

CITY OF LAFAYETTE

3675 Mt. Diablo Boulevard, Suite 210
(925) 284-1951
www.ci.lafayette.ca.us



NOTICE TO CONTRACTORS BID PROPOSAL CONTRACT AGREEMENT CONTRACT SPECIAL PROVISIONS

FOR

CITY OF LAFAYETTE MT. DIABLO BLVD. AT MT. DIABLO CT. INTERSECTION IMPROVEMENTS PROJECT

Project No. 014-9723

Bid Opening Date
Wednesday, May 11, 2022, @ 2:00 p.m.

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APPENDIX C: CITY FURNISHED EQUIPMENT LIST

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NOTICE TO CONTRACTORS

Sealed proposals will be accepted at the office of the City Clerk, 3675 Mt. Diablo Boulevard, Suite 210, Lafayette, California until 2:00 P.M., Wednesday, May 11, 2022 at which time they will be publicly opened and read, for construction of **City of Lafayette, Mt. Diablo Blvd. at Mt. Diablo Ct. Intersection Improvements, Project No. 014-9723**, including, but not limited to: mobilization; traffic control and construction signage; locating and potholing utilities, protecting existing utilities and storm drain; clearing and grubbing including tree protection and trimming; cold planing, removal and disposal of asphalt concrete pavement and subgrade, concrete curb, gutter, flatwork; removal of striping, excavating, cold planing, grading, and compacting pavement subgrade and base materials; construction of minor concrete structures, concrete curb, gutter, curb ramp, asphalt concrete pavement, brick paver medians, installation of traffic signal equipment with safety lighting; video detection camera, including City-furnished decorative street lightings, traffic signal poles, controllers and controller cabinet; furnishing and installing pull boxes, conduits, conductors, signs, traffic stripes, markers, and markings; adjustment of utility covers; installation of irrigation sleeves, pipes, and conduits, coordination with PG&E for inspection and meter installation, and all other utility agencies, City and Contra Costa County Building Inspection, and all other miscellaneous work as shown on the Plans and as described in the Specifications to provide a complete project.

The Engineer's cost estimate is \$610,000.

The contract documents, including the Plans and Specifications, may be obtained through the City of Lafayette Engineering Services Division by contacting the Engineering Assistant at tkain@lovelafayette.org or (925)284-1951.

This project shall be constructed in accordance with the March 2013 edition of the City of Lafayette Standard Specifications, which may be obtained at the City of Lafayette Engineering Services Division. The cost of the Standard Specifications is \$20 per set; the cost of mailing is an additional \$8.

Bids shall be submitted in a sealed envelope titled "**Proposal: City of Lafayette, Mt. Diablo Blvd. at Mt. Diablo Ct. Intersection Improvements, Project No. 014-9723**".

The Contractor shall possess a Class "A" or "C10" license at the time this contract is awarded.

Bidder's attention is directed to requirements in Sections 2 and 3 of the Standard Specifications General Provisions. All bids shall be accompanied by a cashier's or certified check, or a bidder's bond executed by a corporate surety insurer. The bidder's guarantee shall be in the amount equal to at least ten (10) percent of the total bid and shall be made payable to the City of Lafayette. The successful bidder shall furnish a payment bond and a performance bond.

The City of Lafayette reserves the right to waive any informalities or to reject any or all bids. The City has ascertained the General Prevailing Rates of Wages applicable to this work, and these rates are on file at the City offices.

Time of completion allowed for this project will be **forty-five (45) working days**. Bidder's attention is directed to the order of work stated in Section 5 of the Special Provisions.

Questions regarding the project Plans or Specifications may be directed to Farzaneh Sanders, City Engineer's Office, (925) 284-1951.

The plan holders list, as well as the City Standard Specifications, the Project Special Provisions and the General Prevailing Rates of Wages applicable to this work may be downloaded free of charge from the City of Lafayette web site at <http://www.ci.lafayette.ca.us> (click on *Public Works and Construction* under the Quick Links sidebar on the homepage, then *City Construction Projects; Mt. Diablo Blvd. at Mt. Diablo Ct. Intersection Improvements, Project No. 014-9723* is accessible under *Projects Bidding*).

CITY OF LAFAYETTE

Date: April 1, 2022

By: _____/s/_____
Mike Moran, Director of Public Works & Engineering

**CITY OF LAFAYETTE
CALIFORNIA**

BID PROPOSAL

MT. DIABLO BLVD. AT MT. DIABLO CT. INTERSECTION IMPROVEMENTS

PROJECT No. 014-9723

TO THE CITY COUNCIL OF THE CITY OF LAFAYETTE:

In compliance with the annexed notice inviting sealed proposals, the undersigned bidder hereby proposes and agrees to perform the work therein described and to furnish all labor, materials and equipment necessary therefor, in accordance with the Plans and Specifications therefor, and further agrees to enter into a contract therefor, at the following prices:

<u>ITEM NO.</u>	<u>ITEM DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL</u>
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(SEE ATTACHED BID SCHEDULE)

- NOTES:
- All unit prices shall be considered the prices for providing a complete, in-place facility.
 - In the event of a discrepancy between the unit price and item total on the Bid Schedule, the unit price shall be used.

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Bidder acknowledges the receipt of the following addenda to the drawings and specifications.

<u>Addendum No.</u>	<u>Date</u>	<u>Addendum No.</u>	<u>Date</u>
_____	_____	_____	_____
_____	_____	_____	_____

o o o

BID SCHEDULE

Item No.	Description of Items	Quantity	Unit	Unit Prices	Item Total
1	Mobilization (SP-12)	1	LS		
2	Construction Area Sign (SP-13)	4	EA		
3	Traffic Control (SP-14)	1	LD		
4	Remove AC & Base for New Topsoil (SP-17)	90	CY		
5	Remove Concrete Flatwork (SP-17)	1,322	SF		
6	Remove Concrete Curb (SP-17)	118	LF		
7	Remove Concrete Curb & Gutter (SP-17)	232	LF		
8	Remove Sign & Post (SP-17)	3	EA		
9	Remove & Re-install USPS Mailbox (SP-17)	1	EA		
10	Adjust Storm Drain Manhole Frame & Cover to Grade (SP-17)	1	EA		
11	Conform at Decomposed Granite Path (SP-17)	34	SF		
12	Roadway Excavation (F) (SP-18)	28	CY		
13	Cold Plane AC Roadway (2") (SP-20)	2,585	SF		
14	Cold Plane AC Roadway (6") (SP-20)	2,325	SF		
15	Asphalt Concrete, 1/2" Type A (SP-21)	200	TON		
16	Concrete Curb & Gutter (SP-22)	289	LF		
17	Concrete Median Curb (SP-22)	154	LF		
18	Concrete Sidewalk (SP-22)	876	SF		
19	Concrete Curb Ramp with Detectable Panel (SP-22)	465	SF		
20	Interlocking Brick Pavers in Median (SP-23)	315	SF		
21	Irrigation Sleeve (SP-24)	94	LF		
22	Irrigation Pipe & Conduit (SP-24)	876	LF		
23	Irrigation Box (SP-24)	3	EA		
24	Imported Topsoil Placement (F) (SP-24)	81	CY		

BID SCHEDULE (Continued)

Item No.	Description of Items	Quantity	Unit	Unit Prices	Item Total
25	(Not Used)				
26	Existing Sign on New Post (SP-25)	1	EA		
27	New Sign & Post (SP-25)	2	EA		
28	New Sign on Ex. Post/Pole (SP-25)	1	EA		
29	Blue Pavement Marker (SP-26)	1	EA		
30	Thermoplastic Stripe – Detail 9 (SP-26)	225	LF		
31	Thermoplastic Stripe – Detail 21 (SP-26)	50	LF		
32	Thermoplastic Stripe – Detail 27B (SP-26)	135	LF		
33	Thermoplastic Stripe – Detail 38 (SP-26)	145	LF		
34	Thermoplastic Stripe – Detail 39A (SP-26)	95	LF		
35	12” White Thermoplastic Stripe (SP-26)	240	LF		
36	Thermoplastic Marking – Type IV (L) Arrow (SP-26)	2	EA		
37	Thermoplastic Marking – U-turn Pavement Marking (SP-26)	2	EA		
38	Thermoplastic Marking – Bicycle Marking & Arrow (SP-26)	1	EA		
39	Detector Loop (SP-27)	4	EA		
40	Video Detection Camera (SP-27)	3	EA		
41	Traffic Signal Installation (SP-27)	1	LS		
42	Install Street Light Assemblies (SP-27)	2	EA		
ITEM TOTAL (ITEMS 1-42)					

(F) Denotes Final Pay Quantity Per Section 9-1.015 of the State Standard Specifications

Bidder agrees that in case of default in executing and returning the required contract and bonds within ten (10) calendar days after having received the contract, proceeds of the guarantee accompanying his bid will become the property of the City of Lafayette.

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In conformance with Subsection 2-13 "Listing of Proposed Subcontractors" of the Standard Specifications, the name and location of the place of business of each subcontractor is as follows:

	<u>NAME</u>	<u>DIR NUMBER</u>	<u>ADDRESS</u>	<u>WORK TO BE PERFORMED</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____

o o o

Bidder certifies that he is licensed in accordance with an act providing for the registration of Contractors as follows:

License No. _____ Class _____

o o o

Bidder certifies that he has not, nor have any of his or its agents, officers, representatives, or employees, been guilty of collusion with any officer or representative of the City of Lafayette or with any other party or parties in the submission of this Proposal; nor has said bidder received any preferential treatment by any officer or employee of the City of Lafayette in the matter of making or submitting this proposal. The undersigned declares under penalty of perjury that the foregoing is true and correct.

o o o

Bidder certifies that there will be no discrimination in employment with regard to race, color, religion, sex, sexual orientation, or national origin; that all Federal, State, and local directives and executive orders regarding nondiscrimination in employment will be complied with and that the principle of equal opportunity in employment will be demonstrated positively and aggressively.

All bidders that have not had a contract with the City of Lafayette during the past three (3) years shall list below previous jobs that they have successfully completed and shall also show the amount of the contract therefor.

Name and Address of Agency or Individual for Whom Work was Done	Phone Number	Date Completed	Contract Price
1.			
2.			
3.			
4.			
5.			
6.			

NONCOLLUSION DECLARATION

The undersigned declares:

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

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

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

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____, at
Date

_____, _____.
City State

By: _____
Signature

Name: _____
Printed or Typed

Date: _____

Title: _____

PROPOSAL GUARANTEE

BID BOND

MT. DIABLO BLVD. AT MT. DIABLO CT. INTERSECTION IMPROVEMENTS

PROJECT No. 014-9723

KNOW ALL PERSONS BY THESE PRESENTS that _____, as BIDDER, and _____, as SURETY, are held and firmly bound unto City of Lafayette, as Owner, in the penal sum of _____ dollars (\$) which is ten percent of the total amount bid by BIDDER to Owner for the above stated project, for the payment of which sum, BIDDER and SURETY agree to be bound, jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH that, whereas BIDDER is about to submit a bid to Owner for the above stated project, if said bid is rejected, or if said bid is accepted and a contract is awarded and entered into by BIDDER in the manner and time specified, then this obligation shall be null and void, otherwise it shall remain in full force and effect in favor of Owner.

IN WITNESS WHEREOF the parties hereto have set their names, titles, hands, and seals this ____ day of _____, 2022.

BIDDER _____

SURETY _____

Subscribed and sworn to this ____ day of _____, 2022.

NOTARY PUBLIC _____

PROPOSAL SIGNATURE SHEET

The completed proposal submitted herewith includes all sheets numbered "P-1 through P-9" at the bottom. The following required attachments have been executed and are included:

- a. Bid Proposal (with Addenda acknowledgement)
- b. Bid Schedule
- c. Noncollusion Declaration
- d. Proposal Guarantee "Bid Bond" with Notarized Signatures
- e. Proposal Signature Sheet
- f. Public Works Contractor Registration Certification

Legal Name of Firm: _____

Business Address: _____

Telephone Number: () _____

Type of Organization: () Individual () Partnership () Corporation

Joint Venture Proposal?: () Yes () No

Authorized Signature: _____

Name: _____

Position: _____

Date of Execution: _____

For a partnership, name all co-partners below,
For a corporation, name president, secretary, treasurer and manager.

NAME	TITLE
_____	_____
_____	_____
_____	_____
_____	_____

Corporate Seal:

PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/PublicWorks/PublicWorks.html> for additional information.

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

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

Name of Contractor: _____

DIR Registration Number: _____

Contractor further acknowledges:

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

Signature: _____

Name and Title: _____

Dated: _____

CITY OF LAFAYETTE

**CONTRACT AGREEMENT
FOR
CONSTRUCTION**

THIS AGREEMENT is made and entered into as of _____, 2022, by and between the CITY OF LAFAYETTE ("City") and _____ ("Contractor").

RECITALS

- A. City desires to retain the services of Contractor to provide services for Construction of **Mt. Diablo Blvd. at Mt. Diablo Ct. Intersection Improvements Project, Project No. 014-9723**, including, but not limited to: mobilization; traffic control and construction signage; locating and potholing utilities, protecting existing utilities and storm drain; clearing and grubbing including tree protection and trimming; cold planing, removal and disposal of asphalt concrete pavement and subgrade, concrete curb, gutter, flatwork; removal of striping, excavating, cold planing, grading, and compacting pavement subgrade and base materials; construction of minor concrete structures, concrete curb, gutter, curb ramp, asphalt concrete pavement, brick paver medians, installation of traffic signal equipment with safety lighting; video detection camera, including City-furnished decorative street lightings, traffic signal poles, controllers and controller cabinet; furnishing and installing pull boxes, conduits, conductors, signs, traffic stripes, markers, and markings; adjustment of utility covers; installation of irrigation sleeves, pipes, and conduits, coordination with PG&E for inspection and meter installation, and all other utility agencies, City and Contra Costa County Building Inspection, and all other miscellaneous work as shown on the Plans and as described in the Specifications to provide a complete project.
- B. Contractor has represented to City that it has the expertise, experience and qualifications to perform the services described in Paragraph A, above, and those services which are more fully described below.

NOW, THEREFORE, in consideration of the foregoing and the covenants and agreements set forth below, City and Contractor agree as follow:

- 1. Contract Documents. The contract documents for the aforesaid project shall consist of the Notice to Contractors, Bid Proposal, General Provisions, Technical Provisions, Special Provisions including appendices, Design Drawings, and all referenced specifications, details, standard drawings, and their appendices; together with this Contract Agreement and all required bonds, insurance certificates, permits, notices and affidavits; and also including any and all addenda or supplemental agreements clarifying, amending, or extending the work contemplated as may be required to insure its completion in an acceptable manner. All of the provisions of said contract documents are made a part hereof as though fully set forth herein.
- 2. Services. For and in consideration of the payments and agreements to be made and performed by City, Contractor agrees to furnish all materials and perform all work required for the above-stated project, and to fulfill all other obligations as set forth in the aforesaid contract documents. Contractor agrees to receive and accept the prices set forth in the Proposal as full compensation for furnishing all materials, performing all work, and fulfilling all obligations hereunder. Said compensation shall cover all expenses, losses, damages, and consequences arising out of the nature of the work during its

progress or prior to its acceptance including those for well and faithfully completing the work and the whole thereof in the manner and time specified in the aforesaid contract documents; also including those arising from actions of the elements, unforeseen difficulties or obstructions encountered in the prosecution of the work, suspension or discontinuance of the work, and all other unknowns or risks of any description connected with the work.

3. Employment by City. City hereby promises and agrees to employ, and does hereby employ, Contractor to provide the materials, do the work, and fulfill the obligations according to the terms and conditions herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the same at the time, in the manner, and upon the conditions set forth in the contract documents.
4. Worker's Compensation. Contractor acknowledges the provisions of the State Labor Code requiring every employer to be insured against liability for worker's compensation, or to undertake self-insurance in accordance with the provisions of that Code, and certifies compliance with such provisions. Limits shall be not less than those specified in the insurance requirements contained in the General Provisions of the Standard Specifications, and as modified in these Special Provisions.
5. Insurance. With respect to performance of work under this contract, Contractor shall maintain and shall require all of its subcontractors to maintain insurance as required in the General Provisions of the Standard Specifications, and as modified in these Special Provisions.
6. Indemnity. Contractor shall comply with the indemnification requirements contained in the General Provisions of the Standard Specifications.
7. Assignment. This contract is not assignable nor the performance of either party's duties delegable without the prior written consent of the other party. Any attempted or purported assignment or delegation of any of the rights or obligations of either party without the prior written consent of the other shall be void and of no force and effect.
8. Non-discrimination. Contractor shall not discriminate in the hiring of employees or the employment of subcontractors on any basis prohibited by law.
9. Independent Contractor. Contractor is and shall at all times remain as to City, a wholly independent contractor. Neither City nor any of its agents shall have control of the conduct of Contractor or any of the Contractor's employees, except as herein set forth. Contractor shall not at any time or in any manner represent that it or any of its agents or employees are in any manner agents or employees of City.
10. Contractor and Subcontractor Registration. Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public works must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. Contractor is directed to review, fill out and execute the Public Works Contractor Registration Certification contained in the Bid Proposal prior to contract execution.
11. Labor Compliance. This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be the Contractor's sole responsibility to evaluate and pay the cost of complying with all labor compliance requirements under this Contract and applicable law.
12. Notices. All notices and communications shall be sent to the parties at the following addresses:

CITY: City Engineer
City of Lafayette
3675 Mount Diablo Boulevard, Suite 210
Lafayette, California 94549

CONTRACTOR: _____

- 13. Authorized Signature. Contractor affirms that the signatures, titles, and seals set forth hereinafter in execution of this contract agreement represent all individuals, firm members, partners, joint ventures, and/or corporate officers having a principal interest herein.
- 14. Entire Agreement; Modification. This contract supersedes any and all other agreements either oral or written, between the parties and contains all of the covenants and agreements between the parties pertaining to the work of improvements described in Paragraph A of the Recitals herein above. Each party to this contract acknowledges that no representations, inducements, promises, or agreements, orally or otherwise, have been made by any party, or anyone acting on behalf of any party, which are not embodied herein, and that any other agreement, statements or promise not contained in this contract shall not be valid or binding. Any modification of this contract will be effective only if signed by the party to be charged.
- 15. Claims Procedure. In the event of a dispute between the parties regarding a) a time extension demand, b) payment arising for work performed by or on behalf of the contractor which is not otherwise expressly provided for, or c) an amount the payment of which is disputed by the City, the procedure in Section 10 of the City of Lafayette Standard Specifications shall be used.

IN WITNESS WHEREOF the parties hereto for themselves, their heirs, executors, administrators, successors, and assigns do hereby agree to the full performance of the covenants herein contained and have caused this Contract Agreement to be executed in duplicate by setting hereunto their names, titles, hands, and seals this ____ day of _____ 2022.

Contractor: _____
<Type Business Name Here>

Name: _____

Title: _____

Contractor's License No. _____

Agency Business License No. _____

Federal Tax Identification No. _____

Subscribed and sworn to this ____ day of _____ 2022.

Notary Public _____

Agency: _____
City Manager of the City of Lafayette

Attested: _____
City Clerk of the City of Lafayette

Date: _____

PAYMENT BOND

(TO BE EXECUTED WITHIN TEN [10] CALENDAR DAYS OF CONTRACT AWARD)

WHEREAS, the City of Lafayette (Owner) has awarded to _____, as Contractor, a contract for the work described as follows: Construction of **Mt. Diablo Blvd. at Mt. Diablo Ct. Intersection Improvements Project, Project No. 014-9723**, including, but not limited to: mobilization; traffic control and construction signage; locating and potholing utilities, protecting existing utilities and storm drain; clearing and grubbing including tree protection and trimming; cold planing, removal and disposal of asphalt concrete pavement and subgrade, concrete curb, gutter, flatwork; removal of striping, excavating, cold planing, grading, and compacting pavement subgrade and base materials; construction of minor concrete structures, concrete curb, gutter, curb ramp, asphalt concrete pavement, brick paver medians, installation of traffic signal equipment with safety lighting; video detection camera, including City-furnished decorative street lightings, traffic signal poles, controllers and controller cabinet; furnishing and installing pull boxes, conduits, conductors, signs, traffic stripes, markers, and markings; adjustment of utility covers; installation of irrigation sleeves, pipes, and conduits, coordination with PG&E for inspection and meter installation, and all other utility agencies, City and Contra Costa County Building Inspection, and all other miscellaneous work as shown on the Plans and as described in the Specifications to provide a complete project.

AND WHEREAS, said Contractor is required to furnish a bond in connection with said contract, to secure the payment of claims of laborers, mechanics, materials persons, and other persons as provided by law;

NOW, THEREFORE, we, the undersigned Contractor and surety, are held firmly bound unto the Owner in the sum of _____ Dollars (\$_____), for which payment well and truly to be made we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH:

That if said Contractor, its heirs, executors, administrators, successors, or assigns, or subcontractors, shall fail to pay any of the persons named in Civil Code Section 3282, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, or any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the Contractor and its subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor, that the surety or sureties herein will pay for the same in any amount not exceeding the sum specified in this bond, otherwise the above obligation shall be void. In case suit is brought upon this bond, the said surety will pay a reasonable attorney's fee to the Owner in an amount to be fixed by the court.

This bond shall insure to the benefit of any of the persons named in Civil Code Section 3181 as to give a right of action to such persons or their assigns in any suit brought upon this bond.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this ____ day of _____, 2022.

CONTRACTOR: _____	SURETY _____
Print Name: _____	NAME _____
Title: _____	ADDRESS _____
	TELEPHONE _____

PERFORMANCE BOND

(TO BE EXECUTED WITHIN TEN [10] CALENDAR DAYS OF CONTRACT AWARD)

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the City of Lafayette (Owner) has awarded to _____, as Contractor, a contract for the work described as follows: Construction of **Mt. Diablo Blvd. at Mt. Diablo Ct. Intersection Improvements Project, Project No. 014-9723**, including, but not limited to: mobilization; traffic control and construction signage; locating and potholing utilities, protecting existing utilities and storm drain; clearing and grubbing including tree protection and trimming; cold planing, removal and disposal of asphalt concrete pavement and subgrade, concrete curb, gutter, flatwork; removal of striping, excavating, cold planing, grading, and compacting pavement subgrade and base materials; construction of minor concrete structures, concrete curb, gutter, curb ramp, asphalt concrete pavement, brick paver medians, installation of traffic signal equipment with safety lighting; video detection camera, including City-furnished decorative street lightings, traffic signal poles, controllers and controller cabinet; furnishing and installing pull boxes, conduits, conductors, signs, traffic stripes, markers, and markings; adjustment of utility covers; installation of irrigation sleeves, pipes, and conduits, coordination with PG&E for inspection and meter installation, and all other utility agencies, City and Contra Costa County Building Inspection, and all other miscellaneous work as shown on the Plans and as described in the Specifications to provide a complete project

AS WHEREAS, the Contractor is required to furnish a bond in connection with said contract guaranteeing the faithful performance thereof;

NOW, THEREFORE, we, the undersigned Contractor and surety, are held firmly bound unto the Owner in the sum of _____ Dollars (\$ _____), to be paid to the Owner, its successors and assigns, for which payment well and truly to be made we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH:

That if said Contractor, its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by and well and truly keep and perform the covenants, conditions, and agreements in the foregoing contract and any alteration thereof made as therein provided on its or their part to be kept and performed at the time and in the manner therein specified and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Owner, its officers, and agents, as therein stipulated, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and effect. In case suit is brought upon this bond, the said surety will pay a reasonable attorney's fee to the Owner in an amount to be fixed by the court. Surety, for value received, hereby stipulates and agrees that no amendment, change, extension of time, alteration, or addition to said contract, and of any feature or item or items of performance required therein or thereunder, shall in any manner affect its obligations on or under this bond; and said surety does hereby waive notice of any such amendment, change, extension of time, alteration, or addition to said contract, and of any feature or item or items of performance required therein or thereunder, shall in any manner affect its obligations on or under this bond; and said surety does hereby waive notice of any such amendment, change extension of time, alteration, or addition to said contract, and of any feature or item or items of performance required therein or thereunder.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this ____ day of _____, 2022.

CONTRACTOR: _____	SURETY _____
Print Name: _____	NAME _____
Title: _____	ADDRESS _____
	TELEPHONE _____

SPECIAL PROVISIONS SECTION SP-1

GENERAL
(NO BID ITEM)

SP1-01 REFERENCES

The work to be done under this contract, except as modified or supplemented herein, shall conform to the following:

- The City of Lafayette General Provisions of the Standard Specifications dated March 2013, herein referred to as the “General Provisions of the Standard Specifications”.
- The City of Lafayette Technical Provisions of the Standard Specifications dated March 2013, herein referred to as the “Technical Provisions of the Standard Specifications”.

Where specifically referred to, the work shall also conform to the following:

- The State of California Department of Transportation (Caltrans) Standard Specifications for Construction of Local Streets and Roads, 2018 Edition, herein referred to as the “State Specifications” or “State Standard Specifications”.
- The State of California Department of Transportation (Caltrans) Standard Plans, 2018 Edition, herein referred to as the “State Standard Plans”.
- The Contra Costa County Public Works Department Standard Plans, most current edition, herein referred to as the “County Standard Plans”.

These Special Provisions are additions, modifications, or clarifications to the referenced Standard Specifications and generally supersede the referenced or applicable sections of said Standard Specifications. Refer to Section 5-4, “Precedence of Contract Documents”, of the General Provisions of the Standard Specifications for the order of precedence of Contract Documents. Where ambiguity or conflict exist in the interpretation of precedence, the provision resulting in the highest quality or most expensive grade of construction or product shall govern.

SPECIAL PROVISIONS SECTION SP-2, 3 (NOT USED)

SPECIAL PROVISIONS SECTION SP-4

PLANS AND SPECIFICATIONS (GENERAL)

(NO BID ITEM)

The provisions of Section 4, "Plans and Specifications (General)," of the General Provisions of the Standard Specifications shall apply in their entirety and as supplemented herein.

SP4-01 SCOPE OF WORK

The work to be performed under this contract includes, but is not limited to: mobilization; traffic control and construction signage; locating and potholing utilities, protecting existing utilities and storm drain; clearing and grubbing including tree protection and trimming; cold planing, removal and disposal of asphalt concrete pavement and subgrade, concrete curb, gutter, flatwork; removal of striping, excavating, cold planing, grading, and compacting pavement subgrade and base materials; construction of minor concrete structures, concrete curb, gutter, curb ramp, asphalt concrete pavement, brick paver medians, installation of traffic signal equipment with safety lighting; video detection camera, including City-furnished decorative street lightings, traffic signal poles, controllers and controller cabinet; furnishing and installing pull boxes, conduits, conductors, signs, traffic stripes, markers, and markings; adjustment of utility covers; installation of irrigation sleeves, pipes, and conduits, coordination with PG&E for inspection and meter installation, and all other utility agencies, City and Contra Costa County Building Inspection, and all other miscellaneous work as shown on the Plans and as described in the Specifications to provide a complete project.

SP4-02 PAYMENT

No separate payment will be made for preparing and submitting "As-Built Drawings." Full compensation for preparing and submitting "As-Built Drawings" shall be considered as included in the prices paid for various contract items of work, and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-5

CONTROL OF WORK AND MATERIALS

(NO BID ITEM)

The provisions of Section 5, "Control of Work and Materials," of the General Provisions of the Standard Specifications shall apply in their entirety and as supplemented herein.

SP5-01 CONSTRUCTION SURVEY STAKING

The Engineer will provide paint markings for pavement conforms, removal and replacement of pavement, curb, gutter, and curb ramp of all kinds.

The City shall provide all construction survey staking for alignment and grades of roadway, curb, gutter, and other items which, in the opinion of the Engineer, require survey staking. The Contractor shall submit staking requests in writing at least five (5) working days in advance of beginning work that requires construction survey staking. The Contractor shall be responsible for paying the cost of resetting survey stakes which are damaged or obliterated by the Contractor's operations.

Survey stakes for grade will be set on one side of the roadway only. These stakes will provide offset distances, and cuts or fills to the new crown or control line grade breaks, and where applicable, new curb and/or left and right edges of pavement.

The Contractor will be responsible for providing traffic control for the City's survey crew as necessary for any required offset stakes which will need to be set in the roadway, including providing a lane closure and/or flaggers when required. The Engineer will notify the Contractor a minimum of 48 hours prior to the required survey staking in order to coordinate traffic control.

SP5-02 MATERIAL SAMPLING AND TESTING

Compaction tests and/or material sampling and testing may be performed by the City's representatives on roadway subgrade, aggregate base, portland cement concrete, asphalt concrete, and other work and materials, which in the opinion of the Engineer, require sampling or testing. Test locations shall be determined by the Engineer. The Contractor shall coordinate and cooperate with the Engineer and testing personnel, and no claims of delays or inconvenience due to testing and/or sampling shall be allowed.

SP5-03 SUBMITTALS

At minimum, the Contractor shall provide submittals to the Engineer for the following materials. Additional submittals may be found in the various sections of the Special Provisions for the Work.

- Aggregate Base Class 2 (Material Source)
- Asphalt Concrete Mix Designs of All Types
- Portland Cement Concrete Mix Designs of All Types
- Reinforcing Steel
- Pavement Markers
- Thermoplastic Striping Material
- Sign and Post Materials
- Unit Pavers

- Irrigation sleeves, pipes, conduits, including fittings and couplings
- Conductors
- Cut Sheets for Traffic Signal Equipment (excluding equipment furnished by City)
- Cut Sheets for Audible Signal Units (excluding units furnished by City)
- Cut Sheets for ADA push buttons (excluding units furnished by City)
- Data Sheet and Samples for Truncated Domes and Guide Strips
- Water Pollution Control Plan
- Traffic Control Plan and Certification of Qualified Personnel.

SP5-04 ORDER OF WORK

Unless otherwise directed by the Engineer, the following major items of work shall be performed in the following general order. Not every item of Contract Work is shown. Contractor shall accordingly coordinate miscellaneous and coincidental work related to or associated with major work items in order to avoid out-of-sequence construction and conflicts. Not all stages of work apply to every location within the Project.

- 1) Order Traffic Signal Equipment (refer to the Appendix "C" for the list of items that are furnished by the City.)
- 2) Notify Underground Service Alert (USA) to have utilities marked.
- 3) Perform all required utility locating (surface and sub-surface).
- 4) Install construction area signs one week in advance of the start of work on a specific street or work area.
- 5) Install water pollution control measures.
- 6) Install tree protection.
- 7) Perform utility potholing work to confirm depths of existing utility lines. No additional excavation work will be permitted until Contractor's Utility Pothole Log (refer to Appendix "G") is submitted to the Engineer.
- 8) Clearing, grubbing, tree trimming.
- 9) Remove pavement from medians and conform areas as shown on the Plans.
- 10) Remove, replace, and/or construct concrete curb, gutter, curb ramp, sidewalk, and other flatwork.
- 11) Install City furnished decorative streetlights and foundations.
- 12) Install traffic signal and PPB foundations.
- 13) Install traffic signal equipment.
- 14) Sawcut and remove pavement at transverse conform joints at limits of paving.
- 15) Sawcut, remove by cold planing, and place asphalt concrete. Place temporary roadway delineation.
- 16) Construct brick paver median.

- 17) Place topsoil in the medians.
- 18) Raise/adjust all existing utility frames and covers to final grade. Place permanent striping, markers and legends.
- 19) Complete all other construction work and punch list items.
- 20) Remove tree protection, construction area signs and project identification signs.
- 21) Submit as-built plans.

The Contractor's attention is directed to Section SP-8-02, "Progress Schedule", of these Special Provisions.

Any deviation from these requirements and provisions shall be sufficient cause for the Engineer to suspend the work in accordance with the provisions of Section 8-3, "Temporary Suspension of the Work", of the General Provisions. The contractor will not be permitted to resume the work until Contractor has remedied said deviation in accordance with the provisions of the Contract.

SP5-05 PAYMENT

No separate payment will be made for conforming to the provisions of this section. Full compensation for conforming to all the provisions of this section shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed therefor.

SPECIAL PROVISIONS SECTION SP-6

LEGAL RELATIONS AND RESPONSIBILITIES

(NO BID ITEM)

The provisions of Section 6, "Legal Relations and Responsibilities," of the General Provisions of the Standard Specifications shall apply in their entirety and as supplemented herein, and in other related sections of these Special Provisions.

SP6-01 PUBLIC NOTIFICATIONS

Notification requirements in Section 6-10, 6-12.3, and 6-13 of the Standard Specifications General Provisions shall apply. Notices for driveway closures, if needed, must be issued each time driveway or roadway access is restricted and must indicate the specific date and time of the anticipated restricted access.

SP6-02 PAYMENT

No separate payment will be made for conforming to the provisions of this section. Full compensation for conforming to all the provisions of this section shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed therefor.

SPECIAL PROVISIONS SECTION SP-7

EXISTING UTILITIES

(NO BID ITEM)

The provisions of Section 7, "Existing Utilities," of the General Provisions of the Standard Specifications shall apply in their entirety and as supplemented herein.

SP7-01 GENERAL

The Contractor shall expose, by hand digging, protect, and support, all existing utility mains and service laterals that cross, are adjacent to, or are within, trench or excavation areas.

The Contractor shall verify the location of existing utility main lines and service lines that are marked by USA or shown on the Plans, prior to starting any excavation included but not limited to street light pole foundations, signal pole foundations, and sign foundations, concrete curb, gutter, concrete sidewalk, concrete ramp, signal conduit, lighting conduit, irrigation conduit, pipe, and sleeve, and where roadway excavation above a mainline occurs by potholing to verify the horizontal and vertical alignment of the utility main lines. Contractor shall document the pothole information for the utilities on the Utility Pothole Log, included in the Appendix "G" of these Special Provisions.

The Contractor is hereby notified that during construction it may become necessary to coordinate the operation specifically with Pacific Gas and Electric Company, AT&T, U.S. Sprint, East Bay Municipal Utility District, Central Contra Costa Sanitary District, and Comcast (Cable) for the rearrangement of obstructions as needed for the construction of this project. The Contractor shall prepare, maintain, and keep at the construction site, a list of all utility contact persons and their emergency telephone numbers.

The City reserves the right to make adjustments in the grades and/or alignment of the proposed improvements to avoid obstructions. Where it becomes necessary to relocate the obstructions for the construction of the proposed improvements, the Contractor shall assume responsibility for notifying the City, and for the coordination of this work. In either case, no additional compensation will be allowed to the Contractor for delays or inconveniences. The Contractor may request that the

City adjust the contract working days by the number of days that it takes to resolve the obstructions, if the controlling item of work is delayed.

SP7-02 PAYMENT

No separate payment will be made for conforming to the provisions of this section. Full compensation for conforming to all the provisions of this section shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed therefor.

SPECIAL PROVISIONS SECTION SP-8

PROGRESS OF WORK

(NO BID ITEM)

The provisions of Section 8, "Progress of Work," of the General Provisions of the Standard Specifications shall apply in their entirety and as supplemented herein.

SP8-01 PRE-CONSTRUCTION MEETING

A pre-construction meeting for this project will be held at the office of the City of Lafayette, 3675 Mt. Diablo Blvd., Suite 210. The Contractor shall submit all required bonds, insurance, and signed contracts prior to this meeting. The Notice to Proceed will be issued to the Contractor at the pre-construction meeting. Note: The prime contractor's full-time on-site superintendent or foreman for the project, along with any major subcontractor, are required to attend the preconstruction meeting.

At the pre-construction meeting, representatives of the Owner, the Contractor, Subcontractors, and the Engineer will discuss in detail certain procedural aspects of the Work, including, but not limited to:

- Administrative procedures for transmittals, approvals, change orders, and similar items;
- Review of the method of application for payment, progress payments, retention; and final payment;
- Review of the Contractor's construction progress schedule;
- Clarifications of any questions regarding the contract Plans and Special Provisions;
- City to inform the Contractor the estimated delivery date of the city furnished equipment;
- Review of traffic control procedures;

- At the preconstruction meeting the Contractor shall provide a Cal/OSHA trenching permit;
- Contractor shall submit a traffic control plan and provide a certification of “Qualified Personnel”.

SP8-02 PROGRESS SCHEDULE

The Contractor shall submit the construction progress schedule to the Engineer at the preconstruction meeting. Contractor shall also submit an updated schedule by no later than Friday morning of each work week, and as requested by the Engineer per Section 8-2, “Progress Schedule,” of the General Provisions of the Standard Specifications.

Attention is directed to Section SP5-04, “Order of Work,” of these Special Provisions. Each schedule shall specifically note the timeframe and work to be performed by all subcontractors. Subcontractors shall receive all updated schedules so they can plan an appropriate work force to meet the prime Contractor’s timeframe.

SP8-03 WORKING HOURS

Without prior written approval by the Engineer, and except for emergency work, work or activity of any kind shall be limited to the hours from 8:00 a.m. to 5:00 p.m. Monday through Friday. Contractor’s attention is directed to hours for lane closures in Section SP-14 of these Special Provisions.

SP8-04 TIME OF COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall complete the entire Work in this Contract within forty five (45) working days from the start date, including completion of all “Punch List” work. Liquidated damages shall be assessed per Section 8-10, “Liquidated Damages,” the General Provisions of the Standard Specifications.

The project includes work with items that may involve long lead times including items related to the City-furnished traffic signals and lighting. Contractor shall order materials as the first item of work and provide the City with a purchase order and proposed schedule. With the approval of the City, working days may be halted for the items requiring long lead times. All other work unaffected by these items must be completed to the satisfaction of the Engineer before working days are halted.

SP8-05 PAYMENT

No separate payment will be made for conforming to the provisions of this section. Full compensation for conforming to all the provisions of this section shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed therefor.

SPECIAL PROVISIONS SECTION SP-9, 10, 11 (NOT USED)

SPECIAL PROVISIONS SECTION SP-12

MOBILIZATION
(BID ITEM NO. 1)

The provisions of Section 1, "Mobilization," of the Technical Provisions of the Standard Specifications shall apply in their entirety except as modified or supplemented herein.

SP12-01 MEASUREMENT AND PAYMENT

The lump sum Contract Price paid for "**Mobilization**" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment, tree protection, and incidentals, and for all the work involved in mobilization of forces, equipment, materials; preparation of a water pollution control plan for approval by the City and implementation of the approved Plan; and meeting all general conditions and provisions of Contract Documents and as directed by the Engineer, as specified in the Standard Specifications, and no additional compensation will be allowed therefor.

SPECIAL PROVISIONS SECTION SP-13

CONSTRUCTION AREA SIGNS
(BID ITEM NO. 2)

SP13-01 GENERAL

The Engineer shall approve all locations prior to the Contractor installing signs. Signs shall be in place on the project site at least two (2) days prior to the start of work on each street, but not more than seven (7) days prior to the start of work. Signs shall be removed within five (5) days of completing all work on each street. The Contractor shall notify the regional notification center for operators of subsurface installations (USA-Underground Service Alert: 811, at least four (4) working days, but not more than fourteen (14) calendar days, prior to commencing any excavation for construction area sign posts.

The bottom of the mounted sign panel shall be seven (7) feet above existing grade.

The City will provide and install a Project Identification Sign. Contractor shall maintain the sign throughout Construction.

SP13-02 MEASUREMENTS AND PAYMENT

Construction area signs shall be counted and paid based on the number of sign panels installed regardless of the number of signposts installed. No compensation will be provided for the maintenance of the City-provided and installed Project Identification Sign.

The Contract Price paid per each for “**Construction Area Sign**” shall be considered as full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals, and for doing all work involved in furnishing, erecting, maintaining, and removing all construction area signs, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

SPECIAL PROVISIONS SECTION SP-14**TRAFFIC CONTROL**

(BID ITEM NO. 3)

SP14-01 GENERAL

Work shall conform to the requirements of Section 6-12, “Traffic Control,” of the General Provisions and Section 15-4, “Removal of Existing and Temporary Traffic Stripes and Pavement Markings,” of the Technical Provisions of the Standard Specifications. Nothing in these Special Provisions shall be construed as relieving the Contractor from his/her responsibilities as specified in said sections. Any traffic striping or markings that are removed due to any phase of work shall be replaced, or re-aligned if required, with temporary traffic stripes or pavement markings. All temporary striping and markings shall be placed the same day the permanent striping or markings are removed, and they shall be placed before opening the roadway to public traffic.

Contractor shall furnish, install and maintain two each Portable Changeable Message Signs (PCMS) in each direction of the traffic and as directed by the Engineer. Contractor shall prepare Traffic and Pedestrian Control Plan for review and approval by the Engineer prior to the start of construction.

SP14-02 LANE CLOSURES AND HOURS

Contractor’s attention is directed to noticing requirements in Section SP6-01. In addition, beginning at least one (1) week prior to the first lane closure, the Contractor shall furnish and place changeable message signs near the intersection of Mt. Diablo Boulevard and Mt. Diablo Court, one in each direction of the traffic, and as directed by the Engineer. The changeable message signs shall remain in full, continuous operation throughout the entire construction.

At least one ten (10’) foot wide vehicular traffic lane in each direction must be open to public traffic at all times for all contract work. A minimum of two flaggers are required when lane closures result in only one open lane for two-directional traffic, with prior written approval of the Engineer.

Lane closures shall conform to the details shown on State Standard Plan T13, "Traffic Control System for Lane Closure on Two Lane Conventional Highways."

Lane closure hours shall be allowed between 8:30 a.m. and 4:30 p.m.

Contractor shall stage and sequence work such that lane closures and disruptions to mobility of the public are minimized. Even under lane closure conditions, Contractor shall make best efforts to allow passage of vehicles through the work zone when doing so does not interfere with active, critical work. This includes but is not limited to accommodating residents with medical, health, or safety-related needs (doctor appointments, emergency access, and access requirements due to physical disabilities). If work requiring closure is not actively in progress during allowed closure hours, the Engineer may order the road opened to public traffic. The Contractor shall coordinate lane closures with garbage and recycling collection to ensure continuation of service during the construction period.

The full width of the traveled way shall be open for use by public traffic at all other times. Notwithstanding anything to the contrary, emergency vehicles shall be provided immediate access through the construction area at all times.

SP14-03 MEASUREMENT AND PAYMENT

The contract lump sum price paid for "**Traffic Control**" shall be considered as full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals needed to perform all traffic control work, for all phases of the work performed by the Contractor or the Contractor's "subcontractors" including, but not limited to, all notifications, placement and maintenance of PCMS, barricades, steel plates, traffic control plan, maintaining traffic, lane closures, flagmen, installation and removal of temporary pavement delineation, and all other traffic control devices; and all other work as shown on Standard Plans, as specified in the Standard Specifications, the State Specifications, these Special Provisions, and as directed by the Engineer and no additional compensation shall be allowed therefor. There shall be no additional compensation for traffic control due to an increase in the quantities shown on the bid proposal for pay items within the project limits.

Traffic Control required by work which is classified as extra work, as provided in Section 9.3, "Extra Work", of the General Provisions of the Standard Specifications, will be paid for as part of said extra work.

SPECIAL PROVISIONS SECTION SP-15

DUST CONTROL (NO BID ITEM)

The provisions of Section 4, "Dust Control and Watering", of the Technical Provisions of the Standard Specifications shall apply in their entirety and as supplemented herein.

SP15-01 PAYMENT

No separate payment shall be made for conforming to the provisions of this section. Full compensation for conforming to all the provisions of this section shall be considered as included in the prices paid for various contract items of work and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-16

CLEARING AND GRUBBING, TREE PROTECTION, AND TREE TRIMMING
(NO BID ITEM)

The provisions of Section 2, "Clearing and Grubbing," Section 21, "Tree Trimming and Removal," and Section 22-3, "Tree and Plant Protection," of the Technical Provisions of the Standard Specifications shall apply in their entirety except as modified or supplemented herein.

SP16-01 GENERAL

In addition to requirements of the Standard Specifications, clearing and grubbing work shall also include removing and/or relocating landscape borders, decorative rocks, if any, and similar decorative features that conflict with planned construction. Where they occur, Contractor shall salvage these features by placing removed items in a neat stack at an adjacent location on the property frontage to be designated by the Engineer.

All cleared and grubbed areas shall be approved by the Engineer before further grading commences.

Items identified to be removed and salvaged on the Plans or in the field by the Engineer that are in conflict with the new construction shall be salvaged as directed by the Engineer.

Contractor shall remove, salvage, and or relocate decorative rocks/small boulders as needed.

The Details for this work shall be approved by the Engineer prior to construction.

SP16-02 EXISTING IRRIGATION

Contractor is hereby advised that existing irrigation systems exist adjacent to the new improvements to be installed. Contractor shall locate and protect existing irrigation as indicated herein and directed by the Engineer.

Existing irrigation facilities that are to remain or to be relocated, and that are within those areas where clearing and grubbing or earthwork operations are to be performed, shall be checked for missing or damaged components and proper operation prior to performing clearing and grubbing or earthwork operations. Existing irrigation facilities outside of work areas that are affected by the

construction work shall also be checked for proper operation. This work shall also conform to Section 19 "Landscape Irrigation" of the Technical Provisions.

SP16-03 MEASUREMENT AND PAYMENT

No separate payment shall be made for conforming to the provisions of this section. Full compensation for conforming to all the provisions of this section shall be considered as included in the prices paid for various contract items of work and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-17

EXISTING HIGHWAY FACILITIES

(BID ITEM NO. 4 THROUGH 11)

SP17-01 GENERAL

Work shall consist of removing, abandoning, relocating, or protecting existing facilities which interfere with construction. Work performed in connection with various existing highway facilities shall conform to applicable provisions of Section 7, "Existing Utilities," of the General Provisions, Section 2, "Clearing and Grubbing," and Section 22, "Protection and Restoration of Existing Improvements," of the Technical Provisions of the Standard Specifications, these Special Provisions, and as directed by the Engineer.

The Contractor shall fully document pre-construction conditions at all points around the work area. This documentation shall consist of notes, still photographs, and video. Special effort shall be made to document the existing conditions at all buildings and private improvements not to be disturbed. These documents shall be available to the City upon request.

If Contractor damages or destroys materials or facilities designated on the Plans, in these Special Provisions, or by the Engineer to be protected, salvaged or reused, he shall repair or replace them in kind at his sole expense and to the satisfaction of the Engineer.

SP17-02 REMOVALS

Contractor's attention is directed to Section 6-11, "General Safety," of the Standard Specifications General Provisions, and Section SP-14, "Temporary Pavement Delineation," of these Special Provisions.

Removals of existing road facilities not considered to be included in other Contract Work include: asphalt concrete and base for new topsoil, concrete flatwork, curb and gutter; and signs, striping, markings and other miscellaneous structures. These items shall be removed and disposed of in accordance with Section 6-16, "Disposal Outside Project Limits", of the General Provisions of the Standard Specifications. All other removals as shown on the drawings and as directed by the

Engineer to accommodate new construction as intended by Contract, for which no specific Bid Item is shown, shall be considered as incidental work.

Contractor's attention is directed to the removals of existing asphalt concrete roadway for paving conforms, which shall be covered by "Roadway Excavation" and "Cold Planing" bid items as shown on the Plans and specified elsewhere in these Special Provisions.

Where existing curb is to be removed and replaced, and the adjacent pavement is intended to remain, removal work shall include the removal of said curb and area of the adjacent pavement to a width and depth as shown on the Plans and to allow the forming and construction of the replacement new curb.

Contractor's attention is directed to the signing and striping Plan for the removal of existing sign, posts and foundation. Contractor shall salvage and/or re-use existing sign panels as shown on the Plans and directed by the Engineer.

After removal, excavations which are within the limits of new improvements or are in the roadway area shall be backfilled with Class II aggregate base, $\frac{3}{4}$ " maximum, conforming to Section 8, "Aggregate Base", of the Technical Provisions of the Standard Specifications and these Special Provisions. Aggregate base shall be compacted to 95% relative compaction.

After removal, excavations which are outside the limits of new improvements or outside of the roadway area shall be backfilled with native material free of organic material and free of material greater than two (2) inches in greatest dimension and approved by the Engineer for use as backfill material, unless shown to be backfilled otherwise on the Plans. Native material shall be compacted to 90% relative compaction.

For removals that involve sawcutting, all sawcut lines shall be approved by the Engineer prior to sawcutting. Sawcutting along the gutter lips shall be to a neat, straight line in alignment with the projected gutter lip line of adjacent sections.

Removals of area in preparation for new construction shall extend to a depth that is sufficient to accommodate the new improvements to be constructed, including any necessary subgrade. Otherwise, removal shall extend to a depth at least six (6) inches below the surface of the final condition required by Contract.

Storm drain facilities adjoining proposed improvements shall be protected.

Relocation and repair of sanitary sewer laterals, if required, shall conform to Section 22-8 of the Technical Provisions of the Standard Specifications.

Where existing facilities such as pavers, landscaping, decomposed granite, fencing, and miscellaneous property frontage improvements are required to be removed temporarily to provide clearance for construction, upon completion of said construction they shall be reset to their original location and alignment, in a condition equal to or better than that pre-existing.

The Engineer may direct Contractor to salvage components of private improvements including decomposed granite designated to be removed. In such cases, Contractor shall take care to remove the components in a manner to reasonably minimize damage and stockpile them neatly in a location designated by the Engineer, and re-install to the satisfaction of the Engineer.

All existing pavement markers and thermoplastic stripes and legends within the roadway paving limits shall be completely removed immediately prior to asphalt concrete paving. Markers, stripes, or legends which are removed shall be replaced with temporary markers, stripes and legends prior to opening the roadway to vehicular or pedestrian traffic. Pavement delineation removal shall conform to the provisions of Section 15-4, "Removal of Existing and Temporary Stripes and Pavement Markings," of the Technical Provisions of the Standard Specifications. Removal by sandblasting will not be allowed.

Contractor shall comply with the requirements of Section 5-19 "Reuse and Recycling" of the General Provisions of the Standard Specifications.

SP17-03 MONUMENTS AND PROPERTY CORNERS

All monuments and property corners are to be preserved unless designated on the Plans to be replaced. The Contractor shall bear the expense of replacing and recording with the County any monument or benchmark that is disturbed and was not designated to be replaced. Replacement shall be done only under the direction of and in the presence of the Engineer or a licensed surveyor.

Should the Contractor during the course of construction encounter a survey monument or benchmark not shown on the Plans, he/she shall promptly notify the Engineer so that the monument or benchmarks may be referenced accordingly.

SP17-04 ADJUSTMENTS

Where existing facilities including USPS mail box, storm drain manhole and water valves are encountered within the limits of the planned work, Contractor shall adjust or remove and re-install existing facilities to the new finished grade as shown on the Plans and as directed by the Engineer.

For all adjustments, the top surface of the adjusted facility shall be within 1/8 inch of the adjacent finished grade. In asphalt concrete pavement areas, no facility shall be adjusted to grade until the adjacent pavement or surfacing has been completed.

For water valves, Contractor shall coordinate with EBMUD, who will perform work to adjust the valve(s) to final pavement grade. All boxes shall be placed securely in place on a compacted base in native material, asphalt concrete, or concrete as applicable, in a manner that would not result in settling over time.

SP17-05 MEASUREMENT AND PAYMENT

No separate payment shall be made for conforming to the provisions of this section, with the exception of the items specified below. Full compensation for conforming to all the provisions of this section, including minor removal work and the resetting of temporary removals, for which no specific payment is allowed in Contract, shall be considered to be incidental work included in prices paid for various other contract items of work, and no additional compensation will be allowed therefor.

The Contract Prices paid per cubic yard for **“Remove AC & Base for New Topsoil”**, per square foot for **“Remove Concrete Flatwork,”** and per linear foot for **“Remove Concrete Curb”** and **“Remove Concrete Curb & Gutter”** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to sawcut, remove, dispose of existing improvements, and all excavation and preparation required to accommodate new improvements as shown on the contract Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

The Contract Prices paid per each for **“Remove Sign & Post”** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to excavate, remove, and dispose (or salvage and re-use) existing signpost, panels, foundation or footing, including any underlying materials, to allow the installation of the new improvements completely as designed, as shown or intended on the Contract Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

The contract unit prices paid per each for **“Remove & Re-install USPS Mailbox”** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in re-installing the mailbox to grade complete in place, including all required excavation, backfilling, compaction, foundation, and permanent restoration to match surrounding materials, and all other work as shown on the Plans and/or applicable standard plans, and as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

The contract unit prices paid per each for **“Adjust Storm Drain Manhole Frame and Cover to Grade”** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment, and incidentals necessary to raise the entire facility to finished grade following final permanent surfacing, complete and in place, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer; and no additional compensation shall be allowed therefor. Placement of concrete collars and temporary and permanent paving around the structure prior to opening the curb ramp to public traffic shall be considered included in the Contract Price.

The contract unit prices paid per square foot for **“Conform at Decomposed Granite Path”** shall include full compensation for removing, salvaging and or furnishing decomposed granite to match, grading and installing existing or new Decomposed Granite Path as specified herein, shown on the Plans and as directed by the Engineer.

SPECIAL PROVISIONS SECTION SP-18

EXCAVATIONS
(BID ITEM NO. 12)

SP18-01 GENERAL

Excavation of all kinds shall conform to Section 3, "Earthwork," of the Standard Specifications Technical Provisions.

Contractor's attention is directed to Section 6-5, "Weight Limitation," of the General Provisions of the Standard Specifications.

SP18-02 EXCESS MATERIAL AND CONFORMS TO EXISTING TERRAIN

Conforming new improvements to surrounding unimproved terrain shall be made using select material from the excavation. Only select fill generated by project excavation may be reused for fill. Select fill shall conform to Section 3-9 "Select Material" of the Technical Provisions of the Standard Specifications and shall be free of all organic materials, rocks, concrete, asphalt, foreign objects, and other deleterious materials.

It is the Contractor's responsibility to store clean native soils for reuse as fill where allowed by the Engineer. There will be a net excess of excavated material after all conforms are made. Excess material shall be disposed of in accordance with Section 3-8 "Surplus Materials" of the Technical Provisions.

SP18-03 PROTECTION OF EXCAVATED PORTION OF THE ROADWAY

At the end of each day's roadway excavation and paving operations the contractor shall protect the longitudinal drop-off between lanes by constructing temporary asphalt concrete ramps with a 5:1 or flatter slope. In addition, the longitudinal edge shall have 3 foot tall "post tube" delineators with reflective markings and weighted bases placed every 5 feet. The adjacent lane of traffic shall be reconstructed the next day, thereby eliminating the longitudinal drop-off in this area. No longitudinal drop-off shall be permitted over a weekend.

Transverse joints in the roadway shall receive a temporary hot-mix asphalt ramp to the level of the existing pavement and tapered on a slope of 30:1 or flatter to the level of the excavated area.

Asphalt concrete for temporary ramps and tapers shall be commercial quality and may be spread and compacted by any method that will produce a smooth riding surface. The ramps shall be completely removed, including all loose material from the underlying surface, before placing the permanent

surfacing. Permanent asphalt concrete paving shall commence within seventy-two (72) hours of the removal of the existing roadway.

These conditions shall in no way relieve the Contractor of any of his or her liability associated with construction of the improvements. If in the Contractor's opinion additional protective measures are needed, these measures shall be implemented.

SP18-04 SHORING AND BRACING

The provisions of Section 18-1.6, "Bracing Excavations," of the Technical Provisions of the Standard Specifications shall apply.

Excavations shall be adequately shored and braced so that the earth will not slide, move, or settle and so that all existing improvements of any kind will be fully protected from damage.

Removal of shoring shall only be accomplished during backfill operations and in such a manner as to prevent any movement of the ground or damage to the conduit, piping, or other structures.

SP18-05 MEASUREMENT AND PAYMENT

Unless otherwise provided by a Contract Bid Item, there is no separate measurement or payment for excavation associated with various Contract Work, such as curb and gutter, sidewalk, curb ramp, and minor structures. All excavation and backfill necessary to construct all Contract Work shall be considered as included in the Contract Prices paid for the various items of work for this Contract.

The Contract price per cubic yard for "**Roadway Excavation**" shall include the removal and disposal of existing asphalt concrete pavement and base materials to a varying depth for conform paving with the area located at the southwest corner of the Mt. Diablo Blvd and Mt. Diablo Ct. intersection, as shown on the Plans. The work shall include full compensation for all labor, materials, tools, equipment and incidentals, and all work involved, to remove, load, handle, off-haul, dispose of materials, stockpile, deposit, spread, water and compact select materials, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

The quantities shown for "Roadway Excavation" on the bid schedule shall be a "Final Pay Quantity" in accordance with the provisions of the Section 9-6 of the General Provisions of the Standard Specifications.

Full compensation for all required Shoring and Bracing, including furnishing all labor, materials, tools, equipment and incidentals and for performing all work necessary to design and install shore and brace any open trench or excavation requiring shoring and bracing as specified in these Special Provisions and as directed by the Engineer, shall be considered included in the price of the items requiring shoring and bracing, and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-19

AGGREGATE BASE
(NO BID ITEM)

SP19-01 GENERAL

The provisions of Section 8, "Aggregate Base", of the Technical Provisions of the Standard Specifications shall apply in their entirety except as modified or supplemented herein.

Class 2 Aggregate Base shall conform to the "3/4-inch maximum" gradation.

Aggregate base is also referenced as base rock in the contract documents.

SP19-02 MEASUREMENT AND PAYMENT

There shall be no separate measurement or payment for furnishing and placing the aggregate base used in the construction of all other various items of work shown on the Plans, bid proposal, and specified herein, and full compensation shall be considered as included in the contract unit prices paid for those bid items requiring aggregate base, and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-20

COLD PLANING
(BID ITEM NO. 13, 14)

The provisions of Section 13, "Cold Planing", of the Technical Provisions of the Standard Specifications shall apply in their entirety except as modified or supplemented herein.

SP20-01 GENERAL

Existing asphalt concrete shall be planed at the locations and to the various depths and widths as shown on the Plans in accordance with Section 13, "Cold Planing", of the Technical Provisions, these Special Provisions, and as directed by the Engineer.

SP20-02 MEASUREMENT AND PAYMENT

The quantities to be paid shall be measured for the planed area irrespective of the number of passes required to plane the areas to the specified measurement as shown on the Plans.

The Contract Prices paid per square foot for “Cold Plane AC Roadway (2”)” and “Cold Plane AC Roadway (6”)” shall be considered full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved, including but not limited to: conform grinding; leveling or inlay grinding; loading, off hauling, and disposing of spoil materials; street sweeping; furnishing, constructing, maintaining, and removing temporary asphalt concrete ramps, temporary striping, markings, and markers; and all other work as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer; and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-21

ASPHALT CONCRETE (BID ITEM NO. 15)

SP21-01 GENERAL

The provisions of Section 9, “Asphalt Concrete”, of the Technical Provisions of the Standard Specifications shall apply in its entirety except as modified or supplemented herein.

All asphalt concrete shall be 1/2” maximum sized aggregate, PG64-10 Asphalt.

Work consists of installing asphalt concrete inlay and plugs in multiple courses to modify roadway grades where shown on the Plans, and conform paving adjacent to curbs, gutters, curb ramps, and crosswalks. Asphalt concrete conform paving limits are approximate. The Engineer will paint actual conform lines prior to the start of conform paving work.

SP21-02 PAYMENT

The contract unit prices paid per ton for “Asphalt Concrete, 1/2” Type A” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved including but not limited to: subgrade preparation, cleaning, tack coat, furnishing, placing, spreading, and compacting the asphalt concrete to the specified depth, and all other work as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor. There is no adjustment in the Contract quantity or price paid for actual asphalt concrete depth installed exceeding details shown on the Plans.

SPECIAL PROVISIONS SECTION SP-22

CONCRETE CONSTRUCTION (BID ITEM NO. 16 THROUGH 19)

The provisions of Section 17, “Concrete Construction,” of the Technical Provisions of the Standard Specifications shall apply in their entirety except as modified or supplemented herein.

SP22-01 GENERAL

All new curb, gutter, sidewalk, and curb ramps shall conform to the latest applicable Contra Costa County (CCC) Public Works Department "Standard Plans" unless otherwise specified or modified by Contract Documents. All new concrete construction shall include installation of a subbase consisting of a minimum six (6)-inch-thick layer of Class 2 aggregate base, conforming to SP-19, compacted to 95% relative compaction. Work also includes constructing dowelled connections between new and existing facilities.

For all existing inlet tops within limits of work, the Contractor shall install a City-furnished sticker, stating "No Dumping – Drains to Creek", affixed to the curb or other logical nearby location.

The void between the back of new concrete curbs, inlets, and driveways and the surrounding terrain shall be filled with material to match existing surrounding material. This material is typically topsoil, decomposed granite, gravel, or base rock. Fill material shall be placed and compacted to the top of the new concrete improvements and sloped at a maximum of 3:1 to conform to the existing terrain. The fill material shall be compacted to 90% relative compaction. In areas where topsoil is placed, a 1-inch layer of mulch shall be placed over the topsoil.

SP22-02 CONCRETE REQUIREMENTS

Concrete used for all items on this project shall be Class 564-C-3250 with minimum 28-day compressive strength of 3,250 pounds per square inch, unless otherwise specified in the Contract Plans or these Special Provisions.

Concrete used for the signal poles and streetlights foundations shall be Class 590-C-3250 with minimum 28-day compressive strength of 3,250 pounds per square inch.

The maximum slump shall be four (4) inches.

SP22-03 MINOR CONCRETE CONSTRUCTION

Curb shall match existing curb configuration except that six (6) inches of base rock shall be placed under new curb and gutter.

Dowels used in connections between new and existing facilities shall be #4 rebars, 12" long. The dowels shall be in drilled holes, grouted and spaced in conformance with the details shown on CCC Standard Plan CA74 and these Special Provisions. All dowels shall have a minimum 1 ½" concrete cover.

Contractor's attention is directed to the potential existence of private irrigation facilities located behind the existing curb and gutter or at drain inlet locations. Coordination, protection, and relocation of these facilities are considered incidental to Contract Work per Section SP16-02 of the of these Special Provisions. Contractor shall repair any damage on the same day that it is caused by his activities, to a fully functional condition.

SP22-04 PATH OF TRAVEL TACTILE SURFACES

The color of detectable tactile warning panels shall be onyx black (Federal Color No. 17038). Contractor shall submit a six (6)-inch square sample of the product to be used, along with the manufacturer's product data and "cut-sheets" for review and approval prior to ordering. The detectable warning surface shall conform to:

1. Americans with Disabilities Act (ADA) Title III Regulations, 28 CFR Part 36 "ADA Standards For Accessible Design," Appendix A, Section 4.29 for "Detectable Warnings".
2. Division of the State Architect - Access Compliance (DSA-AC) approved detectable warning products as provided in the California Code of Regulations (CCR) Title 24, Part 2, Section 205 definition of "Detectable Warning".

City may accept products from ADA solutions (800-372-0519), Answer Industries (909-230-4064), and Armor-Tile (916-844-4132).

SP22-05 MEASUREMENT AND PAYMENT

Concrete sidewalks and ramps shall be measured by the square foot, and do not include construction of adjacent curbs regardless of whether poured separately or monolithically with concrete flatwork. Curbs, curb & gutters shall be paid for by the linear foot as measured along the exposed face of curb.

The Contract Price paid per linear foot for **"Concrete Curb & Gutter"** and **"Concrete Median Curb"**, and per square foot for **"Concrete Sidewalk"** and **"Concrete Curb Ramp with Detectable Panel"** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to complete the work, including but not limited to – potholing utilities marked under or near new improvements, clearing & grubbing, tree protection, sawcutting; excavation and preparing subbase; dewatering; loading, hauling, and disposal of spoils; forming, placing, and finishing concrete; backfill; doweled connections; setting tactile surfaces in accordance with manufacturer's instructions, and all other work necessary to construct the facility complete and in place as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

"Concrete Curb Ramp" shall be measured as the ramp area up to the groove line defining the ramp, up to and including the adjacent retaining curb where it exists, and inclusive of the detectable panel. The retaining curb associated with a curb ramp shall not be paid separately as a curb & gutter item.

SPECIAL PROVISIONS SECTION SP-23

INTERLOCKING BRICK PAVERS
(BID ITEM NO. 20)

SP23-01 GENERAL

Preparatory work to install brick pavers shall conform to all applicable Sections of the Technical Provisions of the Standard Specifications, including but not be limited to the following sections:

- Section 3, "Earthwork"
- Section 6, "Subgrade Preparation"
- Section 8, "Aggregate Base"
- Section 17, "Concrete Construction".

Contractor's attention is also directed to sections in these Special Provisions corresponding to the above disciplines.

SP23-02 MATERIAL

Brick pavers shall be interlocking Basalite, Spectrum, red/brown, or approved equal. Pavers shall be 80mm thick in all areas.

Pavers shall be free of cracks, seams, or other imperfections that impair their structural integrity or function.

Ten (10) working days prior to ordering materials, Contractor shall submit samples of sufficient number and size to represent a full range of color, texture, and finish specified for approval by the Engineer. Contractor shall obtain unit pavers from a manufacturer having adequate capacity to meet specified requirements and scope of Work. Contractor shall not change source of supply without permission of Engineer.

Sand for leveling course shall be free of deleterious materials, uniformly graded, 100% passing No. 8 sieve and 35% passing No. 50 sieve. Sand leveling bed shall be maximum 1" thick unless otherwise detailed on the Plans. Sand for the paver joints shall be polymeric sand.

Mortar shall be commercial grade, conforming to Section 51-1.02C, "Bonding Materials," of the State Specifications.

SP23-03 INSTALLATION

Pavers shall be installed over sand in non-vehicular-traffic areas, or adhered by mortar to underlying reinforced concrete, as shown on the Contract Plans and in accordance with manufacturer's

installation instructions. Both conditions shall have an aggregate base subbase. Pavers shall be placed to a tolerance of no more than 1/8-inch over a 10-foot horizontal run. Edge-to-edge alignments between two units that form a continuous plane shall be flush with zero tolerance. Chipped, cracked, or broken pavers shall not be used.

Contractor shall coordinate the placement of asphalt concrete with the installation of brick paver median and other special surface treatments in the vehicular travel lanes. New bricks and concrete shall be protected against soiling and marking by oils and asphalt. Soiled bricks shall be removed, cleaned, and replaced. Bricks shall not be cleaned while in place and on site. Cleaning by pressure washing shall require new sand to be swept into paver joints and re-vibrated to lock pavers into place.

Pavers shall not be cut to a dimension of less than 3" in any direction. Otherwise, Contractor shall discuss start-point layout with Engineer in the field and obtain approval prior to beginning work. Any unusual conditions shall also be reviewed with the Engineer prior to installation.

Fine polymeric sand shall be spread over pavers, swept into joints, and vibrated into place for a tight finish, and shall be soaked with water to cause the polymers to harden and secure the sand in place.

SP23-04 MEASUREMENT AND PAYMENT

The Contract Prices paid per square foot for **"Interlocking Brick Pavers in Median"** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved in constructing paver surfacing, including but not be limited to: sawcutting conform joints where needed; installing compacted aggregate base, sand, mortar, and supports; brick paver surfaces, including polymeric sanded joints; and all other work necessary to construct pavers complete in place as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-24

LANDSCAPING AND IRRIGATION

(BID ITEM NO. 21 THROUGH 24)

SP24-01 GENERAL

Work covered under this section shall conform to Section 19 "Landscape Irrigation" and Section 20 "Landscaping" of the City Standard Specifications, Technical Provisions.

Work consists of installing all necessary sleeves, PVC conduits and boxes for irrigation and related electrical, and placement of the city furnished topsoil as shown on the Plans, specified herein and directed by the Engineer.

SP24-02 TOPSOIL

Topsoil for planting area shall be furnished by City and installed by Contractor per Section 20-2.6 of the Technical Provisions of the Standard Specifications. Topsoil shall be placed in lifts no greater than six (6) inches and foot-tamped. The initial layer of topsoil shall be rototilled, or hand worked, and mixed into native soil to a minimum depth of six (6) inches to create a composite zone prior to placing additional topsoil layers to the depths specified on the Plans.

SP24-03 MEASUREMENT AND PAYMENT

The contract unit price paid per linear foot (LF) for “**Irrigation Sleeve**” and “**Irrigation Pipe & Conduit**” and per each for “**Irrigation Box**” shall include full compensation for potholing utilities marked under or crossing new improvements and furnishing all labor, materials, tools, equipment, and incidentals, and for doing all work involved in installing sleeves, PVC conduit and pipe for irrigation, boxes and related electrical work, complete in place including but not limited to: excavation, trenching, backfill and installation of the pipe to support future irrigation as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

The contract Price per cubic yard for “**Imported Topsoil Placement**” shall be considered full compensation for all labor, material, tools, and equipment, and incidentals to coordinate and take delivery of topsoil furnished by City and install in designated areas, including but not limited to: cleaning and preparing site; scarifying native soil; receiving, handling, placing, grading, and compacting topsoil as shown on the Plans, as specified in the Standard Specification and these Special Provisions, and as directed by the Engineer, and no additional compensation shall be made therefor. The quantity shown on the Bid Schedule shall be a “Final Pay Quantity” in accordance with the provisions of Section 9-6 of the General Provisions.

SPECIAL PROVISIONS SECTION SP-25**TRAFFIC SIGNS**

(BID ITEM NO. 26, 27, 28)

Traffic signs shall comply with Section 16, “Traffic Signs” of the Technical Provisions, of the Standard Specifications and with Section 56 “SIGNS” of the State Standard Specifications, City of Lafayette Street Name Signs Standards, and these Special Provisions.

SP25-01 GENERAL

New roadside signposts shall be galvanized 1-3/4” square Ulti-Mate square post systems or approved equal. Refer to Appendix F “Signpost & Accessories” for post and hardware details.

All roadside signs shall be installed with a minimum of seven (7) foot of vertical clearance measured from the lowest point of the sign panel to the ground surface. Roadside signs and posts shall be

furnished and installed by the Contractor as shown on the Plans, as specified in these Specifications, and as directed by the Engineer.

Hardware and foundations for the new signs mounting on the 1-B poles (existing or new) shall conform to the State Standard Plans and Specifications.

Existing post and foundation shall be completely removed, and the excavation backfilled with material matching the surrounding area and adjacent grades.

At no additional cost to the City, Contractor shall replace all signs damaged by Contractor's operations or lost while in Contractor's possession.

The Contractor shall notify the regional notification center for operators of subsurface installations, USA (Underground Service Alert) 811, at least two (2) working days, but not more than fourteen (14) calendar days, prior to commencing any excavation for sign posts.

SP25-02 PAYMENT

The Contract Price paid per each for **"Existing Sign on New Post"**, **"New Sign & Post"** and **"New Sign on Ex. Post/Pole"** shall be considered full compensation and for furnishing all labor, materials, tools, equipment, and incidentals, in relocating exiting bus stop sign, furnishing and installing sign panels, posts, and all miscellaneous hardware to complete installation in place, including but not be limited to: excavation, concrete foundations, sign brackets, straps, and all necessary hardware for post-mounted signs; backfilling holes and restoration surfaces to match adjacent grades and materials, and all other work as shown on the Plans, as specified in the Standard Specifications and in these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-26

TRAFFIC STRIPES, PAVEMENT MARKINGS AND MARKERS

(BID ITEM NO. 29 THROUGH 38)

Thermoplastic Traffic Stripes, Pavement Markings and Markers shall comply with Section 15, "Pavement Striping, Markers and Delineation" of the Technical Provisions, and with Section 84 "Traffic Stripes and Pavement Markings" and Section 85 "Pavement Markers" of the State Standard Specifications and these special provisions.

SP26-01 GENERAL

Temporary "cat tracking" and layout marks shall be placed by the Contractor for all striping (including limit lines and crosswalks). Temporary "cat tracks" shall be approved by the Engineer prior to final striping.

Traffic stripes and pavement markings shall be thermoplastic. Where required on the Plans, thermoplastic shall be skid-resistant. Contractor shall submit product data, including "cut sheets" and color sample for green paint and skid-resistant thermoplastic for review and approval by Engineer prior to installation.

Adhesive shall be hot-melt bituminous adhesive conforming to Section 85 of the State Standard Specifications.

Correction of errors and correction of any damage to the newly placed markers due to the failure of the Contractor to protect the work shall be repaired by the Contractor at no additional cost.

Permanent traffic stripes, pavement markings and markers shall not be placed on new asphalt concrete surfacing until the roadway has been opened to public traffic for a period of not less than seven (7) days.

When performing pavement delineation work, Contractor shall comply with all provisions of SP-14, "Traffic Control."

SP26-02 MEASUREMENT & PAYMENT

Traffic stripes shall be measured by the linear foot along the line of the traffic stripe without deductions for the gaps, as shown on the standard details. Deductions will be made for gaps at cross streets and driveways.

The contract prices paid per each for markers, per linear foot for various thermoplastic stripes and striping details, and per each for various thermoplastic pavement legends & markings, shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, including any necessary "cat tracks", dribble lines and layout work; and all other work as shown on the Plans, the State Standard Plans, and as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-27

SIGNALS, LIGHTING AND ELECTRICAL

(BID ITEM NO. 39 THROUGH 42)

Installation of traffic signals, controller assemblies, service enclosures, conductors and cables shall conform to the provisions in Section 86, "Electrical Systems" of the State Specifications and these Special Provisions. Full compensation for conforming to these Special Provisions shall be included in the prices paid for the various contract electrical items of work and no additional compensation will be allowed therefor.

Contractor's attention is directed to Appendix "A" to these Special Provisions which includes PG&E "Construction Sketch" dated 2/18/2022. Contractor shall fully comply with all PG&E requirements set forth in the Construction Sketch and as directed by the Engineer.

SP27-01 EQUIPMENT LIST AND DRAWINGS

The controller cabinet schematic wiring diagram and intersection sketch shall be combined into one drawing and placed in the cabinet drawer. When the cabinet door is open, the drawing shall be oriented with the intersection.

Within five (5) days after the date of the Notice of Award of the Contract, the Contractor shall submit a complete list of electrical materials to be incorporated into the project stating the Special Provision section, the vendor's name, the manufacturer's name if different from vendor's, trade name, and model number or code for each product. Within five (5) days after the date of Notice to Proceed, the Contractor shall provide to the Engineer a copy of all purchase orders for equipment and materials used in reference to traffic signals and lighting. The Contractor shall also provide copies of all correspondence with equipment and materials suppliers concerning availability, delivery dates, anticipated delays, and shipment notices within five days of each letter. References to costs may be omitted. Consideration for recommending time extensions for materials and equipment delivery delays will not be made unless these provisions are met.

The Contractor shall furnish two maintenance and operation manuals for all cabinets, controller units, vehicle detector sensor units, and any other auxiliary equipment furnished. The maintenance manual and operation manual may be combined into one manual. The maintenance manual or combined maintenance and operation manual shall be submitted at the time the controllers are delivered for testing, or, if ordered by the Engineer, previous to purchase.

The maintenance manual shall include, but not be limited to, the following items:

- (a) Specifications
- (b) Design characteristics
- (c) General operation theory
- (d) Function of all controls
- (e) Trouble shooting procedure (diagnostic routine)
- (f) Block circuit diagram
- (g) Geographical layout of components
- (h) Schematic diagrams
- (i) List of replaceable component parts with stock numbers

SP27-02 MAINTAINING EXISTING ELECTRICAL SYSTEMS

Maintaining existing electrical systems shall conform to the provisions of Section 87-21.03B, "Maintaining Existing Electrical Systems", of the State Specifications. Existing electrical system, consisting of the existing flashing beacon and advanced messaging signs at Mt Diablo Boulevard and Mt Diablo Court shall be kept in effective operation for the benefit of the traveling public during the

progress of the work, except when shutdown is permitted. The electrical system shutdowns shall be limited to the hours as specified in the Contract Plans, and shall be permitted only during the installation of new signal wiring and switchover from existing to new operation, unless prior approval is obtained from the Engineer.

SP27-03 SCHEDULING OF WORK

In the event that the Contractor is unable to respond to a problem that develops during the functional test, or that for any reason he is unable to correct the problem in a timely fashion as determined by the City, the City may have its own maintenance personnel work on the problem. Any such work performed by the City shall not invalidate the guarantee required by the Contract Documents and shall be at the Contractor's expense.

SP27-04 LOCATING ITEMS OF WORK

The Contractor shall be responsible for locating and marking the positions of all signal standards, controller cabinets, service equipment cabinets and pull boxes. The Engineer may assist the Contractor in locating the above items. All locations shall be approved by the Engineer before any work is performed.

SP27-05 EXCAVATING AND BACKFILLING

The excavations required for the installation of conduit, foundations, and other appurtenances shall be performed in such a manner as to avoid any unnecessary damage to streets, sidewalks, landscaping, and other improvements as directed by the Engineer.

SP27-06 FOUNDATIONS

Foundations shall conform to the provisions in Section 87-1.03E(3), "Concrete Pads, Foundations, and Pedestals", of the State Specifications, the Contract Plans and these Special Provisions.

Concrete shall conform to Section 17 of the City Standard Specifications, Technical Provisions. Classification shall be 590-C-3250. Certification of the concrete shall be received from the vendor and delivered to the City Inspector at the time the concrete is poured.

Contractor shall provide for dewatering of the foundation excavations prior to setting footings.

SP27-07 STANDARDS, STEEL PEDESTALS AND POSTS

Traffic signal poles and push button post will be furnished by City to be installed by Contractor. Contractor's attention is directed to Section 5-11 of the General Provisions of the Standard Specifications, except that materials will be delivered to the job site at no charge to Contractor. Contractor shall coordinate with the Engineer and City's supplier to arrange for delivery and acceptance of materials at the job site. Contractor shall be responsible for any costs arising from his

failure to perform said coordination, including costs associated with re-scheduling a delivery, additional handling, storage, and transportation charges incurred by City. Poles delivery schedule will be provided at the preconstruction meeting.

Upon delivery, Contractor shall be responsible for the care and protection of the poles and the repair of any damage to them, including touch-up painting per these Special Provisions. Contractor shall furnish all miscellaneous hardware and perform all incidental work necessary to install poles and attach signal equipment per the referenced Standard Plans, Specifications, these Special Provisions, and as directed by the Engineer.

Handholes for signal standards shall be located 90° clockwise from the traffic signal mast arm.

All signal standards shall have a minimum of 2" and a maximum of 3" of grout installed between the bottom of the base plate and the finish grade.

Traffic signal poles shall be set back from face of curb no less than 30 inches to face of standard or pole, and the base plate installed parallel to the stop bar, unless otherwise specified by the Engineer. The Contractor shall mark and obtain approval of all pole locations in the field prior to excavating for foundations. All poles shall be made leveled and plumb using a level.

SP27-08 CONDUIT

Conduit shall be non-metallic Schedule 40 PVC, except conduits passing through foundations or inside concrete structures (e.g., gateway wall) which shall be rigid metal. Minimum size for conduit shall be 2". All conduits shall be terminated with bushings/end bells. All conduits shall enter the pull box as shown on the Plans. All conduits shall have a ¼" pull rope installed in them. All conduit joints shall be glued.

After conductors have been installed, the ends of conduit terminating in pull boxes and controller cabinets shall be sealed with a U.L. approved plug or duct seal.

When a standard coupling cannot be used for coupling metal type conduit, a U.L. listed threaded union coupling, as specified in the tenth paragraph in Section 87-1.03B, "Conduit Installation", of the Standard Specifications, or a concrete tight-split coupling or concrete tight-set screw coupling shall be used.

Subject to approval by the Engineer, conduit runs shown on the Plans to be located behind curbs may be installed in the street, within 2 foot of and parallel to the face of the curb but not in the traffic wheel path, by the "Trenching in Pavement Method" described below. Pull boxes shall be located behind the curb or at the locations shown on the Plans or as approved by the Engineer.

Directional Drilling Method

The directional boring method shall be used for the installation of conduit except where short conduit runs are required and right-of-way is limited for setting up boring equipment. In those cases, open-trenching shall be permitted subject to approval by the Engineer.

Work shall conform to Section 24 of the Technical Provisions of the Standard Specifications and these Special Provisions. The minimum depth of 36" shall be maintained by the directional boring method except in the vicinity of entering or leaving a pull box or a cabinet, unless otherwise directed by the Engineer.

Placement of the directional boring equipment and alignment of bore shall be approved by the Engineer prior to boring operation. Pavement shall not be disturbed without permission from the Engineer. In the event obstructions are encountered, upon approval from the Engineer, small holes may be cut in the pavement to locate or remove the obstruction

Excessive use of water, such that pavement might be undermined or subgrade softened, will not be permitted.

Trenching Installation of Conduits

When trenching in pavement is allowed, the conduit installation shall meet the trench in pavement requirements of the "Conduit Installation by the Trenching-In-Pavement Method" specified in the State Standard Specifications Section 87-1.03B(6).

Conduit shall be installed with a minimum of 18" of cover in concrete sidewalk areas and curbed median areas, and 36" below finished grade elsewhere outside the paved roadway.

Trenching installation of conduit shall be done per detail(s) shown on the Plans. The top of the installed conduit shall be a minimum of 18" below finished grade. In roadway areas, the trench shall be backfilled with commercial quality concrete and capped with at least 3" of asphalt concrete conforming to these Special Provisions. Payment for surface restoration shall be included in the price paid for conduits unless otherwise stated elsewhere in these Special Provisions.

During Construction, all trenches shall be duly maintained by the Contractor. New trenched areas where vehicular traffic is permitted shall be backfilled and compacted to no more than 1" below the street grade at all times.

All trenches shall be finish-paved within 24 hours of the installation of the concrete backfill. If the Contractor does not comply with this section, the Engineer will order the work done by others and deduct the cost of doing the work from monies due the Contractor.

Conduit installed to a PG&E service point location(s) shall be minimum 3 inches in size or as specified by PG&E in their plan, see Appendix A. The conduit in a foundation and between a foundation and

the nearest pull box shall be the rigid metallic type.

The ends of conduits in pull boxes shall have a bell bushing and shall be a minimum of 4 inches above surface of rock and a minimum of 6 inches below the top of the pull box.

SP27-09 PULL BOXES

Pull boxes shall conform to the provisions in Section 86-1.02C, "Pull Boxes" of the State Standard Specifications and State Revised Standard Detail RSP ES-8A & ES-8B, unless otherwise specified.

Grout in the bottom of pull boxes will not be required. Pull box sumps shall be constructed from 2-inch minimum clean, washed river run rock. All pull boxes shall be "PCC Type", unless permitted otherwise by the Engineer. Lids shall be marked "TRAFFIC SIGNAL".

Recesses for suspension of ballasts will not be required.

Reinforced plastic/fiberglass lids for No. 6 pull boxes are permitted, all others shall be concrete.

SP27-10 CONDUCTORS AND WIRING

Conductors and Wiring shall conform to the provisions in Section 86-1.02F, "Conductors and Cables", of the State Specifications, the Plans and these Special Provisions.

At least 6 foot of slack shall be provided in the pull box nearest each signal or lighting standard, for those conductors terminating in that standard; and 3 foot of slack shall be provided in each conductor in all other pull boxes. The wire bundle entering the controller cabinet shall be coiled in the bottom of the cabinet in order to obtain as much slack as possible.

Signal Cable may be allowed at the Engineer's discretion. If signal cable is allowed, some conduit sizes may need to be increased in size, at the Contractor's expense, to accommodate the total volume of the cable.

Straight splices in signal neutral and multiple lighting conductors shall be insulated in conformance with Method B, tap splices in signal neutral and multiple lighting conductors shall be Type C, and conductors shall be spliced by the use of C-shaped compression connectors; as shown on State Standard Plan ES-13A.

Identification bands shall be constructed from a nylon cable tie with a 0.35" by 0.75" label flag attached. The marking pen shall be one recommended by the manufacturer of the cable tie or it shall be an indelible marking pen compatible with writing on the nylon material. No other method of labeling will be acceptable. All phase conductors and detector cables shall be labeled in the pull box nearest their termination, and in the controller cabinet. Phase conductors shall be labeled with phase designation. Detector cables shall be labeled with phase and loop number. Lighting conductors (street or sign) shall be labeled as appropriate. Spare conductors need not be labeled.

Conductors shall not be pulled into conduits until the pull boxes have been set to grade, rock sumps have been installed, and conduits have been bonded and grounded. All pull boxes shall be inspected and approved prior to pulling any conductors. Conductors shall not be pulled into conduits unless the Engineer is present to observe the operation. The ends of all unused cables shall be sealed.

The Contractor shall provide to the Engineer a Certificate of compliance from the Manufacturer of all the conductors and cables furnished for the project that they comply with the requirements of this Contract.

SP27-11 TESTING

Any damage to new equipment installed as part of a modified facility prior to or during the "five-day functional test" shall be repaired by the Contractor at the Contractor's expense. After successful completion of the five-day test, the City will assume maintenance for the signal. The "five-day functional test" will begin on the day the intersection is turned on. Maintenance by the City will not relieve the Contractor of repairing any deficiency found prior to the acceptance of the contract.

SP27-12 PAINTING

Lighting standards, traffic signal poles, mast arms, service and control cabinets and hardware shall be painted black. Work shall conform to the following:

General

Paint system is divided into two (2) parts:

- The paint that is applied at the *factory* or point of fabrication and;
- The *field painting and touchup* paint that is required at the installation site in Lafayette, California.

The final finish of the poles, in place, shall be free of all scratches, gouges and defects of any kind.

Factory/Fabrication Site

Paint System:

- Prime: Two-part polyamidoamine epoxy, Series N69 Hi-build Epoxoline II by Tnemec Company, or approved equal. Apply by spray to a dry film thickness of 3.0 to 5.0 mils (75 to 125 microns) D.F.T.
- Top Coat: Two-part aliphatic acrylic polyurethane, series 75 semi-gloss by Tnemec Company, or approved equal. Apply by spray to a dry film thickness of 5.0 mils (125 microns) D.F.T.
- Surface Preparation: All scale, rust and other contaminants shall be removed and all surfaces cleaned to Steel Structures Painting Council (SSPC) SP-6 commercial blast cleaning standard. Prior to prime and topcoat application, all surfaces must be clean, dry and free of oil, grease,

fingerprints and other contaminants. The application, curing temperature and metal temperature must be above 60 degrees Fahrenheit (16 degrees Celsius).

- Total Film Thickness: 8 to 10 mils (200 to 250 microns).
- Color: Black or other as specified herein.
- Application Method: Airless, air or H.V.L.P. spray, or electrostatic spray.

Powder Coating:

TGIC-Polyester coating system, Alesta by DuPont/Axalta Coating Systems, PFB652S6 “Vulcan Black” or approved equal, with film thickness of 3.5 to 5.0 mils using cold electrostatic spray application and cured at 400 degrees Fahrenheit for 10 minutes.

Field Painting or Field Touch-Up

- Surface Preparation: Area to be touched-up shall be scarified with a palm sander, pole sander or scotch brite pad. All rust shall be removed to bright metal. All oil, grease, fingerprints and other contaminants shall be removed with clean solvent and clean rags.
- Prime: Two-part polyamide epoxy. Color: Black (or other as specified herein) Tnemec series 27 E.C. epoxy, or approved equal. Apply by brush or roller to 3.0 to 4.5 mils (75 to 110 microns) dry film thickness. This may require two or three coats to reach required D.F.T.
- Top Coat: Two-part aliphatic acrylic polyurethane – series 75 semi-gloss by Tnemec or approved equal. Color: Black (or other as required to match existing top coating). Apply by brush or roller to 3.5 to 5.0 mils (88 to 125 microns) D.F.T. This may require several coats to reach the required D.F.T.
- Total Dry Film Thickness: match factory applied coatings.
- Color: Black or other as specified herein.
- Application Temperature: Shall be 60 degrees Fahrenheit (16 degrees Celsius) or higher. Application temperature is critical for proper adhesion and curing properties. It is best to do the touch-up mid to late mornings so as to allow the higher afternoon temperatures to help these two-part paints to cure properly.

Substitutions

Other coating systems may be substituted for the products specified herein. A complete submittal package shall be submitted to the Engineer for review and approval prior to the coating operation.

SP26-13 SERVICE

The Contractor shall install the City-provided Type III-AF Service Equipment Cabinets at Mt Diablo Boulevard and Mt Diablo Court, as shown on the traffic signal plans and as provided in the State Specifications, and these Special Provisions.

The Contractor shall coordinate with PG&E well in advance of the project for service connection. The Contractor shall furnish and install all materials and equipment necessary to complete the electrical connection between the terminating point of PG&E and the electrical system, as shown on the Contract Plans and as specified in the PG&E Construction Sketch in Appendix "A" of these Special Provisions. Engineer will arrange for inspection of service cabinet at no cost to Contractor.

Notwithstanding any provisions in the State Specifications, labor and materials costs for the entire service conduit connection from the service cabinet or controller cabinet to the service location of the serving utility company shall be considered as included in the Contract Price, and no additional compensation will be allowed therefore.

SP27-14 CONTROLLER ASSEMBLY

Controllers will be furnished by City. Contractor shall install controllers in the cabinets and make all electrical connections and programming as needed, and as necessary to operate the intersection as shown on the Plans.

SP27-15 CONTROLLER CABINET

Attention is directed to the provisions in Section 86-1.02Q, "Cabinets", of the State Specifications and these Special Provisions.

Contractor shall install one (1) City-furnished Model 332L painted aluminum cabinet, made ready to accept controller as furnished by City. The Model 332L cabinet shall be completely wired, including wiring for the conflict monitor (absence of Red indication).

The Contractor shall construct the controller cabinet foundation as shown on Standard Plan ES-3C for the Model 332L cabinet (including furnishing and installing anchor bolts), and shall install the controller cabinet on said foundation and shall make all field wiring connections to the terminal blocks in the controller cabinet.

When installed on the foundation, the door of the cabinet shall face away from traffic so that a technician servicing the cabinet is able to simultaneously observe the operation of the intersection.

In the event that the traffic signal equipment does not comply with the specifications, Contractor shall remove said equipment for repair or replacement within five (5) working days after notification that the equipment is rejected. In the event the equipment is not removed within five days, it may be shipped to Contractor at his/her expense.

The cabinet shall be pre-tested and delivered to the site for installation accompanied with a testing certificate. Testing shall be performed in compliance with Section 86-2.14 of the Caltrans Standard Specifications

SP27-16 SIGNAL FACES AND SIGNAL HEADS

Traffic Signal Faces and Fittings shall conform to Section 86-1.02Rm "Signal Heads", of the State Standard Specifications and these special provisions.

All lamps for traffic signal units shall be furnished by the Contractor. All traffic signal units shall be LED lamps conforming to the State Specifications. Contractor shall provide a Certificate of Compliance from the Manufacturer certifying that the LED signal modules comply with the requirements of these specifications. The certificate shall also include a copy of all applicable test reports on the LED signal modules.

Signal section housing shall be metal and lens door fasteners shall be stainless steel (wing nuts, fastening bolts, etc.).

Mast arm mounted signal heads shall be provided with type "MAS" mounts.

All signal heads shall have 12-inch signal faces.

Terminal compartments, MAS mounts, and slip fitters shall be bronze; framework, elbows and curved washers shall be galvanized steel or bronze. Signal lamps shall be furnished and installed by the Contractor.

"KO" type seals are not acceptable for sealing unused pipe thread connections to terminal compartments, or top/bottom of signal heads. Connections shall be sealed with threaded fittings with a rubber gasket, or by the use of a "beauty plug" designed for such purpose.

All traffic signal heads, back plates, visors and frameworks shall be painted black in accordance with section SP 27-12 "Painting" of these Special Provisions. All signal heads shall be factory assembled with their respective frameworks and tagged by intersection and pole location.

Replacement Modules

Three extra modules of each size and type that are furnished for this project shall be delivered to the Engineer for use as replacements for modules that may fail. Within one year of contract acceptance, any units that have been used to replace defective modules shall be replaced in kind by the Contractor.

Warranty

The manufacturer shall provide a written warranty against defects in materials and workmanship for the LED signal modules for a period of five (5) years after installation of the modules and acceptance of the entire project by the City Council. Modules that fail during this period shall be replaced at no cost to the City.

The replacement modules shall be delivered to the City Corp Yard, Attn: Donna Feehan. Deliveries shall be made on Monday through Friday between 8:00 AM and 3:00 PM. Replacement modules shall be provided promptly after receipt of modules that have failed at no cost to the City, except cost of shipping of the failed modules to the manufacturer. All warranty documentation shall be given to the City prior to installation.

SP27-17 PEDESTRIAN SIGNALS

Pedestrian signals shall be furnished by the Contractor and shall conform to the requirements of Section 86-1.02S(3) "Pedestrian Signal Faces", of the State Standard Specifications and these Special Provisions.

All pedestrian heads, visors and frameworks shall be factory painted black in conformance with Section 27-12 "Painting" of these Special Provisions. All heads shall be factory-assembled with their respective frameworks and tagged by location and intersection. Pedestrian heads and frameworks, as a unit, shall be installed by the Contractor's workmen at the job site. Extreme care shall be taken by the Contractor's workmen during the installation of the signals, frameworks and heads. Any scar marks or cosmetic damage to the equipment caused from tools or installation processes shall be cause for rejection.

Gaskets for the mounting of pedestrian signal heads shall be installed on the outside of the housing to provide a watertight seal, and the Contractor shall take extra care to ensure that the gaskets are properly installed.

Type SP-1-T pedestrian signal mountings shall have an upper and lower mounting bracket attached to the pedestrian signal housing in the same manner as that shown on the Plans for Type SP-2-T mounting.

All pedestrian signals shall be "Countdown". Pedestrian signals installed on new signal poles shall be furnished with all heads, visors, frameworks and mountings necessary for the intended operation.

Countdown Pedestrian Signals

General

All indications shall consist of an array of light emitting diode (LED) pixels. Pedestrian and countdown LED traffic signal modules shall be Diolux Model P16MAD-S or approved equal. The message-bearing surface of the module shall be supplied with an outline "HAND" and "MAN" symbol, overlapping, that

comply with PTC SI standard for these symbols for a message-bearing surface of the size specified. The numbers 00 to 99 on the numerical display shall have a minimum height of 7 inches. This message-bearing surface shall be designed so that it can be removed from the sealed unit for replacement without further damage to the module.

- a) LED pedestrian and countdown signal modules shall not require special tools for installation.
- b) LED pedestrian and countdown signal modules shall fit into existing traffic housings built to the VTCSH Standard without any modification to the housing.
- c) LED pedestrian and countdown signal modules shall be weathertight, fit securely in the housing and shall connect directly to existing electrical wiring.
- d) Installation of a replacement LED module into the existing pedestrian housing shall only require the removal of the existing optical unit components, i.e., lens, lamp, gaskets, and reflector.
- e) Each retrofit shall include all necessary components to complete conversion including a one-piece gasket.
- f) Each pedestrian and countdown module shall have a sticker attached stating compliance to the ITE Standard for color. (Portland orange and white; red and green is optional)

LED Signal Lens

- a) The lens of the LED pedestrian and countdown signal modules shall be polycarbonate UV stabilized and a minimum $\frac{1}{4}$ " thick.
- b) The exterior of the lens of the LED pedestrian countdown signal module shall be smooth and frosted to prevent sun phantom.

LED Pedestrian and Countdown Signal Module Construction

- a) The LED pedestrian and countdown signal modules shall be a single, self-contained device, not requiring on-site assembly for installation into the existing traffic signal housing.
- b) All Portland Orange LEDs shall be "AllnGaP" technology or equal, and rated for 100,000 hours or more at 25° C and 20 mA. "ALGaAS" technology is not acceptable. White LEDs must be InGaN technology.
- c) All internal LED and electronic components shall be adequately supported to withstand mechanical shock and vibration from high winds and other sources.
- d) The signal module shall be made of UL94VO flame-retardant materials. The lens is excluded from this requirement.
- e) Each individual LED traffic module shall be identified for warranty purposes with the manufacturer's trade name, serial number and operating characteristics, i.e., rated voltage, power consumption, and volt-ampere.

Environmental Requirements

- a) The LED pedestrian and countdown signal modules shall be rated for use in the ambient operating temperature range of -40° C to +60° C (-40° F to +140° F).
- b) The LED pedestrian and countdown signal modules, when properly installed with gasket, shall be protected against dust and moisture intrusion per requirements of NEMA Standard

250-1991, sections 4.7.2.1 and 4.7.3.2, for type 4 enclosures to protect all internal LED, electronic, and electrical components.

Luminous Intensity

- a) Pedestrian and countdown LED signal modules shall be designed to operate over the specified ambient temperature and voltage range, attract the attention of, and be readable to, a viewer (both day and night) at all distances from 3 m to the full width of the area to be crossed. A minimum of 150 LEDs should be used in the Portland orange hand symbol and 100 LEDs in the white man symbol.
- b) The luminous intensity of the LED pedestrian and countdown signal module shall not vary more than +/-10% for voltage range of 80 VAC to 135 VAC.

Chromaticity

The measured chromaticity coordinates of the LED signal modules shall conform to the chromaticity requirements of Section 5.3 and Figure C of the PTCSI standard.

Electrical

- a) The secured, color coded, 914 mm (36 in) long, 600 V, 20 AWG minimum, jacketed wires, conforming to the National Electrical Code, rated for service at +105° C, ½ inch stripped and tinned are to be provided for electrical connection.
- b) The LED pedestrian and countdown signal module shall operate from a 60 +/-3 Hz AC line over a voltage range of 80 VAC to 135 VAC. Rated voltage for all measurements shall be 120 +/-3 volts rms.
- c) The LED circuitry shall prevent perceptible flicker over the voltage range specified above.
- d) The LED pedestrian and countdown signal module shall include voltage surge protection against high-repetition noise transients and low-repetition noise transients as stated in Section 2.1.6, NEMA Standard TS-2, 1992.
- e) Catastrophic failure of one LED light source shall not result in the loss of more than the light from that one LED.
- f) The LED pedestrian and countdown signal module shall be operationally compatible with the currently used controller assemblies. The LED pedestrian and countdown signal module shall be operationally compatible with conflict monitors.
- g) The LED pedestrian and countdown signal module, including its circuitry, must meet Federal Communications Commission (FCC) Title 47, Subpart B, Section 15 regulations concerning the emission of noise.
- h) The LED pedestrian and countdown signal module shall provide a power factor of 0.90 or greater over the operating voltage range and temperature range specified above for modules with 6 watts or more.
- i) Total harmonic distortion (current and voltage) induced into an AC power line by an LED pedestrian and countdown module shall not exceed 20% over the operating voltage range and temperature range specified above.

Functions

Basic Operation

The control and regulation module shall be of the “smart” type in order for the countdown displays to be automatically adjusted with the programmed intervals of the traffic controller. The system must also be equipped with a dimming circuit to automatically reduce the brightness of the messages with regard to the ambient lighting. This circuit must have a reaction delay to refute sudden and temporary lighting changes due to automobile headlights.

The countdown pedestrian face module shall incorporate a white, digital “countdown” display of the time remaining in the pedestrian walk and/or clearance intervals along with standard white walking man and Portland orange upraised hand displays. The countdown digits display shall be blank when not counting down. Count down shall start at the “flashing hand stage” and shall be blank during the “walking man” stage.

Signal Type Automatic Identification

The different sequences of the pedestrian and countdown signal listed below will automatically be identified by the control module, without manual intervention or modification necessary.

Type 1: When sound-activated signals are combined with the signal display or when this type of signal is required, the pictogram of the walking man only must be displayed during the first phase or walking period. During the clearance phase, the flashing hand pictogram must be displayed.

Type 2: Flashing-walking man followed by flashing hand outline.

Type 3: Steady walking man only, followed by steady hand.

Type 4: Steady walking man only, followed by flashing hand outline which is the actual method used for regular pedestrian signals.

Type 5: Steady walking man only, followed by flashing walking man and back to steady hand.

Type 6: Steady walking man only, followed by flashing walking man, then flashing back to steady hand (type 4 and 5 combined).

Power Failure

The equipment must maintain a consistent countdown during short power failures (<1 second). A longer failure or an absence of signal superior to one (1) second must turn off display and trigger a restart system, as it is done for the NEMA traffic controller. On the other hand, the timings set in the control module’s memory shall be kept regardless of the length of the failure.

Quality Assurance

LED Pedestrian and countdown modules shall be manufactured in accordance with a Vendor quality assurance (QA) program including both design and production quality assurance. All QA process and test results documentation described below shall be kept on file for a minimum of seven (7) years.

Production Quality Assurance

The following Production Quality Assurance tests shall be performed on each new LED signal module prior to shipment. Failure to meet requirements of any tests shall be cause for rejection.

- a) Pedestrian and countdown Module Burn-In – All LED signal modules (or boards) shall be energized for a minimum of 24 hours, at 100 percent duty cycle, in an ambient temperature of 60° C (140° F).
- b) After burn-in, all LED pedestrian and countdown modules shall be tested for rated initial luminous intensity. Each module shall be energized at the rated voltage for a five-minute stabilization period before measurement is made. The ambient temperature for this measurement shall be the ambient operating temperature range of -40° C to +60° C (-40° F to 140° F).
- c) After burn-in, all LED pedestrian and countdown modules shall be tested for power factor and shall meet the requirements defined in this specification.
- d) After burn-in, all LED pedestrian and countdown modules shall be measured for current flow in amperes. The measured current values shall not exceed 110% of the design qualification measurements (described in the next section).
- e) All LED pedestrian and countdown modules shall be visually inspected for any exterior physical damage or assembly anomalies. Careful attention shall be paid to the surface of the lens to ensure there are no scratches, cracks, chips, discoloration, or other defects.

Design Qualification Testing

Design Qualification testing described below shall be completed, documented, and submitted with the equipment quotation. All Design Qualification testing shall be performed after a burn-in (module energized for a minimum of 24 hours, at 100 percent duty cycle, in an ambient temperature of +60° C (+140° F)).

- a) The LED pedestrian and countdown modules shall be measured for wattage by an independent testing laboratory.
- b) The LED pedestrian and countdown module shall be measured for chromaticity per the requirements defined in this specification using a spectrometer at an ambient temperature of +25° C (+77° F).
- c) The LED pedestrian and countdown modules shall be measured for power factor per the requirements defined in this specification by an independent testing laboratory.
- d) The LED modules shall be measured for total harmonic distortion per the requirements defined in the specification by an independent testing laboratory.
- e) The LED pedestrian and countdown modules shall be tested for electronic noise per the requirements defined in this specification with reference to Class A emission limits referenced FCC Title 47 Subpart B, Section 15 by an independent testing laboratory.

- f) The LED pedestrian and countdown modules shall be tested for transient immunity (e.g. early electronic component mortality failures, component reliability problems) using NEMA Standard TS 2-1992 by an independent testing laboratory.
- g) Temperature cycling shall be performed on the LED pedestrian countdown modules, by an independent testing laboratory, in accordance with MIL-STD-883, Test Method 1010. Using the temperature range of -40°C to $+60^{\circ}\text{C}$ (-40°F to 140°F), twenty (20) cycles (minimum) with a thirty-(30) minute transfer time between temperature extremes and with a thirty (30)-minute dwell time at each extreme shall be performed. Modules under test shall not be energized. Modules that fail to function properly or show evidence of cracking of the lens or housing shall be rejected.

NOTE: With respect to design changes, if the construction of the modules has not been modified, documentation of testing on older modules is acceptable at time of bid. Updated documentation will be required prior to first shipment.

Manufacturer Qualification

Manufacture/Distributor/Vendor must have experience with furnishing LED lighting for the installation of at least 5,000 LED traffic signals on any one project.

Warranty

- a) The unit shall be repaired by the Contractor if it exhibits a failure due to workmanship or material defect within the first five (5) years after acceptance of the entire project by the City Council.
- b) The unit shall be repaired or replaced if the intensity level falls below 50% of the original values within 36 months of delivery.

SP27-18 PEDESTRIAN PUSHBUTTON ASSEMBLIES

General:

Pedestrian pushbutton assemblies shall comply with Section 86-1.02U, "Push Button Assemblies", of the State Specifications.

Type B Push Button Assemblies

The first paragraph in Section 86-1.02U, "Push Button Assemblies", of the State Specifications is amended to read: The housing for a push button assembly must be made of die-cast aluminum, permanent mold-cast aluminum, or UV-stabilized self-extinguishing structural plastic.

The housing must have a uniform color that matches color no. 17038, 27038, or 37038 of AMS-STD-595.

If the pushbutton is to be attached to a pole, the housing must be shaped to fit the pole's curvature.

The assembly must be waterproof and shockproof.

Pedestrian pushbutton shall be a highly vandal-resistant button with essentially no moving parts. Button shall be pressure-activated and when the switch activates, there shall be a two-tone beep and the LED will flash.

Body Material: Aluminum, Powder Coated
 Color: Black
 Button Material: 316 Stainless Steel
 Piezo Driven Solid State Switch:
 Operating Force: 3 lbs. Maximum
 Operating Temperature: -30°F to 165°F (-34°C to 70°C)
 Operating Voltage: 15-36V DC or 12-28V AC
 On Resistance: 10 ohms typical.
 Operating Life: Greater than 100 million operations.
 Switch Hold Time: 6 seconds Minimum
 Operating Standby Current: 10µA typical (equivalent to 2 M W at 20V)
 LED: Operating Mode: Approx. 0.025 sec flash each time button is pressed.
 Luminous Intensity: Greater than 1200 mcd (ultra bright red)
 Viewing Angle: 160°
 Beeper: Sounds simultaneously with LED flash.
 Different tones for press and release, 2.3 kHz & 2.6 kHz.
 Beeper uses power from existing switch wires.

The pedestrian pushbutton actuator surface shall have a diameter of 2" or greater and meet or exceed all ADA accessibility guidelines for pedestrian pushbuttons.

SP27-19 ACCESSIBLE PEDESTRIAN SIGNALS AND PUSHBUTTONS

If Accessible Pedestrian Signals (APS) and Pushbuttons are called out on the Plans, the pedestrian signals and pushbutton assemblies shall have accessibility features conforming to the following requirements.

Accessible Pushbuttons

1. Accessible pedestrian signal pushbuttons shall clearly indicate by means of tactile arrows which crosswalk signal is actuated by each pushbutton.
 - a. Tactile arrows shall be located on the pushbutton.
 - b. Tactile arrows shall be raised 0.03 inch minimum and shall be 1.5 inch minimum in length.
 - c. Tactile arrows shall have visual contrast (light on dark or dark on light) with the background.
 - d. Tactile arrows shall be aligned parallel to the direction of travel on the associated crosswalk.
2. Accessible pedestrian pushbuttons shall incorporate a locator tone.
 - a. Pushbutton locator tones shall have a maximum duration of 0.15 seconds and shall repeat at 1-second intervals.
 - b. Pushbutton locator tones shall be intensity responsive to ambient sound and be audible within 10 feet from the pushbutton. Pushbutton locator tones shall be no

- more than 5dBA louder than ambient sound and shall not be audible at more than 15 feet from the pushbutton.
- c. Pushbutton locator tones shall operate during the FLASHING DON'T WALK and the DON'T WALK intervals only.
 - d. Pushbutton locator tones shall be deactivated during flashing operation of the traffic signal.
3. If an extended pushbutton press is used to provide any additional feature(s), a pushbutton press of less than one second shall actuate only the pedestrian timing and any associated accessible WALK signal. A pushbutton press of one second or more shall actuate the pedestrian timing, and associated accessible WALK signal, and any additional feature(s).
 4. If used, a pilot light or other means of indication installed with a pedestrian pushbutton shall not be illuminated until actuated. Once it is actuated, it shall remain illuminated until the pedestrian's WALK signal indication is displayed. Each activation shall be accompanied by the speech message "Wait".

Audible Walk Indications

1. Accessible pedestrian signals shall have an audible walk indication during the WALK interval only. The audible walk indication length shall be adjustable for a range of 4 seconds to 50 seconds, or the audible walk indication can be programmed to be 'on' throughout the entire WALK interval. When the pedestrian signal rests in walk, the accessible walk signal shall be capable of being recalled by a button press during the WALK interval
2. The audible walk indication shall be by tone or by speech method.
3. Audible tone walk indications shall be a percussive tone consisting of multiple frequencies with a dominant component at 880Hz. The tone shall repeat at 8 to 10 ticks per second. Audible tone shall be the default walk indication.
4. The audible walk indication shall be set to be no more than 5 dBA louder than ambient sound except when a louder signal is provided in response to an extended button press. Automatic volumes adjustment in response to ambient traffic sound shall be provided up to a maximum volume of 100 dBA.

Installation of Accessible Pedestrian Pushbutton Assemblies

APS and Pushbuttons shall be installed as shown on the Plans and must comply with California MUTCD, Chapter 4E.

SP27-20 DETECTOR LOOPS

Loop wire shall be Type 1. The loop lead-in cable shall be Type B. The "drain" wire from the cable shall be run to the chassis ground in the cabinet. Stop bar loops shall be "Type D" and all other loops shall be "Type E Loop Detector Configuration", per Caltrans Revised Standard Plan ES-5B unless indicated otherwise on the Plans.

Each cable shall be identified in the pull-box nearest the loop and in the controller cabinet as to its "phase and loop number".

Detector sensor units shall be "Detector Systems Model 222", or, approved equal. Detector sensor units furnished shall function without "locking up". If the detector sensor units furnished for the contract continually lock up when tuned for a motorcycle, all sensor units shall be replaced with another brand of detector.

Conductors to be buried in the pavement shall be installed only in the presence of the Engineer. All loops shall be connected in series.

"Overcoat Loop Filler", or approved equal, shall be used to install the detector loops. Epoxy shall not be used except in concrete surfaces. Asphalt concrete shall be used to fill all curb termination points.

Slots cut in the pavement shall be washed clean, blown out and thoroughly dried before installing conductors. Residue resulting from slot-cutting operations shall not be permitted to flow across shoulders or lanes occupied by public traffic and shall be removed from the pavement surface before any such material flows off of the pavement surface.

SP27-21 VIDEO IMAGE VEHICLE DETECTION SYSTEM

The video detection system shall be Iteris Vantage RZ4, or approved equal, and shall include the following features:

Camera Specifications:

- Color or monochrome image sensors available
- Latest CCD sensing element and DSP technology
- Electronic shutter and auto iris lens
- Auto focus with manual override

Camera Housing Specifications:

- Sealed housing to IP67 specification
- Integrated adjustable sunshield
- Auto-sensing power supply – 115/240 VAC 50/60 Hz
- Internal heater with proportional power control
- Integrated mounting bracket
- Separate connectors for power and video

Each video detection processor shall have the ability to process video from minimum of 4 and maximum of 8 cameras. The video detection processor shall be installed in a standard TS2 detector rack and shall interface directly with the controller via the SDLC communications bus. Loop detectors and other devices may be installed in the same rack as the video detection processor.

Video cable between the cameras and controller cabinet shall be as recommended by the manufacturer. Power cable between the cameras and controller cabinet shall be any #18-3 type for

use in underground conduit and UV stabilized. Zoom and focus controls shall be available from the controller cabinet. One copy of software or one each of the control unit required for zoom & focus functions at the cabinet shall be provided by the VDS manufacturer to the City.

Initial setup and subsequent maintenance of the video detection configurations shall be accomplished using a video monitor and standard USB Mouse. The video detection system shall allow viewing of up to 8 cameras on the monitor without moving video cables. Video detection system at Mt. Diablo Boulevard and Mt. Diablo Court shall be set up for portable connection to the laptop.

Each video detection system shall be IP Addressable and shall provide streaming video using MPEG4 and/or H.264 video compression. All setup, maintenance, and data acquisition functionality shall be available from a remote site using TCP/IP communications protocol. The system shall provide a minimum of 16 video streams without utilizing third party video compression devices. All functionality shall be integrated into the VDS Communications interface.

The video detection cameras shall be specifically designed for vehicle detection applications and optimized to work with the manufacturer's advanced detection algorithms. The cameras shall utilize technology providing full motion 30 fps NTSC video. The lens shall provide full zoom function with auto focus providing a horizontal field of view to detect the vehicles as shown on the Plans. The sealed housing shall meet the IP67 specification and utilize an advanced proportional heater to keep the lens clear during inclement weather. The cameras sunshield shall be adjustable without altering any other camera FOV adjustments.

The cameras shall be mounted on the traffic signal luminaire mast arm or as indicated on the Plans.

Mounting brackets used on luminaire mast arms shall be universal in nature and shall allow for mounting camera on pole shaft if required.

The video detection camera shall be installed by factory-certified installers as recommended by the supplier and documented in installation materials provided by the supplier. Proof of factory certification shall be provided.

On site hands-on Training shall be provided at no added cost to the using agency. The training will consist of 8 hours of instruction and practice. Training will be conducted on two consecutive days to provide for on-street staffing. Dates for the training will be coordinated between the City and the video detection manufacturer.

The Contractor may use metal screw for mounting to the signal bridge. Metal screw and mounting to the signal bridge shall be waterproof and painted to match the signal bridge. The Contractor shall submit show drawings for mounting to the signal bridge for approval by the Engineer. The Contractor shall not proceed without approval by the Engineer.

Contractor shall perform proper testing to ensure full functional video detection system. Testing shall be completed with the presence of the City Engineer and shall be performed to the satisfaction of the

Engineer. If the Engineer determines that the video detection system does not meet the performance requirements, Contractor shall re-calibrate and retest the unit, and resubmit new test data within seven (7) days. After 3 failed attempts, Contractor shall replace the video detection system with a new unit.

Notify the Engineer twenty (20) days before the unit is ready for acceptance testing. Acceptance testing must be scheduled to be completed before the end of a normal work shift. Contractor shall demonstrate that all video detection systems satisfy the functional requirements.

SP27-22 SAFETY LIGHTING

Luminaires for safety lighting shall be Philips Lumec Roadfocus, RFS-35W16LED4K-T-R3S-UNIV-DMG-FAWS-API-BK, 35-watt LED fixtures (Contact John Benson, ALR, telephone: 510.638.3800 x183, johnbenson@alrinc.com), or approved equal. Fixtures shall include a "Field Adjustable Wattage Selector (FAWS)" option, allowing for multi-positional field adjustments of the lamp wattage down to 40% of the maximum illumination output.

Contractor shall submit product cut sheets and technical data on the fixture to be provided for review and approval prior to ordering.

Notwithstanding provisions regarding functional testing elsewhere in these Special Provisions, testing of safety lighting luminaires shall include field adjustments of the lamp wattage to refine illumination output of each fixture to the satisfaction of the Engineer. Upon installation, fixtures shall be set at the "normal" maximum output level. The Engineer will observe the lighting operations for three (3) days. If directed, Contractor shall make a field adjustment to the lamp wattage using the FAWS option in each fixture to a level determined by the Engineer, who will observe the lighting operations for three (3) additional days. If directed, Contractor shall make a second and final adjustment to lamp wattage to a level determined by the Engineer. The functional test period shall be considered to commence with the final wattage adjustment.

SP27-23 EMERGENCY VEHICLE PREEMPTION EQUIPMENT

The Contractor shall furnish and install required emergency vehicle detector system, which shall include optical detectors, rack(s), phase discriminator cards (minimum two), cables, etc., (complete and operable), as shown on the Plans and according to the manufacturer's recommendations.

The Engineer will mark the optical detector location for the Contractor. The Contractor shall notify the Engineer at least 48 hours prior to installing the optical detector.

Mounting of the optical detector conform to the following:

- Signal Mast Arm - Install on the preinstalled coupling as shown on the Plans or if approved by engineer can be installed per Detail B on Revised Caltrans Standard Plans ES-4E.
- Type 1 Standards - Install per Detail B on Revised Caltrans Standard Plan ES-4E.

Optical detectors shall be GTT Model 752, or approved equal, compatible with the City and Contra Costa County Consolidated Fire Prevention District (CCCCFPD).

Optical cables shall be labeled in the controller cabinet and in the pull boxes adjacent to the signal standards with appropriate phase designations.

Cable shall be as specified by the manufacturer and shall be installed with six (6) feet of slack in controller cabinet and pull boxes. The cable shall not be spliced. The City and/or the CCCCCFPD will test the optical system. Tests will be performed at a distance between 300 feet to 1,800 feet between the emitter and the detector being tested.

Contractor shall submit product data, including "cut sheets", for equipment to be provided for review and approval of Engineer prior to ordering. It is Contractor's responsibility to coordinate with Contra Costa Consolidated Fire District in order to submit a product that is compatible with emergency vehicles deployed within the Lafayette operational area. Approval of a submittal shall not relieve Contractor of his sole responsibility to install a functional system that is compatible with the District's operational requirements to activate preemption.

SP27-24 CITY-FURNISHED STREETLIGHT ASSEMBLIES

Streetlight pole and luminaire assemblies shall be furnished by the City to be installed by Contractor. Contractor's attention is directed to Section 5-11 of the General Provisions, except that materials will be delivered to the job site at no charge to Contractor. Contractor shall coordinate with Ray Snider with Independent Electric Supply at 209-221-6260 and the Engineer to arrange for delivery and acceptance of the materials at the job site. Contractor shall be responsible for any costs arising from his failure to perform said coordination, including costs associated with re-scheduling a delivery, additional handling, storage, and transportation charges incurred by City. Streetlight assembly delivery schedule will be provided at the pre-construction meeting.

Cut sheet of the streetlight assembly is included in Appendix "D" for reference. Contractor shall provide flexible conduit for the receptacle wires and make the final connection. All equipment will be furnished pre-painted.

Streetlight foundations shall conform to the provisions in of the State Standard Specifications and these Special Provisions. Portland cement concrete shall conform to Section SP-22, "Concrete Construction," of these Special Provisions.

Exposed foundation anchor bolts shall be properly protected with either barricades or traffic cones until the standards are erected.

Standard foundations as detailed on the Plans shall be used, except where required by site conditions or the Engineer directs the use of alternate foundation detail (spread foundation). Poles will be furnished with four ¾" diameter x 30" fully hot-dip galvanized L-type anchor bolts, each to be

installed with a 3" projection. Contractor shall make necessary modifications to anchor bolts where the spread footing is installed. Contractor shall provide the ¾" diameter x 36" fully hot-dip galvanized L-type anchor bolts that are required for the standard foundation where used.

SP27-25 STREET NAME SIGNS – CITY FURNISHED

Street name signs will be furnished by City. Contractor shall be responsible to coordinate with the City to obtain the signs, transport and install signs on signal equipment and poles per applicable details of the State Standard Plans. All installation straps and visible hardware shall be painted black per these Special Provisions.

Upon receipt of signs, Contractor shall be responsible for the care and protection of said signs. Gouges, scratches and visible cosmetic defects shall be repaired to the satisfaction of the Engineer, or the entire sign shall be replaced in kind, all at the Contractor's sole expense.

SP27-26 MEASUREMENT AND PAYMENT

The contract price per each for "**Video Detection Camera**" and "**Detector Loop**" shall include full compensation for furnishing all labor, materials including hardware, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing these units complete in place, including all necessary electrical connections, to operate as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

The contract lump sum price paid for "**Traffic Signal Installation**" shall include full compensation for furnishing all labor, materials including hardware, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing, modifying, or removing the signals, lighting and electrical systems, combinations or units thereof, including but not limited to: clearing and grubbing; tree trimming; excavation; dewatering; shoring and bracing; foundations; conduit; cable; pull boxes; signal heads; pedestrian signal system; video image vehicle detection system except individual camera units; installation of agency-furnished street name signs, service cabinet, and luminaires; emergency preemption system; trenching; boring; coating and painting; restoring curb, sidewalk, landscaping, pavement, pavement markings and stripes, and appurtenances damaged or destroyed during construction; and salvaging existing materials as shown and specified on the plans, as specified in these Special Provisions and as directed by the Engineer, and no additional compensation will be allowed therefor.

The contract price per each for "**Install Streetlight Assemblies**" shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work to install a functional street lighting system as shown on the Plans, as specified in these Special Provisions, the State Standard Plans and Specifications, and as directed by the Engineer, including but not be limited to: coordinating to receive, off load, store, and protect the City-furnished materials; excavation; removing, off-hauling, and disposal of spoils; preparing subgrade; installing standard or alternate (spread) foundation; installing street light assembly; provide and install flexible conduit for the GFIC receptacle; anchor bolts for standard foundations; making all electrical connections; touch-up painting; and performing functional tests, and no additional payment shall be allowed therefor.

APPENDICES

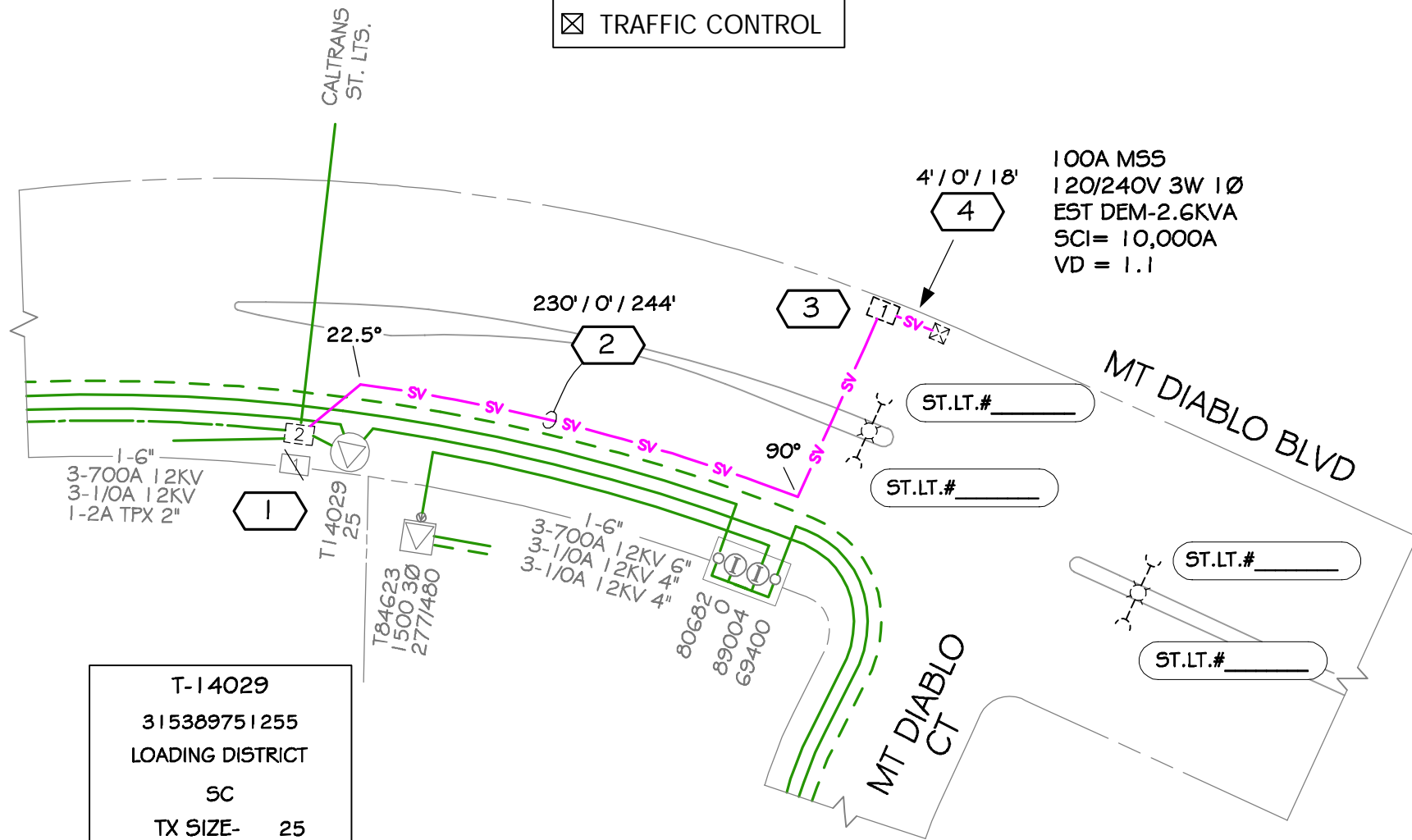
- A. PG&E CONSTRUCTION SKETCH DATED 2/18/2022
- B. CONTRA COSTA COUNTY BUILDING PERMIT
- C. CITY FURNISHED TRAFFIC SIGNAL EQUIPMENT LIST AND
STREET NAME SIGNS
- D. CITY FURNISHED STREETLIGHT POLE & LUMINAIRE ASSEMBLY
- E. STATE & CONTRA COSTA COUNTY STANDARD PLANS
- F. SIGNPOST & ACCESSORIES
- G. UTILITY POTHOLE LOG CONTRACTOR'S FORM

APPENDIX A

**PG&E CONSTRUCTION SKETCH
DATED 02/18/2022**

REQUIRED PERMITS

- COUNTY CITY
- TRAFFIC CONTROL



T-14029
 315389751255
 LOADING DISTRICT
 SC
 TX SIZE- 25
 KVA 1Ø- 5
 KVA 3Ø-
 % L.F. - 56

LEGEND

INSTALL	DESCRIPTION
— sv —	1-1/0 AL TPX SERVICE (BY PG&E) IN 1-3" CONDUIT (BY APPLICANT)
[2]	SECONDARY ENCLOSURE, 17" x 30" x 18", NON-CONCRETE (BY PG&E)
[1]	SERVICE ENCLOSURE, 13" x 24" x 18", ON-CONCRETE (BY APPLICANT)
	ELECTRIC METER (BY PG&E)
	LS2A STREET LIGHT (BY APPLICANT)
(xx' / xx' / xx')	FRANCHISE CONDUIT / PP CONDUIT / CABLE
REMOVE	DESCRIPTION
	#1 SECONDARY ENCLOSURE (BY PG&E)

100A M55
 120/240V 3W 1Ø
 EST DEM-2.6KVA
 SCI = 10,000A
 VD = 1.1

APPLICANT NOTES

REFER TO ELECTRIC & GAS SERVICE REQUIREMENTS (GREEN BOOK) OR SEPARATE PG&E STANDARD DWGS. CONTACT YOUR PG&E REPRESENTATIVE FOR COPIES, OR ACCESS www.pge.com/greenbook

CONDUIT, TRENCHING, AND BACKFILL:

- 1) ALL DIMENSIONS AND LOCATIONS ARE ESTIMATED, APPROXIMATE AND MAY BE SUPERSEDED BY A JOINT TRENCH DRAWING. REFER TO THE JOINT TRENCH COMPOSITE DRAWING FOR EXACT TRENCH LOCATION
- 2) MAINTAIN MAXIMUM PRACTICABLE HORIZONTAL CLEARANCE BETWEEN PG&E FACILITIES AND "WET" UTILITIES (WATER, SEWER, STORM DRAIN, ETC.). THE MIN. ALLOWABLE SEPARATION BETWEEN PG&E FACILITIES AND ANY PARALLEL "WET" UTILITY IS 3/FT. WITH A PRESENCE OF 1/FT. OF UNDISTURBED EARTH OR THE INSTALLATION OF A SUITABLE BARRIER. THIS MEASUREMENT IS BETWEEN THE OUTER EDGE OF THE PG&E FACILITY AND THE OUTER EDGE OF THE PARALLEL "WET" FACILITY. IF 3/FT. CANNOT BE MAINTAINED, A FORMAL VARIANCE MUST BE OBTAINED FROM PG&E WORK WITH THE PG&E INSPECTOR (REFERENCE PG&E UO STANDARD 55453).
- 3) BOX, PAD, AND CONDUIT SIZES AND LOCATIONS SHALL CONFORM TO THE PG&E ELECTRIC CONST. DWG.
- 4) PROVIDE LONG CONDUIT SWEEPS WHERE INDICATED. RECOMMENDED SWEEP RADIUS (1Ø OF RADIUS PER INCH OF CONDUIT DIAMETER) EXAMPLE: 4" CONDUIT = 4Ø RADIUS
- 5) DO NOT EXCEED 300 DEGREES OF BENDS IN ANY CONDUIT RUN (INCLUDING FEED LOCATION). NOTE: SECONDARY AND SERVICE RUNS OF 200 FEET OR LESS MAY HAVE UP TO 315 DEGREES OF BENDS (REFERENCE PG&E DOCUMENT 038193).
- 6) MANUFACTURED BENDS OR APPLICATION OF HEAT SHALL NOT BE USED TO OBTAIN LONG DUCT SWEEPS.
- 7) ALL CONDUITS SHALL BE PROVEN AND A POLYESTER PULLING TAPE INSTALLED.
- 8) MANUFACTURED BENDS ARE NOT TO BE CUT, SHORTENED, OR ALTERED IN ANY WAY.
- 9) IDENTIFY ENDS OF BURIED DUCT WITH AN ELECTRONIC MARKER AND A VERTICAL DUCT SCRAP INSTALLED FROM RIGID CAP TO GROUND LEVEL.
- 10) CONDUITS ENTERING PRIMARY BOXES SHALL BE AT A RIGHT ANGLE TO THE WINDOW OR WALL.
- 11) LS2 STREET LIGHT CONDUIT GOING TO PG&E BOXES OR PEDESTALS NOT DESIGNATED AS P.O.S. (INCLUDING TRANSFORMERS) WILL NOT BE ACCEPTED OR CONNECTED.
- 12) ONLY ONE LS2 STREET LIGHT (P.O.S.) CONNECTION PER BOX OR PEDESTAL.
- 13) APPLICANT SHALL NOT ENTER ANY ENERGIZED PG&E ENCLOSURES WITHOUT THE PRESENCE OF PG&E QUALIFIED ELECTRICAL WORKER.

LAND RIGHTS AND EASEMENTS:

- 14) APPLICANT TO PROVIDE ADEQUATE P.U.E'S AND/OR ROWS FOR PG&E FACILITIES. ANY ADDITIONAL REQUIRED RIGHTS OF WAY ARE TO BE SURVEYED AND DOCUMENTED BY PG&E AT THE APPLICANT'S EXPENSE.

SAFETY AND WORKMANSHIP:

- 15) CALL 811 (UNDERGROUND SERVICE ALERT) 48 HOURS PRIOR TO EXCAVATION FOR UNDERGROUND UTILITY LOCATION MARKING.
- 16) 48 HOUR NOTICE REQUIRED FOR UNDERGROUND INSPECTION.
- 17) MATERIALS AND WORKMANSHIP SHALL BE FIRST QUALITY IN EVERY RESPECT, PLUMB AND TRUE, AND ACCORDING TO THE SPECIFIC REQUIREMENTS OF THE DRAWINGS AND THE ABOVE APPLICABLE NOTES AND SPECIFICATIONS.
- 18) THE APPLICANT IS TO VERIFY ALL PROPOSED INSTALLATIONS, CONDITIONS & SPECIFICATIONS PRIOR TO COMMENCING WITH ANY PORTION OF WORK. ANY DISCREPANCIES, DELETIONS OR INCONSISTENCIES ARE TO BE REPORTED TO THE PG&E REPRESENTATIVE IMMEDIATELY. THE APPLICANT SHALL COMPLY WITH ALL APPLICABLE SPECIFICATIONS. ANY VARIATIONS FROM PLANS OR SPECIFICATIONS RELIEVES PG&E OF ALL RESPONSIBILITY FOR THE SUBSTRUCTURE OR DESIGN.

PG&E GAS WORK:

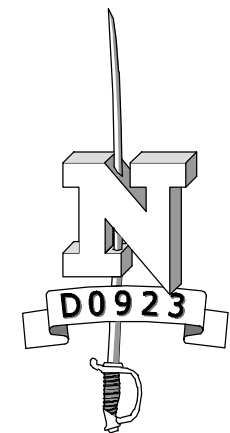
- 1 (BETTERMENT) REPLACE #1 SEC. BOX W/ #2 SEC. BOX;
- LOCK BOLTS ON TRANSF. ENCLOSURE BROKEN, PLEASE INSTALL NEW BOLTS.

PG&E ELECTRIC WORK:

- 1 (BETTERMENT) REPLACE 4WAY MULTI-TAP BUSS W/ 6WAY MULTI-TAP BUSS
- 2 (RULE-16) PULL-IN 1-1/0A TPX SERVICE CABLE
- 3 (RULE-16) INSTALL SV STRAIGHT SPLICES
- 4 (RULE-16) PULL-IN 1-1/0A TPX SERVICE CABLE AND INSTALL METER

APPLICANT WORK:

- 2 INSTALL 1-3" SERVICE CONDUIT
- 3 INSTALL #1 SERVICE BOX
- 4 INSTALL 1-3" SERVICE CONDUIT



EST: AL TEIXEIRA	925-270-2377	CONSTRUCTION SKETCH STREET LIGHTS & TRAFFIC CONTROL MT DIABLO BLVD & MT DIABLO CT., LAFAYETTE	NO ENVIRONMENTAL ISSUES	PG&E	NEAR LOC: N/A
ADE: JOHN SUPER	925-270-2725		Know what's below. Call before you dig.	811	GAS CONFLICT: NO
SUPV: PAUL LUCAS	925-270-2275				
REP: RAE STEVENSON - DOWELL	925-270-2749				
PLNR: N/A	N/A				
NOTIF: 121957643	JPA#: N/A				
SCALE: 1" = 50'	DATE: 2/18/2022				
PM: 35286139	SHEET: 1 OF 1 REV. -				
PRIMARY VOLTAGE: 12 kV	VOLTAGE AREA: 1	LATITUDE: 37.8968	LONGITUDE: -122.099	SOURCE SIDE DEVICE: J20453	SUB & CIRCUIT: ROSSMOOR 1104
DSGN SAG: SSSU	RAPTOR ZONE: YES	LOADING AREA: LIGHT	ARRESTER DIST: 3	CORROSION AREA: NON	INSULATION DIST: B
EXEMPT EQUIP. INST.: N/A	FIRE AREA: LRA-TIER 1				

APPENDIX B

CONTRA COSTA COUNTY BUILDING PERMIT



BUILDING PERMIT

Parcel #: 233133023 Job Address: 3249 MT DIABLO CT , LAFAYETTE Today's Date: 2/25/2022
 Permit #: BIEC22-002023 Commercial Date Applied: 2/25/2022
 Type of Permit: EC Electrical Date Issued: 2/25/2022
 Applicant's Name: City of Lafayette Contractor:
 Applicant's Phone: 9252841951 Contractor Phone:
 Owner's Name: CITY OF LAFAYETTE Address:
 Owner's Address: 3249 MT DIABLO CT STE 202
 LAFAYETTE, CA 94549-4050

Zoning: Lot No: No. Stories: 2 No. of Units: 0

Work Description: CITY OF LAFAYETTE-Installation of electric meter for the traffic signals at the intersection of Mt. Diablo Blvd. and Mt. Diablo Ct.

Valuation Calculation Information:

Occupancy	Type	Factor	Sq Feet	Valuation
U - Utility, misc. electrical	U - Utility Bid Price	1.00	0.00	10,000.00
Totals...			0.00	10,000.00

Permit Fee Details:

Item #	Description	Account Code	Total Fee	Paid
111	PC Review Processing - PCPS	002681/9090	46.52	\$46.52
134	Elec Comm - E98	002661/9090	185.00	\$185.00
181	City Surcharge - #SC	830300/0800	115.76	
228	CASp Certification & Training	002461/9080	4.00	\$4.00
229	State Spec Rev Fund-SRF	830300/0800	1.00	\$1.00
Totals:			\$352.28	\$236.52

ALL FEES ARE SUBJECT TO CHANGE AND WILL BE CHARGED AT THE RATE IN EFFECT AT THE TIME PAYMENT IS MADE.

EXPIRATION: This permit will expire 365 days from the date of issue without approval of a required inspection or if 180 days lapse between approved required inspections. If the permit expires before work is completed and/or inspected, no additional work shall be performed until a new permit is obtained. Under California Law, uninspected work is a property defect and must be disclosed to the next owner prior to transfer of title.

REIMBURSEMENT: SB815 states that a permittee is entitled to reimbursement of permit fees if the local enforcement agency fails to conduct an inspection of the permitted work within 60 day of receiving notice that the work is completed.

EXTENSION: Prior to permit expiration and upon written request, a one-time extension, not to exceed 180 days, may be granted.

Building Division
 Approved By: _____

Jason Crapo, Deputy Director, Building Official

2/25/2022

_____ Date

**CONTRA COSTA COUNTY BUILDING INSPECTION
INSPECTION RECORD CARD**

BIEC22-002023

(See reverse side of this card for permit-specific information)

NOTICE AND WARNING: Do not cover any work until it has been inspected and approved. This card must be posted on the job site, and in a manner as to be visible from the street. The card and the approved plans must be available for each inspection, or the inspection will not be made.

Inspections may be scheduled with the automated system by calling 925-646-4108. Same-day inspection requests with automated system are accepted until 5:30 AM Monday-Friday. Same day inspection requests left on a voicemail will not be scheduled. To view your scheduled inspection timeframe posted after 8:45 AM Monday-Friday, click on the link [Daily Building Inspection Schedule](https://www.contracosta.ca.gov/Inspections) at <https://www.contracosta.ca.gov/Inspections>. Inspections may also be scheduled online at <https://epermits.cccounty.us>

A RE-INSPECTION FEE WILL BE CHARGED WHEN A RETURN TRIP IS NECESSARY DUE TO THE FOLLOWING: 1) Work is not ready for the inspection called for; 2) Deficiencies found in the previous inspection still not corrected, or new deficiencies were created; 3) Lack of access to the work to be inspected; 4) Lack of approved plans or this card on the job site; 5) Lack of representative over the age of 18 to meet with inspector on site.

Insp Codes	Inspector's Initials	Date	Insp Codes	Inspector's Initials	Date
FOUNDATION			INSULATION		
199	<input type="checkbox"/> Survey Cert. Rec'd	_____	107	<input type="checkbox"/> Underfloor Insul	_____
100	<input type="checkbox"/> Set Backs	_____	110	<input type="checkbox"/> Framing Insul	_____
406	<input type="checkbox"/> Ufer Ground	_____	117	<input type="checkbox"/> Ceiling Insul	_____
101	<input type="checkbox"/> Piers	_____	PLUMBING		
102	<input type="checkbox"/> Forms	_____	301	<input type="checkbox"/> Ground Plumbing	_____
103	<input type="checkbox"/> Slab Foundation	_____	302	<input type="checkbox"/> Water Service	_____
125	<input type="checkbox"/> Slab Garage	_____	303	<input type="checkbox"/> Shower Pan Test	_____
604	<input type="checkbox"/> Driveway	_____	304	<input type="checkbox"/> Rough Plumbing	_____
GRADING PERMIT INSP.			305	<input type="checkbox"/> Undfl. Plumbing	_____
600	<input type="checkbox"/> Pre-Const. Insp	_____	306	<input type="checkbox"/> Water Heater	_____
601	<input type="checkbox"/> Rough Grading	_____	309	<input type="checkbox"/> Gas Test	_____
602	<input type="checkbox"/> SUB/MS in Prog	_____	310	<input type="checkbox"/> T-Bar Plumbing	_____
608	<input type="checkbox"/> Gen Bldg Site / In Prog	_____	312	<input type="checkbox"/> Gas Meter Release	_____
MOBILE HOMES			BLOCK / CONCRETE		
701	<input type="checkbox"/> MH Set-Up	_____	113	<input type="checkbox"/> Fireplace/Rebar/ Foundation	_____
703	<input type="checkbox"/> MH Accessory Insp	_____	POOLS / SPA		
707	<input type="checkbox"/> MH Permanent FD	_____	201	<input type="checkbox"/> Site Check / Pregunite	_____
720	<input type="checkbox"/> MH Final	_____	202	<input type="checkbox"/> Bonding-Cavity / Deck	_____
STRUCTURAL			203	<input type="checkbox"/> Pre Final	_____
104	<input type="checkbox"/> Shear Nailing – Int	_____	204	<input type="checkbox"/> Final - Pool	_____
126	<input type="checkbox"/> Shear Nailing – Ext	_____	MECHANICAL		
106	<input type="checkbox"/> Underfloor	_____	501	<input type="checkbox"/> Furnace Compt	_____
108	<input type="checkbox"/> Roof Deck Nail	_____	502	<input type="checkbox"/> Combustion Air	_____
109	<input type="checkbox"/> Framing	_____	503	<input type="checkbox"/> Rough Mechanical	_____
111	<input type="checkbox"/> Firewall	_____	504	<input type="checkbox"/> Fire Damper	_____
116	<input type="checkbox"/> Deck Framing	_____	506	<input type="checkbox"/> Commercial Hood	_____
127	<input type="checkbox"/> Drywall	_____	508	<input type="checkbox"/> T-Bar - Mech	_____
114	<input type="checkbox"/> Ext Lath / Int Lath	_____	AGENCY APPROVALS		
115	<input type="checkbox"/> Structural-Misc / T-Bar	_____	<input type="checkbox"/> Fire Dist	UTL _____	Final _____
118	<input type="checkbox"/> Wet Wall	_____	<input type="checkbox"/> Pub Works	UTL _____	Final _____
123	<input type="checkbox"/> Roof / In Progress	_____	<input type="checkbox"/> Planning / CDD	UTL _____	Final _____
124	<input type="checkbox"/> Window Replacement	_____	<input type="checkbox"/> San Dist	UTL _____	Final _____
128	<input type="checkbox"/> Fire Penetration	_____	<input type="checkbox"/> Env Health	UTL _____	Final _____
ELECTRICAL			<input type="checkbox"/> Haz Mat	UTL _____	Final _____
401	<input type="checkbox"/> Power Pole	_____	FINAL INSPECTIONS		
402	<input type="checkbox"/> Conduit / Underground	_____	120	<input type="checkbox"/> BUILDING	_____
404	<input type="checkbox"/> Rough Elect	_____	320	<input type="checkbox"/> Plumbing	_____
405	<input type="checkbox"/> Bonding	_____	420	<input type="checkbox"/> Electrical	_____
407	<input type="checkbox"/> Restore Svce / 90-Day	_____	520	<input type="checkbox"/> Mechanical	_____
408	<input type="checkbox"/> T-Bar Elect	_____	620	<input type="checkbox"/> Grading / Drainage	_____
409	<input type="checkbox"/> Electric Meter Release	_____	820	<input type="checkbox"/> Disabled Access	_____

Other: _____

Comments: _____

This card will serve as Certificate of Occupancy / Completion upon authorized signature.

Jason Crapo, Deputy Director

Authorized Signature

Date

APPENDIX C

CITY FURNISHED TRAFFIC SIGNAL EQUIPMENT LIST AND STREET NAME SIGNS

**MT DIABLO BOULEVARD AT MT DIABLO COURT TRAFFIC SIGNAL POLES & EQUIPMENT
PROJECT #014-9723
CITY FURNISHED EQUIPMENT LIST**

All equipment refers to State of California Department of Transportation (Caltrans) Standard Designations.

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Type 29-5-100, 40' Signal Mast Arm, 15' Luminaire Mast Arm*	1	Each		
2	Type 19-4-100, 25' Signal Mast Arm, 15' Luminaire Mast Arm, mounted 90° with SMA*	1	Each		
3	Type 29-5-100, 45' Signal Mast Arm, 15' Luminaire Mast Arm*	1	Each		
4	Type 1-B	2	Each		
5	Type 15-TS, 15' Luminaire Arm	1	Each		
6	Pedestrian Push Button Pole Assembly (PBA)	1	Each		
7	Type 332 Cabinet	1	Each		
8	Type III-AF Service Equipment Enclosure	1	Each		
	TOTAL				

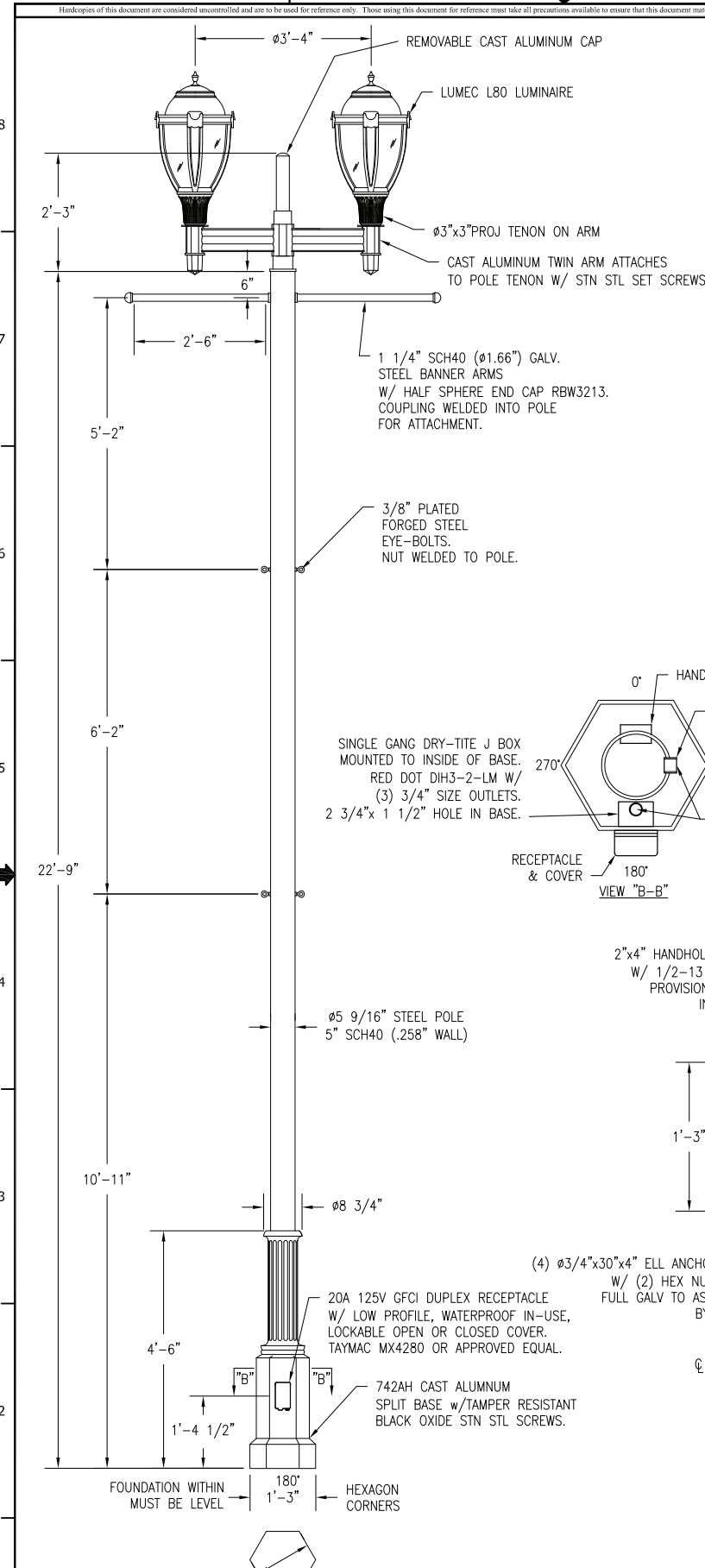
* Refer to the Equipment Schedule on Plan Sheet TS-2 for further details



Layfayette SNS:
15" SNS for Mast Arm - .125 Aluminum -
Street Name 6.5"t and Road type
HIP white on 3M 1179 Brown with 1170 clear overlay

APPENDIX D

CITY FURNISHED STREETLIGHT POLE & LUMINAIRE ASSEMBLY



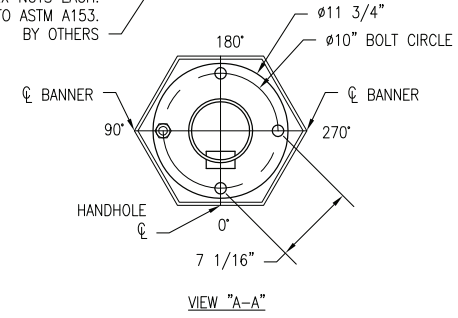
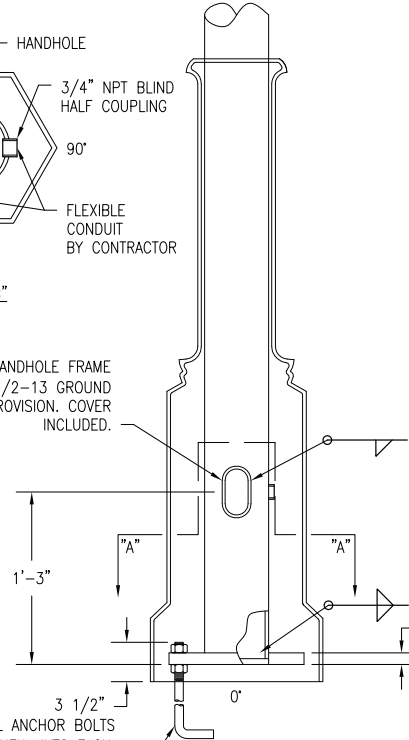
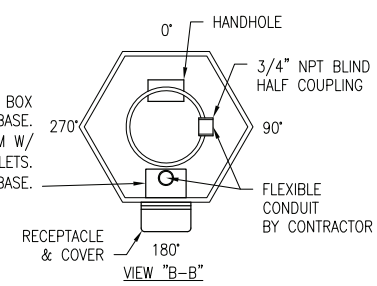
MATERIAL SPECIFICATIONS	
POLE TUBE	A53 GR B
PLATE	ASTM A36
BAR HANDHOLE FRAME	ASTM A529 GR 50 (PREFERRED) or ASTM A572 GR 50 or ASTM A709 GR 50
HANDHOLE COVER	ASTM A36 or A1011
ANCHOR BOLTS	ASTM A307
ANCHOR BOLT NUTS	ASTM A563 GR A
BOLT/NUT COVERS	ASTM B26 (319F or 356F)
ARM CONNECTION BOLTS	ASTM A325
ARM CONNECTION NUTS	ASTM A563 GR DH
TENON TUBE	ASTM A513
PIPE	ASTM A501, A53 GRB
SPLIT BASE, ARM	ASTM B26 356.0
S.S. HARDWARE	AISI-300 SERIES (18-8)
STRUCTURE FINISH	PAINTED BLACK PER CUSTOMER REQUIREMENTS. SEE NOTE

DESIGN CRITERIA:

1. DESIGNED IN ACCORDANCE WITH 2001 AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" FOR 100 M.P.H. WIND ZONE.
2. ANCHOR BOLTS ANALYZED FOR STEEL STRENGTH ONLY. THE ANCHOR BOLT EMBEDMENT LENGTH SHOWN ON THIS DRAWING SHALL BE VERIFIED BY THE FOUNDATION ENGINEER.
3. THE EXPOSED LENGTH OF THE ANCHOR BOLT BETWEEN THE TOP OF THE FOUNDATION AND THE BOTTOM OF THE LEVELING NUT SHOULD NOT EXCEED ONE BOLT DIAMETER.
4. CUSTOMER TO CONFIRM ALL DIMENSIONS & ORIENTATIONS BEFORE RELEASING ORDER FOR MANUFACTURING.

FINISH NOTE:

1. ALL COMPONENTS OF THE POLE, ARM, SPLIT BASE, EYE-BOLTS, RECEPTACLE COVER ETC. SHALL BE PAINTED TENEMC BLACK PER CITY OF LAFAYETTE PAINT SPECIFICATIONS PER ATTACHED SP27-17



CITY OF LAFAYETTE
ENGINEERING DIVISION
SUBMITTAL REVIEW

Approved
 Approved As Noted
 Revise & Resubmit
 Submit
 Received & Filed
 Rejected

Reviewed By: *[Signature]*
Date: 11/03/2021

STATE: LAFAYETTE, CALIFORNIA	REQ# / SO# : NCA43814	REV	ADD PAINT NOTE, A.BOLT DATA & RECEPTACLE	8/28/13	MB	MB
PROJECT NAME: EAST END PED/BIKE & STREETScape IMPROVEMENTS PROJECT		REVISIONS				
ORNAMENTAL ROADWAY LIGHTING AND BANNER STANDARD DESIGN NUMBER: B99-742-B563-Y1						
	DESIGNED BY	CHECKED BY	DATE	SCALE	ENG REF	
	MB	MB	4/9/12		N99-B521	
N99-742-B563				REVISION	SHEET	
				R1.1	1 OF 1	

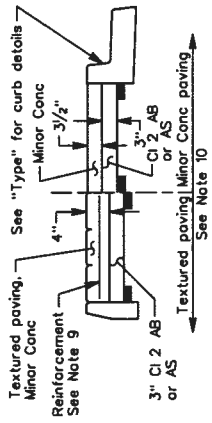
APPENDIX E

STATE & CONTRA COSTA COUNTY STANDARD PLANS

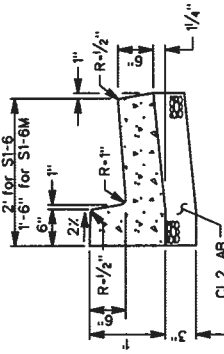


RECORDED
JULIA R. BUEREN
 PUBLIC WORKS DIRECTOR
 COUNTY OF CONTRA COSTA
 DATE: 11/17/2011
 PLANS APPROVAL DATE

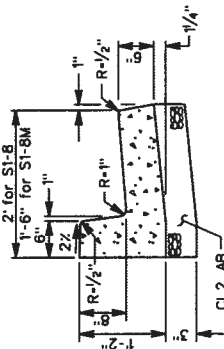
The County of Contra Costa or its officers or agents shall not be held responsible for the accuracy or completeness of electronic copies of this plan sheet.



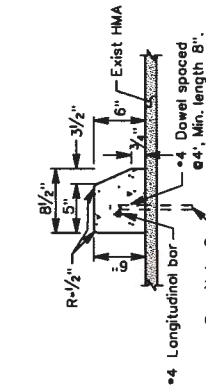
TYPICAL MEDIAN PAVING DETAIL



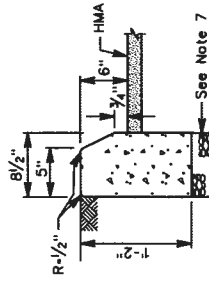
TYPE S1-6 & S1-6M



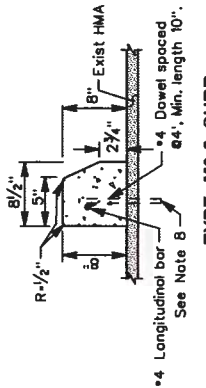
TYPE S1-8 & S1-8M



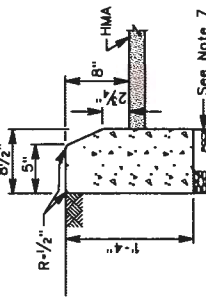
TYPE M3-6 CURB
 See Note 6



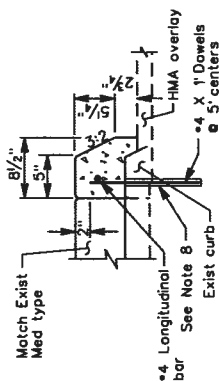
TYPE M1-6 CURB



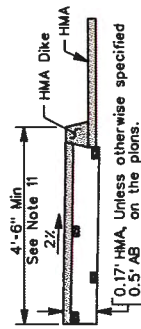
TYPE M3-8 CURB



TYPE M1-8 CURB



MODIFIED TYPE M3-8 CURB

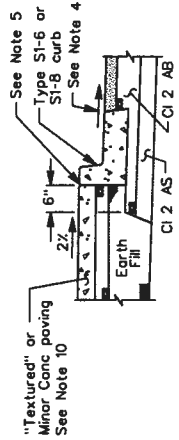


HMA PATH WITH HMA DIKE

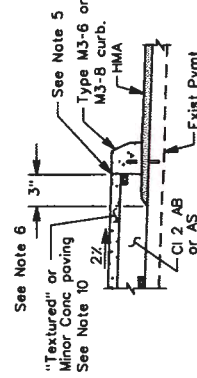
NOTES:

1. Minor Concrete in conformance with Section 90-2, "Minor Concrete" at the California Department of Transportation's Standard Specifications containing no less than 505 lb. per cubic yard of cementitious material shall be used for all concrete construction detailed on this plan.
2. Weakened plane joints shall be provided at 10' intervals on all curbs. See Standard Plan CA70, "Detail B".
3. All new curb where it conforms to existing facilities shall be doweled as per Standard Plan CA74.
4. When the street slopes away from the curb, the gutter slope shall match the cross slope of the street.
 Paving at the gutter lip shall conform to Standard Plan CA70 Detail A, except that where the street slopes away from the curb, the paving shall match the gutter lip.
5. Curb may be constructed monolithically with the median paving, in which case a weakened plane joint conforming to Standard Plan CA70 Detail B shall be provided along the back of the curb.
6. Type M3 curb shall be used only when placed on existing or overlaid pavement.
7. A 3" minimum compacted layer of Class 2 aggregate base or subbase shall be placed under Type M1 curb, unless noted otherwise on the plans.
8. Place dowels in 1" diameter drilled hole filled with 1:1 sand grout. Omit dowels when curb is extruded.
9. Reinforcement shall be #4 bars at 18" OC each way or 6" x 6", 8" x 8", 10 gage welded wire fabric.
10. Median paving may be "textured" as approved by the Public Works Department.
11. Width of HMA path shall be a minimum of 4'-6" measured from top face of curb or dike.

TYPE A TRAFFIC MEDIAN
 Half Section



TYPE B TRAFFIC MEDIAN
 Half Section



TYPE C TRAFFIC MEDIAN
 Half Section

COUNTY OF CONTRA COSTA PUBLIC WORKS DEPARTMENT MARTINEZ, CALIFORNIA STANDARD PLAN	
MEDIAN, CURB AND HMA DIKE DETAILS	
SCALE: NO SCALE	DATE: 3/14
DRAWN BY: R. HUSSEY	PLAN NO. CA71
BY	CHECKED BY: M. HOLLINGSWORTH

NO.	DATE	REVISION DESCRIPTION

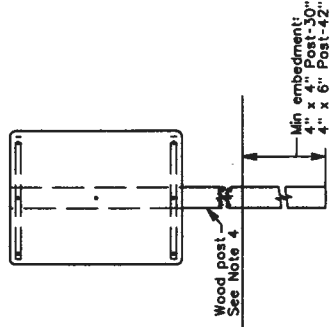


PUBLIC WORKS DIRECTOR
 APPROVAL DATE: March 11, 2014

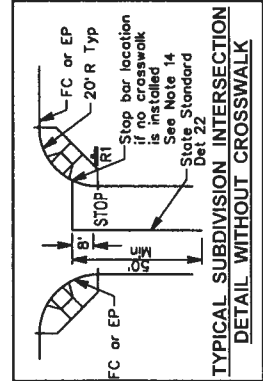
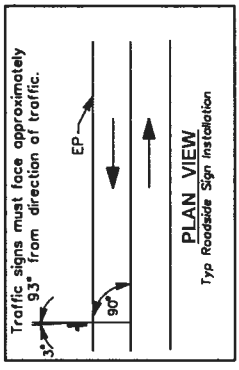
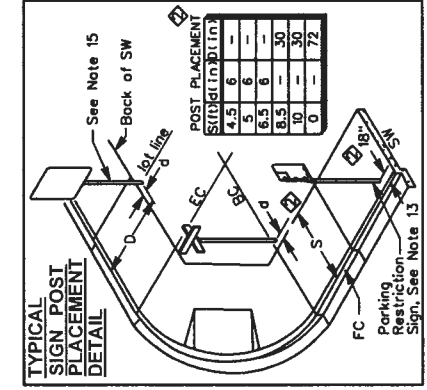
The County of Contra Costa certifies that the engineer or engineer-in-charge is duly licensed and is the author of the design and is responsible for the completeness of electronic copies of this plan sheet.

NOTES:

- Street name signs (SNS) shall conform to the Public Works Department Standard Provisions for Public Works Construction. All traffic signs shall comply with current edition of California Manual of Uniform Traffic Control Devices (California MUTCD).
- All sign support posts shall be 2" (12 gauge) "Unistrut", except as noted on this plan. Square sign post system approved for highway sign use by the FHWA is an acceptable substitution for "Unistrut".
- Posts supporting street name signs and traffic signs, shall not be painted. 7' minimum clearance between bottom of sign and any sidewalk or pedestrian path.
- Only wood posts shall be used in rural locations and shall conform to Section 56 of California Department of Transportation's Standard Specifications for grade, species and preservative treatment.
 - Use 4" x 4" wood posts with any size R7 sign.
 - Use 4" x 6" wood post with any 36" x 42" R-2 sign. A hole must be drilled at the base in accordance with California Department of Transportation's Standard Plan RS2, "Breakaway Feature".
- Street name signs (SNS) shall be installed on the corner with the greatest sight distance and which favors the major street where conditions permit. SNS may be installed on the same sign post with a STOP (RT) sign.
 - One SNS shall be installed at an intersection on each side of the major road with two or more lanes in each direction.
 - Where sign posts are to be installed in an existing sidewalk, the sidewalk shall be sawcut to a neat appearance. Then new concrete placed and finished to match surrounding grade after sign post installation.
- Striping details and markings shall conform to the California Department of Transportation's Standard Plans, and this Standard Plan.
- Pavement markings and stripes shall be thermoplastic and shall conform to Section 84 of California Department of Transportation's Standard Specifications, Public Works Department Standard Provisions for Public Works Construction and project special provisions, if any.
 - For G7 sign use 6" U.C. and 4 1/2" L.C. lettering.
 - The first 3' of all median curb noses shall be painted with reflective white paint.
 - All button head bolt threads shall be peened after assembly.
- Sidewalk with parking restriction signs should be minimum 6'-6" wide.
- Stop bars shall always be placed prior to a curb ramp.
- Mid-black signs in residential areas shall be placed at or near lot line, except as indicated on this Standard Plan.



WOOD POST FOUNDATION AND MOUNTING DETAILS



COUNTY OF CONTRA COSTA
 PUBLIC WORKS DEPARTMENT
 MARTINEZ, CALIFORNIA
 STANDARD PLAN

SIGNING & STRIPING STANDARDS

SCALE: NO SCALE DATE: 3/14
 DRAWN BY: H. HUSSEY PLAN NO. **CRS1**
 CHECKED BY: M. HOLLINGSWORTH

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Oliver Jones
REGISTERED CIVIL ENGINEER

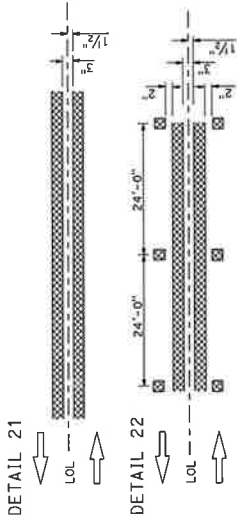
May 31, 2018

AT&T FERRAS
CHS002
REV. 3-31-19
DATE

REGISTERED CIVIL ENGINEER
STATE OF CALIFORNIA
EXPIRES 5/31/2021

THIS DOCUMENT IS THE PROPERTY OF AT&T FERRAS AND IS TO BE RETURNED TO THE OFFICE OF AT&T FERRAS UPON COMPLETION OF THE PROJECT. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF AT&T FERRAS.

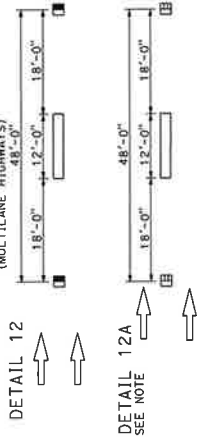
NO PASSING ZONES-TWO DIRECTION



DETAIL 23 DELETED

DETAIL 23 DELETED

LANELINES (Cont)
(MULTILANE HIGHWAYS)



DETAIL 13 DELETED

DETAIL 13 DELETED

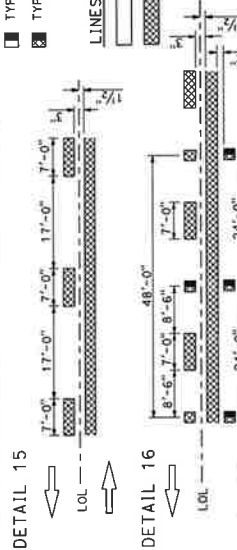
DETAIL 14 DELETED

DETAIL 14 DELETED

DETAIL 14A DELETED

DETAIL 14A DELETED

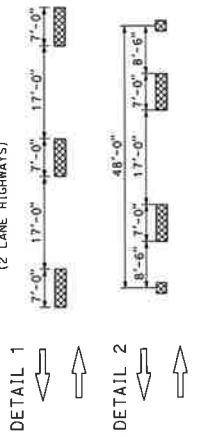
NO PASSING ZONES-ONE DIRECTION



DETAIL 17 DELETED

DETAIL 17 DELETED

CENTERLINES
(2 LANE HIGHWAYS)



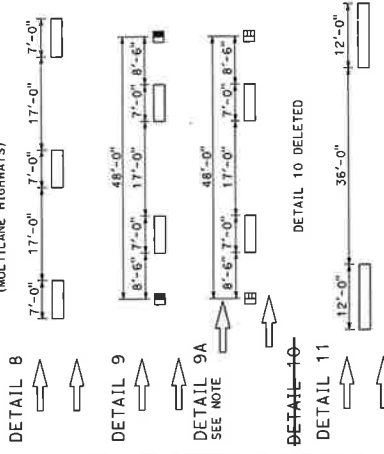
DETAIL 3 DELETED

DETAIL 3 DELETED

DETAIL 4 DELETED

DETAIL 4 DELETED

LANELINES
(MULTILANE HIGHWAYS)



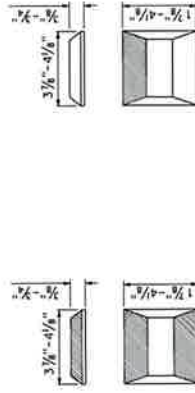
DETAIL 10 DELETED

DETAIL 10 DELETED

LEGEND

- MARKERS**
- TYPE C RED-CLEAR RETROREFLECTIVE
 - TYPE D TWO-WAY YELLOW RETROREFLECTIVE
 - TYPE G ONE-WAY CLEAR RETROREFLECTIVE
 - TYPE H ONE-WAY YELLOW RETROREFLECTIVE

- LINES**
- 6" WHITE
 - 6" YELLOW



TYPE C AND TYPE D TYPE G AND TYPE H

RETROREFLECTIVE FACE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**PAVEMENT MARKERS
AND TRAFFIC LINES
TYPICAL DETAILS**

NO SCALE

A 20A

Return to Table of Contents

COUNTY ROUTE TOTAL PROJECT SHEET TOTAL SHEETS
 REGISTERED CIVIL ENGINEER
 MAY 31, 2018
 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 45116 FERRAZ
 No. CEN002
 Exp. 3-31-19
 THE STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 FOR THE ATTORNEY GENERAL'S OFFICE OF GENERAL COUNSEL
 (CONS. & SUP. PLAN 347-C)

INTERSECTIONS TREATMENTS

LEGEND

MARKERS

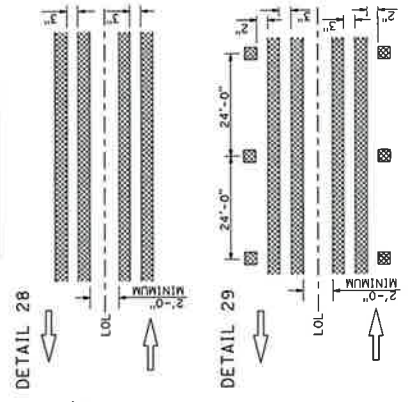
- TYPE D
- TYPE H
- TYPE RY

LINES

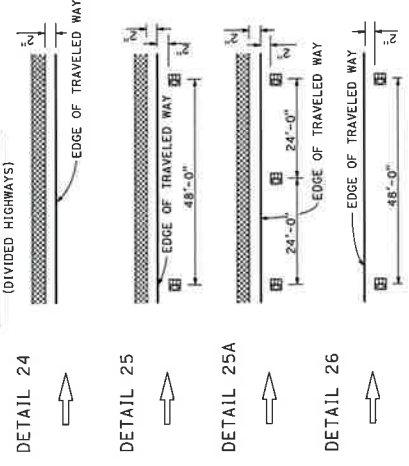
- 6" WHITE
- 6" YELLOW

TWO-WAY YELLOW RETROREFLECTIVE
 ONE-WAY YELLOW RETROREFLECTIVE
 RED-YELLOW RETROREFLECTIVE

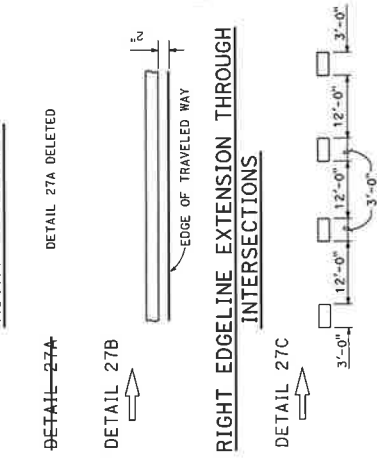
MEDIAN ISLANDS



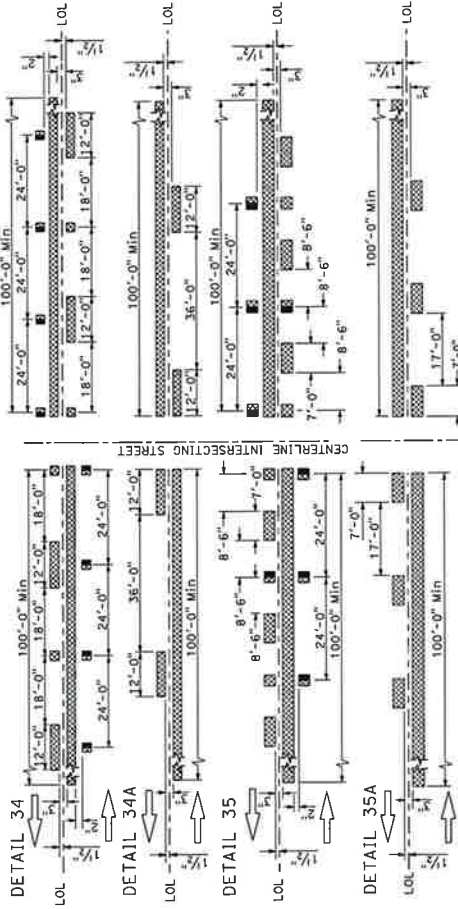
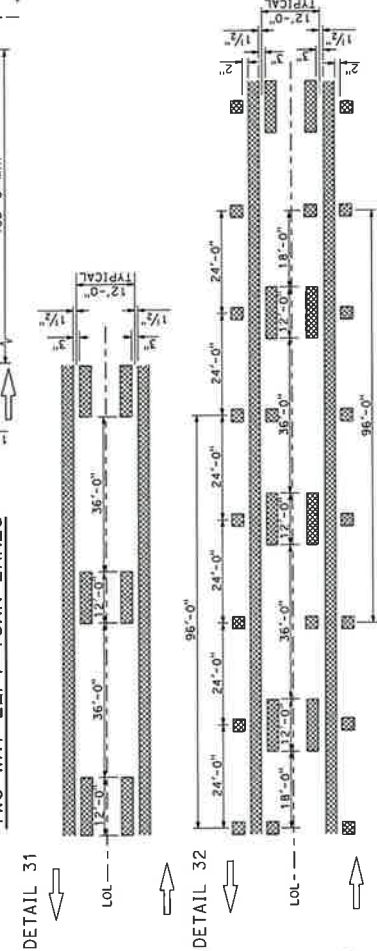
LEFT EDGELINES



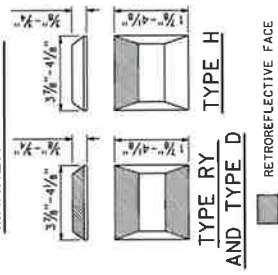
RIGHT EDGELINES



TWO-WAY LEFT TURN LANES



MARKER DETAILS



PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

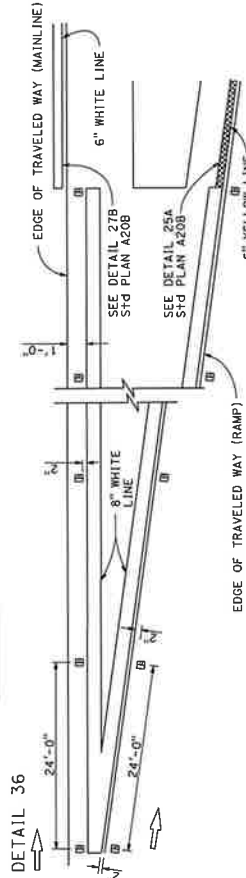
A 20B

Return to Table of Contents

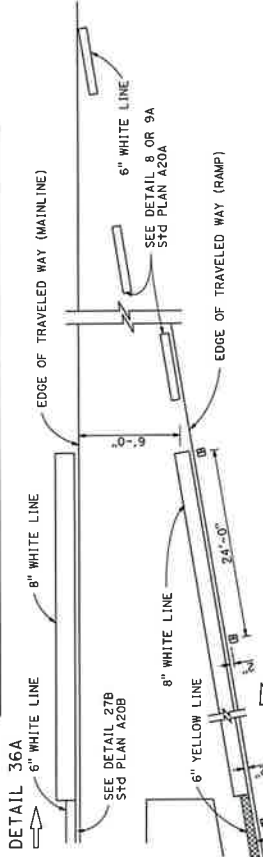
0141 COUNTY ROUTE TOTAL PROJECT SHEET NUMBER 10/13/18

REGISTERED CIVIL ENGINEER
 May 31, 2018
 11160 Ferndale
 No. C60482
 1000 S. UNIVERSITY AVENUE, SUITE 200
 OAKLAND, CALIFORNIA 94612
 FOR DETAILS, SEE THE SPECIFICATIONS TO THE STANDARD PLANS AND THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND MATERIALS.
 THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF ANY INFORMATION OBTAINED FROM ANY SOURCE OTHER THAN THAT PROVIDED BY THE CLIENT.

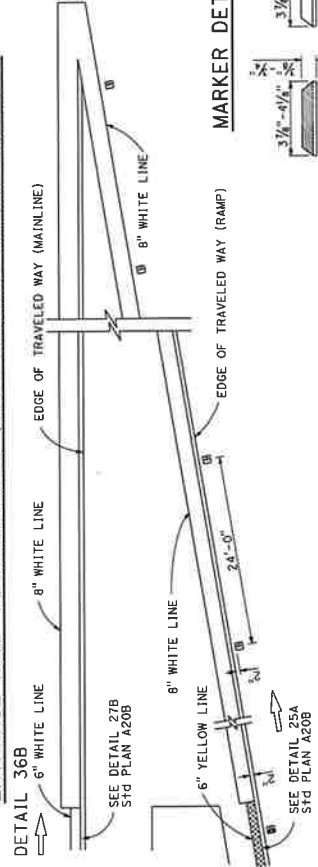
EXIT RAMP NEUTRAL AREA (CORE) TREATMENT



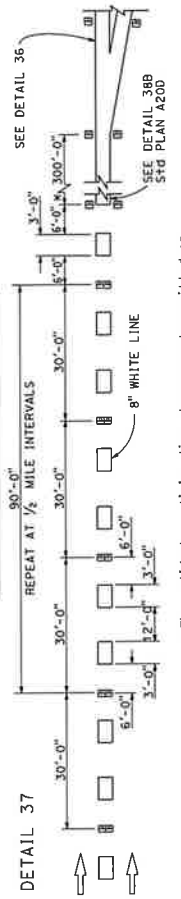
ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT



ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT



LANE DROP AT EXIT RAMP

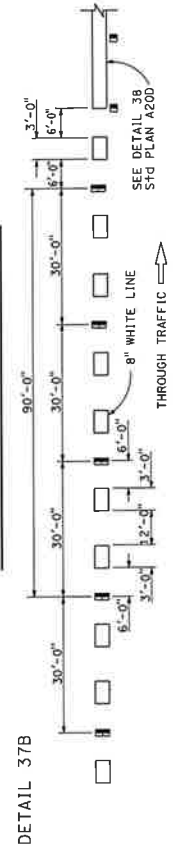


* The solid channelizing line shown may be omitted on short auxiliary lanes where weaving length is critical.

~~DETAIL 37A~~

DETAIL 37A DELETED

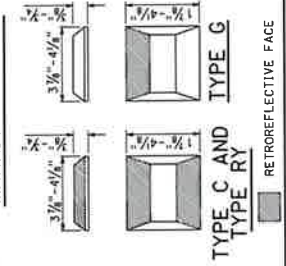
LANE DROP AT INTERSECTIONS



~~DETAIL 37C~~

DETAIL 37C DELETED

MARKER DETAILS



- LEGEND:**
- MARKERS
- TYPE C RED-CLEAR RETROREFLECTIVE
 - TYPE RY RED-YELLOW RETROREFLECTIVE
 - TYPE G ONE-WAY CLEAR RETROREFLECTIVE
 - TYPE G AND TYPE RY RETROREFLECTIVE FACE

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

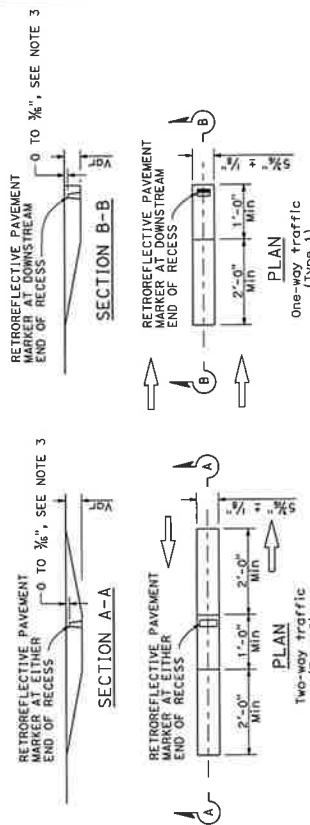
**PAVEMENT MARKERS
 AND TRAFFIC LINES
 AND TYPICAL DETAILS**

NO SCALE

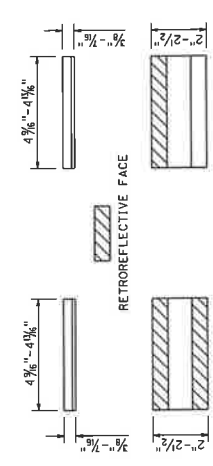
A20C

Return to Table of Contents

COUNTY ROUTE TOTAL PROJECT SHEET NO. 1000
 REGISTERED CIVIL ENGINEER
 May 31, 2018
 PLANS APPROVAL DATE
 ALL RIGHTS RESERVED
 REGISTERED PROFESSIONAL ENGINEER
 No. 23119
 STATE OF CALIFORNIA
 BOARD OF PROFESSIONAL ENGINEERS



RECESS DETAIL FOR RETROREFLECTIVE PAVEMENT MARKER



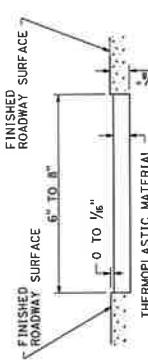
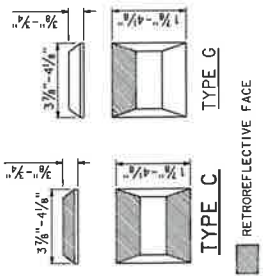
- RECESSED MARKER NOTES:**
- See typical traffic line details for pavement markings used with recessed pavement markers. Detail 144 requires a Type 2 recess.
 - The retroreflective pavement markers shown for recessed installations are not to be used for non-recessed installations.
 - The top of pavement markers installed in recesses shall be 0 to 1/8" below the pavement surface.

TYPE C AND TYPE D TYPE G AND TYPE H
See Notes 1 and 2.
RETROREFLECTIVE PAVEMENT MARKER FOR RECESSED INSTALLATION

LEGEND

TYPE C RED-CLEAR RETROREFLECTIVE
 TYPE G ONE-WAY CLEAR RETROREFLECTIVE
 6" YELLOW LINE

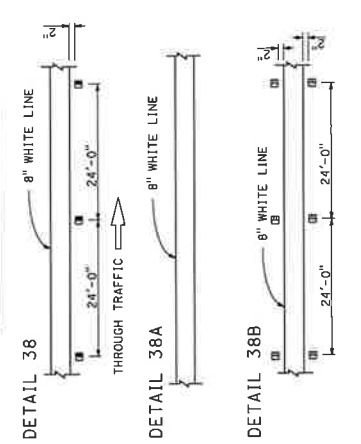
MARKER DETAILS



DETAIL FOR RECESSED THERMOPLASTIC STRIPE

- See Notes A and B.
- RECESSED THERMOPLASTIC NOTES**
- See typical traffic line details for pavement marking patterns.
 - The top of the thermoplastic installed in recessed pavement shall be 0 to 1/8" below the pavement surface.

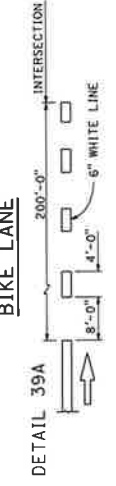
CHANNELIZING LINE



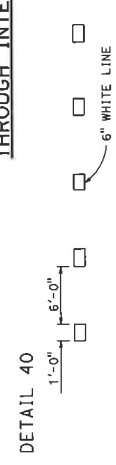
BIKE LANE LINE



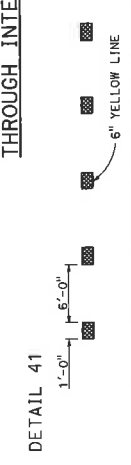
INTERSECTION BIKE LANE



LANE LINE EXTENSIONS THROUGH INTERSECTIONS



CENTER LINE EXTENSIONS THROUGH INTERSECTIONS




STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

NO SCALE

A20D

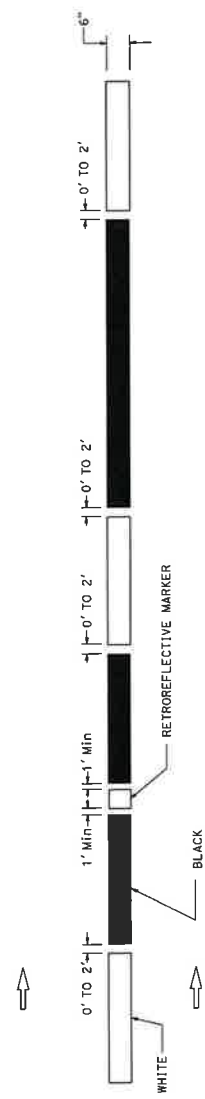
Return to Table of Contents

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS



Alijo Farouk
 REGISTERED CIVIL ENGINEER
 May 31, 2018
 PLACE APPROVAL DATE
 THIS PLAN SHALL NOT BE REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE CONSULTANT.

- NOTES:**
1. See Standard Plans A20A, A20B, A20C, and A20D for pavement markers and traffic lines typical details.
 2. Detail 9 traffic stripe shown, see project plans for traffic stripe details.



OPTION 2
 TYPICAL LANE LINE CONTRAST DETAIL

See Note 2



OPTION 1
 TYPICAL LANE LINE OR RIGHT EDGE LINE CONTRAST DETAIL

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKERS
 AND TRAFFIC LINES**
TYPICAL DETAILS FOR CONTRAST STRIPING
 NO SCALE
A20E

DIS#	COUNTY	ROUTE	POST MILES	SHEET	TOTAL SHEETS

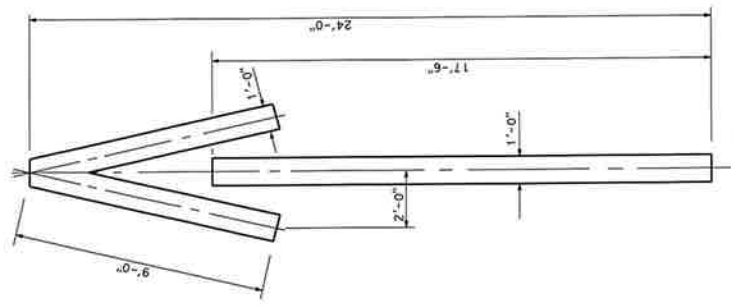
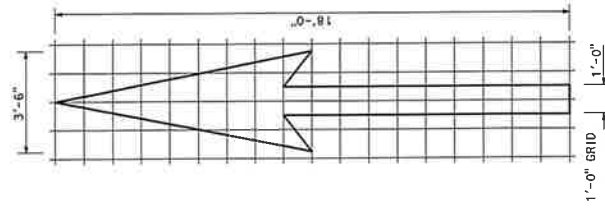
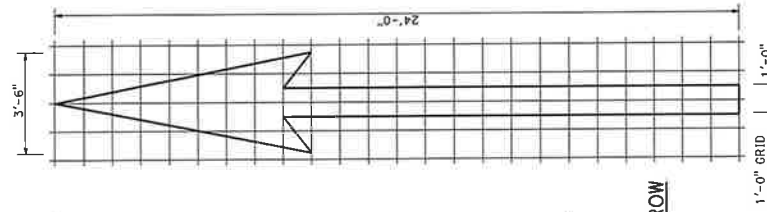
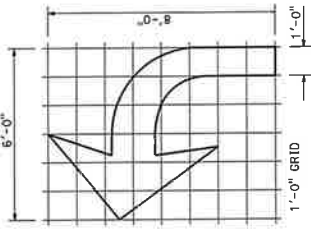
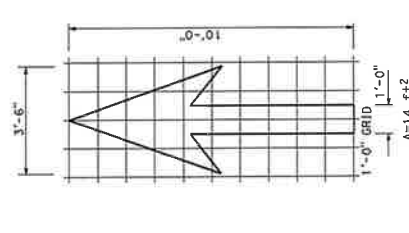
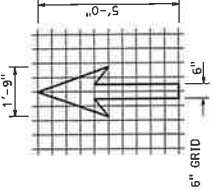
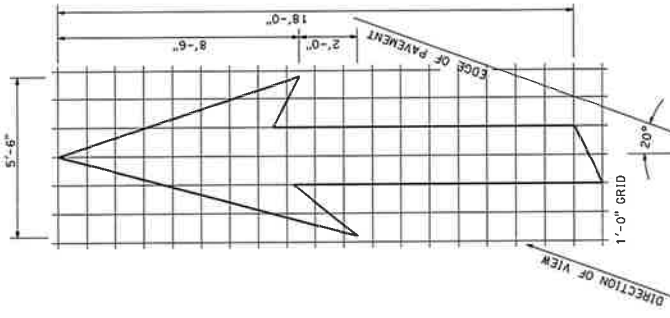
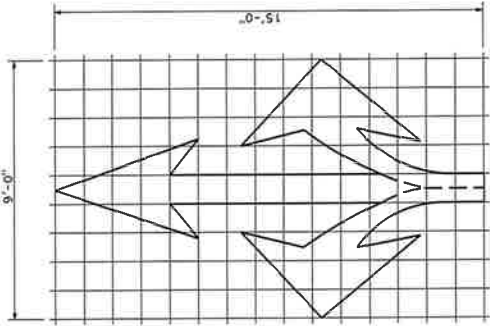
Oliver Feunoy
REGISTERED CIVIL ENGINEER

NOV. 31, 2018
PLANS EXPIRATION DATE

ATILIO FERRO
CHROME
NOV. 21, 2018
PLANS EXPIRATION DATE

REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
NO. 42154
EXPIRES 11/21/2021

FOR ALL WORK, THE ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION AND THE PRESENCE OF SCANNED COPIES OF THIS PLAN SHALL NOT BE A BASIS FOR LIABILITY.



NOTE:
Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

A24A

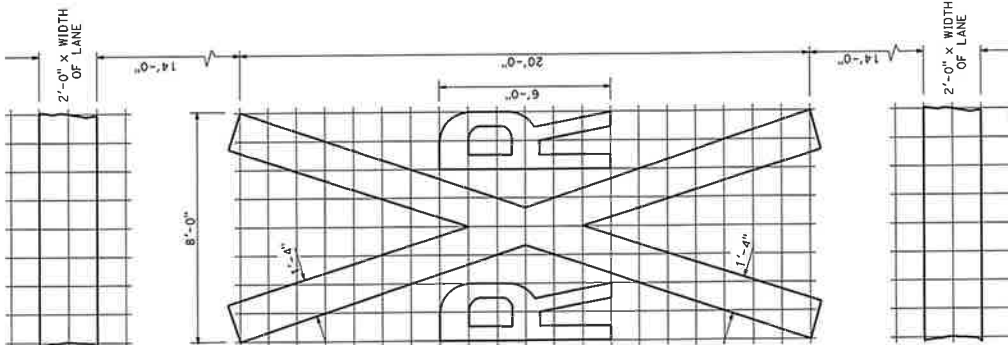
Return to Table of Contents

DIST	COUNTY	ROUTE	TOTAL SHEETS	SHEET NO.

Alfego Ferracuti
REGISTERED CIVIL ENGINEER

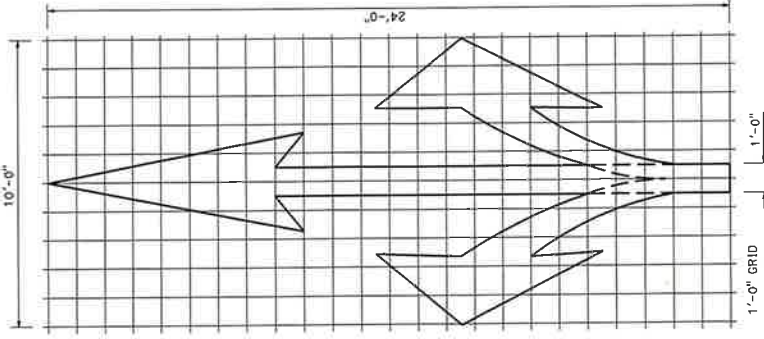
NOV 31 2018
STATE OF CALIFORNIA
DIVISION OF PROFESSIONAL ENGINEERS

THE STATE OF CALIFORNIA AND ITS OFFICERS
DO NOT GUARANTEE THE ACCURACY OR
COMPLETENESS OF THIS PLAN SHEET.

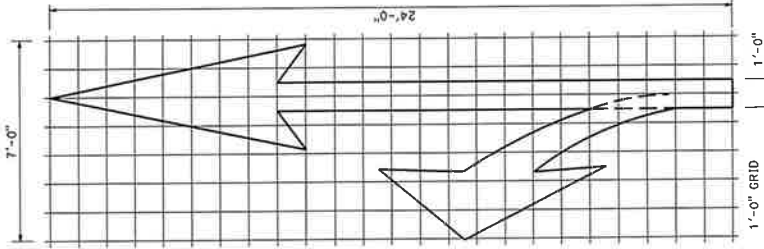


RAILROAD CROSSING SYMBOL
 1'-0" GRID
 A=70 ft² *

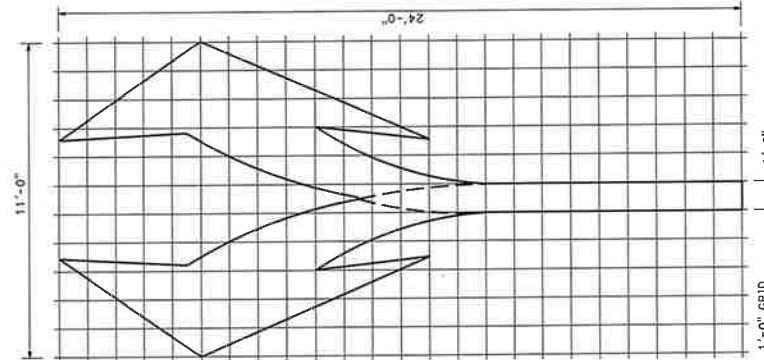
* 70 ft² does not include the 2'-0" x variable width transverse lines.



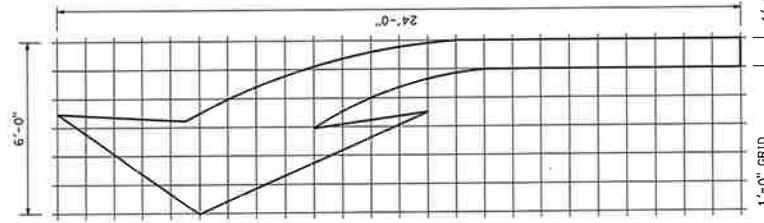
TYPE II (B) ARROW
 A=59 ft²



TYPE II (L) ARROW
 A=45 ft²
 (For Type II (R) use mirror image)



TYPE III (B) ARROW
 A=73 ft²



TYPE III (L) ARROW
 A=42 ft²
 (For Type III (R) use mirror image)

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**PAVEMENT MARKINGS
 ARROWS AND SYMBOLS**

NO SCALE

A24B

Return to Table of Contents

Dist#1	COUNTY	ROUTE	POST MILES	FILE NO.	SHEETS

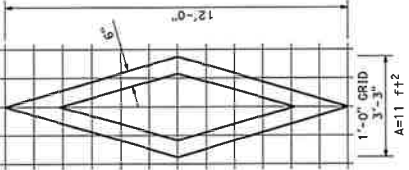
Oliver Farny
REGISTERED CIVIL ENGINEER

May 31, 2018
ROADS APPROVAL DATE

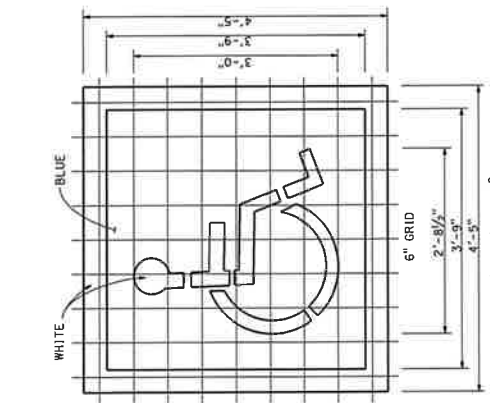
CR0002
PROJECT NO.

FOR ANY REVISIONS
OR ASSETS SHALL NOT BE RESPONSIBLE FOR
THESE CHANGES. CONTACTS OF PLANNER
FOR ANY CHANGES.

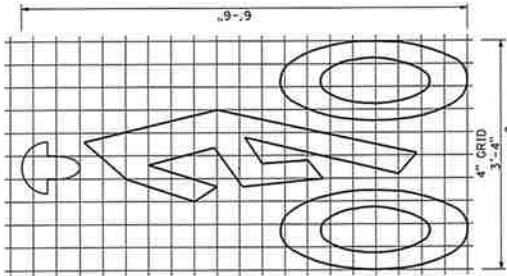
NOTE:
Minor variations in dimensions may be accepted by the Engineer.



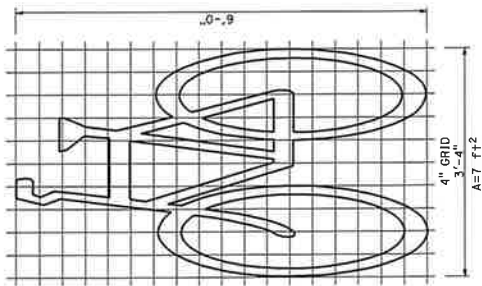
DIAMOND SYMBOL



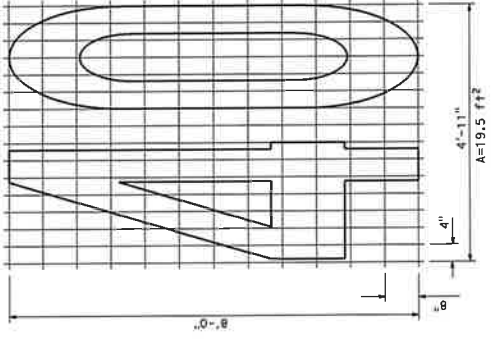
INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) MARKING



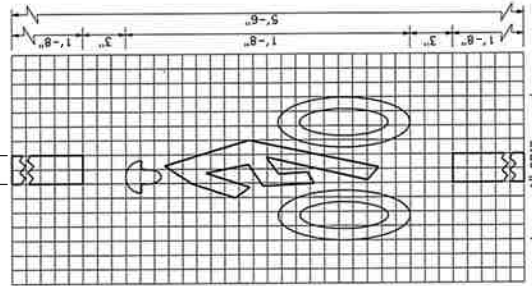
BIKE LANE SYMBOL WITH PERSON



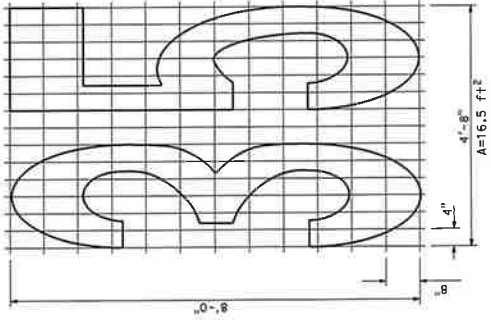
BIKE LANE SYMBOL WITHOUT PERSON



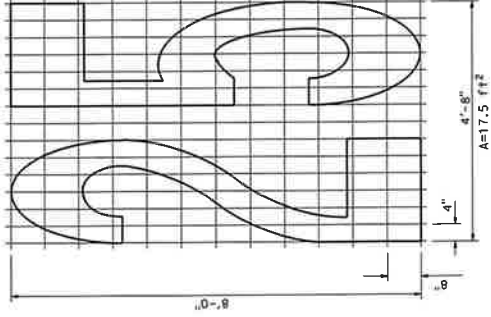
SHARED ROADWAY BICYCLE MARKING



BICYCLE LOOP DETECTOR SYMBOL



NUMERALS




STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
SYMBOLS AND NUMERALS**
NO SCALE

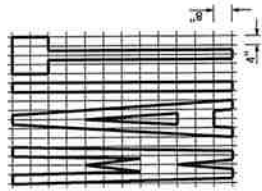
A24C

Return to Table of Contents

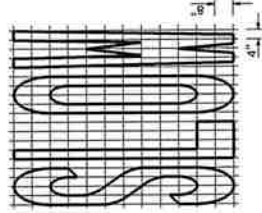
101** COUNTY	ROUTE	TOTAL SHEETS	SHEET NO.



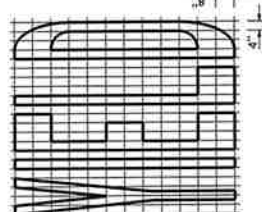
Attilio Ferrero
 REGISTERED CIVIL ENGINEER
 May 31, 2018
 THE STATE OF CALIFORNIA HAS THIS OFFICER
 OR AGENT, SHALL NOT BE RESPONSIBLE FOR
 CONFORMING TO THIS PLAN SHEET.



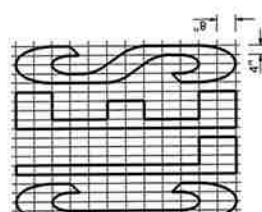
A=19 ft+2



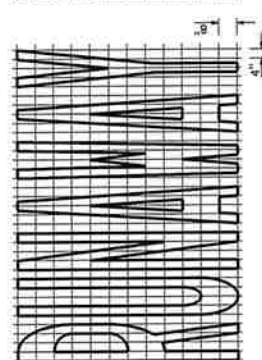
A=23 ft+2



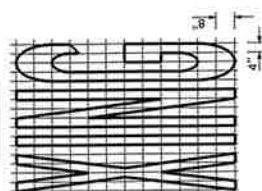
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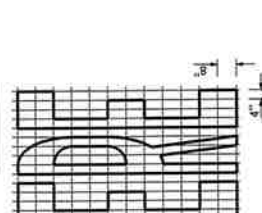
A=42 ft+2



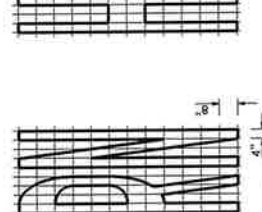
A=43 ft+2



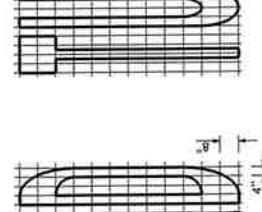
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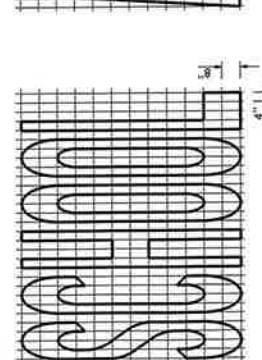
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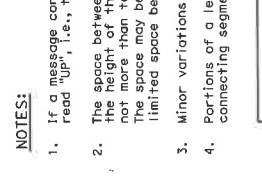
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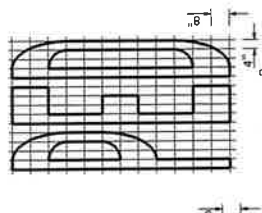
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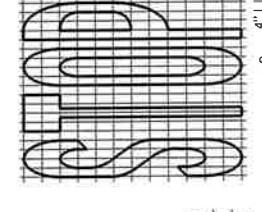
A=35 ft+2



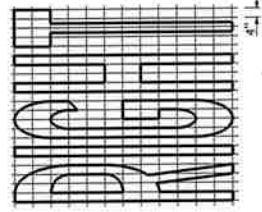
A=18 ft+2



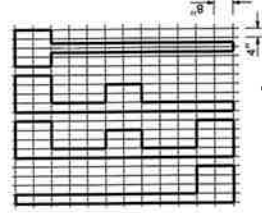
A=22 ft+2



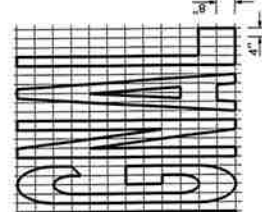
A=26 ft+2



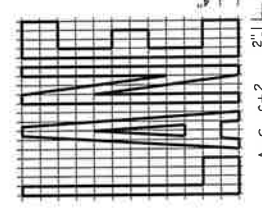
A=19 ft+2



A=32 ft+2



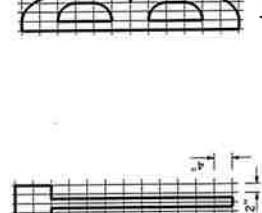
A=32 ft+2



A=6 ft+2



A=5 ft+2



A=10 ft+2

NOTES:

1. If a message consists of more than one word, it must read "UP", i.e., the first word must be nearest the driver.
2. The space between words must be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.

WORD MARKINGS

ITEM	ft+2	ITEM	ft+2	ITEM	ft+2	ITEM	ft+2
XING	21	YIELD	24	BIKE	5	PED	18
AHEAD	31	SCHOOL	35	SLOW	23	COMPACT	10
WAIT	19	SIGNAL	32	STOP	22	RUNWAY	43
LANE	6	TURN	24	LEFT	19	VEHICLES	42
RIGHT	26	HERE	26				

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

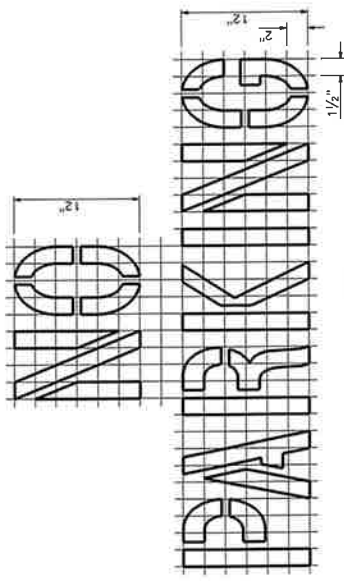
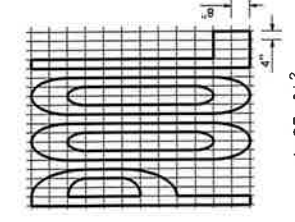
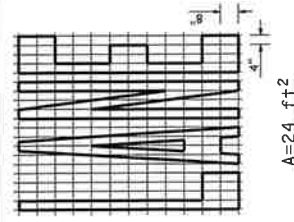
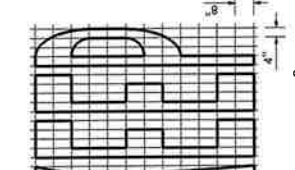
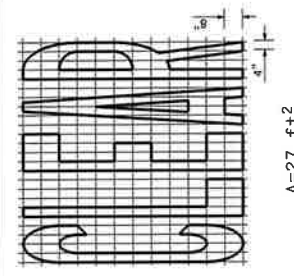
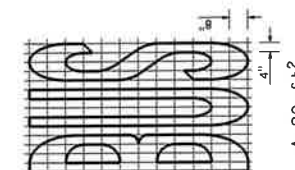
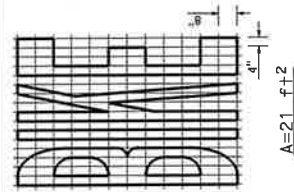
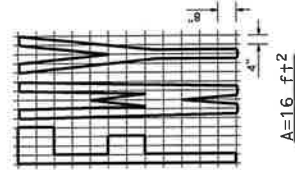
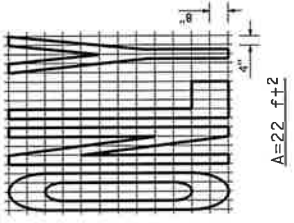
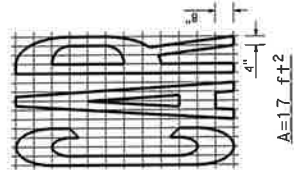
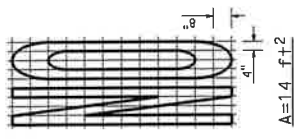
PAVEMENT MARKINGS
WORDS

NO SCALE

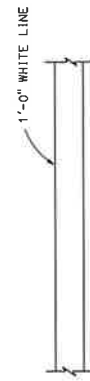
A24D

DISTRICT COUNTY ROUTE TOTAL SHEETS NO. SHEETS
 REGISTERED CIVIL ENGINEER
 May 31, 2018
 LICENSE EXPIRES
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 No. 33119
 State of California
 May 31, 2018
 LICENSE EXPIRES
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 No. 33119
 State of California

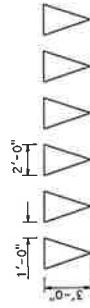
WORD MARKINGS			
ITEM	ft+2	ITEM	ft+2
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	PWT	16



- NOTES:**
- If a message consists of more than one word, it must read "Up", i.e., the first word must be nearest the driver.
 - The space between words must be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
 - Minor variations in dimensions may be accepted by the Engineer.
 - Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
 - The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
 - The words "NO PARKING" shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.



LIMIT LINE (STOP LINE)



YIELD LINE

A=24 ft+2
See Notes 6 and 7

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS WORDS, LIMIT AND YIELD LINES

NO SCALE

A24E

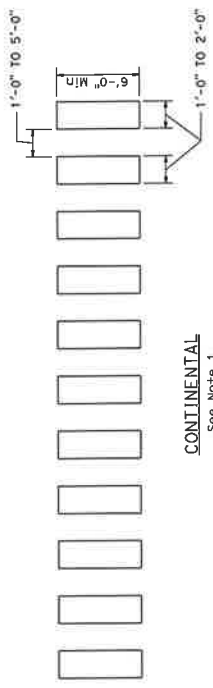
Dist:	COUNTY	ROUTE	TOTAL SHEETS	SHEET NO.

Oliver Farnsworth
 REGISTERED CIVIL ENGINEER
 No. 10000
 STATE OF CALIFORNIA
 EXPIRES 12/31/19

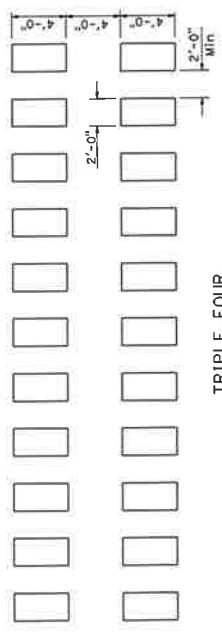
May 31, 2018
 CLASS APPROVAL DATE
 FOR AGENTS ONLY. NOT AN ENDORSEMENT FOR
 COMPETENCE OR FITNESS TO PERFORM THE
 DUTIES OF THIS BOARD OFFICE.

NOTES:

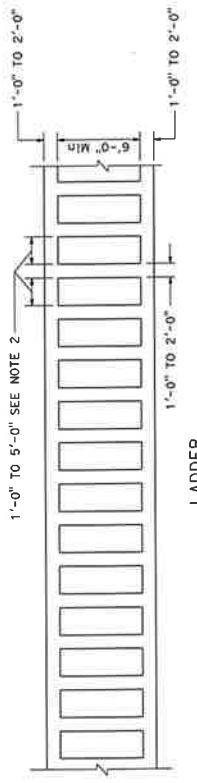
1. Spaces between markings must be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except those near schools must be yellow.



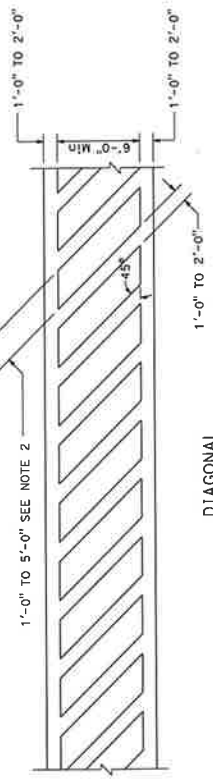
CONTINENTAL
See Note 1



TRIPLE FOUR
See Note 1

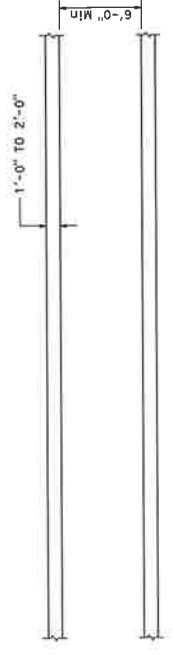


LADDER



DIAGONAL

HIGHER VISIBILITY CROSSWALKS



BASIC

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
CROSSWALKS**

NO SCALE

A24F

PROJECT MILES SHEET NO. SHEETS

COUNTY ROUTE

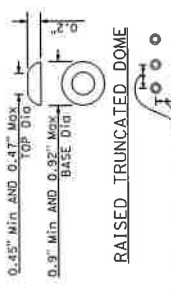
REGISTERED CIVIL ENGINEER

May 31, 2018

PLANS APPROVAL DATE

FOR AGENCY USE ONLY - NOT TO BE REPRODUCED FOR ANY OTHER PROJECTS OR SCALES

Professional Engineer Seal: RICHARD L. GIBSON, License No. C-44115, State of California, Exp. 12-31-19

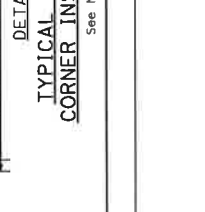
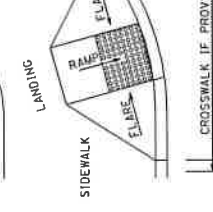
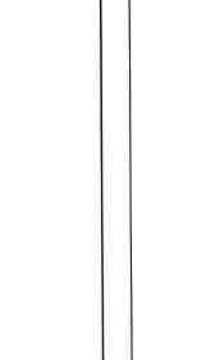
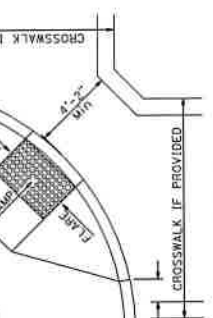
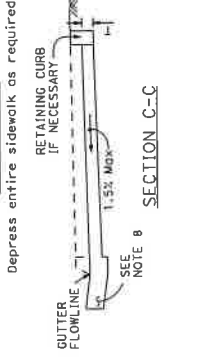
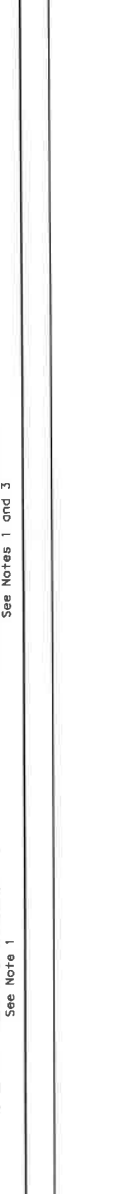
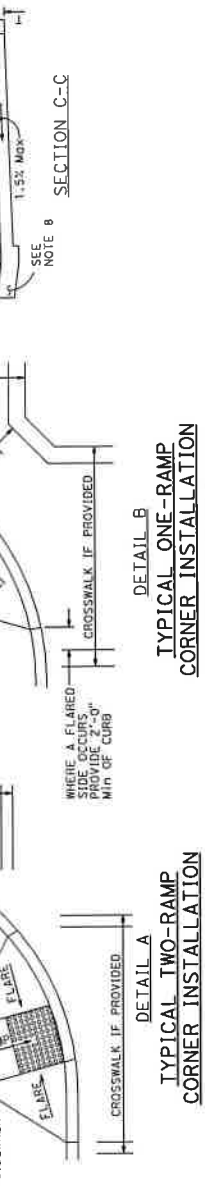
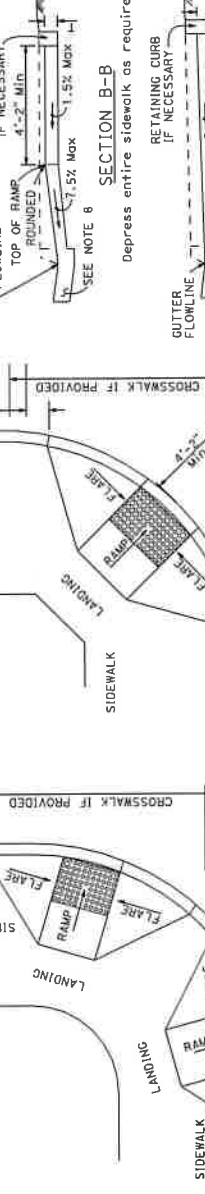
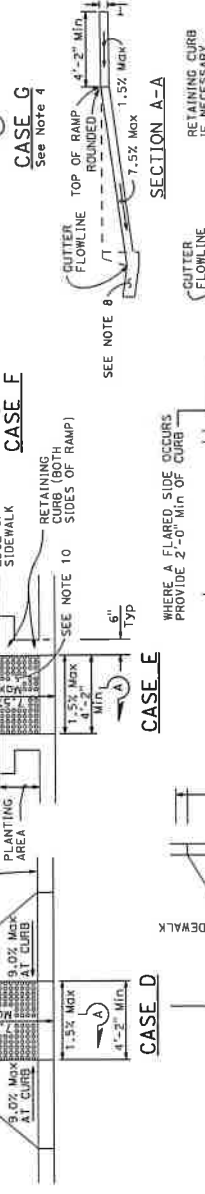
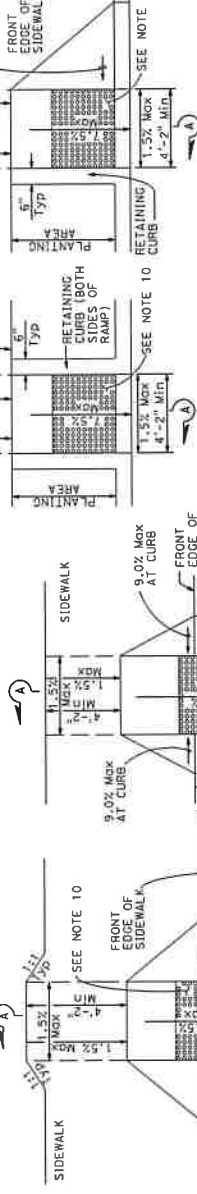
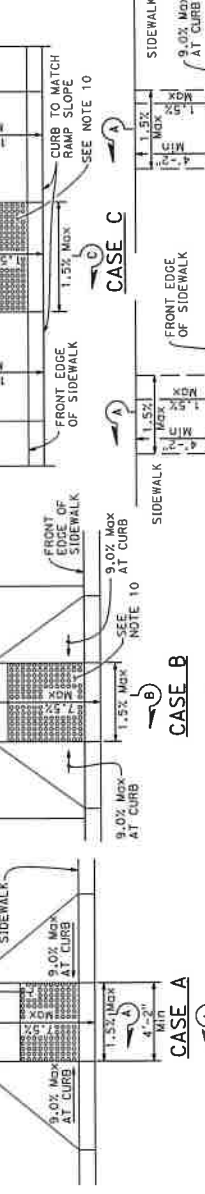
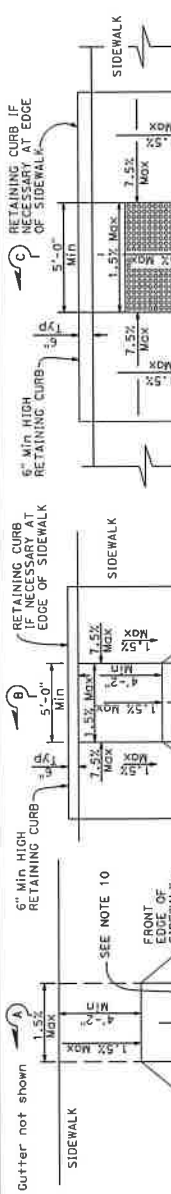


RAISED TRUNCATED DOME PATTERN (IN-LINE)

DETECTABLE WARNING SURFACE

NOTES:

1. All site conditions dictate. Case A through Case G curb ramps may be used for corner installations similar to those shown in Detail A and Detail B. The case of curb ramps used in Detail A do not have to be the same. Case A through Case G curb ramps also may be used at mid-block locations, as site conditions dictate, or specific site configuration, including the conform to existing sidewalk, see Project Plans.
2. If distance from curb to back of sidewalk is too short to accommodate ramp and 4'-2" platform (landing) as shown in Case A through Case G, the ramp may be depressed longitudinally as in Case B or C or may be widened as in Case D.
3. When ramp is located in center of curb return, crosswalk configuration must be similar to that shown for Detail B.
4. As site conditions dictate, the retaining curb side and the flared side of the Case G ramp is a typical rectangle, unless modified in the Project Plans.
5. The ramp portion of the curb ramp is a typical rectangle, unless modified in the Project Plans.
6. Side slope of ramp flares vary uniformly from a maximum of 9.0% at curb to 1.5% at sidewalk. Sidewalk slope adjacent to top of the ramp, except in Case C and Case F.
7. The adjacent surfaces at transitions of curb ramps to walks, gutters, and streets shall be at the same level.
8. Counter slopes of adjoining gutters and road surfaces immediately adjacent to and within 24 inches of the curb ramp shall not be steeper than 2:1 (50% slope). Gutter pan slope shall not exceed 1" of depth for each 2'-0" of width.
9. Transition gutter pan slope from 1" of depth for each 2'-0" of width to typical gutter pan slope per Standard Plan A87A.
10. The detectable warning surface will be a rectangle as shown at back of curb, unless modified in the Project Plans. Curb ramps shall have a detectable warning surface that extends the full width and 3" depth of the ramp. A maximum gap of 1/4 inch is allowed on each side of the ramp. Detectable warning surfaces shall conform to the requirements in the Standard Specifications.
11. Sidewalk and ramp thickness, "t", shall be 3/2" minimum.
12. Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp shall be constructed in accordance with the case by the owner prior to, or in conjunction with, curb ramp construction.
13. Detectable warning surface may have to be cut to allow removal of utility covers while maintaining detectable warning width and depth.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CURB RAMP DETAILS

NO SCALE

A88A

APPENDIX F

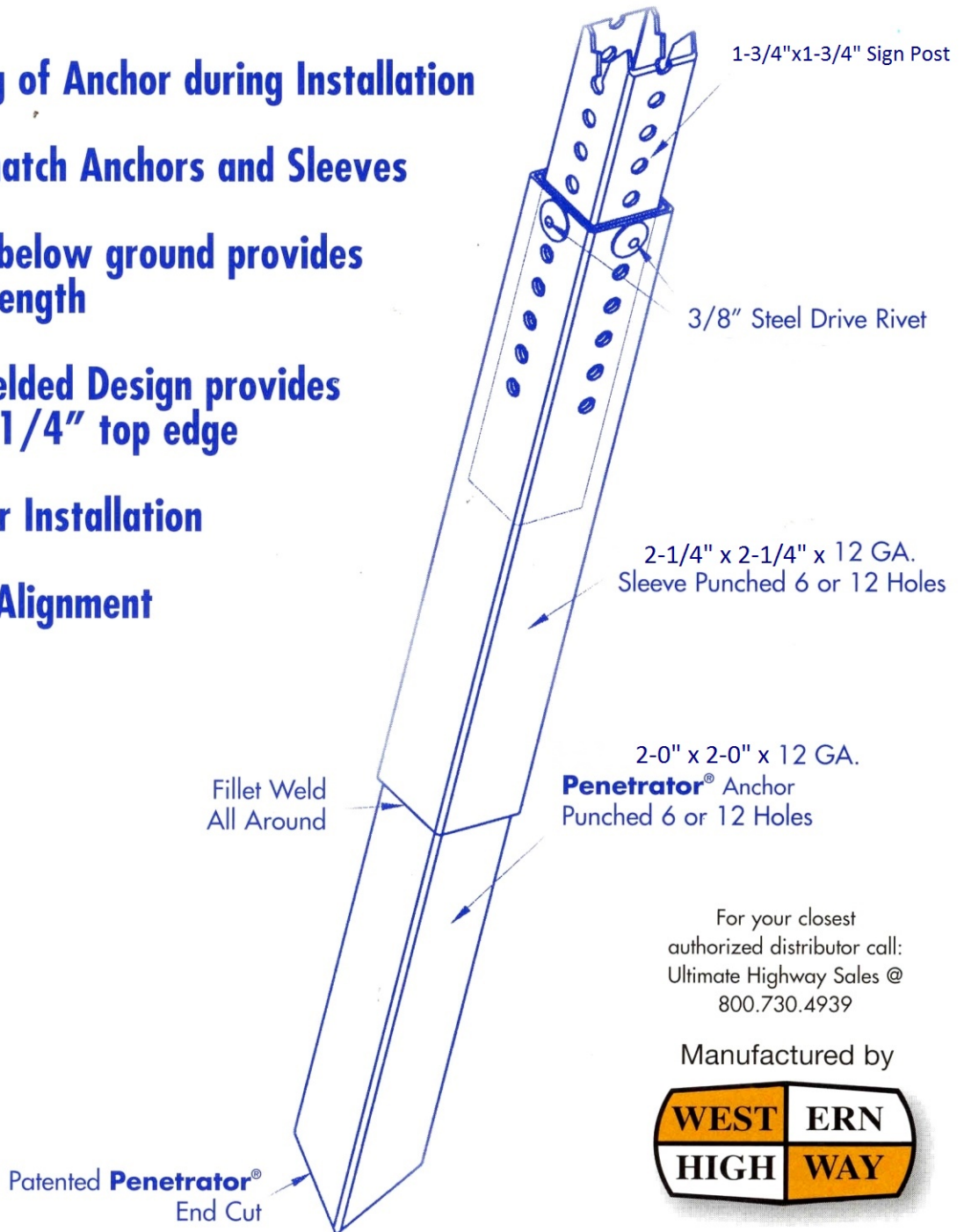
SIGNPOST & ACCESSORIES

The Anchor-Mate®

The Best Drivable Anchor in the World!

by **Ulti-Mate**®
The Ultimate Sign Support System

- No Deforming of Anchor during Installation
- No need to match Anchors and Sleeves
- Solid section below ground provides additional strength
- Two Piece Welded Design provides almost a full 1/4" top edge
- Quicker Easier Installation
- Perfect Hole Alignment



For your closest authorized distributor call:
Ultimate Highway Sales @
800.730.4939

Manufactured by



<http://www.westernhighway.com>
E-mail: whpsales@westernhighway.com

Ulti-Mate®

The Ultimate Sign Support System

Traffic signs are the primary source of information for motorists. The biggest and brightest sign is only effective if the support it is mounted on keeps the sign in its intended position. Sign supports need to be strong,

versatile and cost effective. The Ulti-Mate® sign support system, approved by the Federal Highway Administration, is the most reliable, economical and easiest to install support system available.

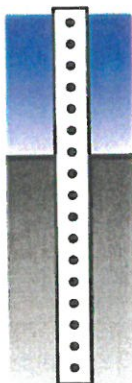
MATERIALS & SPECIFICATIONS

The Ulti-Mate sign support system is available in 12 and 14 gage steel complying with ASTM specification A653, hot dip galvanized conforming to coating designation G-140 for excellent corrosion prevention.

- Available with 7/16" holes on 1" centers on 2 or 4 sides (11.1mm on 25.4mm centers).
- The Ulti-Mate sign support system is completely compatible with all existing square posts.
- Mating tube sections allow for fast, safe ground level installations.

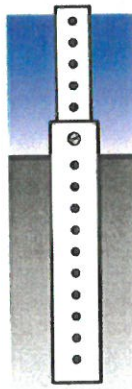
- Ground anchor posts allow for rapid replacement installations when necessary.
- Square tube sections provide superior resistance to wind and other forces over U-channel or round posts.
- The Ulti-Mate sign support system provides four flat surfaces for mounting signs in any direction and at any height without the need for additional hardware.
- FHWA approved as meeting safety requirements for sign supports.
- Custom sign support colors available on request.

FHWA APPROVED INSTALLATIONS



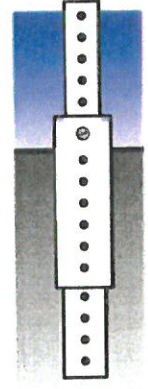
DIRECT INSTALLATION

The Ulti-Mate sign post can be installed directly into the ground using power equipment or a sledge-hammer with driving cap.



EZ INSTALLATION

The Ulti-Mate 12 gage anchor system allows crews to work at ground level for fast installations and replacements. The Ulti-Mate anchor is installed directly into the ground, leaving 1 or 2 holes above grade level. The Ulti-Mate sign post slides into the anchor for safe and easy installations.



HI-IMPACT INSTALLATION

The Ulti-Mate double 12 gage system is for areas that require frequent replacements due to damaged sign posts. This unique method utilizes a two-piece breakaway anchor that makes replacement work fast and safe.

For an easy to follow post-selection ordering guide, contact your local Ulti-Mate distributor.

AVAILABLE PRODUCTS

Tube Size	English			Tube Size	Metric	
	Wall Thickness Gage	Wall Thickness Inches	Pounds Per Foot		Wall Thickness (mm)	Kilograms Per Meter
1.75 x 1.75	14	0.083	1.71	44.45 x 44.45	2.10	2.54
2.00 x 2.00	14	0.083	1.99	50.80 x 50.80	2.10	2.96
2.25 x 2.25	14	0.083	2.28	57.15 x 57.15	2.10	3.39
1.50 x 1.50	12	0.105	1.74	38.10 x 38.10	2.66	2.59
1.75 x 1.75	12	0.105	2.09	44.45 x 44.45	2.66	3.11
2.00 x 2.00	12	0.105	2.44	50.80 x 50.80	2.66	3.63
2.25 x 2.25	12	0.105	2.79	57.15 x 57.15	2.66	4.16
2.50 x 2.50	12	0.105	3.14	63.50 x 63.50	2.66	4.69

Distributed by:

For the name of your closest authorized distributor, call Ultimate Highway Sales at (800) 730-4939.

Because you don't need all those holes...

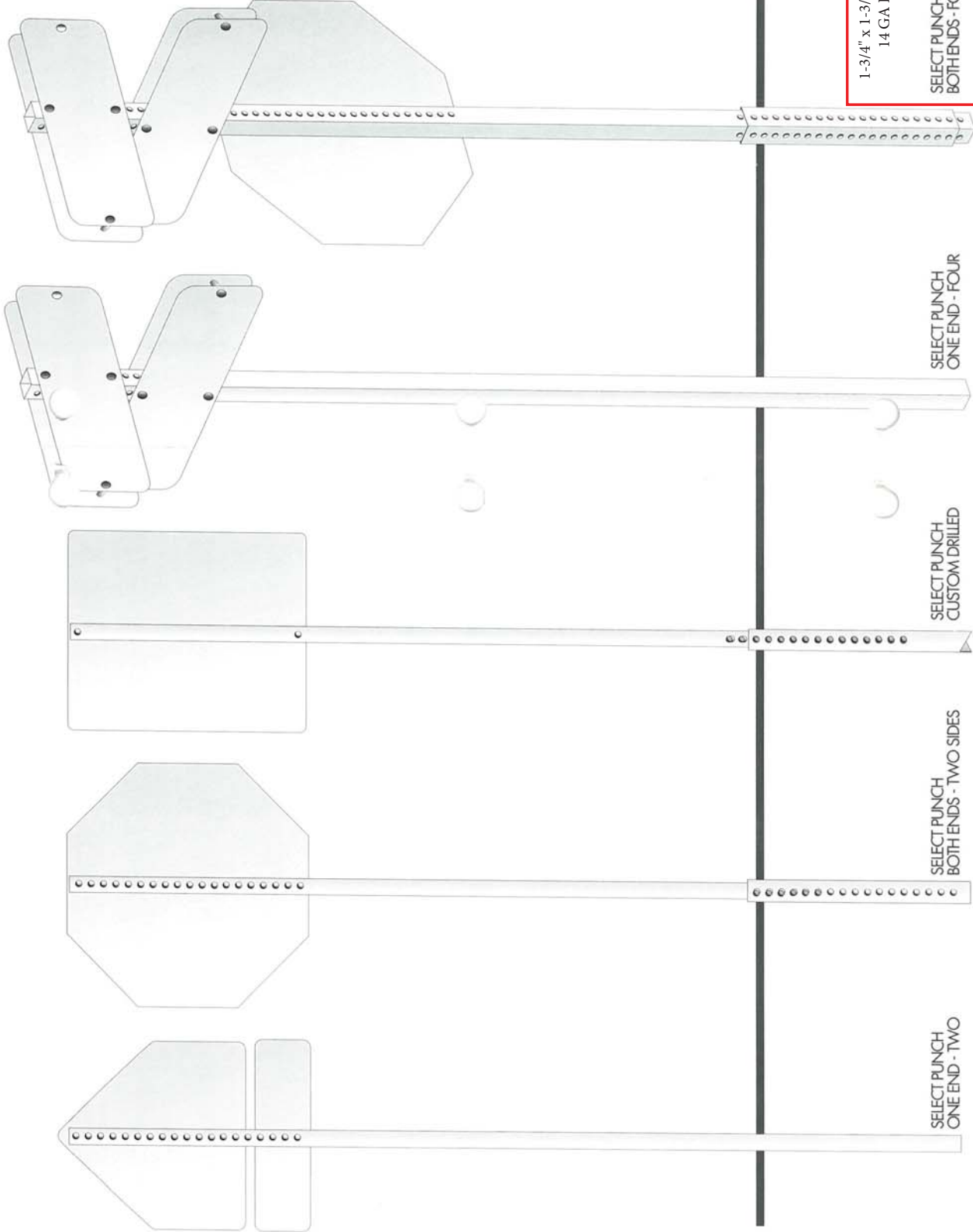
Since the introduction of Ulti-Mate, the Ultimate Sign Support System, we have talked to highway engineers, designers and installers across the country on how to make the best better. The most common response was, "We don't need all those holes". The typical twelve foot post has 564 holes; in most cases only 2 holes are required. With that in mind, we are pleased to offer the Select Punch by Ulti-Mate. Choose the option that best serves your needs... No more unnecessary holes.

- Continuous punching in increments of six, on two or four sides and from either end.
- Custom drilling available to your exact location and hole size as required.
- Also available on all base posts including the Penetrator.
- Minimum of 25 posts per order.

Select Punch by Ulti-Mate. You talked and we listened. **The best just got better.**

Ulti-Mate[®]
The Ultimate Sign Support System

Manufactured by



1-3/4" x 1-3/4" x 120"
14 GA Post
SELECT PUNCH
BOTH ENDS - FOUR SIDES

SELECT PUNCH
ONE END - FOUR

SELECT PUNCH
CUSTOM DRILLED

SELECT PUNCH
BOTH ENDS - TWO SIDES

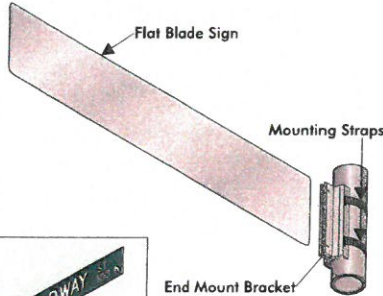
SELECT PUNCH
ONE END - TWO

HARDWARE FLAT AND EXTRUDED BLADES

MOUNTING COMPONENTS

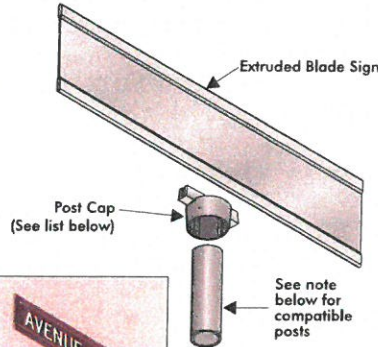
CONFIGURATION: End Mount

Configuration includes nut and bolt set to hold sign in bracket



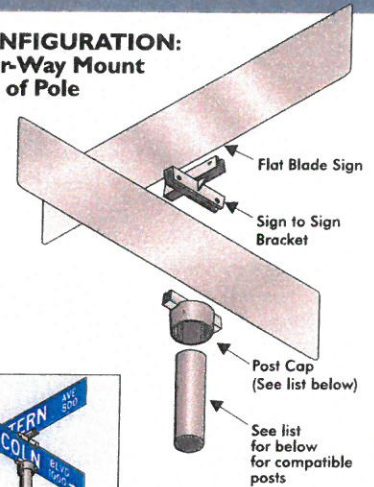
Sign fully assembled on post.

CONFIGURATION: Single Mount Top of Pole



Sign fully assembled on post.

CONFIGURATION: Four-Way Mount Top of Pole



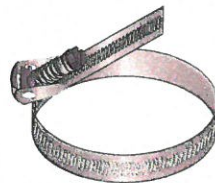
Sign fully assembled on post.



END MOUNT BRACKET

Blade street signs can be held on their ends with this bracket.

- EMB-6 for AX-6 or AF-6 signs
- EMB-6.75 for AX-6.75 or AF-6.75 signs
- EMB-9 for AX-9 or AF-9 signs

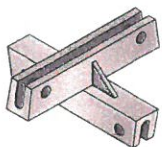


MOUNTING STRAP

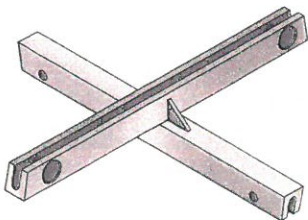
Stainless Steel Strap/Clamp - inexpensive and convenient for mounting sign brackets and other uses. With a length of 32 inches, the clamp can accommodate poles up to 9 inches wide.

SIGN TO SIGN BRACKETS

Bracket allows two blade signs to be stacked on top of one another.



- 707XCS for AX-6 or AX-6.75 signs
- 808XCS for AX-9 signs
- 606FCS for AF-6 or AF-6.75 signs
- 808FCS for AF-9 signs



- 812XCS for AX-9 signs
- 812FCS for AF-9 signs

POST CAPS AND POST INFORMATION

Post caps are recommended for "Single Top of Pole" or "Four-Way Top of Pole" configurations of blade street signs. Western Highway supplies post caps for the most common street sign posts. Use the following chart to see if your posts are compatible with our regularly available post caps.

<p>Cylindrical Post Caps</p>	<p>Fits 2" ID Diameter Post 707X-2 for AX-6 or AX-6.75 808X-2 for AX-9 signs 606F-2 for AF-6 or AF-6.75 signs 808F-2 for AF-9 signs</p>	<p>Fits 2-1/2" ID Diameter Post 707X-2.5 for AX-6 or AX-6.75 808X-2.5 for AX-9 signs 606F-2.5 for AF-6 or AF-6.75 signs 808F-2.5 for AF-9 signs</p>
<p>Square Post Cap</p>	<p>Fits Square Tube Post 850X for AX-6, AX-6.75 or AX-9 signs 850F for AF-6, AF-6.75 or AF-9 signs</p>	
<p>U-Channel Post Cap</p>	<p>Fits U-Channel Post 707XU for AX-6 or AX-6.75 signs 808XU for AX-9 signs 606FU for AF-6 or AF-6.75 signs 808FU for AF-9 signs</p>	

Other post caps are available. Please call us to confirm inventory.


SIGN POST

H21-DP
DELINEATOR POSTS
 HOT DIPPED GALVANIZED OR BAKED ENAMEL GREEN
 5 ft.
 6 ft.
 1.12 #/ft 30 - 3/8" holes on 1" centers. Light weight but strong. Ideal for Delineators, or marking utility lines.




H21-GP
 5 ft., 6 ft. GUIDE POSTS (FOR MTG. TARGET PLATES)

H21-GP
 40 Inch (for mtg. Type "K" Plates) California Spec. Flanges slotted ends pointed.



PIPE POST


H21-RP2-12
H21-RP2.5-12
H21-RP2
H21-RP2.5
 GALVANIZED STEEL PIPE POSTS
 Schedule 40 steel pipe
 2 inch and 2 1/2 inch I.D.
 10 1/2 ft. and 12 ft. long.
IN STOCK



"U" CHANNEL POSTS
 HOT DIPPED GALVANIZED OR BAKED ENAMEL GREEN

H21-SP
SIGN POSTS
 6 ft. 7 ft.
 8 ft. 9 ft.
 10 ft. 11 ft.
 12 ft.
 2 lb. per foot


(Other lengths on special order) Hot rolled, high carbon, rail steel. 3/8" holes punched on 1" centers, full length. Bottom pointed. High carbon steel is recommended because it resist bending. Meets & exceeds California State specifications.




Uti-Mate[®]

The Ultimate Sign Support System

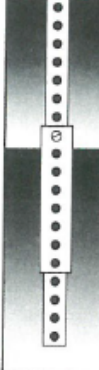
DIRECT INSTALLATION
 The Uti-mate sign post can be installed directly into the ground using power equipment or a sledgehammer with drive cap.



EZ INSTALLATION
 The Uti-mate 12 gage anchor system allows crews to work at ground level for fast installations and replacements. The Uti-mate anchor is installed directly into the ground, leaving 1 or 2 holes above grade level. The Uti-mate sign post slides into the anchor for safe and easy installations.



HI-IMPACT INSTALLATION
 The Uti-mate double 12 gage system is for areas that require frequent replacements due to damaged sign posts. This unique method utilizes a two-piece breakaway anchor that makes replacement work fast and safe.



Tube Size	English		Pounds Per Foot	Tube Size	Metric	
	Wall Thickness Gage	Inches			Wall Thickness (mm)	Kilograms Per Meter
1.75 x 1.75	14	0.083	1.71	44.45 x 44.45	2.10	2.54
2.00 x 2.00	14	0.083	1.99	50.80 x 50.80	2.10	2.96
2.25 x 2.25	14	0.083	2.28	57.15 x 57.15	2.10	3.39
1.50 x 1.50	12	0.105	1.74	38.10 x 38.10	2.66	2.59
1.75 x 1.75	12	0.105	2.09	44.45 x 44.45	2.66	3.11
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2.50 x 2.50	12	0.105	3.14	63.50 x 63.50	2.66	4.69

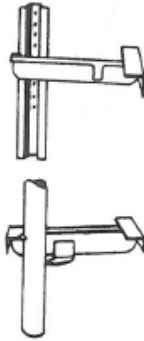
See Separate Literature

SIGN POST ACCESSORIES



H25-4A
DETACHABLE
POST PULLER ONLY
(any shape post)
Must be used with Jack.

H25-7
POST PULLER JACK
ONLY
Includes Base & Handle.



H25-6
Self Locking
U-Post Step

H25-6A
Self Locking
2" Pipe Step



H25-8
POST DRIVER
For Driving U Channel
Sign Posts.
38 lb.



H26-SP
1 1/2" x 48 PIPE ONLY
Painted Black

Use H5 Spacer and H6-2.5
Bolts for mounting signs to
above.



H26-20B
20 lb. Base Only

H26-30B
30 lb. Base Only

H26-40B
40 lb. Base Only

5/16" flat steel plate
base. Painted black.



ULTI-MATE STOP

TO BE USED FOR
TEMPORARY TRAFFIC
CONTROL SITUATIONS.

See separate literature for
complete information.



H21-SPDC
MANUAL DRIVE CAP
For U-Channel.

H21-SPPDC
POWER DRIVE CAP
& 7/8" SHANK
For U-Channel.

UM-MDC175
MANUAL DRIVE CAP
For 1 3/4" anchor posts.

UM-MDC200
MANUAL DRIVE CAP
For 2" anchor posts.

UM-MDC225
MANUAL DRIVE CAP
For 2 1/4" anchor posts.

UM-MDC250
MANUAL DRIVE CAP
For 2 1/2" anchor posts.



UM-PDCS7/8-325
POWER DRIVE SHANK
7/8" x 3 1/4"

UM-PDCS7/8-425
POWER DRIVE SHANK
7/8" x 4 1/4"

UM-PDCS1-425
POWER DRIVE SHANK
1" x 4 1/4"

UM-PDCS1 1/8-6
POWER DRIVE SHANK
1 1/8" x 6"

UM-PDCS1 1/4-6
POWER DRIVE SHANK
1 1/4" x 6"



UM-PDC175
POWER DRIVE CAP
For 1 3/4" anchor posts.

UM-PDC200
POWER DRIVE CAP
For 2" anchor posts.

UM-PDC225
POWER DRIVE CAP
For 2 1/4" anchor posts.

UM-PDC250
POWER DRIVE CAP
For 2 1/2" anchor posts.



**STREET NAME
SIGN
HARDWARE**

WE MANUFACTURE A COMPLETE LINE OF STREET
NAME SIGN MOUNTING HARDWARE. LOOK FOR IT
IN THE STREET NAME SIGN SECTION OF YOUR
WESTERN HIGHWAY PRODUCTS CATALOG.

10650 FERN AVENUE, STANTON, CALIFORNIA 90680
(714) 761-4811 (800) 479-3783 FAX (714) 952-2118
<http://www.westernhighway.com> E-mail whpsales@westernhighway.com

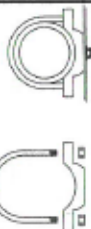
SIGN MOUNTING HARDWARE

	<p>H1-SL STRAP-ON BRACKET (Straight Leg) Extra Heavy 1/8" Steel, Hot dipped galv. with 5/16" tapped hole. Slotted for 3/4" Strap. Mounting Bolt not included.</p> <p>H1-SLSS STAINLESS STEEL BRACKET Includes Mounting Bolt.</p>	<p>H6-STB SEAL-TITE BOLT 5/16" X 1/2" bolt with Neoprene washer for mounting Signs with tapped brackets or pipe.</p>
	<p>H2-FL STRAP-ON BRACKET (Flared Leg) For banding to large poles. Extra Heavy 1/8" Steel, Hot dipped galv. with 5/16" tapped hole. Slotted for 3/4" Strap.</p> <p>H2-FLSS STAINLESS STEEL BRACKET Includes Mounting Bolt.</p>	<p>H6-TPBKEY KEY WRENCH For tamper proof bolt.</p> <p>H6-TPDR RACKET DRIVER For tamper proof bolt.</p> <p>H6-TP TAMPER PROOF BOLT 5/16" X 1/2" special spanner head bolt. Use same as H6-STB bolt.</p>
	<p>H3-CLB STRAP-ON BRACKET CANTILEVER Heavy Gauge Aluminum Use one for each sign hole. For mounting double face Signs - slotted for 3/4" strap and punched for 5/16" bolts.</p>	<p>H6-VGNG For Galv. Bolt H6-VGNP For Plated Bolt VANDLGARD-NUT Tamper Proof Nut for Sign Mounting Call Western Highway for information on this unique, easily installed nut that cuts sign losses.</p>
	<p>H4-D-007 STRAP-ON L-MOUNT BRKT. Stainless Steel Double holes for mounting long signs. May be used back to back in pairs for extra rigid cantilever mounting. Slotted for 3/4" Strap.</p>	<p>H6-2.5 BG 2 1/2" - Galv. H6-2.5 BP 2 1/2" - Plated BUTTON THEFT PROOF BOLT When this button head bolt is used with nut H6-VGN above, theft is almost impossible. 5/16" Diameter. Available in both galvanized and plated.</p> <p>H6-4.5 CB 4 1/2" Plated Carriage Bolt includes adaptor washer. Washer can be sold as separate item.</p>
	<p>H5 BOLT-ON SPACER Galv. Channel Iron 1 1/2" x 1 1/2" x 1/8" Provides flat mounting surface when bolting sign to any size pipe to prevent wobble.</p>	<p>H6-23 SIGN MTG. HDWR. For U Channel Posts. Aluminum spacer 3 1/2" x 2 1/2", 5/16" x 2 1/2" Bolt, Washer and Nut.</p> <p>H6-24 GUIDE PLATE MTG. HDWR. 1/4 X 1/2" Bolt, Washer and Lock Nut (8 sets reqd. per Guide Marker).</p>

SIGN MOUNTING HARDWARE



HWSSC
STAINLESS STEEL-CLAMP
 Inexpensive and convenient for mounting sign brackets and other uses. 32" long fits 2" to 9" diameter pipe pole.



H9-2
H9-2.5
CLAMP ON U-BRACKETS
 (Single Bracket)
 Includes steel zinc coated U bolt with nuts and cast aluminum bracket. Sign fastening bolt not included.
 (Use H6-STB or H6-TP)
 Fits 2" and 2 1/2" I.D. standard pipe, eliminates strapping or drilling holes.



H10-1 (3/16 x 1 x 36")
SIGN BRACE (Galv.)
 To fit 4 x 4 posts.
H10-2 (3/16 x 1 x 37 1/4")
 To fit 4 x 6 posts.
H10-4.5HG
HEX HEAD BRACE BOLT
 5/16" x 4 1/2" Includes nut & washer.
H10-6.5HG
HEX HEAD BRACE BOLT
 5/16" x 6 1/2" Includes nut & washer.
H10-8.5HG
HEX HEAD BRACE BOLT
 5/16" x 8 1/2" Includes nut & washer.



H11-C203 3/8"
H11-C204 1/2"
H11-C205 5/8"
H11-C206 3/4"
HEAVY DUTY
BANDING TAPE
 .030 Stainless Steel 100 Ft. Roll.



H16-C253 3/8"
H16-C254 1/2"
H16-C255 5/8"
H16-C256 3/4"
HEAVY DUTY
BUCKLES
 Stainless Steel 100 per Box.

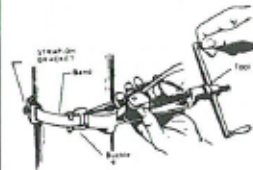


H14-C130
3/4" STRAPPING TAPE
 .015 Stainless Steel
 200 Ft. Roll.



H14-C163
3/4" STRAPPING TAPE
 .020 Stainless Steel
 200 Ft. Roll.

H14-C156
VALUE CLIP
 100 per Box.



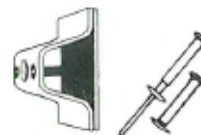
H18-C001
BANDING TOOL
 For use with any size Banding or Strapping Tape.



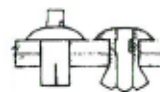
H19-HP2
HAND PLIER RIVETING TOOL
 For self-setting rivets. Complete with 4 size Heads - 3/32, 1/8, 5/32, 3/16.



H20-AB66A
3/16" SELF-SETTING RIVETS
 For fastening C.M. Ref. Buttons with Hand Plier. 100 per Box.



H20-18
1/4" x 7/8" POP RIVET
 100 per Box.



H20-26
CHERRY-MATE FASTENER
1/4" X 1 3/8" POP RIVETS
 A convenient way to mount signs on the H21-SP sign posts. 100 per Box.

H20-316 3/16" x 9/16"
DRIVE RIVETS
 For fastening C.M. Ref. Buttons with Hammer.

H20-38 3/8" x 1/2"
 For sign mounting. 100 per box.

APPENDIX G

UTILITY POTHOLE LOG CONTRACTOR'S FORM

Utility Pothole Log

Brook Street Park Improvements Project, Project #012-9179

(To be filled out and submitted to the Engineer prior to commencing excavation work)

The Contractor shall notify Underground Service Alert (800-227-2600) prior to potholing for utilities.

The Contractor shall positively locate all utilities (laterals and mains) marked by utility representatives or identified by the Engineer.

Address	Approx. Station	Offset From Existing Improvement or Centerline	Utility Owner and Type	Depth
<i>2685 Sample Street</i>	<i>10+53</i>	<i>2' from North Gutter Lip, in Street</i>	<i>PG&E (Gas Service)</i>	<i>36"</i>

*Depth measured from existing surface

Please sign and date attesting that the above information is true and correct to the best of your knowledge.

Contractor Name: _____

Signature of Contractor's Representative: _____

Date: _____

Signature of City of Lafayette Representative: _____

Date: _____