipment Rental Rates book.
- b. Materials Materials cost shall be the cost of all materials purchased by the Contractor and used in the extra work and shall be the actual cost of such materials, including sales taxes, freight and delivery charges. The City reserves the right to approve materials to be furnished by the Contractor, sources of supply or, if necessary, to furnish the materials to the Contractor. No compensation will be paid to the Contractor for any material furnished by the City or for materials not used.
- c. Equipment Rental The Contractor will be allowed the actual rental rate of equipment, prorated over the time the machinery or equipment is required. For Contractor owned equipment, this rate shall be as stipulated in the State of California, Labor Surcharge and Equipment Rental Rates book. In addition, the Contractor will be allowed reasonable move-in and move-out charges, if applicable. All equipment shall, in the opinion of the Engineer, be in good working order, good condition, and suitable for its purpose. Equipment or tools having a replacement value of \$200.00 or less, whether or not consumed by use, shall be considered small tools and no payment will be made therefore.
- d. Other Services or Expenditures The City may authorize and approve payment for work performed by special forces or necessary services and expenditures other than labor, materials, and equipment rental.

During the performance of extra work by force account, and as a condition to the Contractor's right to an adjustment of the contract sum, the Contractor shall prepare daily reports itemizing all costs for labor,

materials, and equipment rental. For labor costs, the reports shall include names, job classifications, hours worked and rates of pay. For equipment costs, the reports shall include size, type, identification number and hours of operation. All records and reports shall be submitted to the Engineer for approval on a daily basis. Reports shall be made on the City of East Palo Alto Daily Extra Work Report Form.

### 4.08 Resolution of Disputes

It is the intent of this Contract that disputes regarding the Contract be resolved promptly and fairly between the City and the Contractor. However, it is recognized that some disputes will require detailed investigation and review by one or both parties before a determination and resolution can be reached. For the protection of the rights of both the Contractor and the City, the following is required to initiate review, determination and resolution.

<u>4.08.1 Notice</u> - Contractor shall provide a written notice of disputed work to the Engineer's attention prior to the commencement of and sufficiently in advance of performing the disputed work to allow the Engineer initial review of the disputed work. The notice shall be submitted in accordance with General Provisions, Section 4.05, "Requests for Information, Inconsistencies and Changed Conditions". If the Contractor disagrees with the Engineer's decision, or in any case where the Contractor deems additional compensation or a time extension to the Contract time is due the Contractor for work or materials not covered in the Contract or which the Engineer has not recognized as extra work, the Contractor shall notify the Engineer, in writing, of its intention to dispute the Engineer's decision.

Timely notice of potential claim is of great importance to the Engineer and the City, and is not merely a formality. Such notice allows the City to consider preventative action, to monitor the Contractor's increased costs resulting from the situation, to marshal facts, and to plan its affairs. Such notice by the Contractor, and the fact that the Engineer has kept account of the work in question, shall not in any way be construed as proving the validity of the dispute.

Notice pertaining to decisions provided in General Provisions, Section 4.05, "Requests for Information, Inconsistencies and Changed Conditions", or such other determinations by the Engineer shall be filed in writing to the Engineer within ten (10) days of receipt of such decision and prior to the commencement of such work. Written notice shall be clearly titled "Notice of Potential Claim" and shall be numbered starting with Number 1.

Such notice of potential claim must be stated with specificity, including identification of the event giving rise to potential claim, the date of the event, and the asserted effect on contract sum and contract time. The notice of potential claim shall include adequate supporting data. Adequate supporting data for a potential claim for an adjustment of the contract time shall include scheduling data demonstrating the impact of the event on the completion of the work. Adequate supporting data for a potential claim for an adjustment of the contract sum shall include a detailed cost breakdown of the items allowed, isolating labor, material, and equipment costs, and providing detailed quantities and unit prices for changed work. If the exact amount of a potential claim is not ascertainable at the time such potential claim is made, the supporting data currently available shall be submitted. Supplemental data supporting the exact amount of the potential claim shall be submitted as soon as available.

In proceeding with a disputed portion of the Work, the Contractor shall keep accurate records of all costs, including a summary of the hours and classification of equipment and labor utilized on the disputed work, as well as a summary of any materials or any specialized services which are used. Such information shall be submitted to the Engineer daily, receipt of which shall not be construed as an authorization for or acceptance of the disputed work.

No claim for additional compensation or extension of time for a delay will be considered unless the provisions of General Provisions, Section 7.17, "Delays and Extensions of Time" are complied with. No claim filed after the date of final payment will be considered.

Unless notice is properly given, the Contractor shall not recover costs or any damages incurred by it because of the alleged extra work, changed work or other situation which had required notice been given, would have given rise to a right for additional compensation. <u>4.08.2 Response by Engineer</u> - The Engineer shall review the "Notice of Potential Claim" and within ten (10) days of receipt of the notice shall respond to the Contractor in writing with its determination, or if it is necessary to extend this period, the Engineer shall notify the Contractor in writing as to when a decision will be provided.

<u>4.08.3 Appeals to the Assistant Director of Public Works/City Engineer</u> - In the event the Contractor disagrees with the Engineer's determination provided in accordance with Section 4.08.2, "Response by Engineer", the Contractor may, within ten (10) days of receipt of such determination, appeal the determination to the Assistant Director of Public Works/City Engineer for review. The Assistant Director of Public Works/City Engineer and transmit the decision in writing to the Contractor within 30 days from the date of receipt of the appeal.

In the event the Contractor disagrees with the determination of the Assistant Director of Public Works/City Engineer, the Contractor shall notify the Engineer, in writing within ten (10) days of receipt of such determination, of its intention to file a claim in accordance with General Provisions, Section 4.09, "Resolution of Claims Under Public Contract Code Section 20101" and Section 4.10. "Resolution of Claims under Public Contract Code Section 9204". Failure of the Contractor to appeal the determination of the Engineer within said ten (10) day period shall constitute a waiver of the Contractor's right to file a claim resulting from such determination or decision.

<u>4.08.4 Dispute Meetings</u> - From time to time the Contractor may request or the Engineer may call a special meeting to discuss outstanding disputes should it deem this a means of possible help in the resolution of the dispute. The Contractor shall cooperate and attend prepared to discuss its dispute and make available the personnel, subcontractors and suppliers necessary for resolution, and all documents which may reasonably be requested by the Engineer.

<u>4.08.5 Submission of Potential Claim Costs</u> – Potential claim costs must be submitted within thirty (30) days after the last cost of work for which the Contractor contends it is due additional compensation. But if costs are incurred over a span of more than thirty (30) days, then within fifteen (15) days after the thirtieth day and every month thereafter, the Contractor shall submit to the Engineer, as best the Contractor is able, its costs incurred for the claimed matter.

Potential claims shall be made in itemized detail and should the Engineer be dissatisfied with the format or detail of presentation, upon request for more or different information, the Contractor will promptly comply, to the satisfaction of the Engineer. If the additional costs are in any respect not knowable with certainty, they shall be estimated as best can be done. The Engineer shall have the right as provided in Section 4, "Changes in Work" to review the Contractor's records pertaining to a submitted claim. In case the claim is found to be just, it shall be allowed and paid for as provided in Section 4, "Changes in Work".

# 4.09 Resolution of Claims Under Public Contract Code Section 20104

Disputes pertaining to this Agreement for three hundred and seventy-five thousand dollars (\$375,000) or less which cannot be resolved between the parties pursuant to Section 4.08, "Resolution of Disputes", shall be resolved pursuant to the provisions of Public Contract Code commencing at Section 20104.

<u>4.09.1 Disputes for \$375,000 or Less</u> - Said Code sections provide in part that: Under the law (starting at Public Contract Code Section 20104.2) construction claims of \$375,000.00 or less on local public agency construction contracts must be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment.

The City must respond in writing to any written claim of three hundred seventy-five thousand dollars (\$375,000) or less within 60 days (or, in the case of claims of less than \$50,000, within 45 days) of receipt of claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the City may have against the claimant.

If additional information is thereafter required, it shall be requested and provided, pursuant to Public Contract Code Section 20104.2, upon mutual agreement of the City and the claimant.

The City's written response to the claim, as further documented, shall be submitted to the claimant within 30 days (or, for claims of less than \$50,000, within 15 days) after receipt of the further documentation, or within a period of time no greater than that taken by the claimant in producing the additional information or requested documentation, whichever is greater.

If the claimant disputes the City's written response (or if the City fails to respond within the time periods prescribed above) the claimant may notify the City, in writing, within 15 days of receipt of the City's response or within 15 days of the City's failure to respond within the times prescribed, respectively, and demand an informal settlement conference. The City must then schedule a settlement conference within 30 days.

Following the settlement conference, if the claim or any portion remains in dispute, the claimant may file a claim as required by the claims statute commencing at California Government Code Section 910 and in accordance with the East Palo Alto Municipal Code. The time within which a Government Code claim must be filed is tolled from the time the claimant submits the Public Contract Code claim until the time when the claim is denied. Pursuant to East Palo Alto Municipal Code, the claim must be filed with the City Clerk.

<u>4.09.2 Disputes Exceeding \$375,000</u> - Unless this Contract provides otherwise, all claims between the City and the Contractor that are not resolved between the parties and are not governed by Public Contract Code Section 20104 shall be resolved per the procedures established in Public Contract Code Section 9204 and per Section 4.10, "Resolution of Claims under Public Contract Code Section 9204" below.

<u>4.09.3 Civil Action Proceedings</u> - If a civil action is filed to resolve the claim, then between 30 and 60 days after the filing of responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by the parties. The parties are given 15 days to select a disinterested third person as mediator. Mediation must commence within 30 days of submittal and conclude within 15 days of commencement unless the time is extended for good cause by the court.

If the matter remains in dispute, the case must be submitted to judicial arbitration pursuant to procedures set forth in the Code of Civil Procedure commencing at Section 1141.10. Discovery is permitted consistent with the rules pertaining to judicial arbitration.

Arbitrators shall be experienced in construction law.

A party who appeals an arbitration award and does not obtain a more favorable judgment shall pay the attorney's fees on appeal of the other party. The City must pay interest at the legal rate on any arbitration award or judgment, commencing on the date when suit was filed. Except as otherwise provided in the Contract, the City must pay the undisputed portions of any claims.

Should either party to this Contract bring legal action against the other, the case shall be handled either by the Superior Court of the State of California in the County of Santa Clara, or the United States District Court, Northern District of California. The Agreement shall be construed and its performance enforced under California Law.

### 4.10 Resolution of Claims under Public Contract Code Section 9204

The provisions of this section are provided pursuant to Public Contract Code Section 9204. These provisions are applicable only until January 1, 2020 and then are repealed and not applicable to this Contract unless another State statute extends the date of these provisions.

<u>4.10.1 Claim Definition</u> - "Claim" means a separate demand by the Contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

a. A time extension, including, without limitation, for relief from damages or penalties for delay assessed by the City.

b. Payment by the City of money or damages arising from work done by, or on behalf of, the Contractor pursuant to the Contract and payment for which is not otherwise expressly

provided or to which the Contractor is not otherwise entitled.

c. Payment of an amount that is disputed by the City.

<u>4.10.2 Claim Process</u> - Upon receipt of a claim pursuant to this Section, the City shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, the City and Contractor may, by mutual agreement, extend the time period provided in this subsection.

The Contractor shall furnish reasonable documentation to support the claim.

If the City needs approval from the City Council to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the City Council does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the City shall have up to three days following the next duly publicly noticed meeting of the City Council after the 45-day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the City issues its written statement. If the City fails to issue a written statement, provision of General Provisions, Section 4.10.3.1, "City's Failure to Respond", shall apply.

<u>4.10.3 Disputed Claims</u> - If the Contractor disputes the City's written response, or if the City fails to respond to a claim issued pursuant to this section within the time prescribed, the Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the City shall schedule a meet and confer conference within 30 days for settlement of the dispute.

Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the City shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the City issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the City and the Contractor sharing the associated costs equally. The City and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

Unless otherwise agreed to by the City and the Contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Public Contract Code Section 20104.4 to mediate after litigation has been commenced.

<u>4.10.3.1 City's Failure to Respond</u> - Failure by the City to respond to a claim from the Contractor within the time periods described in this subsection or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied because of the City's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the Contractor.

<u>4.10.3.2 Interest</u> - Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

<u>4.10.3.3 Subcontractor Claims</u> - If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against the City because privity of contract does not exist, the Contractor may present to the City a claim on behalf of a subcontractor or lower tier subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the Contractor present a claim for work which was performed by the subcontractor requesting that the claim be presented to the City shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the Contractor shall notify the subcontractor in writing as to whether the Contractor presented the claim to the City and, if the Contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

<u>4.10.3.4 Waiver of Provisions</u> - A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) the City may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

# SECTION 5 – CONTROL OF MATERIALS

### 5.01 Materials and Workmanship

All materials, parts and equipment furnished by the Contractor in the work shall be new, high grade, and free from defects. Workmanship shall be in accordance with generally accepted standards. Materials and workmanship shall be subject to the Engineer's approval.

Materials and workmanship not conforming to the requirements of these specifications shall be considered defective and will be subject to rejection. Defective work or material, whether in place or not, shall be removed immediately from the site by the Contractor, at the Contractor's expense, when so directed by the Engineer.

If the Contractor fails to replace any defective or damaged work or material after notice from the Engineer, the Engineer may cause such work or materials to be replaced. The replacement expense shall be deducted from the amount to be paid to the Contractor.

Used or secondhand materials, parts and equipment is permissible only if permitted by the Special Provisions.

Submittals for specialized material or equipment to be used in the work that is not readily available from material suppliers (such as electroliers, luminaries, signal poles, heads, cable, controllers, pumps, etc.) shall be submitted within five (5) working days after Notice to Proceed. Time extensions will not be granted for project delays due to the unavailability of such specialized material and equipment unless the Contractor furnishes the Engineer with documentation of purchase order dates, acceptable reason for delay of delivery, or proof of diligent efforts to obtain said items from alternate sources.

The Contractor shall provide the Engineer with periodic reports to inform the Engineer of any changes in the projected material or equipment delivery dates.

#### 5.02 Protection of Work and Materials

The Contractor shall provide and maintain storage facilities and employ such measures as will preserve the specified quality and fitness of materials to be used in the work. Stored materials shall be reasonably accessible for inspection. The Contractor shall also adequately protect new and existing work and equipment for the duration of the contract.

The Contractor shall not, without the City's consent, assign, sell, mortgage or remove equipment or materials which have been installed or delivered and which may be necessary for the completion of the contract.

#### 5.03 Trade Names or Approved Equals

Whenever any particular material, process, or equipment is indicated by patent, proprietary or brand name, or by name of a manufacturer, such wording is used for the purpose of facilitating its description and shall be deemed to be followed by the words "or approved equal". Because products specified may have a uniqueness that can't be matched, the Contractor must "bid" the work based upon the products specified. If, during the submittal process, an equivalent product is proposed by the contractor, the contractor must provide data to show that the product is considered equal. Contractor shall also identify any price differences, which shall be considered as part of the substitution and if accepted, shall result in an appropriate credit or cost to the City by change order should the substitution be made.

Wherever catalog numbers and specific brands of trade names followed by the designation "or approved equal" are used in conjunction with a designated material, product, item, or service mentioned in these specifications, they are used to establish the standards of quality and utility required. "Or approved equal" proposals will be subject to acceptance by the City.

Unless otherwise authorized by the Engineer, the proposed substitution must be submitted in sufficient time, before the normal use or installation of the material, process or equipment, for the Engineer to determine the equivalency and for the Contractor to make any required purchases (including delivery).

At the Contractor's expense, shall furnish data concerning items offered by the Contractor as equivalent to those specified. The Contractor shall have the material tested as required by the Engineer to determine that the quality, strength, physical, chemical, or other characteristics, including durability, finish, efficiency, dimensions, service, and suitability are such that the item will fulfill its intended function. Installation and use of a proposed item shall not occur until after approval by the Engineer.

Test methods shall be submitted for approval by the Engineer prior to the test being performed on an item proposed for substitution. Test results shall be reported promptly to the Engineer, who will evaluate the results and determine if the proposed item is equivalent. The Engineer shall determine whether the material offered is equivalent to that specified, and the Engineer's findings shall be final. If a substitute offered by the Contractor is found to be not equal to the specified material, the Contractor shall furnish and install the specified material.

The specified contract completion time shall not be affected by any circumstances developing from the provisions of this Section.

# 5.04 Inspection of Materials by City

Unless otherwise specified, inspection may be required at the source for such typical materials and fabricated items as bituminous paving mixtures, structural concrete, metal fabrication, metal casting, welding, concrete pipe manufacture, protective coating application, and similar shop or plant operations.

Standard items of equipment such as electric motors, conveyers, elevators, plumbing fixtures, etc., are subject to inspection at the job site. Special items of equipment such as designed electrical panel boards, large pumps, sewage plant equipment, etc., are subject to inspection at the source, normally only for performance testing. The Special Provisions may specify additional inspection requirements.

### 5.05 Inspection of Materials by Others

When the City does not elect to make its own inspection at the source, the Contractor shall, at its expense, engage an inspector or accredited testing laboratory to inspect the materials, equipment or process. The inspector or representative of the testing laboratory shall judge the materials by the requirements of the plans and specifications. No materials or equipment shall be shipped nor any processing, fabrication or treatment of such materials shall be done without a favorable inspection. These materials shall be subject to re-inspection at the job-site.

### 5.06 Certification

The Engineer may waive material testing requirements of the Specifications and accept the manufacturer's written Certificate of Compliance or test data demonstrating that the materials to be supplied meet the requirements of the Specifications. A Certificate of Compliance is acceptable for authorizing the use of steel pipe in sizes less than 18 inches and vitrified clay, cast iron or ductile iron pipe in all sizes. The City may request any materials used on the basis of a Certificate of Compliance to be sampled or tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Contractor of the responsibility for incorporating materials in the work which conforms to the requirements of the Contract Documents. The Certificate of Compliance shall be signed and dated by the manufacturer, state the lot number for which the Certificate applies, indicate the specifications which the materials comply with, state the quantity of material covered by the certificate, and clearly demonstrate that the materials certified are specifically to be used for this project. Unsigned, generic, or non-project specific certificates of compliances will not be accepted as a means of release. In addition, the Contractor's Quality Control Manager shall be responsible for reviewing the Certificates of Compliances to verify acceptability and conformance with these specifications prior to submitting to the City.

### 5.07 Weighing and Metering Equipment

All scales and metering equipment used for proportioning materials shall be inspected for accuracy and certified within the past 12 months by the State of California Bureau of Weights and Measures, by the County Director or Sealer of Weights and Measures, or by a scale mechanic registered with or licensed by the County.

The accuracy of the work by a scale service agency, except as stated herein, shall meet the standards of the California Business and Professions Code and the California Code of Regulations pertaining to weighing devices. A certificate of compliance shall be presented to the Engineer for approval prior to operation, and shall be renewed whenever required by the Engineer at no cost to the City.

All scales shall be arranged so they may be read easily from the operator's platform or area. They shall indicate the true net weight without the application of any factor. The figures of the scales shall be clearly legible. Scales shall be accurate to within 1 percent when tested with the plant shut down. Weighing equipment shall be so insulated against vibration or moving of other operating equipment in the plant area such that the error in weighing with the entire plant running will not exceed 2 percent for any setting nor 1.5 percent for any batch.

# 5.08 Calibration of Testing Equipment

Testing equipment, such as but not limited to, pressure gages, metering devices, hydraulic systems, force (load) measuring instruments, and strain-measuring devices shall be calibrated by a testing agency acceptable to the Engineer at intervals not to exceed 12 months, and following repairs, modification, or relocation of the equipment. Calibration certificates shall be provided when requested by the Engineer.

# **SECTION 6 – UTILITIES**

### 6.01 Contractor's Obligation to Identify and Protect Subsurface Infrastructure

The Contractor shall locate and protect service laterals, conduits, and appurtenances of any underground facility, the presence of which could be reasonably inferred from the Contract Documents or from the presence of visible facilities such as buildings, meters, and junction boxes, prior to doing any work that may damage any such facilities, or interfere with their service. Where underground main distribution conduits, such as water, gas, sewer, electric power, telephone, or cable television are shown on the plans, the Contractor shall assume that every parcel will be served by a service connection for each type of utility. The Contractor shall comply with all requirements for the protection of underground infrastructure.

It shall be the Contractor's responsibility to complete all work in a manner that satisfies utility company standards, providing if requested, detailed plans prepared by a California Registered Civil Engineer showing necessary temporary support of utilities during coordinated construction work. The Contractor is directed to contact these agencies before submitting bids and to be familiar with their requirements.

The Contractor agrees to assume liability and to hold the City of East Palo Alto, its officers, and employees harmless from any damages resulting from the existence of underground utilities and structures not reported to the Engineer, not indicated on the public records examined, or located at variance with that reported or shown on records examined.

### 6.02 Location

The City will search known records and indicate on the plans those utilities, except service connections, which may affect the work. All available information regarding removal, relocation, or disconnection of utilities, or installation of new utilities, will be furnished to prospective bidders before the receipt of bids. The Contractor shall immediately report to the Engineer those utilities omitted from the plans or found substantially at variance with the location shown.

Existing and proposed utilities and improvements are shown in their approximate locations. Locations may not have been field verified and no guarantee is made as to the accuracy and completeness of the information shown. The fact that any facility is not shown on the plans shall not relieve the Contractor of responsibility under this Section. It shall be the Contractor's responsibility to determine the existence and location of utilities shown on the plans, indicated by field locating services, or evidenced by facilities visible in the field. No additional compensation will be allowed for delays incurred as a result of the Contractor's failure to field verify and/or pothole existing utilities prior to beginning construction. Potholing shall be considered as part of the various contract bid items and no additional compensation will be allowed.

At least two (2) working days prior to commencing work, the Contractor shall request utility owners to mark or otherwise indicate the location of their substructures. Contractor shall contact Underground Service Alert (USA) at (800) 642-2444 and the Engineer at least 48 hours prior to excavation. The locations of utilities as shown on the plans are approximate and are not to be construed as certainty. It shall be the Contractor's responsibility to determine the true location and depth of all utilities and service connections affecting or conflicting with the work, prior to the performance of the work. As necessary, the Contractor shall pothole these utilities prior to working in the area to avoid damage to them. Potholing shall be considered as part of the contract bid items, and no separate payment will be made. Contractor shall familiarize himself with the type, material, age and condition of any utility which may be affected by the work.

### 6.03 Protection

As necessary or as directed by the Engineer, the Contractor shall field adjust proposed improvements to avoid conflicts with existing improvements. The Contractor shall not interrupt the service function or disturb the supporting base of any utility, without authority from the utility owner or order from the City.

Where protection is required to insure support of existing underground, overhead and at-grade utilities (including their associated structures and service connections) as shown on the plans, the Contractor shall furnish and place the necessary protection at Contractor's expense. In case of damage, the

Contractor, without additional compensation, shall restore utilities to as good of a condition as they were found.

Upon learning of the existence and location of any utility omitted from or shown incorrectly on the plans, the Contractor shall notify the City and be fully responsible for protecting such utility. When authorized by the Engineer, additional protection may be paid by change order, for utilities other than a service connection.

The Contractor shall immediately notify the Engineer and the utility owner if the Contractor disturbs, disconnects or damages any utility. If the utility is located substantially as indicated on the plans, the Contractor shall bear the costs of repair or replacement.

When placing concrete around or contiguous to any utility, at the Contractor's expense, shall furnish and install a cushion of expansion joint material, clear opening, sleeve, or other suitable material approved by the Engineer so as to prevent embedment or bonding of the utility with the concrete.

### 6.04 Shut Down Notification

Contractor shall coordinate all shut downs with the City's Public Works Department, and follow all of their requirements for exercising and shutting off water valves on main lines. The Contractor shall have all materials required for the work at the job site prior to requesting a shut off.

Shut down of water or sewer services shall be done only after the Contractor has coordinated the shut down with the Engineer and the property owners. When a water main, sewer main, or service lateral is to be shut down, the Contractor shall coordinate with and notify the Engineer in writing, at least seventy-two (72) hours in advance of the shut down. Except for scheduled shutdowns and in cases of emergency, the Contractor shall notify all customers and effected parties of a shut down at least forty-eight (48) hours in advance by writing and four (4) hours in advance by person to allow adequate draw time. Once shut down, the Contractor shall proceed with the work in an expedient manner until the water lines or sewer lines are back in service.

### 6.05 Removal

Unless otherwise specified, the Contractor shall remove all portions of interfering utilities shown on the plans as 'abandoned' or "to be abandoned in place". Before starting removal operations, the Contractor shall ascertain from the utility owner whether abandonment is complete. The costs involved in the removal and disposal of utilities to be abandoned shall be considered as part of the contract bid items, and no separate payment will be made.

### 6.06 Relocation

When feasible, the owners of utilities within the area affected by the work will complete their necessary installations, relocations, repairs, or replacements before commencement of work by the Contractor. When the Contract Documents or plans indicate that a utility is to be relocated, altered or constructed by others, the City will conduct all negotiations with the owners and the work will be done at no cost to the Contractor.

Utilities interfering with the permanent project work, discovered after the award of the contract, shall either be relocated, altered, or reconstructed by the utility owners, or the Engineer may order changes in the work to avoid interference. Such changes will be addressed in accordance with General Provisions, Section 4, "Changes in Work".

When the plans or Specifications provide for the Contractor to alter, relocate, or reconstruct a utility, all costs for such work shall be absorbed in the contract bid items. Temporary or permanent relocation or alteration of utilities by and for the Contractor's convenience shall be the Contractor's responsibility, and the Contractor shall make all arrangements, obtain all approvals, and bear all costs. The Contractor may, agree with the owner of any utility to disconnect and reconnect interfering service connections for the Contractor's own convenience or to expedite the work. The City shall not be involved in any such agreement.

# 6.07 Delays

The Contractor is responsible for notifying utility owners in time to prevent delays attributable to utility relocations or alterations as called for in the Contract Documents. The Contractor shall not be entitled to damages or additional payment if such delay does occur. The Engineer will determine the extent of the delay on the project as a whole, and any commensurate extension of time.

# 6.08 Cooperation

When necessary, the Contractor shall conduct operations so as to permit access to the worksite and provide time for utility work to be accomplished during the progress of the contract work.

# SECTION 7 – PROSECUTION AND PROGRESS

# 7.01 Notice to Proceed

Following contract execution the City shall issue the Contractor a Notice to Proceed provided that the documents are acceptable to the City. Unless stated otherwise, the contract time shall commence upon the receipt date on the Notice to Proceed.

# 7.02 Commencement of Work

Work shall commence within fifteen (15) calendar days following the receipt date on the Notice to Proceed, and shall be diligently prosecuted to completion within the time provided in the Notice to Bidders.

### 7.03 Administrative Duties

The Contractor shall coordinate the scheduling and timing of administrative duties with other activities to avoid conflicts and to ensure orderly project progress. Such activities include, but shall not be limited to, the preparation of construction schedules, preparation and processing of submittals, requests for information and responding to requests for quotations, attending and preparing for progress meetings and coordinating project closeout activities.

### 7.04 Construction Schedule

The Contractor shall submit to the Engineer an acceptable Critical Path Method (CPM) progress schedule showing the critical path for completing the various items of work within the number of contract days specified. The schedule shall show the order in which the Contractor proposes to carry out the major items of work and the dates on which the Contractor will start and finish the various items (including procurement of materials and equipment). If requested, the schedule shall reflect person/crew hours and equipment loading for various construction activities in order for the City to better evaluate the proposed schedule.

The Contractor shall submit a schedule showing all work completed within the contract time. If the Contractor's schedule shows completion prior to the contract time this creates float at the end of the schedule, as a mutual resource. For example, the City will not charge liquidated damages in case the actual completion of work goes beyond the contractor's proposed completion date as long as the contract time is not exceeded. Similarly, the Contractor cannot charge any extended overhead or any additional costs if the Contractor's proposed completion date is not met for any reason as long as the completion is not delayed beyond the contract time is the specified contract duration plus any additional days provided by contract change order.

A Preliminary Construction Schedule shall be submitted at least three (3) working days prior to the Preconstruction Conference. The Preconstruction Conference may be postponed if the Preliminary Construction Schedule is not received prior to the meeting. The Preliminary Construction Schedule shall be prepared in any time-scaled graphical form the Contractor chooses, and shall show or allow for the following;

- 1. The time scale shall be in days (not dates) and the work shall be shown as finishing on, or before, the number of days specified as the Contract Duration.
- 2. Specified Milestones shall be identified and shall conform to specification requirements.
- 3. Time for Contractor's preparation of and City's review of submittals, particularly in the early phases of the work, and for procurement activities.
- 4. Time for final inspection and completion of punchlist correction work at the end of the project.
- 5. The activities shall follow a logical progressive sequence to completion of the project.
- 6. The City will review the Preliminary Construction Schedule within the number of days stated in the Special Provisions, after receipt of the Preliminary Construction Schedule.

Within the number of days stated in the Special Provisions after receiving review comments of the Preliminary Construction Schedule, the Contractor shall submit the Baseline Construction Schedule. The

City will review the Baseline Construction Schedule within the number of days stated in the Special Provisions. No progress payments will be made until the Baseline Construction Schedule has been favorably reviewed by the City. No construction work shall commence at the site until the Baseline Construction Schedule has been favorably reviewed by the City.

With each monthly progress payment request, the Contractor shall submit an Updated Construction Schedule showing actual progress of activities to date, and the remaining activities to completion. Progress payment requests will not be actioned if not accompanied by an Updated Baseline Schedule. Upon acceptance, the Baseline Construction Schedule shall become the working construction schedule unless replaced by a Revised Construction Schedule.

If at any time the Updated Baseline Construction Schedule indicates that the completion date has fallen behind the current due date by more than either 30 days or 20% of the remaining duration, whichever is less, or the activity logic has become unfeasible for any reason, the Baseline Construction Schedule shall be revised by the Contractor. The Revised Construction Schedule shall incorporate any additional or changed work to date (identified by Contract Change Order number or Request for Quote number (but not both)) and any revised activity logic. Requirements for submittal of the Baseline Construction Schedule shall apply to the Revised Construction Schedule. Revised Construction Schedules shall be identified by sequential number and a revision date. Upon acceptance, the Revised Construction Schedule shall become the working construction schedule unless replaced by a subsequent Revised Construction Schedule. Updating of Revised Construction Schedules shall occur as specified for the Baseline Construction Schedule, including the criteria requiring further revisions.

# 7.05 Three Week Look Ahead Schedule

The Contractor is required to furnish to the Engineer, on a weekly basis at the project's weekly progress meetings, a 3-week look ahead schedule. The schedule must show planned activities in sufficient detail to allow proper monitoring of the planned construction activities.

# 7.06 Construction Sequence

When required by the Special Provisions or plans, the Contractor shall follow the sequence of operations as set forth therein. The Contractor shall prepare and submit at the pre-construction meeting a staging or phasing plan identifying the sequence of construction work and traffic control needed to complete the project. The staging plan shall be subject to review and approval by the Engineer, prior to the start of construction. The goal of the phasing plan will be to minimize impacts to surrounding businesses and residents in the project areas.

# 7.07 Recording Existing Conditions

Existing conditions throughout the project site shall be photographed and video recorded by the Contractor. Recordings of these pre-construction conditions shall be complete, comprehensive, and shall be submitted to the Engineer five (5) days before start of construction. Recording shall include and show every detail of existing improvements, including the current condition of the curb, gutter, sidewalk, signs, landscaping, streetlights, roadway, structures near the project including face of buildings, canopies, shades, fences, calabazas creek, pedestrian/bike trail, and any other features within the limits of work.

### 7.08 Preconstruction Conference

The City shall designate a date and time for the pre-construction conference once the contract has been fully executed. The meeting shall be attended by responsible representatives of the Contractor, including the designated Contractor's Representative and Job Superintendent. At the pre-construction conference, the City shall discuss various administrative procedures and project coordination issues. The City will provide one full size set of reproducible contract drawings, and one unbound set of project specifications and addenda to the Contractor at the Preconstruction Conference, or shortly thereafter. The Contractor shall be responsible for conforming the drawings and specifications to incorporate the addenda, and for printing sufficient copies of drawings and specifications for the use of the Contractor, subcontractors and suppliers.

At a minimum, the Contractor should be prepared to furnish and discuss the following:

- 1. Letter designating the Superintendent.
- 2. A list of key personnel and emergency contact information including telephone numbers to be used in case of emergency.
- 3. Preliminary schedule and project phasing plans, including lead time for submittal and fabrication of critical features.
- 4. Utility company coordination and/or permit issues.

### 7.09 Progress Meeting

The Contractor's Project Manager, Job Superintendent and if requested by the City, Subcontractors shall attend weekly progress meetings to be scheduled by the Engineer at a time agreeable to both the Engineer and the Contractor. Contractor shall also attend special meetings in addition to regular progress meetings if necessary and directed by the Engineer.

### 7.10 Hours of Construction

Construction activities shall be limited to the hours of 8:00 a.m. to 5:00 p.m., unless otherwise noted or further restricted in the Special Provisions, Contract Documents, or as directed by the Engineer. No work shall be done on weekends, holidays or outside these specified hours, unless otherwise approved by the Engineer. The Contractor shall take into consideration and coordinate time constraints for special events or activities organized by the City or other agencies. No mechanical equipment, including hauling or deliveries by trucks, shall start before 8:00 a.m. and all equipment must shut down before 5:00 p.m. unless approved by the Engineer.

Written requests to exceptions shall be provided by the Contractor at least 7 calendar days prior to proposed work.

Exceptions to working days or hours will be considered only when, in the opinion of the Engineer, construction during the specified work days/hours would inconvenience the public and neighboring residents more than working at other hours or on weekends or holidays, or is deemed to be in the best interest of the City. Exceptions will not be granted merely to expedite the construction work or for the Contractor's convenience. If these exceptions are granted, Contractor shall comply with East Palo Alto Municipal Code Section 16.08.030, which restricts hours of construction noise Monday - Friday between 7:00 a.m. and 6:00 p.m. Saturday hours of operation shall be between 8:00 a.m. - 5:00 p.m.

No work shall be performed on Sundays and City Holidays. City Holidays are:

- New Year's Eve and New Year's Day
  - If the 1<sup>st</sup> of January falls on a Saturday, the holiday will be observed on the Thursday and Friday prior to New Year's Day. If the 1<sup>st</sup> of January falls on a Sunday or Monday, the holiday will be observed on Friday and Monday.
- Martin Luther King, Jr. Day
- Lincoln's Birthday
- Cesar Chavez Day
- Presidents Day
- Memorial Day
- Independence Day
  - If the 4<sup>th</sup> of July falls on a Saturday, the holiday will be observed on the Friday prior to Independence Day. If the 4<sup>th</sup> of July falls on a Sunday, the holiday will be observed on the following Monday.
- Labor Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day

# 7.11 Prosecution of Work

To minimize public inconvenience and possible hazards and to restore the streets and other work areas to their original condition and former state of usefulness as soon as practicable, the Contractor shall diligently prosecute the work to completion. If, in the Engineer's opinion the Contractor fails to prosecute the work to the extent that the above purposes are not being accomplished, the Contractor shall, upon orders from the Engineer, immediately take the steps necessary to fully accomplish said purposes. All costs for prosecuting the work as described herein shall be absorbed in the Contractor's bid. Should the Contractor fail to take the necessary steps to fully accomplish said purposes, after orders of the Engineer to do so, the Engineer may suspend the work in whole or in part, until the Contractor takes said steps. With or without such suspension, the Engineer may cause such steps to be taken by force account or by other means at the Contractor's expense.

# 7.12 Suspension of Work

Work may be stopped or suspended in whole or in part when, in the Engineer's opinion, the suspension is necessary and in the interest of the City. The Contractor shall immediately comply with any written order of the Engineer suspending work. Suspended work shall be resumed upon written order of the Engineer. An extension of contract time equal to the period of suspension shall be issued to the Contractor by change order. Any claim by the Contractor for an adjustment of the contract sum or the contract time shall be made within ten (10) working days after the start of suspension of the work.

If work is suspended through no fault of the City, all expenses and losses incurred by the Contractor during such suspensions shall be borne by the Contractor. If the Contractor fails to properly provide for public safety, traffic, and protection of the work during periods of suspension, the City may elect to do so, and shall deduct the cost thereof from monies due the Contractor. Such action will not relieve the Contractor from any liability.

# 7.13 Default by the Contractor and Termination of Control

As a result of any of the following events, the Contractor shall be deemed to be in default:

- a. If the Contractor is in bankruptcy or makes a general assignment for the benefit of creditors, or
- b. If the Contractor fails to make prompt payment to subcontractors for labor or materials, or
- c. If a receiver is appointed on account of the Contractor's insolvency, or
- d. If the Contractor fails to provide enough properly skilled workmen or enough materials to insure compliance with the construction time schedule, or
- e. If the Contractor fails to perform any portion of the work within the timing requirements of the Contract Documents, or abandons the project site, or
- f. If the Contractor disregards instructions from the Engineer or violates any provision of the contract, or
- g. If the Contractor fails to replace or repair any damage caused by the Contractor or its agents, representatives, contractors, subcontractors, or employees in connection with the performance of the work, or
- h. If the Contractor violates any legal requirement related to the work.

In case of default, the City may give written notice to the Contractor and the Contractor's bonding agent that if the default is not remedied within ten (10) calendar days or the Contractor does not provide adequate written assurance to the satisfaction of the Engineer that the cure will be forthcoming, the Contractor's control over the work may be terminated as of the date specified in the written notice.

Upon such termination of control the City may enter upon and take possession of the entire work and may also take possession, for the purpose of completing the work, of all of the Contractor's tools, equipment and appliances upon the work, and all materials on the site or stored off-site for incorporation into the work. The City may, at its sole option and without further notice to anyone, complete the work by day labor, by contract entered into by negotiations, by competitive bidding, by calling upon the performance of the performance bond surety, or by other means as the City, in its discretion, shall elect.

After termination of the Contractor's control over the work as herein provided, the Contractor shall not be entitled to any further payments under the contract until the entire work thereunder has been fully completed and finally accepted by the City. After such completion and acceptance, if the "unpaid balance of the contract price" (as defined in the next paragraph) exceeds the sum of the amounts expended by the City in taking over and completing the work, including all managerial and administrative expense incurred by the City on account thereof and the amount of all damages incurred by the City by reason of the Contractor's default, such excess shall be paid to the Contractor. If the said amount expended exceeds the unpaid balance, the Contractor and the Contractor's surety shall be liable to the City for the difference. At the Contractor's request, the expense incurred by the City in taking over and completing the work, and the amount of any damage incurred by the City by reason of the Contractor's default shall be audited and certified by an independent third party, whose certificate thereof shall be binding and conclusive upon the parties.

For the purposes of the computations required by the paragraph above, the "unpaid balance of the contract price" shall be the original contract price as adjusted by any change orders issued prior to termination of the Contractor's control, less all payments made on account thereof prior to such termination, and less any and all amounts withheld or paid pursuant to stop notices filed with the City upon claims of subcontractors or others from equipment, labor or materials furnished to the work on behalf of the Contractor.

Upon completion and acceptance of the work, the Contractor shall be entitled to the return of all materials not used in the work, but without claim against the City for loss or damage with respect thereto, and shall be entitled to the return of all the Contractor's equipment, tools and appliances taken possession of by the City, but without claim against the City for any charge for the use thereof or for usual and ordinary depreciation and wear and tear.

The exercise of remedies provided for in this sub-section, for default by the Contractor, shall be in addition to, and shall not be deemed a waiver by the City of any other rights or remedies due the City under the contract provisions, for default by the Contractor.

# 7.14 City's Right to Terminate Contract

The City may, at its option, terminate the Agreement, in whole or from time to time in part, at any time by giving notice to the Contractor. Upon such termination, the Contractor agrees to waive any claims for damages, including loss of anticipated profits, on account thereof; and, as the sole right and remedy of the Contractor, the City shall pay the Contractor in accordance with this sub-section. Upon termination, the obligations of the Contractor for portions of the work already performed shall continue.

- a. Upon receipt of a Notice of Termination, the Contractor shall, unless the notice directs otherwise, do the following:
  - 1. Immediately discontinue the work to the extent specified in the notice.
  - 2. Place no further orders or subcontracts for materials, equipment, services, or facilities, except as may be necessary to complete such portion of the work that are not to be discontinued.
  - 3. Promptly cancel, on the most favorable terms reasonably possible, all subcontracts to the extent that they relate to the performance of the discontinued portion of the work.
  - 4. Thereafter do only such work as may be necessary to preserve and protect the work already in progress and to protect materials, plants, and equipment on the project site or in transit thereto.
- b. Upon such termination, the City shall pay to the Contractor as a sole and exclusive remedy for the termination, the sum of the following, and the Contractor will be entitled to no other compensation or damages, and expressly waives same:
  - 1. The amount of the contract amount allocated to the portion of the work properly performed by the Contractor as of the date of termination, less sums previously paid to the Contractor, plus
  - 2. Previously unpaid costs of any items delivered to the project site which were fabricated for

subsequent incorporation in the work, plus

- 3. Any proven losses with respect to materials and equipment directly resulting from such termination, plus
- 4. Reasonable demobilization costs in excess of what would have been incurred if work were not terminated, plus
- 5. Reasonable costs for preparing a statement of the aforesaid costs, expenses, and losses in connection with such termination.

The City may terminate the Agreement at its own discretion or when conditions encountered during the work make it impossible or impracticable to proceed, or when the City is prevented from proceeding with the Agreement by act of God, by law, or by official action of a public authority.

### 7.15 Time of Completion and Days Charged

The Contractor shall diligently prosecute and fully complete the work within the number of calendar or working days set forth in the Notice to Bidders or shall be subject to liquidated damages. Full liquidated damages will be assessed for delays beyond the required substantial completion date. Reduced liquidated damages will be assessed for delays after the substantial completion date. LDs Time is of the essence in the performance of all obligations under the Contract Documents, and all timing requirements shall be strictly adhered to unless otherwise modified by the City. See General Provisions, Sections 7.12, "Prosecution of Work", and 7.16, "Liquidated Damages".

Under a calendar day contract, City observed holidays and inclement weather delays are to be anticipated and unless there is a deviation from what is customary for the time of year the project is under construction, no additional days will be granted. Every day, including holidays, Saturdays and Sundays shall be counted as a day charged under a calendar day contract.

Under a working day contract, the Contractor will be given credit for City observed holidays and inclement weather delays, in accordance with the State Standard Specifications. Should the Contractor prepare to begin work at the regular starting time in the morning of any day on which inclement weather, or the conditions resulting from the weather prevents the work from beginning at the usual starting time and the crew is dismissed as a result thereof and the Contractor does not proceed with at least 75 percent of the normal labor and equipment force engaged in the current controlling operations for at least 60 percent of the total daily time being currently spent on the controlling operations, the Contractor will not be charged for a working day whether or not conditions should change thereafter.

### 7.16 Liquidated Damages

The City and the Contractor, by execution of the agreement, each agree that time is of the essence in the performance of the work, and that actual damages for inconvenience and loss from any delay in completion of the contract beyond the date provided in the Notice to Bidders is extremely difficult or impossible to determine.

The City and the Contractor further agree, as specified in the Notice to Bidders, that liquidated damages shall be assessed for each and every calendar or working day required to complete the contract in excess of the contract time established for the project, and that the amount stated therein is a reasonable estimate of the amount of such damages. The Engineer may deduct any liquidated damaged owed to the City, as determined by the Engineer from any payments otherwise payable to the Contractor under this agreement.

Nothing contained herein shall limit the City's rights or remedies against Contractor for any default other than failure to complete the work within the contract time. This provision for liquidated damages shall not be applicable nor act as a limitation upon the City if the Contractor abandons the work. In such event, the Contractor shall be liable to the City for all losses incurred.

The date of the Engineer's Certificate of Substantial Completion shall be the termination date, if applicable, of full liquidated damages. The completion date of the project shall be the termination date, if

applicable, of reduced liquidated damages, after substantial completion. Tiered liquidated damages shall be more fully detailed in the Special Provisions.

Separate from the above-mentioned liquidated damages, the Contractor may be responsible for paying all damages incurred by third parties due to non-completion of the project by the date specified.

### 7.17 Delays and Extensions of Time

- a. Excusable Delays shall mean delays in the prosecution or completion of the work which result from causes beyond the control of the Contractor and City and which could not have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor, suppliers, or any tier of the Contractor's subcontractors. Excusable Delays fall into the following categories:
  - Abnormal Delays Excusable Delays caused by acts of god, fire, unusual storms, floods, tidal waves, earthquakes, strikes, labor disputes, freight embargoes, and shortages of materials insofar as they prevent the Contractor from proceeding with at least seventy-five (75) percent of the normal labor and equipment force for at least five (5) hours per day toward completion of the current critical path activity.
  - Weather Delays Excusable Delays due to inclement weather conditions or the conditions resulting from weather prevent the Contractor from proceeding with seventy-five (75) percent of the normal labor and equipment force engaged in the current critical activity item for a period of at least five (5) hours per day toward completion of the current critical path activity.
  - 3. Material Shortage Delays Excusable Delays due to shortages of material, provided that the Contractor submits satisfactory proof to the Engineer. For the proof to be satisfactory, the Contractor must demonstrate that every effort to obtain the materials from all known sources within reasonable reach of the proposed work. Only the physical shortage of material, caused by unusual circumstances, will be considered under these provisions as an excusable delay, and no consideration will be given to any claim that material could not be obtained at a reasonable, practical, or economical price, unless it is shown to the satisfaction of the Engineer that such material ordered or delivered late or for material shortage delay will not be considered for material ordered or delivered late or for material whose availability is affected by virtue of mishandled procurement. The above provisions shall apply equally to equipment to be installed in the work.
- b. Compensable Delays shall include delays that occur in the prosecution or completion of the work, through no fault of the Contractor which prevent the Contractor from proceeding with at least seventy-five (75) percent of the normal labor and equipment force for at least five (5) hours per day toward completion of the current critical activity item(s) on the latest favorably reviewed progress schedule due to the following causes:
  - 1. Delays due solely to the actions and/or inactions of the City.
  - 2. Delays due to changed conditions as defined in General Provisions, Section 4.05, "Requests for Information, Inconsistencies and Changed Conditions".
  - 3. Delays due to other Contractors employed by the City who interfere with the Contractor's prosecution of the work as defined above.
- c. Inexcusable Delay means any delay in the completion of the work beyond the expiration of the contract time resulting from causes other than Excusable Delays or Compensable Delays. An Inexcusable Delay shall not entitle the Contractor to an extension of the contract time or an adjustment of the contract sum.
- d. Concurrent Delays those periods of delay when the prosecution of the work is delayed during the same period of time due to causes from a combination of the delays defined as Excusable,

#### Compensable or Inexcusable.

If the Contractor desires an extension of time, the Contractor shall file a written request based upon the delays reported. The Engineer will ascertain the facts, the extent of the delays, and the effect upon the entire project, and the City will grant an extension of time equivalent to verified time lost. The request for an extension of time must be made no later than ten (10) working days after the start of the condition that purportedly caused the delay, and no later than fifteen (15) working days after the date on which performance on the condition purportedly causing the delay has ended.

Contractor may make a delay claim for an extension of the contract time for an Excusable Delay or a Compensable Delay. If an Excusable Delay and a Compensable Delay occur concurrently, the maximum extension of the contract time shall be the number of calendar days from the commencement of the first delay to the cessation of the delay which ends last. If an Inexcusable Delay occurs concurrently with either an Excusable Delay or a Compensable Delay, the maximum extension of the contract time shall be the number of calendar days from the contract time shall be the number of calendar or working days, if any, by which the Excusable Delay or the Compensable Delay exceeds the Inexcusable Delay.

For a Compensable Delay, the Contractor may make a delay claim for an adjustment in the contract sum in an amount equal to the sum of the actual and unavoidable additional costs of labor, material, and equipment furnished at the site by the Contractor or subcontractors.

Extensions of time, when granted, will be based upon the effect of delays to the project as a whole and will not be granted for non-controlling delays to minor portions of the work unless it can be shown that such delays did, in fact, delay the progress of the project as a whole. For purposes of determining delays, all float associated with the project schedule shall belong to the project. See General Provisions, Section 7.04, "Construction Schedule".

If delays are caused by unforeseen events beyond the control of either the Contractor or the City, such delays will entitle the Contractor to an extension of time as provided herein, but the Contractor shall not be entitled to damages or additional payment due to these delays. War, governmental regulations, labor disputes, strikes, fires, floods, adverse weather necessitating cessation of work, other similar action of the elements, inability to obtain materials, equipment, or labor because of Federal Government restrictions arising out of National Defense, required extra work, action or inaction by the City, or other specific reasons as may be further described in the specifications may constitute such a delay. If delays beyond the Contractor's control are caused by reasons other than those mentioned above, but are substantially equal in gravity to those enumerated, an extension of time may be granted, if deemed by the Engineer to be in the best interests of the City.

For Compensable Delay periods resulting in indirect overhead expenses, the Contractor shall be reimbursed as provided for in General Provisions, Section 4, "Changes in Work".

### 7.18 Substantial Completion

When work in accordance with the Contract Documents has progressed to a stage of one-hundred percent (100%) complete, as determined by the Engineer, except for the completion of minor punch list items of deficiencies or omissions in the work which require correction in order to satisfy the agreement, yet do not impair the City's ability to occupy and fully utilize the work for its intended purpose, the project shall be deemed "Substantially Complete". Portions of the work may also be designated by the City as substantially complete if the Contract Documents require separate delivery.

When the Engineer determines that the work or such designated portions of the work are substantially complete, the Engineer will prepare and sign a Certificate of Substantial Completion. The date of substantial completion shall establish the date of occupancy by the City and the transfer of responsibility from the Contractor to the City for such items as security, maintenance, heat, utilities, insurance, and damage to the work from causes other than that of the Contractor. Unless otherwise indicated in the Certificate of Substantial Completion, the Contractor's guarantee for the work shall commence upon the date of substantial completion.

# 7.19 Project Completion and Closeout

After the Contractor has received the Certificate of Substantial Completion and has only minor work remaining, project closeout may begin. The following items and procedures are required as part of the project close out process.

- a. Within 14 days from the issuance of the Certificate of Completion, a pre-final inspection will be scheduled and conducted by the City. As a result of the inspection, the City will advise the Contractor of any work that must be completed, in the form of a punch list.
- b. Following the completion of punch list items, the Contractor shall make a written request to the city to conduct a final inspection. The written request shall be accompanied by a Certification that the work has been performed in accordance with the Contract Documents and shall be on the Contractor's Certification of Completion form enclosed in Appendix A of these General Provisions.
- c. Upon satisfactory completion of the punch list items, the City will consider the construction work complete and issue a completion letter establishing the completion date and detailing required closeout items for the contract.
- d. The contractor shall provide a final payment request with lien releases (if applicable) in a format acceptable to the City.

Should it become necessary, due to developed conditions, for the City to occupy any portion of the work, or any part of any structure or equipment, before the contract is completed or accepted, such occupancy shall not constitute an acceptance of any part of the work, unless so stated in writing by the City.

### 7.20 Acceptance

Acceptance by the Director of Public Works will be recommended after the work has been fully completed and when all the requirements for Acceptance are met as set forth in the Contract Documents. Following acceptance, a Notice of Completion will be filed with the County Recorder. Remaining contract retention will be released within 35 days of recording of the Notice of Completion with the County Recorder or within 60 calendar days, whichever is shorter.

### 7.21 Protection and Cleanup

The scope of this project includes the protection of all work until completion of all the work and removal of all excess construction equipment, materials and debris from the site, in accordance with these specifications.

The Contractor shall be responsible for repair or replacement of work damaged due to any vandalism prior to completion of the work.

### 7.22 Risk of Loss

The Contractor shall be responsible for the charge, care and protection of the project and shall bear all risks of injury or damage to the work, materials or equipment delivered to the site, by any means including fire, earthquake, wind, storm or other action of the elements, vandalism, or loss by theft, from the date of commencement of construction to the date of formal acceptance by the City Council. The Contractor shall rebuild, repair, restore and make good all injuries or damage to any portion of the work, and shall bear the entire expense thereof, except such injuries or damages that are caused by riot, insurrection, acts of the Federal or State Government, or a public enemy in time of war.

### 7.23 Use of Improvements During Construction

The City reserves the right to take over and utilize all or part of any completed facility or appurtenance. Such action by the City will not relieve the Contractor of responsibility for injury or damage to said completed portions of the improvement resulting from use by public traffic, from the action of the elements or from any other cause attributable to the Contractor's operations or negligence. The Contractor will be required to restore such portions of the improvement before final acceptance. Nothing in this Section shall be construed as relieving the Contractor from full responsibility for correcting defective work or materials.

# SECTION 8 – RESPONSIBILITIES OF THE CONTRACTOR

# 8.01 Contractor's Responsibility for the Work

The Contractor shall supervise, coordinate, and direct the work using Contractor's best skill and attention. Contractor shall have control over and be solely responsible for construction means, methods, techniques, sequences, procedures, and the coordination of all portions of the work in accordance with the terms of the Contract Documents.

The Contractor shall be responsible for assuring that all portions of the work, including those portions already performed under the Contract, conform to the requirements of the Contract Document and are ready to receive subsequent work.

The Contractor shall furnish and maintain in good condition all equipment and facilities as required for the proper execution and inspection of the work. Such equipment and facilities shall meet all requirements of applicable ordinances and laws.

### 8.02 Contractor's Responsibility for Subcontracted Work

The City will deal directly with, and make all payments to the Contractor only. The Contractor shall be responsible for the coordination of all trades, subcontractors, and suppliers engaged upon the work. Neither the City nor the Engineer will undertake to settle any differences between the Contractor and the Contractor's subcontractors.

All persons engaged in the work, including subcontractors, will be considered as employees of the Contractor. The Contractor will be held responsible for their work and shall be responsible to the City for acts and omissions including those by their respective agents and employees.

When subcontracted work is not prosecuted in a manner satisfactory to the Engineer, the Contractor shall be notified to take corrective action within a specified time. If timely correction is not made, then upon receipt by the Contractor of written instructions from the Engineer, the Subcontractor shall be removed immediately from the work and shall not be reemployed.

### 8.03 Superintendent

The Contractor shall have on the job at all times a competent superintendent, employed by the Contractor, who can read and write in English, and shall represent the Contractor and all direction given to the superintendent shall be as binding as if given to the Contractor. The Contractor shall employ, and provide a written letter designating a superintendent or representative who shall be present on the job site whenever work is in progress to coordinate all work with the City and neighboring property owners. A backup representative may also be provided. A joint venture shall designate only one Superintendent.

Directions and information given to the Superintendent shall be considered as having the same effect as if delivered to the Contractor and the Superintendent shall have complete authority to act on behalf of the Contractor.

City approval of the Superintendent is required prior to starting work. The City reserves the right to request an appropriately qualified replacement of the Superintendent any time during construction of the project. Contractor shall provide the Engineer with the Superintendent's telephone number, along with an afterhours emergency contact number of a responsible person who shall correct hazardous situations, should they occur, during times other than the normal working hours.

#### 8.04 Character of Employees

Only competent supervisors and workers shall be employed on the work, and, if required by the Owner, the Contractor shall discharge any person who commits trespass or is, in the opinion of the Owner, disorderly, dangerous, insubordinate, incompetent, or otherwise objectionable. Such discharge shall not be the basis of any claim for compensation or damages against the City of East Palo Alto or any of its officers, employees or agents.

### 8.05 Laws to be Observed

The Contractor shall fully observe and comply with all State and Federal laws including those of CAL-OSHA and municipal ordinances and regulations which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having jurisdiction or authority over the same. The Contractor shall also cause all agents and employees engaged on the project to observe and comply with all such laws, ordinances, regulations, orders and decrees of bodies or tribunals having any jurisdiction or authority over the work; and shall protect and indemnify the City of East Palo Alto and all officers, employees, and agents thereof connected with the work against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or its employees, or subcontractors. If any discrepancy or inconsistency is discovered in the plans, drawings, specifications or contract for the work in relation to any such law, ordinance, regulation, order or decree, whether by the Contractor or its employees, or subcontractors, the Contractor shall forthwith report the same to the Owner in writing.

- a. Non-Discrimination Contractor shall abide by all federal and state laws preventing discrimination in the employment of persons upon public works and shall ensure by appropriate contract provisions that all subcontractors are similarly obligated to comply with all such laws. These laws include, but are not limited to the following California Labor Code Section 1735 which provides that "No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or sex of such persons, except as provided in Section 12940 of the Government Code, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter". Likewise, Contractor and all of its subcontractors shall abide by the provisions of California Labor Code Section 1777.6 prohibiting discrimination in the acceptance of otherwise gualified apprentices; and California Labor Code Section 3095 which declares unlawful the discrimination in any recruitment or apprenticeship program on stated grounds. City shall be entitled to retain and withhold all penalties as authorized pursuant to California Labor code, Division 2, Part 7, Chapter 1, commencing with Section 1720 and following, in accordance with the provisions of that Chapter, and the regulations established by the Director of Industrial Relations pursuant to the statutory authority of such chapter.
- b. Hours of Labor Pursuant to Labor Code, Sections 1810, eight (8) hours labor shall constitute a legal day's work and as such, the Contractor shall not permit any worker to labor more than eight (8) hours during any one (1) calendar day or more than forty (40) hours during any one (1) calendar week, except as permitted by law and in such cases only upon such conditions as are provided by law. Pursuant to Labor Code, Sections 1813, Contractor shall forfeit to the City, as a penalty, twenty-five dollars (\$25.00) for each worker employed in the execution of this Agreement by Contractor, or any Subcontractor, for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one (1) calendar day or more than forty (40) hours in any one (1) calendar week in violation of the terms of this Section or in violation of the provision of any law of the State of California. Such forfeiture amounts may be deducted from the contract sum. Contractor and each Subcontractor shall keep, or cause to be kept, an accurate record showing the actual hours worked each calendar day and each calendar week by each worker employed on the project, which record shall be kept open at all reasonable hours to the inspection of the City, its officers and agents, and to the inspection of the appropriate enforcement agency of the State of California.
- c. Prevailing Wage As identified in the Notice to Bidders, the work contemplated by this agreement is a public work subject to prevailing wages under California Labor Code, Sections 1720 et. seq. The State of California Department of Industrial Relations has ascertained the general prevailing per diem wage rates in the locality in which the work is to be performed for each craft, classification, or type of worker required to perform the work. A schedule of the most recent general prevailing per diem wage rates made available to the City will be on file at the City's principal facility office and will be made available to any interested party upon request. This prevailing wage rate schedule is provided by the City for Bidder's information only and is not

guaranteed by the City to be current. Contractor is obligated to verify all appropriate prevailing wage rates and pay those rates as required. By this reference the verified current schedule of prevailing wage rates is made part of the Contract Documents. Contractor shall pay not less than the prevailing per diem wage rates, as specified in the schedule and any amendments thereto, to all workers employed by Contractor in the execution of the work. Contractor shall cause all subcontracts to include the provision that all Subcontractors shall pay not less than the specified prevailing per diem wage rates to all workers employed by such Subcontractors in the execution of the work.

Contractor shall forfeit to the City, as a penalty, no more that fifty dollars (\$50.00) for each calendar day or portion thereof for each worker that is paid less than the specified prevailing per diem wage rates for the work or craft in which the worker is employed for any portion of the work done by Contractor or any Subcontractor in violation of the provisions of the Labor Code, and in particular Sections 1770 to 1781 thereof, inclusive. Such forfeiture amounts may be deducted from the contract sum. Contractor shall also pay to any worker who was paid less than the specified prevailing per diem wage rate for the work or craft for which the worker was employed for any portion of the work, for each calendar day, or portion thereof, for which the worker was paid less than the specified prevailing per diem wage rate, an amount equal to the difference between the specified prevailing per diem wage rate and the amount which was paid to the worker.

The City will not recognize any claim for additional compensation because of the payment by the Contractor for any wage rate in excess of prevailing wage rates set forth in the Agreement, including payment in excess of the prevailing wage for extra work paid by force account. The possibility of wage increases is one of the elements to be considered by the Contractor in determining the Contractor's bid and will not, under any circumstances be considered as the basis of a claim against the City under the Agreement.

d. Certified Payroll Records – Pursuant to Labor Code, Sections 1776, Contractor and all Subcontractors shall keep an accurate payroll record, showing the name, address, social security number, job classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed in connection with the work. All payroll records shall be certified as being true and correct by Contractor or Subcontractors keeping such records; and the payroll records shall be provided to the City no later than three weeks after closing of payroll for City-funded projects, and no later than one week for federal aid projects. Certified payroll shall also be made available for inspection upon request by the State of California Division of Labor Standards Enforcement, or the Division of Apprenticeship Standards of the State of California Division of Industrial Relations.

Each Contractor and every lower-tier Subcontractor will be required to submit certified payrolls and labor compliance documentations electronically via the software LCPtracker. Electronic submission will be a web-based system, accessed on the World Wide Web by a web browser. Each Contractor user will be given a Log-On identification and password to access the City's reporting system.

e. Apprentice Program – Attention is directed to State of California Labor Code, Sections 3095, 1777.5, 1777.6, and 1777.7 and Title 8, California Code of Regulations, Section 200, and the applicable Sections that follow. Responsibility for compliance with these requirements lies with the Contractor. To ensure compliance and complete understanding of the law requiring apprentices, and specifically the required ratio thereunder, Contractor or Subcontractors should, where some question exists, contact the Division of Apprenticeship Standards, 525 Golden Gate Avenue, San Francisco, California, or one of its branch offices prior to commencement of the work. In the event Contractor willfully fails to comply with this Section, it will be considered in violation of the requirements of the Contract.

Contractor and all of its subcontractors shall abide by the provisions of <u>California Labor Code</u> <u>Section 1777.6</u> prohibiting discrimination in the acceptance of otherwise qualified apprentices; and <u>California Labor Code Section 3095</u> which declares unlawful the discrimination in any recruitment or apprenticeship program on stated grounds. City shall be entitled to retain and withhold all penalties as authorized pursuant to California Labor code, Division 2, Part 7, Chapter 1, commencing with Section 1720 and following, in accordance with the provisions of that Chapter, and the regulations established by the Director of Industrial Relations pursuant to the statutory authority of such chapter.

Nothing contained herein shall be considered or interpreted as prohibiting or preventing the hiring by Contractor or Subcontractors of journeyworker trainees who may receive on-the-job training to enable them to achieve journeyworker status in any craft or trade under standards other than those set forth for apprentices.

#### 8.06 Special Permits, Licenses and Fees

Unless otherwise stated in the Special Provisions, the Contractor shall procure all permits and licenses, pay all charges and fees, including a City business license tax, and give all notices necessary for lawful prosecution of the work. All permits, licenses, and other authorizations shall be secured in sufficient time to prevent delays to the work. The Contractor shall comply with the provisions of said permits, licenses and other authorizations.

In the event that the City has obtained permits, licenses, or other authorization applicable to the work in conformance with the requirements of California Environmental Quality Act (CEQA) (Public Resources Code, Sections 21000 and following), the Contractor shall comply with the provisions of these permits, licenses, and other authorizations.

For City Capital Improvement Construction Projects, the Contractor shall obtain a "No Fee" encroachment and/or building permit. Contractor shall coordinate through the Engineer and the City's Building Division to insure that all appropriate construction inspections occur. Contractor shall be responsible to obtain all signatures required for the work.

#### 8.07 Coordination and Cooperation

Construction work by utility companies or other contractors may be needed or may be occurring simultaneously within or adjacent to the limits of work for this project. The Contractor shall coordinate and cooperate with all other contractors and utility companies throughout the duration of this project to avoid delays and minimize interference and conflicts. Cooperation will be required in the arrangement for the storage of materials, and in the detailed execution of the work. It is the Contractor's responsibility to ascertain the nature of work by others, coordinate the work, and install, modify, and maintain traffic control as necessary to avoid interferences and delays on the construction activities. Failure of the Contractor to keep informed of the work progressing on the site and failure to give written notice of lack of progress or defective workmanship by others shall be construed as acceptance by the Contractor of the status of the work as being satisfactory for proper coordination with Contractor's own work.

The City reserves the right to perform work or allow others to perform work, as necessary, within or adjacent to the limits of this project, at any time. If the Contractor or any of the Contractor's Subcontractors or employees cause loss or damage to any separate contractor on the work, the Contractor, by agreement or arbitration will settle any claim for such loss or damage if the Contractor deems it necessary. If such separate contractor shall sue the City, on account of any loss so sustained, the City shall notify the Contractor, who shall indemnify and save harmless the City against any loss or damage arising therefrom, including the cost and expense of defending any such suit.

The Contractor's bid shall absorb all costs involved in coordinating the work with others. The Contractor will not be entitled to additional compensation from the City for damages resulting from such simultaneous, collateral and essential work.

#### 8.08 Use of Premises

The Contractor shall confine construction activities to the project limits; which shall consist of right-of-way, easements and/or property owned by the City of East Palo Alto, without exception, unless otherwise authorized in writing by the City. With prior approval of the Engineer, adjacent street right-of-way may also be utilized for day-to-day operations. Unless approved by the Engineer, no storage of materials and

equipment will be allowed to remain within the right-of-way during non-working hours, on the weekends, or during holidays.

Each day, after the completion of construction operations, unless otherwise approved by the Engineer, the project limits shall be secured. All excess materials and equipment not protected by approved traffic control devices (such as k-rails) shall be relocated to a staging area or demobilized. If the area is accessible to the public, trench spoils shall be off-hauled daily and open excavations shall be protected with steel plates.

Personnel of Contractor and Subcontractors shall not occupy, live upon, or otherwise make use of the project site during any time that work is not being performed at the project site, except as otherwise provided for in the Contract Documents for issues such as site security.

#### 8.09 Construction Staging and Field Office

If additional space beyond the construction limits is necessary for staging, the Contractor shall make special arrangements with neighboring property owner(s) to secure a staging area for a field office and/or material and equipment storage at the Contractor's own cost and initiative. The staging area must be fenced, with screening, and shall be operated in a manner that minimizes the inconvenience to neighbors.

Areas used to store materials, supplies or equipment overnight shall be defined as a staging area. City streets shall not be used as staging areas unless specifically authorized in writing by the City Representative. Vacant and/or city controlled land may be used as staging area only with written permission of the City Representative. Privately owned lots shall not be used as staging areas without specific written consent of the property owner. A copy of such private property owner consent shall be submitted to the City Representative prior to use of private property as a staging area. No equipment shall be left on residential streets on Saturday, Sunday or holidays unless work is active on the day.

The Contractor is encouraged to negotiate side agreements with the property owner of such sites prior to submitting bids. In addition to approval from the property owner, the Contractor may also need to secure a Use Permit from the City's Planning Division.

#### 8.10 Site Security

Contractor shall be responsible for the care and custody of work and the site, including all necessary security provisions, on a 24-hour per day basis throughout the entire term of the Agreement. The Contractor shall provide and maintain storage facilities and employ such measures as will preserve the specified quality and fitness of materials to be used in the work.

#### 8.11 Construction Water

Construction water is available at cost to the Contractor. The Contractor is responsible for obtaining the required hydrant construction meter from the Water Department located at 2415 University Ave, second floor, in the City of East Palo Alto.

The Water Department shall equip the construction meter with a Back Flow Preventer (BFP) with a single or double check valve. The Contractor shall bare full responsibility of the water meter and any apparatuses attached once issued by the Water Department. The Contractor shall be responsible in maintaining all *hydrant valve stems* using the proper *hydrant wrench* and maintained *correct placement* of the meter to the hydrant at all time. Contractor shall use proper treatment methods of cleaning all attached hoses prior of connection to the (BFP).

#### 8.12 Project Site Maintenance

a. Disposal of Material – Unless otherwise shown on the plans or specified herein, all excess materials and materials removed from existing improvements shall become the property of, and be disposed by the Contractor. The Contractor shall be responsible for all costs associated with disposing all excess materials in a safe and legal manner. No material shall be placed on private or public property without prior approval from the City and the property owner. The Contractor shall not allow any refuse, excavated material, surplus concrete or mortar, or any associated washings, to be disposed upon paved streets, into manholes or into the City's storm drain system.

Contractor shall establish a system for daily collection and disposal of waste materials from construction areas and elsewhere on the site. Contractor shall handle waste materials that are hazardous, dangerous, or unsanitary separately from inert waste by containerizing appropriately. Burning or burying of waste materials on site will not be permitted.

All materials removed from the existing improvements identified in the project plans to be salvaged, shall be delivered to the City Corporation Yard at 221 Commercial Street or at any other site designated by the Engineer within the City, at no additional cost.

b. Cleanup and Dust Control – At all times during construction, including weekends and holidays, and throughout all phases of construction, including work suspensions and until final acceptance of the project, the Contractor shall keep the work site clean and free from rubbish, debris, and prevent the formation of an airborne dust nuisance.

Materials and equipment shall be removed from the site as soon as they are no longer necessary. Upon completion of the work and before final inspection, the entire site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. All cleanup costs shall be absorbed in the Contractor's bid.

The Contractor shall abate dust nuisance by cleaning, sweeping, and sprinkling with water, those excavated areas of dirt or other materials which are prone to causing dust, within both the project site and the storage or staging area. If required or directed by the Engineer, the Contractor shall provide an approved water truck of large capacity with spraying capability.

Contractor shall perform thorough daily street sweeping as deemed necessary by the City Representative. The contractor shall have on-site or readily available, street sweeping equipment capable of performing sweeping with mechanical brooms and with either regenerative air vacuum filter technology. Mechanical brooms shall be used for wet soil, or soils that are ground into the texture of the pavement. Regenerative air or vacuum filter equipment shall be used for dry soils to minimize dust disturbance. If in the opinion of the City Representative, sweeping is not performed in an adequate manner, the City reserves the right to perform the necessary work with City or other forces and back-charge the contractor for the cost.

The Contractor shall be required to apply water for dust control immediately during construction efforts and within one (1) hour after notification by the Engineer that an airborne nuisance exists. If dust control is not adequate in the opinion of the Engineer, the Engineer will have this work done by others and will deduct such cost from the total contract price.

All hauling trucks or other construction vehicles leaving the site shall be cleaned of mud or dirt clinging to exterior body surfaces or wheel rims before traveling on City streets outside the work limits. All trucks coming to or leaving the site with materials or loose debris shall be loaded in a manner, which will prevent the dropping of materials or debris on City streets. Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately at the Contractor's expense.

When construction operations cause dirt to be deposited on public streets, the Contractor shall immediately remove such material. Streets shall be cleaned by street sweeping, rather than flushing, so as to prevent mud from entering the storm drain system.

Excess excavated material shall be removed from the site immediately. Sufficient material may remain for use as backfill if permitted by the specifications. Forms and form lumber shall be removed from the site as soon as practicable after stripping.

Failure of the Contractor to comply with the Engineer's cleanup orders may result in an order to suspend work until the condition is corrected. No additional compensation will be allowed as a result of such suspension.

- c. Air Pollution Control The Contractor shall not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as will violate the regulations of any legally constituted authority.
- d. Noise Control The Contractor shall make every reasonable effort to control noise generated as a result of construction to the satisfaction of the Engineer. Use of an air compressor, jackhammer or other loud, vibrating sound generating device shall be limited to operations between the hours of 8:00 a.m. and 4:00 p.m. unless otherwise authorized by the Engineer.
- e. *Pest Control* At the time of acceptance, structures entirely constructed under the contract shall be free of rodents, insects, vermin and pests. Necessary extermination work shall be arranged and paid for by the Contractor as part of the contract work within the contract time and shall be performed by a licensed exterminator in accordance with requirements of governing authorities. The Contractor may be liable for injury to persons or property and responsible for the elimination of offensive odors resulting from extermination operations.
- f. Sanitation The Contractor shall provide and maintain enclosed toilets and hand washing stations for the use of employees engaged in the work. These accommodations shall be maintained in a neat and sanitary condition. They shall also comply with all applicable laws, ordinances and regulations pertaining to the public health and sanitation of dwellings and camps.
- g. Wastewater Wastewater systems shall not be interrupted. Should the Contractor disrupt existing sewer facilities, the Contractor shall immediately notify the Engineer, and the Contractor shall establish a plan, subject to the approval of the City, to convey the sewage in closed conduits and disposed of it back into the sanitary sewer system. Sewage shall not be permitted to flow in trenches or be covered by backfill.
- h. Temporary Light, Power and Water The Contractor shall furnish, install, maintain, and remove all temporary light, power, and water, including piping, wiring, lamps, and other equipment, necessary for the work at the Contractor's own expense. The Contractor shall not draw water from any City water source, except to extinguish a fire, without first obtaining a hydrant meter from the City. Temporary wiring and electrical facilities shall be in accordance with applicable provisions of Electrical Safety Orders of the State of California. The Contractor shall provide, maintain, and remove upon completion of work, temporary utilities and construction required for performance of the work, and safety of personnel.

For permanent utility connections, the Contractor shall coordinate with the proper agencies, any utility connections required. Contractor shall be responsible for distribution of power or water to points of use.

i. Storm Water Pollution Control – Storm Water Pollution Control work shall consist of following Best Management Practices (BMP) for storm water pollution prevention, submitting a Storm Water Pollution Prevention Plan (SWPPP) in compliance with all NPDES requirements, and constructing those facilities which may be required to provide prevention, control, and abatement of water pollution. SWPPP shall address how the Contractor will prevent materials specified above from being rinsed or washed into the storm drain system and which BMPs will be implemented for preventing sediment and pollutant discharges into the stormwater system.

In compliance with State and Federal regulations on construction storm water management and non-point source pollution control, no pollutants will be allowed to enter the storm drainage system. The Contractor shall be responsible for containing and removing any waste from the Contractor's construction operations using the appropriate BMP. The Contractor shall be responsible for cleaning catch basins of solid or liquid waste materials originating from the Contractor's operation before this material migrates further into the storm drain system. Violation of this provision shall cause the City to issue a stop-work notice and take necessary action to require the Contractor to correct and comply with regulations. All costs related to the stop-work action and corrective work to come into compliance shall be fully borne by the Contractor.

All construction efforts shall be conducted in a manner which prevents the release of hazardous material or hazardous waste into the soil or groundwater, and minimizes the discharge of pollutants into the storm drain system. The Contractor shall comply with guidelines to prevent pollutants from entering the public storm drain system that would otherwise allow pollutants to flow into creeks and then directly into San Francisco Bay.

# All fines or enforcement action by regulatory agencies for violations of permits or NPDES requirements shall be the full responsibility of the Contractor.

The Contractor is prohibited from rinsing or washing any of the following materials into the streets, shoulder areas, inlets, catch basins, or gutters:

- Concrete
- Grout
- Mortar
- Drywall compound
- Cement and stucco
- Solvents and adhesives
- Thinners
- Sediment/dirt
- Cleared vegetation/plant material

- Paints (water and oil based) and paint chips
- Gasoline
- Diesel Fuel
- Oil
- Sawdust
- Asphalt and concrete sawcut slurry
- Fertilizer or pesticides
- Sand blast grit and material
- Other construction materials or wastes

In addition, the Contractor shall implement appropriate measures to reduce sediment and pollutants in storm water discharges from construction sites on jobs within the City of East Palo Alto. Information on Best Management Practices (BMPs) is available from a variety of sources, including (but not limited to) the following references:

Blueprint for a Clean Bay - Best Management Practices for the Construction Industry to preventStormwater Pollution from Construction-Related Activities; City of East Palo Alto latest revision athttp://EastPaloAlto.ca.gov/Portals/0/EastPaloAlto/CDD/Permits/Building/BlueprintforaCleanBay.pdf

<u>California State Best Management Practices (BMP) Handbooks (Construction, New Development and Redevelopment, Municipal, and Industrial) Revised</u>. California Storm Water Quality Association, 2003.

<u>Erosion and Sediment Control Field Manual</u>, Third Edition. California Regional Water Quality Control Board San Francisco Bay Region, 1999.

The Contractor shall refer to the Technical Specifications for any additional requirements related to discharges to storm sewers. The City will monitor the construction site to insure that the Contractor complies with all contract requirements. The Contractor shall submit for review a Storm Water Pollution Prevention Plan that addresses:

- 1. How the Contractor will prevent materials specified above from being rinsed or washed into the storm drain system, and
- 2. Which BMPs will be implemented for preventing sediment and pollutant discharges into stormwater discharges.

The Contractor shall not proceed with any site work which potentially creates any material that could enter the storm drain system or Calabazas Creek, until the accepted Storm Water Pollution Prevention Plan is in place.

The first progress payment will not be made until the Storm Water Pollution Prevention Plan has been submitted and favorably reviewed.

#### 8.13 Climate Preservation

Idling times will be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]), or less. Clear signage will be provided at all access points to remind construction workers of idling restrictions.

#### 8.14 Preservation of Property

The Contractor shall be responsible for the protection of public and private property adjacent to the work.

Due care shall be exercised to avoid damage to existing roadway improvements and facilities, adjacent property, roadside trees, lawn and shrubbery not designated for removal, pole lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipe lines under or above ground, sewer and water laterals, and any other improvements or facilities within or outside the limits of construction. As ordered and approved by the Engineer, the Contractor shall provide and install suitable safeguards to protect such objects from injury or damage. If such objects are injured or damaged by reason of the Contractor's operations, they shall be replaced or restored, at the Contractor's expense, to a condition as good as when the Contractor entered upon the work, or as good as required by the Contract Documents.

Existing striping damaged during construction within and adjacent to the project site shall be replaced in kind. Partially damaged striping (such as what might occur trenching through a pavement legend), shall be replaced in their entirety.

Any survey monuments that are damaged or removed as part of the construction shall be replaced by the Contractor and a Record of Survey, as required by State law, shall be filed by a licensed Land Surveyor at the Contractor's expense, or as specified above.

The fact that any such improvement or facility is not shown upon the plans shall not relieve the Contractor's responsibility under this Section. It shall be the Contractor's responsibility to ascertain the existence of any underground improvements or facilities indicated on the plans, indicated by locating services, or as evidenced by facilities visible in the field.

#### 8.15 Protection of Traffic Signal Facilities

The Contractor shall give at least 72 hours advance notice to the Engineer before commencing any street work (such as pavement grinding or trenching) that may potentially damage any traffic signal detection loop wires or any other signal facility. This requirement is in addition to any Underground Services Alert notifications. The City will then mark the underground traffic signal facilities.

The Contractor shall not proceed with any grinding, trenching or other underground work until it has been verified with the City Representative that signal facilities have been marked. The Contractor shall be responsible for all damage to traffic signal facilities arising from failure to properly comply with these provisions.

In the event that the Contractor's construction activities cause any failure of a traffic facility, it shall be repaired and be made fully operable within 24 hours of the damage occurring. In the event that such repair is not undertaken within this time limit, the City may repair the facility at the Contractor's expense. In the event that such repair is not undertaken within this time limit, the City may repair the facility at the facility and deduct the cost from monies due to the Contractor. The amount deducted will include actual expenses incurred.

#### 8.16 Restoration of Adjacent and Existing Improvements

Contractor shall do all cutting, fitting, or patching of the work required to make all parts of the work come together properly with existing and adjacent conditions.

Unless otherwise provided, the Contractor shall repair or replace all existing improvements (e.g., curbs, sidewalks, driveways, fences, signs, utilities, street surfaces, structures, etc.) damaged or removed as a

result of the Contractor's operations. Repairs and replacements shall be at least equal to existing improvements, and shall match in terms of condition, finish and dimension.

All Underground Services Alert (USA) markings on concrete or asphaltic pavement or other structures shall be removed when they are no longer required. Acceptable means of removal include sand blasting or high pressure washing.

All traffic signs and street signs within the limit of work necessarily removed during the various phases of operations shall be temporarily reset by the Contractor at or near the original location upon completion of each phase of construction operations. Prior to removal of all traffic control signs, the Contractor shall take photographs of the site which show the existing location of these signs so that upon completion the photographs will aid in resetting the signs at or near their original location. Traffic control signs and street signs will be replaced upon completion of the work and the cost of removal and replacement will be included in various bid items and no separate payment will be made.

Rural type mail boxes shall be maintained by the Contractor in a manner satisfactory to the property owner and postal service, and the Contractor shall relocate the same as soon as possible to a permanent location in accordance with postal regulations and in a location acceptable to the property owner.

Any object to be removed and reused at other locations shall be removed with due care and delivered or stored at the project's construction storage area, or if approved by the Engineer, at any other site designated by the Engineer within the City. Such objects may consist of street light poles, signal mast arms and other objects directed by the Engineer. Items not approved by the Engineer for reuse purposes, and without salvage value, shall become the property of the Contractor, to be disposed of at Contractor expense, in an acceptable manner.

#### 8.17 Archeological Remains

If archeological remains are uncovered during excavation, earthwork within 100 feet of these materials will be stopped until a professional archeologist registered by the Society for California Archeology (SCA) and/or the Society of Professional Archeology (SOPA) has had an opportunity to evaluate the significance of the find and suggest appropriate mitigation measures.

#### 8.18 Access to Private Property

The Contractor shall schedule and perform operations so as to minimize disruption of access to private property. Prior to blocking access to any private driveway or parking lot entrance, the Contractor shall notify the resident, business owner or tenant of pending closure and allow residents to remove vehicles. During non-working hours no driveway, house or parking lot shall be denied access to a public roadway.

The Contractor shall coordinate with the adjacent property owners and businesses and maintain vehicle and pedestrian access to their properties at all times. Temporary access ramps, fencing, or other measures shall be provided as needed.

#### 8.19 Notification and Relations with Property Owners

A two-week and a **72-hour** prior to construction public notification is required. Two weeks prior to beginning any work on the project, the Contractor shall deliver written notice to all adjoining residents, businesses, tenants and other applicable parties. Notice shall be given for general construction activity as well as specific activities that will inconvenience residents/property owners/tenants or, in any way, affect their operations or access to their property. Such notices shall include the expected date for start of construction, a general description of the construction activity to take place, expected duration, and the name, address, and an approved emergency contact number for the public to reference during the construction. A follow up notice shall be distributed 72-hours prior to the construction activity. Copies of all notices shall be submitted to the Engineer for review and approval prior to public distribution.

All costs involved in providing notification and access shall be included in the amount bid for the various bid items and no additional compensation will be allowed.

#### 8.20 Traffic Control and Public Convenience

The Contractor shall provide for safe movement of all vehicular, bicycle and pedestrian traffic through and around the construction operations with as little inconvenience and delay as possible. The Contractor shall have no amount of work under construction other than what the Contractor can properly prosecute with due regard to the rights and convenience of the public.

Proper conveyance of vehicular traffic and pedestrians through the work area depends upon navigating under unexpected situations. The means of clarifying such conditions to the public include the Contractor's use of signs, flagmen, pavement markings, barricades, lights, cones and delineators. No one standard sequence of signs or control devices will suit all conditions which may result from construction operations. Even for the same work, the conditions may vary from hour to hour, requiring adjustment and revisions of the traffic control in effect. The traffic control requirements specified herein are therefore intended to establish general principles to be observed in the control and regulation of traffic through and around the construction operations anticipated for this project. The requirements set forth in this Section represent the minimum traffic control requirements imposed and the Contractor shall be solely responsible for providing the full extent of traffic control measures that are necessary. Only individuals trained and certified in the principles of implementing traffic control and/or traffic control flagging shall be assigned that responsibility at the work site.

The Contractor shall maintain sufficient safeguards against occurrence of accidents, injuries, or damage to any person or property and shall be responsible for same if such occurs. The Contractor shall also maintain adequate protection of its work and materials from destruction and loss and shall protect the City's property from damage arising in connection with this contract, and shall make good any such damage, destruction or loss.

- a. *Traffic Control Plan* The Contractor shall submit a Traffic Control Plan to clearly describe proposed traffic control measures. The plan shall be generally in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).
- b. Traffic Control Devices Traffic control devices shall be provided in sufficient quantities and types as required to provide safe and adequate traffic control. During hours of darkness, approved lights and/or flares shall be included, in proper working order, to illuminate signs and hazards and alert approaching traffic. Barricades shall be furnished and maintained along all open trenches in contact with traffic. No work may begin on any day or at any time before traffic control devices have been placed, test driven and, if required, adjusted and revised. All traffic control devices shall be placed in accordance with the Manual of Uniform Traffic Control Devices and the Contractor's favorably reviewed traffic control plans. Locations of devices shall be adjusted to suit the conditions and circumstances of each detour situation. In all cases, signs shall be placed to most effectively convey their messages to approaching traffic.

The Contractor shall maintain all traffic control devices, at proper locations and in proper working order, at all times during construction operations and whenever a hazard resulting from Contractor's operations exists. The Contractor shall adjust and revise traffic control devices, placement, etc., to suit changing conditions around construction operations. Traffic control devices shall remain in place at all times, as required to alert approaching traffic of upcoming hazards. After hazards have been removed, all traffic control devices shall be removed. Temporary signs shall be removed or their messages covered.

Daily traffic control measures shall continue until cleanup activities have been satisfactorily completed and all of the Contractor's equipment has been removed from the traveled way.

- c. *Traffic Control Detours* The Contractor shall direct, divert and detour traffic through, around and adjacent to construction operations in accordance with the traffic control plans specified in the Contract Documents or in accordance with the Contractor's favorably reviewed traffic control plans.
  - 1. Field Review of Detours Immediately after traffic control devices have been placed, the detour shall be test driven by the Engineer and the Contractor's Superintendent. The test

drive shall include approaches to the detour from each possible direction, and traverse the full length of each detour route. The Contractor shall adjust and revise all traffic control devices as determined to be required by the test drive and the test drive shall be repeated, if determined necessary by the Engineer. The Contractor shall provide additional traffic control devices as required to maintain the flow of traffic throughout construction operation.

- 2. Diverting Bicycle and Pedestrian Traffic Whenever construction operations obstruct the flow of bicycle and pedestrian traffic or present a hazard to bicycles and pedestrians, the Contractor shall take appropriate action to protect and separate bicycles and pedestrians from the work area. Such action may include placement of barricades between bicycles and pedestrians and the work areas, placement of warning signs, and provisions utilizing personnel as required to protect and maintain access for bicycles and pedestrians as conditions warrant.
- Diverting Vehicular Traffic Whenever construction operations obstruct the flow of vehicular traffic or present a hazard to vehicles operating in the vicinity of construction operations, the Contractor shall take appropriate action to warn, detour and otherwise protect approaching drivers and vehicles.
- 4. Flagmen The Contractor shall employ flagmen as required for each specific detour and at all locations where barricades and warning signs cannot control the movement of traffic. A warning sign shall be placed ahead of the flagman reading: "Flagman Ahead." The distance between the sign and the flagman should be based on the average traffic speed, allowing approximately 50 feet for each 10 miles per hour. During hours of darkness, flagman stations shall be illuminated such that the flagman will be clearly visible to approaching traffic. Lights for illuminating the flagman station shall receive favorable review by the Engineer. The flagman shall wear a red or orange warning garment when flagging. Flagmen shall be provided with approved red flags or STOP/SLOW hand paddles, and two-way radios for communication. When flagging during hours of darkness, the flagman shall signal with a red light or flare and shall have a belt and suspender harness fitted with reflectors or made from reflectorized cloth on the outside of the garment, unless the garment is well reflectorized in one of these ways.
- 5. Notice to Agencies The Contractor shall notify the Engineer and all agencies having jurisdiction over the work, in writing, at least seventy two (72) hours, excluding holidays and weekends, prior to instituting any lane closure or detour. At the end of each workday, the Contractor shall inform the Engineer, Police Department and Fire Departments of the status of all detours, lane restrictions, or road closures. The Contractor shall cooperate and coordinate with the various parties involved in the collection and removal of trash and garbage, the transit providers, the U.S. Postal Service, and others, as necessary, in order to maintain existing schedules and services.
- 6. Emergency Vehicle Access Through Detours During all detours and/or street closures the Contractor shall provide for the movement of emergency vehicles through the work area. It is essential that the Contractor's work and equipment does not impede emergency access.
- 7. Night Detours Except for the detour shown on the project plans, the Contractor shall not be permitted to maintain any lane closure or road closure during non-working hours without first obtaining written approval from the Engineer. During non-working hours the Contractor shall restore travel lanes to their original alignment and configuration by means of placing temporary asphalt pavement or bridging with steel plates. The Contractor shall place "ROUGH ROAD" signs conforming to the Manual of Uniform Traffic Control Devices at uneven temporary pavement or bridging locations. See General Provisions, Section 9.18 (b), "Trench Safety Requirements".
- 8. Temporary Traffic Lanes Temporary traffic lanes shall be at least 10 feet wide, or 11 feet wide around curves. Provide an additional two (2) feet of clearance from curbs. The length

of temporary lanes should be limited to the area under construction and the distance necessary to divert traffic.

- d. Lane Closure Restrictions See Special Provisions for project specific restrictions.
- e. Parking Restrictions The Contractor shall post approved "No Parking" signs at all locations necessary to establish work areas and detour traffic. Signs shall read: "NO PARKING CONSTRUCTION TOW AWAY ZONE," show the actual day and hours of parking restriction and indicate the telephone number of the City's Police Department or agency having jurisdiction. Signs shall be placed at least forty hours (48) hours in advance of the restriction. The Engineer shall approve the location and duration of no parking limits and verify their placement. "No Parking" signs shall be removed when no work is under construction and must be reposted forty eight (48) hours before the resumption of construction activities.

For any violation of "No Parking" signs by motorists, the Contractor shall contact and coordinate directly with the City's Police Department for removal of vehicles in accordance with the California Vehicle Code. The Contractor shall also coordinate with the Police Department directly for enforcement and towing of parked vehicles.

#### 8.21 Safety

In accordance with generally accepted construction practices and State Law, the Contractor shall be solely and completely responsible for conditions on the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours, and shall encompass all persons, including City Staff and its Consultants.

The services of the Owner in conducting inspection or construction review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's work methods, equipment, bracing, shoring or scaffolding, or safety measures, in, on, or near the construction site.

OSHA approved safety vests and hardhats shall be worn by the Contractor, all subcontractors and other personnel when working or present on the site.

The Contractor shall carefully instruct all personnel working in potentially hazardous work areas as to potential dangers and shall provide such necessary safety equipment and instructions as are necessary to prevent injury to personnel and damage to property. Special care shall be exercised relative to work underground.

All work and materials shall be in strict accordance with all applicable, City, County, State and Federal Rules, Regulations, and Codes, and attention is drawn to the requirements of CAL/OSHA. The Contractor shall be solely responsible for compliance with all City, County and State blasting requirements and for any damages caused by its operations. The Contractor shall be responsible for obtaining permits required by Section 6500 of the State Labor Code and Section 341 of Title 8 of the California Code of Regulations.

In accordance with Section 6705 of the State Labor Code, the Contractor shall submit to the Owner specific plans to show details of provisions for worker protection from caving ground. This in no way relieves the Contractor from the requirement of maintaining safety in all operations it or its subcontractor's performance. The detailed plan showing design of shoring, bracing, sloping or other provisions shall be prepared by a Civil or Structural Engineer registered in the State of California as required. Acceptance by the Owner only constitutes acknowledgment of the submission and does not constitute review or acceptance of the designs, design assumptions or criteria, completeness of submissions, applicability to areas of intended use, nor implementation of the plans, which are solely the responsibility of the Contractor and its registered engineer.

Notwithstanding any classifications relative to the Tunnel Safety Orders, work within confined spaces on this project is subject to the definitions and applicable provisions of Title 8, California Code of Regulations, Section 5156 et seq.

The Contractor shall so perform its work as not to expose personnel to, or to discharge into the atmosphere from any source whatever, smoke, dust, asbestos, toxic chemicals or other air contaminants in violation of the laws, rules, and regulations of the regulatory agencies having jurisdiction. All work involving exposure to hazardous materials shall be performed with protection of personnel in compliance with all applicable regulations and safety requirements.

Nothing in these Specifications is to be construed to permit work not conforming to governing codes. When Contract Documents differ from governing codes, the Contractor shall furnish and install the higher standards called for without extra charge.

#### 8.22 Patent Fees or Royalties

The patent fees or royalties on any patented article or process which may be furnished or used in the work shall be absorbed in the Contractor's bid. The Contractor shall indemnify, defend and hold the City harmless from any legal action that may be brought for infringement of patents.

#### 8.23 Advertising

The names of the Contractor or Subcontractors, with their addresses and the designation of their particular specialties, may be displayed at the job site on removable signs only if written approval is received from the Engineer. Commercial advertising material shall not be attached to, or painted on the surfaces of, any buildings, fences, canopies, or barricades.

#### 8.24 Antitrust Claims

Attention is directed to Public Contract Code, Section 7103.5 which provides: "In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the 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. Sec 15) or the Cartwright Act (Chapter 2, commencing with Section 16700, of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or subcontract. The assignment shall be made and become effective at the time the City tenders final payment to the Contractor, without further acknowledgement by the parties".

#### 8.25 Audit and Examination of Records

The City and entities and agencies designated by the City, shall have access to, and the right to audit and examine at no additional cost, all of the Contractor's project related data including but not limited to, books, estimates, records, contracts, bid cost data, Subcontractor and supplier job cost data, change orders, correspondence, instructions, drawings, receipts, vouchers, purchase orders, notes, computations, daily logs, and memoranda relating to the work. Pursuant to Government Code, Section 8546.7, the Contractor shall preserve all such records and will be subject to examination and audit by the State Auditor, at the request of the City, for a period of three (3) years after final payment under the Agreement.

#### 8.26 Web-Based Construction Document Management

The Contractor shall utilize e-Builder for submission of data and documents throughout the duration of the Contract, unless specified otherwise in the Contract Documents. e-Builder is a web-based construction management application hosted by e-Builder. It shall be the primary means of project information submission and management or as otherwise agreed upon with the Engineer. The Engineer will establish the Contractor's access to e-Builder by providing one license to Contractor personnel at City's cost. The contractor and users will be required to set up their computers/systems to use e-Builder in accordance to the e-Builder User Training Guider-2015. The City will provide one classroom training or a web-based seminar. A training session is 1 - 2 hours.

e-Builder is a web-based environment and therefore it is subject to the inherent speed and connectivity limitations of the Internet. The Contractor is responsible for its own connectivity to the Internet. e-Builder response time is dependent on the Contractor's equipment, including processor speed, Internet access speed, etc. and current traffic on the Internet. The City will not be liable for any delays associated from the usage of e-Builder including, but not limited to: slow response time, down time periods, connectivity

problems, or loss of information. The Contractor shall ensure connectivity to the e-Builder system whether at the home office or job site. Under no circumstances will usage of e-Builder be grounds for a time extension or cost adjustment to the Contract.

Data entered in a collaborative mode (entered with the intent to share as determined by permissions and workflows within the e-Builder system) by the Engineer and the Contractor will be jointly owned.

The Contractor is responsible for managing, tracking, and documenting the Work to comply with the requirements of the Contract Documents. The City's acceptance via automated system notifications or audit logs extends only to the face value of the submitted documentation and does not constitute validation of the Contractor's submitted information.

While regular email will still be used for communication, e-Builder shall be utilized as much as possible in connection with all document and information management required by these Contract Documents. Contractor shall be responsible for scanning or otherwise converting to electronic format all project submittals and Contractor correspondence, drawings, sketches, etc., and uploading them to the e-Builder web site and shall be responsible for the validity of its information placed in e-Builder. The Contractor shall utilize the existing forms and processes in e-Builder to the maximum extent possible. If a required form does not exist in e-Builder, the Contractor shall include a form of its own or one provided by the Engineer (if available) as an attachment to a submittal or process. Documents and information to be submitted electronically include, but are not limited to:

- 1. Submittals using the Submittal Module
- 2. Requests for Information using the RFI process
- 3. Change Order Requests using RFQ and CCO processes
- 4. Progress payments requests using Pay Application process
- 5. Construction Closeout process
- 6. Compliance documentation (test reports, QA/QC reports, certifications)
- 7. Schedules and associated updates

The term "Copy" or "Copies" shall refer to electronic copies unless a hard copy is specified. Where a hard copy is specified, both electronic and paper versions shall be submitted.

Related Sections: Article 3.13, Submittals, General Provisions

## **SECTION 9 – MEASUREMENT AND PAYMENT**

#### 9.01 Measurement of Quantities for Unit Price Work

Materials and items of work which are to be paid for on the basis of measurement shall be measured in accordance with the methods stipulated in the particular sections of the Contract Documents involved.

Unless otherwise specified, quantities of work shall be determined from measurements or dimensions in the horizontal planes. Stationing shall be along the street centerline, lengths of sanitary sewers, storm drains and water lines shall be measured as the horizontal distances from center to center of structures, rounded to the nearest foot, and lengths of all return radii and curb data shall be measured along the face of curb.

Unless otherwise provided in the Contract Documents, volumetric quantities shall be the product of the mean area of vertical or horizontal sections and the intervening horizontal or vertical dimensions. Measurements shall be in accordance with U.S. Standard Measures. A pound is an avoirdupois pound. A ton is 2,000 pounds avoirdupois. The unit of liquid measure is the U.S. gallon.

When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by the Engineer, on a completely automated weighing and recording system. The Contractor shall furnish the Engineer with duplicate licensed weighmaster's certificates showing the actual net weights. The City will accept the certificates as evidence of the weights delivered.

#### 9.02 Bid Items

Should any bid item be eliminated in its entirety, payment will be made to the Contractor for actual costs incurred, in connection with such eliminated contract work, and for costs incurred prior to the date of the Engineer's written notification eliminating such work. The actual costs to be paid to the Contractor shall be computed in the same manner as if the work were to be paid on a force account basis. No compensation will be made to the Contractor, in any case, for loss of anticipated profits. Increased or decreased scope involving a change order will be paid as stipulated in the change order.

The estimated value of work performed, for lump sum bids or lump sum bid items will be determined from the Schedule of Values. The schedule of values shall be required by the Contractor for all lump sum bid items that breaks down the work into individual quantifiable components, plus quantities and unit prices of those components that when summed up equates to the lump sum amount of the bid item. Change order pricing for addition or deletion of those components shall be based on the lump sum breakdown contained in the Schedule of Values. No progress payment will be made until a Schedule of Values has been submitted by the Contractor and accepted by the City. Progress payments for unit price bid items will be based on the estimated quantity of work performed during the month.

Elements of work shall be separated into groupings appropriate for the project. The Technical Specifications may be used as a guide for establishing these groupings. Within each grouping, work shall be itemized by readily measurable quantities of work complete in place. The Schedule of Values shall be broken down on the basis of each lump sum bid item. Move-on costs, bond and insurance costs, and submittal preparation costs can be included in the schedule of values under a separate mobilization line item. This line item shall not exceed 5% of the contract's value. Overhead and profit shall not be allowed as line items but shall be prorated over other items of work. In the event that the Schedule of Values is not accepted by the City, another Schedule of Values shall be submitted that is acceptable to the City. The Schedule of Values shall be submitted by the Contractor within 14 days of Notice to Proceed.

The estimated value of work performed, for lump sum bids or lump sum bid items will be determined from the schedule of values, to be prepared by the Contractor and presented at the preconstruction meeting. Elements of work on the schedule of values shall be separated into groupings appropriate for the project. The Technical Specifications may be used as a guide for establishing these groupings. Move-in costs, bond and insurance costs, and submittal preparation costs can be included in the schedule of values under a separate mobilization line item. This line item shall not exceed 5% of the contract's value. Overhead and profit shall not be allowed as a line item, but shall be prorated over other items of work.

#### 9.03 Bid Quantities

Payments to the Contractor will be made only for the actual quantities of contract items constructed in accordance with the plans and specifications. Payment will not be made for materials wasted or disposed of in a manner not called for under the contract. This includes rejected material not unloaded from vehicles, material rejected after it has been placed and material placed outside of the plan lines. Unless otherwise provided, no payment will be made for materials delivered to the site but not incorporated in the work. Such quantities will not be included in the final pay quantities. No compensation will be allowed for the disposal of rejected or excess material.

When the estimated quantity for a specific portion of work is designated on the Bid Schedule as a "Final Pay Quantity", the estimated quantity specified shall be the final quantity for which payment for such specified portion of the work will be made, regardless of the actual quantity constructed, unless the dimensions of said portions of the work shown on the plans are revised by the Engineer. If such dimensions are revised and such revisions result in an increase or decrease in the quantity of such work, the final quantity for payment will be revised by the amount represented by the change. The estimated quantity for any portion of the work designated as a Final Pay Quantity shall be considered as approximate only and no guarantee is made that the quantity, which can be determined by computations, based upon the details and dimensions shown on the plans, will equal the estimated quantity. No allowance will be made in the event that the quantities based upon computations do not equal the estimated quantities. Final pay quantities will be designated on the Bid Schedule with the letter (F) and shall only apply to the corresponding portions of work specifically designated on the plans. Any portion of work not designated as a final pay quantity will be measured and paid for as specified under other provisions of the Contract Documents.

#### 9.04 Progress Payments

On or about the 25<sup>th</sup> day of each month may be designated as the date which would terminate each working month for the purpose of making progress payments. In the event that this estimate cannot be mutually agreed, the City will determine the value for progress payment purposes.

The Contractor's request for a progress payment shall be submitted via e-Builder. Request for Progress Payment form (PAS Form 051) enclosed in Appendix A of these General Provisions shall be attached to the process. The Request for Progress Payment form shall be complete and properly executed by the contractor, and have, as attachments, the items listed on the form.

The Contractor shall, on the date established, prepare and submit a progress estimate to the City for work accomplished during the previous working month, based on the various contract bid items and the unit bid prices. Invoices shall include amounts previously paid, itemized retention and any deductions or additions authorized by change order. Consultation with the Engineer may be necessary to determine the amount of work accomplished.

The first progress payment will not be made until the following submittals and documents have been provided and accepted: list and schedule of submittals, baseline construction schedule, schedule of values, SWPPP, and certified payroll submitted plus uploaded onto the DIR online payroll system covering the work pay period. Subsequent progress payment requests will not be accepted unless accompanied by the progress payment cover letter, an updated baseline or revised schedule, a certification that the record drawings have been updated as of the date of the invoice, and certified payroll covering the work pay period.

Upon receipt of a progress payment request, the City shall, within seven (7) days, determine if the request is proper, and if disputed the City will return the progress payment to the Contractor along with a written document setting forth the progress payment request's shortcomings. Following receipt of an undisputed and properly submitted progress payment request, the City shall make payment within thirty (30) days.

Contractor may request partial payment for materials delivered to the site but not yet incorporated into the work (materials on hand). To receive consideration for payment of materials on hand, the Contractor shall

provide the Engineer with a list of such materials at least five (5) working days prior to submitting the monthly estimate of amount earned for work completed. At the Engineer's sole discretion, up to seventy-

five percent (75%) of the estimated value of materials on hand may be considered for payment, subject to the following:

- a. Only materials which have received favorable review of shop drawings will qualify.
- b. Eligible materials must be delivered and properly stored, protected, and maintained in a manner favorably reviewed by the Engineer, at the job site or at a bonded warehouse.
- c. The Contractor's actual net cost for the materials must be supported by paid invoices to suppliers or other documentation requested by the Engineer.
- d. Materials delivered to the site less than thirty (30) days prior to their scheduled incorporation in the work shall not qualify.
- e. Partial payments for materials on hand shall not be deemed to be final payment for the material nor relieve the Contractor's obligations under the Contract.
- f. Partial payments for materials on hand shall be subject to retention.
- g. City reserves and shall have the right to withhold payment for any equipment and/or specifically fabricated materials that, in the sole judgment of City, is not adequately and properly protected against weather and/or damage, prior to or following incorporation into the Work.

From each progress estimate, five percent (5%) will be deducted and retained by the City, and the remainder of the amount due, less the amount of all previous payment will be paid to the Contractor provided all work invoiced has been completed and approved by the Engineer.

The Engineer may withhold or nullify, the whole or any part of any payment to such extent as may be necessary to protect the City from loss on account of any of the following:

- a. Defective or vandalized work not remedied,
- b. Damage to the City or another Contractor,
- c. Stop notices, or failure of the Contractor to make payments properly to subcontractors or laborers or suppliers, in which case 125% of the stop notice amount shall be withheld until a release form is received,
- d. Failure of Contractor to maintain, update and submit record documents, schedules or other submittals as required by the Contract Documents,
- e. Any other failure of Contractor to perform its obligations under the Contract Documents.

The Contractor may elect to receive one hundred percent (100%) of payments due under the contract from time to time, without retention of any portion of the payment by the City, by depositing and maintaining securities of a value equivalent to the retention amount with the City in accordance with the provisions of Public Contract Code, Section 22300. Such securities, if deposited by the Contractor, shall be valued by the City's Finance Director, whose decision on valuation of the securities shall be final.

Contractor warrants that, upon submittal of an application for payment, all work for which payment has been previously issued by the City and received by the Contractor, shall be free and clear of all claims, stop notices, security interests, and encumbrances in favor of Contractor, Subcontractors, or other persons or firms entitled to make claims by reason of having provided labor, materials, or equipment relating to work. The payment of progress payments by the City shall not be construed as an absolute acceptance of the work done up to the time of such payments and shall not constitute acceptance of defective work.

#### 9.05 Final Payment

The City shall, prior to final acceptance, provide the Contractor with a copy of the final quantities for the various contract bid items and a summary of contract change orders for the Contractor's review. All prior payments shall be subject to correction in determining the total contract sum. The Contractor shall reply promptly in writing, to indicate either the Contractor's concurrence or an explanation of possible discrepancies in the total contract sum.

The project will not be submitted to the Director of Public Works for acceptance until the Engineer and the Contractor concur with the totals of all quantities, costs, contract change orders and the total contract sum. Following concurrence, a semi-final payment will be made to the Contractor after deducting all previous payments and all amounts to be retained under the provisions of the contract. The retention payment shall be due and payable as a final payment after the expiration of thirty-five (35) days following the date of recording at the County after final acceptance of the work.

If within the time fixed by law, a properly executed notice to stop payment is filed with the City, due to Contractor's failure to pay for labor or materials used in the work, all money due for such labor or materials will be withheld from payment to the Contractor in accordance with applicable laws.

If releases are required, the Contractor shall pay or cause to be paid to Subcontractors the amount stated in the conditional releases within five (5) days after receipt of the semi-final payment, and shall promptly thereafter furnish evidence of such payment to the City.

The securities deposited by the Contractor will be released, providing that the following requirements of the contract have been fulfilled:

- a. Satisfactory completion of all construction work and written acceptance of said work by the City;
- b. The submission by the Contractor to the Engineer of all required stop notice releases, submittals, written guarantees, warranties, operating manuals, and other project related documentation;
- c. The return to the Engineer of all drawings and written specifications loaned to the Contractor during the construction period.
- d. The submission by the Contractor to the Engineer of record documents and a set of red-lined drawings showing the revisions to the original set of drawings which reflect the actual construction of the project for preparation of "Record Drawings".

The Contractor agrees that the payment of the final amount due under the contract shall release the City of East Palo Alto from any and all claims or liability on account of all work performed under the contract, except those items previously made in writing and identified by the Contractor as unsettled. Release of the final payment by the City shall not be construed as an acceptance of any defective work or acceptance of improper materials.

#### 9.06 Claims

The term "Claim" shall mean a written demand or assertion by the Contractor seeking, as a matter of asserted right, adjustment in the terms of the Contract Documents, payment of money, extension of time, or other relief with respect to the Contract Documents, or determination of other disputes or matters in question between the City and Contractor arising out of or related to the Contract Documents or the performance of the work, including claims alleging an error or omission.

A notice of potential claim must be stated with specificity, including identification of the event giving rise to potential claim, the date of the event, and the asserted effect on contract sum and contract time. The notice of potential claim shall include adequate supporting data. Adequate supporting data for a potential

claim for an adjustment of the contract time shall include scheduling data demonstrating the impact of the event on the completion of the work. Adequate supporting data for a potential claim for an adjustment of the contract sum shall include a detailed cost breakdown of the items allowed, isolating labor, material, and equipment costs, and providing detailed quantities and unit prices for changed work. If the exact amount of a potential claim is not ascertainable at the time such potential claim is made, the supporting data currently available shall be submitted. Supplemental data supporting the exact amount of the potential claim shall be submitted as soon as available.

Notwithstanding the making of any potential claim or the existence of any dispute regarding any potential claim, unless otherwise directed by the Engineer, the Contractor shall not cause any delay, cessation, or termination in the performance of the work, including portions of the work pertaining to a potential claim.

#### 9.07 Time Limit on Potential Claims

Contractor shall submit any and all notices of potential claims, together with adequate supporting data to the Engineer as soon as possible but not later than ten (10) working days after occurrence of the event giving rise to the claim, or the date the Contractor first recognized, or reasonably should have recognized, the condition giving rise to the claim, whichever is earlier. Contractor hereby expressly waives all claims not made within this time limit.

Contractor is expressly barred from asserting any potential claims of which the Contractor was aware, whether or not the exact amount of such potential claims was ascertainable, that is not submitted to the Engineer prior to the Contractor proceeding with the work.

#### 9.08 City Response to Potential Claims

The Engineer shall promptly review potential claims. If additional supporting data is deemed necessary, the Engineer shall request such additional data within ten (10) working days after receipt of the potential claim. The Contractor shall furnish such additional data no later than ten (10) working days after receipt of the City's request. The Engineer shall render a decision promptly, but in any event, within thirty (30) working days after the receipt of the potential claim or the receipt of additional supporting data. If the amount of the claim is in excess of \$50,000, the aforesaid thirty (30) working day period shall be sixty (60) working days. Failure of the Engineer to render a decision within the aforesaid thirty (30) or sixty (60) working day period shall be deemed a decision denying the claim and the last day of such period shall be the date of such decision. The decision of the Engineer shall be final and binding unless appealed in accordance with the General Provisions, Section 9.09, "Appeal of the Engineer's Decision".

#### 9.09 Appeal of Engineer's Decision

If Contractor disputes the Engineer's decision of a claim, the Contractor shall, within thirty (30) calendar days of the decision, make a written appeal of the decision to the Engineer. The written appeal shall include all supporting data upon which the Contractor requests the City to modify its decision, including all documentation transmitted between the Contractor and the Engineer on the underlying potential claim. The Engineer shall make a good faith effort to resolve the potential claim prior to final completion of the Project. In the event the potential claim is not resolved prior to final completion, the Contractor's potential claim shall be heard by the Director of Public Works prior to recommending final acceptance of the Contract. The Contractor's administrative remedies under the Contract Documents shall be exhausted after the decision of the Director of Public Works is rendered. In case of disagreement with the decision of the Director of Public Works is rendered. In case of disagreement with the decision of the Director of Public Works is rendered. In case of disagreement with the decision of the Director of Public Works is rendered. In case of disagreement with the decision of the Director of Public Works is rendered. In case of disagreement with the decision of the Director of Public Works is rendered. In case of disagreement with the decision of the Director of Public Works is rendered. In case of disagreement with the decision of the Director of Public Works, the Contractor may pursue the resolution of the dispute by presenting a formal claim to the City.

## **SECTION 10 – GUARANTEE**

#### 10.01 Warranties

The Contractor shall be held responsible for and shall make good any defects through faulty or improper workmanship or through defective materials, arising or discovered, in any part of this work within the time specified (stated in the Special Provisions) after the completion and acceptance of the entire project.

- a. *Warranty Form* Contractor warranties shall be on the Contractor's own letterhead, addressed to the City, and shall in all cases be furnished to the City in duplicate. In addition, furnish City with original copies of all manufacturer's warranties.
- b. Standard Product Warranties are pre-printed written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the City. Contractor shall provide to the City the Manufacturer's Standard written warranties of all the equipment installed for the project.
- c. Special Warranties are written warranties required by or incorporated in Contract Documents, to extend time limits provided by standard warranties or to provide greater rights for the City. Special warranties for products and installations that are specified to be warranted, shall be provided. When a special warranty is to be executed by the Contractor, or the Contractor and a Subcontractor, or the Contractor and a Supplier or Manufacturer, the Contractor shall prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the City, for approval, prior to final execution.
- d. *Disclaimers and Limitations* Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor from providing the specified warranty on the work that incorporates the products. Nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor, from meeting specified warranty obligations.
- e. Rejection of Warranties The City reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents. The City reserves the right to refuse to accept work where a special warranty, or similar commitment is required, until evidence is presented that entities required to countersign commitments are willing to do so.
- f. *Related Damages and Losses* When correcting warranted work that has failed, the contractor shall remove and replace other work that has been damaged as a result of such failure, or that which must be removed and replaced to provide access for correction of the warranted work.
- g. *Reinstatement of Warranty* When work covered by a warranty has failed and been corrected, the warranty shall be reinstated by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for time.
- h. Replacement Cost On determination that work covered by a warranty has failed, the contractor shall replace or rebuild the work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective work regardless of whether the City has benefited from use of the work through part of its useful service life.
- i. *City's Recourse* Written warranties made to the City are in addition to implied warranties, and shall not limit duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the City can enforce such other duties, obligations, rights, or remedies.

j. Notice to Perform Warranty Work – The Contractor is required to repair or replace warranted work within 10 days of receiving written notice from the City of a failure of warranted work. If the required repair or replacement work has not been performed by the Contractor within the time allowed, the City may, at its sole discretion, undertake appropriate warranty work without further notice to the Contractor.

In the event that the nature of the failed warranted work is such that further damage will occur, or there is a danger to life or property, the City may undertake immediate repair or replacement without notice to the Contractor.

The cost of repair work undertaken by the City under these provisions shall be recoverable from the Contractor.

#### 10.02 Contractor's Guarantee

Prior to final acceptance, the Contractor shall warrant and guarantee to the City that all work is in accordance with the Contract Documents and is not defective.

The guarantee shall be accompanied by a warranty bond for ten percent (10%) of the final contract sum, which shall warrant the quality of the work for a period of one (1) year after acceptance. The guarantee and warranty bond shall be in accordance with the Agreement Forms furnished in the Contract Documents.

#### 10.03 Correction of Defective Work During the Guarantee Period

If within one (1) year after the date of acceptance, or such longer period of time as may be prescribed by laws or regulations or by the terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, the Contractor shall promptly without cost to the City and in accordance with the City's written instructions, either correct such defective work or if it has been rejected by the City, remove it from the site and replace it with non-defective work.

If the Contractor does not promptly comply with the terms of such instructions within ten (10) working days after written demand by the City, the City may have the defective work corrected. The City may also correct defective work immediately in cases of emergency where delay would cause serious risk of loss or damage. All direct, indirect and consequential costs of correcting defective work (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) shall be absorbed by the Contractor.

The Contractor shall remove from the Project site portions of the work and materials which are not in accordance with the Contract Documents and which are neither corrected by the Contractor nor accepted by the City.

#### APPENDIX A – GENERAL PROVISION FORMS

#### Form Title

## **Reference Section**

Three Week Look Ahead Schedule	7.05
Daily Extra Work Report (SAMPLE)	4.06
Request For Progress Payment	9.04
Contractor's Certification of Completion	7.19

							C	City o	f Eas	st Pa	I	Proje	Wee ct's T ctor's	Fitle,		head	Sche	edule												
															Ν	Aontl	1												Μ	lo
Task No.	Work To Be Performed	Comments	5 M	6 T	7 W	8 T	9 F	10 S	11 S	12 M	13 T	14 W	15 T	16 F	17 S	18 S	19 M	20 T	21 W	22 T	23 F	24 S	25 S	26 M	27 T	28 W	29 T	30 F	1 S	2 S
1																														
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														
13																														
14																														
15																														

	DAILY EXT	RA V	VORK R	EPORT	No.				RF	Q No	
Work Pe	rformed by ion of Work		Project No Contractor's Job No				 				
Code.	Equipment (and I.D. No.)	Hour s	Hrly. Rate	Ext. Amou	nts Labor	Class.	Hours	Hrly.	Rate	Ext. Ame	ounts
							Reg. O.T.				
			C A								
					<b>IPLE</b>						
						_					
							Reg. O.T.				
	Material and/or Work done b	y Specia	list (provide i	nvoices)				SUB-T	OTAL		
	Description	No.	Unit Cost	Ext. Amou	Labor Surcharge (Reg.)			%			
					Labor Surcharge (O.T.) Other			%			
						Sub-To	otal Cost o	f Labor	Α		
Sub-Tota	I Cost of Equipment, Materials	s and Spe	ecialist Work						В		
CONTRAC	TOR'S REPRESENTATIVE				Markup on Labor Cost			%	(A)		
lours a	nd Quantities accepted as co	orrect			Markup on Equipment,	Material ar	nd Work	%	(B)		
CITY INSP	ECTOR							Т	OTAL		

11

Project		Project No	Date / /
То:	Director of Public Works City of East Palo Alto 1960 Tate Street East Palo Alto, CA 94303	From:	
Attn:	Construction Contract Administrate	or	
A progre	ess payment is requested in accorda	nce with the following:	
For the f	irst Progress Payment		
	Certified Payroll	dated/) supporting the invoice <i>g have been submitted and appro</i> ired dule able)	ved by the City:
For the s	second and subsequent Progress Pa	ayment	
	<ul><li>Schedule of Values analysis</li><li>Certified Payroll</li></ul>	dated <u>/ /</u> )	tion Schedule dated <u>/ / ,</u>

and I certify that the Record Drawings have been updated to incorporate all field changes and extra/changed work as of \_\_/ /\_\_. Furthermore, I have sought and obtained the assigned City Inspector's review of the status of the Record Drawings as evidenced by the Inspector's signature of acknowledgment on this Request.

City Inspector's Signature

Dated / /

Contractor's Signature

## CONTRACTOR'S CERTIFICATION OF COMPLETION

Project		Project No		Date	/ /	-
То:	Director of Public Works City of East Palo Alto 1960 Tate Street East Palo Alto, CA 94303					
Attn:	Construction Contract Administrato	r				
This is t	o certify that I,					_
am an a	uthorized official of					_
working	in the capacity of					
	re been properly authorized by the fir ubject contract:	m or corporation	to sign the follov	ving state	ements p	pertaining
	I know of my own personal knowl described above has been perform accordance with, and in conformity	ned, and material	s used and insta	lled in ev	very par	
	The contract work is now comple	to in all parts ar	d requiremente	and roc	dy for y	your final

The contract work is now complete in all parts and requirements, and ready for your final inspection.

I understand that neither the determination by the Owner that the work is complete, nor the acceptance thereof by the City, shall operate as a bar to claim against the Contractor under the terms of the guarantee provisions of the contract documents.

**Contractor's Signature** 

Title

## SPECIAL PROVISIONS

## TABLE OF CONTENTS\*

1.	DESCRIPTION AND LOCATION	2
2.	PRE-BID CONFERENCE	. 2
3.	CONTRACTOR'S LICENSE	. 2
4.	PRECONSTRUCTION CONFERENCE	. 2
5.	TIME FOR COMPLETION	. 2
6.	COORDINATION	. 2
7.	SUBMITTALS	. 2
8.	LIQUIDATED DAMAGES	. 3
9.	BID ITEMS	3
10.	SPECIALTY ITEMS	. 8
11.	WARRANTY DURATION	. 8
12.	DISPOSAL FEES	. 8
13.	MATERIALS SUPPLIED BY CITY	. 8
14.	TESTING	. 9
15.	WATER	. 9
16.	SPECIAL PERMITS	. 9
17.	REVOCABLE ITEMS	. 9
18.	HAZARDOUS MATERIALS/CONDITIONS	. 9
19.	DISCLOSURE INFORMATION/DOCUMENTS	. 9
21.	WORK TO BE PERFORMED BY CONTRACTOR	. 9
22.	WORK SITES AND PAYMENT	. 9
23.	PROGRESS PAYMENT RETENTION	10
24.	WORKING HOURS	10
25.	NOTIFICATION AND RELATIONS WITH PROPERTY OWNERS	10
26.	PUBLIC CONVENIENCE AND SAFETY	10
27.	TRAFFIC CONTROL AND LANE CLOSURE RESTRICTIONS-	10
28.	STAGING AREAS AND FIELD OFFICE	10
29.	PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS	10
ESCRO	DW AGREEMENT FOR SECURITY DEPOSITS	11

#### 1. Description and Location

The project is located at various locations in the City of East Palo Alto, California.

The project consist of furnishing all tools, equipment, apparatus, facilities, labor, transportation and material necessary to perform site preparation and improvements for the ANNUAL STREET RESURFACING PROJECT 2022 in accordance with these plans and specifications.

#### 2. Pre-Bid Conference

N/A

#### 3. Contractor's License

Contractor shall be licensed under the provisions of chapter 9, Division 3 of the Business and Profession Code of the State of California to do the type of work contemplated in the project. The general class or type of work called for under the contract requires a class "A" Contractor license. Contractor shall maintain this license for the duration of the work.

#### 4. Preconstruction Conference

The City will schedule a preconstruction conference to be held within 10 calendar days of the date specified in the Notice to Proceed.

#### 5. Time for Completion

Contractor has seventy (70) working days to complete the project from the date specified in the Notice to Proceed.

#### 6. Coordination

The Contractor shall coordinate all project work with the City's electrical contractor at the project site.

#### 7. Submittals

- a. The Contractor shall provide submittals for the following. The submittals are anticipated to include, but are not limited to the following: asphalt, slurry, concrete, truncated domes.
- b.

Submittal Type		Number of copies/units						
List and Schedule of S	ubmittals	1 hardcopy and via email						
Proposed Substitutions		1 hardcopy and via email						
Schedule of Values		1 hardcopy and via email						
Construction Schedule	s (Preliminary, Baseline &							
Revised)		1 hardcopy and via email						
Other Submittals		1 hardcopy and via email						
		1 (unless required otherwise in the						
Samples		Technical Specifications)						
Shop Drawings		1 hardcopy and via email						
		3 (unless the number specified in the						
Manuals and Instructio	ns	Technical Specifications is greater)						
Warranties/Guaranties		1 hardcopy and via email						
		The "job site" print.						
	a. Original contract drawings							
		Original reproducible drawings with all						
Record Drawings	b. "As Built" Drawings	changes marked						

b Detailed requirements for specific submittals (other than the number to be provided and review times) may be received from the City.

- c The List and Schedule of Submittals shall be provided within 10 working days from the date the Notice to Proceed is issued.
- d The Owner shall review submittals (other than Construction Schedule submittals for which there are different requirements) within 28 days of receipt and shall review each resubmittal within 21 days of receipt of complete submittal.
- e The Construction Schedule submitted shall identify major noise generating construction activities. Contractor to notify adjacent affected properties at least 72 hours prior to major noise generating construction activities.

#### 8. Liquidated Damages

Liquidated damages shall be in the sum of one thousand and no/100 (\$1,000) per calendar day.

#### 9. Bid Items

Bid Items and total project costs shall include the entire project as shown in the drawings and described in the specifications. All bid items must be filled in completely. Quote in figures only, unless words are specifically requested. Full compensation for conforming to the requirements of each section shall be included in the contract price for each item and no additional compensation will be allowed therefor. See Caltrans Standard Specifications for more information on specs for items not detailed in the Technical Specifications.

The contract price paid for each bid item shall include full compensation for performing the scope of work specified on the plans and specifications including all labor, material, tools, equipment, and incidentals, and for doing all the work associated with each bid item. Refer to the Technical Specifications for details.

#### Bid Item 1 – Mobilization (5% Max):

Mobilization (includes bonds and insurance) – The Contractor shall furnish all labor, materials, tools, equipment and incidentals to and away from the project site; for establishment and dismantling of all facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning and after completing work on the various contract items on the project site. These include obtaining all necessary permits, providing on site sanitary facility, address numbers providing all OSHA and City required notices and signs, and providing initial submittals. All the work

involved in mobilization as specified herein, and no additional compensation will be allowed therefore. Allowable payment for mobilization shall not exceed 5% of the total for contract items of work. Payment for this item shall be on a lump sum basis.

Payments for mobilization will be made as follows:

- a. When the monthly partial payment estimate of the amount earned, not including the amount of mobilization, is less than 5 percent of the original contract amount, 25 percent of the contract item price for mobilization will be included in the estimate for payment.
- b. When the monthly partial payment estimate of the amount earned, not including the amount of mobilization, is 5 percent or more of the original contract amount, 50 percent of the contract item price for mobilization will be included in the estimate for payment.
- c. When the monthly partial payment estimate of the amount earned, not including the amount of mobilization, is 10 percent or more of the original contract amount, 75 percent of the contract item price for mobilization will be included in the estimate for payment.
- d. When the monthly partial payment estimate of the amount earned, not including the amount of mobilization, is 20 percent or more of the original contract amount, 95 percent of the contract item price for mobilization will be included in the estimate payment.
- e. When the monthly partial payment estimate of the amount earned, not including the amount of mobilization, is 50 percent or more of the original contract amount, 100 percent of the contract item price for mobilization will be included in the estimate for payment.

#### Bid Item 2 – Traffic Control (10% Max):

The contract price paid for Traffic Control shall include full compensation for performing the scope of work, including all necessary designation of an individual dedicated traffic control coordinator, traffic control plan submittals, project signs, implementation and maintenance of the approved traffic control plans for all work in construction zones throughout the duration of the project. This item shall include any arrow boards that the contractor utilizes under the traffic control plan, however, changeable message boards utilized shall be paid under a separate bid item.

Payment for complying with the provisions for Traffic Control shall be paid by lump sum. Payments for the lump sum item shall be determined based on the percentage of the bid item work completed as determined by the Engineer at the time the progress payment is prepared.

#### Bid Item 3 – Construction Staking and Surveying:

The Contractor shall provide all surveys required conducting and control the work and all survey shall be under the control of an independent land surveyor licensed in the State of California. The Contractor shall be fully responsible for layout and horizontal and vertical control of the construction of the project, including setting of line and grade stakes.

The Contractor shall provide, preserve, and replace if necessary, all of the necessary construction stakes required for the construction of the project.

Prior to starting any construction, the Contractor shall submit to the Engineer for approval the frequency, information, and format of survey stakes and other construction control and the horizontal and vertical control to be used for the project. Immediately upon completion of the work, the Contractor shall submit to the Engineer copies of all survey and field notes.

As a final grade check, all curb and gutter, valley gutter placed shall be water tested upon stripping of forms. Improvements including sidewalks to be surveyed to ensure within public right of way.

The Contractor shall replace at the Contractor's sole expense and at no cost to the City, any survey marking or stakes that are disturbed or destroyed.

If in the opinion of the Engineer, it is necessary to bring independent surveyors on the job site to adequately control the work, the cost of the independent surveys will be deducted from the progress payment due to the Contractor.

The contract lump sum price for providing Construction Survey and Staking shall include full compensation for furnishing all equipment, materials, personnel necessary for construction staking and no additional compensation will be allowed therefore.

#### **Bid Item 4 – Stormwater Pollution Prevention and Dust Control:**

The contract price paid for implementation of construction best management practices (BMPs) shall include full compensation for performing the scope of work specified in the "General Requirement" specifications section, and as shown on the plans, including all labor, materials, tools, equipment and incidentals, and for doing all the work involved in implementation of construction BMPs, including materials and waste management, equipment management and spill control, earthmoving, concrete management and dewatering, paving and asphalt work and painting and paint removal, and no additional compensation will be allowed.

Payment for complying with the provisions for implementation of SWPPP, construction BMPs and Dust Control shall be paid by lump sum. Payments for the lump sum item shall be determined based on the percentage of the bid item work completed as determined by the Engineer at the time the progress payment is prepared.

#### Bid Item 5 – Construction Signage:

The contract price paid for Construction Signage shall include full compensation for performing the scope of work specified in the "Construction Signage" Technical Specifications section, including fabrication and placement. Construction signage shall be posted at most visible and critical locations prior to commencement of construction. Signage shall be relocated to work areas as needed.

Construction signage at the project site shall include the following:

- Minimum size of 48"x96"
- Project name
- City logo
- Grant funding source (if applicable)
- General project timeframe (shall be updated if schedule changes)
- 24-hour project contact phone number

#### Bid Item 6-10, 45-47 – Concrete Improvements:

The contract price paid for Concrete Improvements shall include full compensation for performing the scope of work specified in the "Concrete Improvements" Technical Specifications section, including, as appropriate, but not necessarily limited to, sawcutting of existing concrete along existing score lines, removal and disposal of existing materials, excavation, subgrade preparation, compaction, grading, class 2 aggregate base, removing/relocation of signs, conform, disposal of surplus materials, installation and removal of formwork, clearing & grubbing, tree trimming performed by a qualified arborist, installation of root barrier, construction of concrete improvements, flowline test, inlet protection, adjustment of any utility boxes, valves, monuments, drain inlets, steel plates, vaults, and manholes to match finished grade, finishing, application of curing compound, restoration of surrounding improvements including planting, irrigation repairs, concrete removal and replacement of wood chips, etc., painting of curbs to match preconstruction conditions, replacement of engraved curb markings, ADA compliant slopes, truncated domes, landings and markings at curb ramps, vehicular and pedestrian accommodations, notification of adjacent residents, posting of no parking signs, clean-up and incidentals to complete work according to the plans and specifications. All work to conform with section 90 of the state standard specifications.

"PCC Curb & Gutter - Remove and Replace" shall be measured and paid per linear foot of curb and gutter installed, measured along the face of curb.

"PCC Valley Gutter and PCC Sidewalk - Remove and Replace" shall be measured and paid per square foot of concrete installed.

"PCC Curb Ramp" shall be measured and paid per each curb ramp, for complete removal and replacement of ramp. Retaining curbs (if necessary) at the edge of sidewalk and at the back of certain curb ramps as well as the curb and gutter immediately adjacent to ramps shall be included as part of the per each cost of the ramp. Any additional AC or PCC conforms shall also be included in this item. Ramp construction shall comply with City and ADA slope and dimension requirements. Truncated domes to be Armor Tile or approved equal, cast in place, yellow in color.

"PCC Convert Storm Drain" shall be measured and paid per each location. Conversion will be from a drop inlet to a curb opening catch basin.

#### Bid Item 11-12 – Asphalt Concrete Grinding:

The contract price paid for Asphalt Concrete Grinding shall include full compensation for performing the scope of work specified in the "Asphalt Concrete Grinding" Technical Specifications section, including but not necessarily limited to full road width grinding (including dealing with existing roadway structures). Collect, haul, recycle, or appropriately dispose of excess grindings. Do not sweep or wash into gutters.

"Asphalt Concrete Grinding – 1 Inch Wedge Grind" shall be measured and paid per linear foot of 6 feet wide asphalt pavement length removed.

"Asphalt Concrete Grinding - 2 Inch Full Grind" shall be measured and paid per square yard of asphalt pavement area removed.

#### Bid Item 13 – HMA Concrete Paving (2 inch) thickness:

The contract price paid for Hot Mix Asphalt Paving shall include full compensation for performing the scope of work specified in the "Hot Mix Asphalt (HMA) Paving" Technical Specifications section, including but not necessarily limited to cleaning the existing surface as needed, application of asphaltic prime coat and/or binder, leveling course (if necessary or called for), deeplift asphalt concrete pavement conform for curb ramps, curb and gutter repair, placement and compaction of asphalt concrete, sand, spreading sand on the asphalt concrete surface, sweeping and removing excess sand from pavement surface, repair of poor workmanship or damage, and clean-up.

The contract price for "HMA Paving – 2 Inch Thick" shall be measured and paid per Ton, over the area and thickness indicated on the plans and specifications. Contractor shall furnish weight tags to the Engineer daily and shall indicate on the tags the location (street and which pass) the material was used.

#### Bid Item 14-15 – Type II Slurry Seal:

The contract price paid for Type II Slurry Seal shall include full compensation for performing the scope of work specified in the "Type II Slurry Seal" Technical Specifications section, including but not limited to surface preparation, cleaning, placement of slurry seal, and cleanup.

The contract price for "Type II Slurry Seal" shall be measured and paid per square yard, over the area indicated on the plans and specifications.

#### Bid Item 17 – Base Repair (4 Inch Digouts):

The contract price paid for Base Repair (4 inch Digouts) shall include full compensation for performing the scope of work specified in the "Base Repair (4 inch Digouts)" Technical Specifications section, removal of AC pavement digout areas, sawcutting for vertical edges, disposal of digout materials, preparation of digout area, HMA paving within excavated digout area, and compaction, root removal, placement of tack coat and asphalt concrete and clean-up.

The contract price for "Base Repair" shall be measured and paid per square foot, over the area indicated on the plans and specifications. The specific location of digouts will be marked in the field by the Public Works Inspector.

#### Bid Item 18-19, 27-30, 33-38 – Thermoplastic Pavement Striping and Markings:

The contract price paid for Pavement Striping and Markings shall include full compensation for performing the scope of work specified in the "Thermoplastic Pavement Striping and Markings" Technical Specifications section, including but not necessarily limited to, removal of existing thermoplastic or paint striping, markings and markers, pavement preparation, establishing alignment and layout, placement of new striping in theormoplastic, application of buttons and reflectors, corrective work and clean-up.

"Thermoplastic Pavement Symbols and Legends" consisting of miscellaneous legends and arrows as defined with calculated areas in the State Standard Plans shall be measured and paid per square foot of area installed.

"Thermoplastic – 6 Inch", "Thermoplastic– 12 Inch", consisting of various lines defined in the various details of the State Standard Plans, shall be measured and paid for per linear foot of stripe installed.

NOTE: Liquidated damages shall apply for delayed placement of striping after paving operations. Refer to technical specification section for liquidated damages amount.

#### Bid Item 20-24 – Utility Grade Adjustments:

The contract price paid for Utility Grade Adjustments shall include full compensation for performing the scope of work specified in the "Utility Grade Adjustments" Technical Specifications section, including but not necessarily limited to, surveying of utilities prior to grinding or paving operations, providing utility survey records, locating and marking utilities based on survey records prior to utility adjustment operations, replacement materials (where applicable), modification by grinding (if needed), raising/lowering frames and covers, patching after overlay and clean-up.

"Raise to Grade" of the following items; stormwater manholes, sanitary manhole, communication vault, monuments, water valve covers, and detector vaults shall be measured and paid per each structure adjusted.

NOTE: Adjustments shall be adjusted twice: lowered prior to grinding and then raised after paving.

Within paved areas, it is anticipated and it should be bid such that all valve and monument boxes will need to be replaced. It is also anticipated that all manhole frames and covers will be reused. Should a replacement manhole frame or cover be required, it shall be furnished by the City for installation by the Contractor.

Adjustments in concrete areas to vaults, manhole or valve boxes shall only be paid if the box and lid need replacement. If the existing structure can be reused within a concrete area, then no compensation shall be made and adjustment shall be considered as included in the contract unit price for concrete improvements and/or other items of work.

NOTE: Liquidated damages shall apply for delayed adjustments of utilities, as described in the "Utility Structure Adjustments" technical specification section.

#### Bid Item 26 – Replacement of Existing Facilities and New Facilities:

The contract price paid for "Replacement of Existing Facilities and New Facilities" shall include full compensation for performing the scope of work specified in the "Replacement of Existing Facilities and New Facilities" Technical Specifications section, including but not necessarily limited to, surveying of utilities prior to grinding or paving operations, providing utility survey records, locating and marking utilities based on survey records prior to utility adjustment operations, replacement materials (where applicable), modification by grinding (if needed), raising/lowering frames and covers, patching after overlay and clean-up.

All work per plans and technical specifications and shall include traffic detectors loops, and speed humps.

Contractor shall notify the Engineer at least two (2) working days in advance of the detector loop removal operation. All installed loop detectors shall be completely functional to the satisfaction of the Engineer within five consecutive working days after placement of pavement finish course.

The contract price for the "Removal and Replacement of the following items: Traffic Loopsshall be measured and paid per each item.

#### Bid Item 32 – Signage:

This work shall consist of furnishing all materials, equipment and labor necessary in the fabrication and installation or re-installation of all the metal signs per plans and/or specifications. Signage items shall include all surface preparation, pole, installation, pole foundation, sign and hardware installations as required. Included also is any necessary removal, salvage, temporary signage, relocation, and traffic control required to accomplish the scope of work detailed on the drawings and as described in these specifications. It may be necessary to phase the construction of the signage in the interest of public safety. The Contractor shall install signs when required to maintain public safety or convenience, as determined by the Engineer.

Streets that will need signage are those which require new bike striping and where specified on the plans. Additionally, other streets may be identified by the City Inspector. All sign locations shall be field verified and approved by the Engineer prior to excavation for the sign foundation.

All signing shall conform to the 2014 edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD) and these special provisions. Submittals for all signs shall be submitted for review by the Engineer prior to fabrication.

Materials shall be in conformance with the latest editions of the 2010 Standard Specifications Section 56, the Caltrans Standard Sign Specifications and the MUTCD, except that all materials will be supplied by the Contractor. All signs shall be fabricated from high tensile alloy aluminum with reflective smooth finish. Sign panels shall be a minimum of 0.080 inch thick, cut to size and shape with a tolerance of 1/32 inch. Panels shall be flat and free of buckles, warps, dents, burrs and any other defects resulting from fabrication.

Signs shall be installed as directed by the Engineer and shall be "Bike Lane" R3-17, In-Road Pedestrian Signs R1-6, Pedestrian Crossing Signs W11-2, No Parking Signs R28 (CA), and "Share the Road" signs. Construction and panel installation shall be per the Standard Specifications. Sign panels shall be level and sign posts shall be plumb.

The contract unit price for signs shall include full compensation for furnishing all labor, material, equipment, tools, and incidentals necessary to perform the full scope of work as described above, as shown on the plans, as specified herein and as directed by the Engineer.

#### Bid Item 39-42 – Alternative Bid - Bulbouts:

The contract price paid for "Alternative Bid 1 – Bulbouts" shall include full compensation for performing the scope of work specified in **Appendix A – Bulbout Locations**, found in the Technical Specifications. This work will include, but is not limited to, sawcutting of existing concrete along existing score lines, removal and disposal of existing materials, excavation, subgrade preparation, compaction, grading, class 2 aggregate base, removing/relocation of signs, conform, disposal of surplus materials, installation and removal of formwork, clearing & grubbing, tree trimming performed by a qualified arborist, installation of root barrier, construction of concrete improvements, flowline test, inlet protection, adjustment of any utility boxes, valves, monuments, drain inlets, steel plates, vaults, and manholes to match finished grade, finishing, application of curing compound, restoration of surrounding improvements including planting, irrigation repairs, concrete removal and replacement of wood chips, etc., painting of curbs to match preconstruction conditions, replacement of engraved curb markings, ADA compliant slopes, truncated domes, landings and markings at curb ramps, vehicular and pedestrian accommodations, notification of adjacent residents, posting of no parking signs, clean-up and incidentals to complete work according to the plans and specifications.

Additionally, the locations must be surveyed to ensure positive drainage is maintained after construction. The contract price paid for this is included under Bid Item 40 "Construction Staking and Surveying (Bulbouts)".

#### Bid Item 16 – Multi Layer Treatments:

Language to be finalized as part of the 100% PS&E

#### 10. Specialty Items

N/A

#### 11. Warranty Duration

Unless specifically stated in the Technical Specifications, all items shall have a one-year warranty from the date of final acceptance of the project.

#### 12. Disposal Fees

The Contractor shall be responsible to pay all applicable disposal fees and the cost of this shall be included in the various bid items.

#### 13. Materials Supplied by City

None

#### 14. Testing

Except as stated otherwise in the specifications, the Contractor shall perform sampling and testing to demonstrate compliance with contract requirements. Testing shall be undertaken by an independent testing laboratory qualified to perform sampling and testing required by this contract. The testing laboratory must be independent of the material suppliers. All sampling and testing shall be performed in accordance with the required frequencies specified in the Caltrans Standard Specifications and manuals, and per the City's Quality Assurance Program (QAP).

Test results shall be provided showing actual results and include a statement that the item tested or analyzed conforms or fails to conform to specified requirements. Test results shall cite applicable specification references and required tests or analytical procedures used. Test results shall be certified by a testing laboratory representative authorized to do so. Reports shall have the cover sheet conspicuously stamped in large red letters "CONFORMS" or "DOES NOT CONFORM." If the items fails to conform, notify the Engineer. Payment for testing will be included in the bid item price paid for the item of work requiring testing and no additional payment will be allowed therefor.

#### 15. Water

The Contractor shall pay for and shall construct all facilities necessary to furnish water for its use during construction, including potable water service. Water used for human consumption shall be kept free from contamination and shall conform to the requirements of the State and local authorities for potable water. The Contractor will pay for all water used for their operations on site.

The purchase of potable water for construction purposes requires obtaining a Hydrant Permit from the City's Water Company located at City Hall, 2415 University Avenue, East Palo Alto.

#### 16. Special Permits

N/A

#### 17. Revocable Items

Items listed as "revocable" may be deleted entirely or in part, or added at the sole discretion of the City. All provisions of Section 9-1.06 of the Standard Specifications shall not apply to entire or partial deletion of or addition to revocable items.

#### 18. Hazardous Materials/Conditions

N/A

#### 19. Disclosure Information/Documents

(Not part of the contract documents and not bound in) N/A

#### 21. Work to be Performed by Contractor

The Contractor shall perform, with its own organization, Contract work amounting to at least <u>25%</u> percent of the Contract price, except that any designated "Specialty Items" may be performed by subcontract, and the amount of any such "Specialty Items" so performed may be excluded from the computation.

#### 22. Work Sites and Payment

This contract is made of many individual work sites. A work site is typically all concrete replacement work at a single addressed parcel or property. Typically, all tasks, as prescribed in the specifications, are required to be performed to constitute a completed work site. All variances from typical shall be defined in writing by the City Inspector/Representative.

Payment shall be on the basis of completed individual work sites; this shall include all work tasks required to complete an individual work site, including cleanup and restoration work.

#### 23. Progress Payment Retention

Retention shall be five percent (5%) for the estimated value of work.

#### 24. Working Hours

Construction work shall be limited to 8:00 a.m. to 5:00 p.m. Monday to Friday, excluding City holidays. Additional restrictions will be expected for work on Bay Road. Exceptions shall be approved by City Engineer.

#### 25. Notification and Relations with Property Owners

At ten (10) working days and again at two (2) working days prior to mobilizing to a site or performing any action which affects residents, schools or businesses, the Contractor shall distribute an approved written notice to all adjoining residents and businesses, property owners, tenants and applicable parties. Such notice shall include the expected date for start of construction, a general description of the construction activity to take place, expected duration of the activity, traffic delays, alternative routes, driveway closures and the name, address, and a 24-hour local telephone number of the Contractor. A draft copy of the notice shall be provided to the City Engineer for approval, prior to distribution.

The Contractor shall provide the Engineer a copy of the proposed written notification prior to mailing or delivery for approval at least 5 days prior to their distribution.

Delays in performing the work or changes in the construction schedule, for any reason, shall require the Contractor to provide written re-notification to residents, businesses, City services within 24 hours that any delay or change is reported to or discovered by the City Engineer.

The Contractor shall not impede or impair waste haulers, recycling operations and buses within the project area. It is the Contractor's responsibility to determine which waste haulers, recycling operators and buses are scheduled to work/run in the project area and to develop a project schedule that will not impede or impair their operations.

#### 26. Public Convenience and Safety

The Contractor shall provide for the convenience and safety of traffic and the public in conformance with the provisions in Section 7-1.03 and Section 7-1.04 of the 2010 Caltrans Standard Specifications.

#### 27. Traffic Control and Lane Closure Restrictions-

If needed, the contractor is required to provide and maintain throughout the duration of the project adequate traffic control for all modes of traffic. No blocking of the public way is permitted at any time.

#### 28. Staging Areas and Field office

Contractor will be allowed to stage on site.

#### 29. Protection and Restoration of Existing Improvements

Contractor shall protect in place, or remove and replace, existing improvements which may be damaged by Contractor's operations. Existing improvements may include, but are not limited to, irrigation lines, irrigation control wiring, landscaping, trees/roots, pavement, drainage devices, lighting, roads and roadway markings, and pedestrian walkways. Any damage to existing facilities, landscape, or irrigation shall corrected by the Contractor to original condition at no cost to the City.

Contractor shall ensure construction or resurfacing materials do not enter the storm drain system.

## ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between CITY OF EAST PALO ALTO whose address is 2415 University Avenue, East Palo Alto, California 94303 hereinafter called "Owner", and \_\_\_\_\_\_, whose address is \_\_\_\_\_\_, hereinafter called "Contractor", and \_\_\_\_\_\_, whose address is \_\_\_\_\_\_, hereinafter called "Escrow Agent."

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

Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the (1) option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and Contractor for in the amount of dated (hereinafter referred to as the "Contract"). Alternatively, on written request of the contractor, the owner shall make payments of the retention earnings directly to the escrow agent. When Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of the City of East Palo Alto, and shall designate the Contractor as the beneficial owner.

(2) The Owner shall make progress payments to the Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contractor provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

(3) When the Owner makes payment of retentions earned directly to the escrow agent, the escrow agent shall hold them for the benefit of the contractor until such time as the escrow created under this contract is terminated. The contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the owner pays the escrow agent directly.

(4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor and Escrow Agent.

(5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.

(6) Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor. The signature of the representative of Owner granting such consent shall be acknowledged by a notary public.

(7) The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.

(8) Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.

(9) Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (4) to (8), inclusive, of this agreement, provided that the written authorization from Owner to Escrow Agent given pursuant to paragraph 6 above authorizing release of funds to Contractor, has an acknowledgment of the signature of Owner's representative. Assuming that any notice received by Escrow Agent which is required to have a notary's acknowledgment of a signature according to this agreement, is so acknowledged, the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of the respective signatures are as follows:

On behalf of Owner:

Signature

Name (typed or printed)

Title

Address

On behalf of Contractor:

Signature

Name (typed or printed)

Title

Address

On behalf of Escrow Agent:

Signature

Name (typed or printed)

Title

Address

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

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the dates set forth below.

By: City of East Palo Alto (Owner)

Signature

Name (typed or printed)

Title

Date

By:\_\_\_\_\_ (Contractor)

Signature \*

Name (typed or printed)

Title

Date

Signature \*

Name (typed or printed)

Title

Date

By:\_\_\_\_\_ (Escrow Agent)

Signature\*\*

Name (typed or printed)

Title

Date

\* Signature of Contractor shall be notarized. Signature shall be of two classes of officers of a corporation, unless accompanied by copy of Resolution of Board of Directors authorizing execution of this agreement. \*\*Signature shall be notarized.