

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 2020 ROAD RESURFACING PROJECT

Project No. 014-9724

**Bid Opening Date
Tuesday, July 7, 2020, 2:00 p.m.**

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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., Tuesday, July 7, 2020, at which time they will be publicly opened and read, for construction of **City of Lafayette, 2020 Road Resurfacing Project, Project No. 014-9724**, including, but not limited to: mobilization; traffic control and construction signage; potholing utilities; clearing and grubbing including tree protection, trimming, and removal; removal and disposal of asphalt concrete pavement and subgrade, concrete and asphalt curb, gutter, flatwork; construction of minor concrete structures, concrete and/or asphalt curb, gutter, driveways, asphalt concrete pavement, storm drain facilities, vehicle detection loops, traffic stripes, markers, and markings; adjustment of utility covers; installation of survey monuments; 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 \$2,200,000.

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, 2020 Road Resurfacing Project, Project No. 014-9724**".

The Contractor shall possess a Class "A" 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 **sixty (60) 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 Matt Luttrupp, City Engineer's Office, (925) 299-3247.

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; 2020 Road Resurfacing Project, Project No. 014-9724* is accessible under *Projects Bidding*).

CITY OF LAFAYETTE

Date: June 3, 2020

By: /s/
Matt Luttrupp, Engineering Services Manager

**CITY OF LAFAYETTE
CALIFORNIA
BID PROPOSAL
2020 ROAD RESURFACING PROJECT
PROJECT No. 014-9724**

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>
_____	_____	_____	_____
_____	_____	_____	_____

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2020 ROAD RESURFACING PROJECT
PROJECT NO. 014-9724
BID SCHEDULE

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Mobilization (SP-12)	1	LS		
2	Project Identification Signs (City Furnished) (SP-12)	10	EA		
3	Construction Area Signs (SP-13)	26	EA		
4	Traffic Control (SP-14)	1	LS		
5	Clearing and Grubbing, Tree Trimming, and Tree Protection (SP-16)	1	LS		
6	Remove Tree and Stump (SP-16)	5	EA		
7	Adjust Existing Manhole or Rodding Inlet Frame and Cover to Grade (SP-17)	38	EA		
8	Adjust Existing Utility Valve Frame and Cover to Grade (SP-17)	57	EA		
9	Adjust Water Meter Box to Grade (SP-17)	6	EA		
10	Remove Asphalt Concrete Driveway, Pathway, or Shoulder (SP-17)	5,130	SF		
11	Remove Asphalt Berm (SP-17)	4,427	LF		
12	Remove Speed Bump (SP-17)	3	EA		
13	Remove Paver Driveway or Pathway (SP-17)	73	SF		
14	Remove Concrete Curb and Gutter (SP-17)	26	LF		
15	Remove Concrete Driveway, Sidewalk, or Shoulder (SP-17)	472	SF		
16	Remove Storm Drain Pipe, Various Sizes (SP-17)	213	SF		
17	Remove Object Marker (SP-17)	2	EA		
18	Relocate Mailbox on New Post (SP-17)	4	EA		
19	Concrete Curb and Gutter (SP-23)	152	LF		
20	A1-6 Concrete Curb (SP-23)	179	LF		
21	Concrete Curb Ramp with Detectable Panel (SP-23)	769	SF		
22	Concrete Collar (SP-23)	1	EA		
23	Type 'G' Inlet (SP-23)	1	EA		
24	Type 'J' Inlet (SP-23)	1	EA		
25	12-Inch HDPE Pipe (SP-24)	61	LF		
26	15-Inch HDPE Pipe (SP-24)	267	LF		
27	Re-grade Existing Earth Ditch (SP-28)	207	LF		
28	Clean Existing Paved Ditch (SP-28)	412	LF		
29	Conform and Wedge Grind Asphalt Pavement (SP-18)	24,328	SF		

2020 ROAD RESURFACING PROJECT
PROJECT NO. 014-9724
BID SCHEDULE

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
30	Crack Seal Pavement (SP-21)	1	LS		
31	Pavement Repair (6-inch) (SP-22)	16,915	SF		
32	Road Widening and Inlay (0.3') (SP-22)	2,547	SF		
33	Asphalt Concrete Pavement (SP-22)	4,264	TONS		
34	Overlylay AC Driveway, Pathway or Conform Paving (SP-22)	11,615	SF		
35	AC Driveway, Pathway or Shoulder on Existing Base Material (SP-22)	2,238	SF		
36	AC Driveway, Pathway or Shoulder on 6" Class II AB (SP-22)	583	SF		
37	Asphalt Speed Bump (SP-22)	3	EA		
38	Type 'A' Asphalt Dike/Berm (SP-22)	3,564	LF		
39	Type 'C' Asphalt Dike/Berm (SP-22)	861	LF		
40	Remove Pavement Markers and Thermoplastic Stripes and Markings (SP-17)	1	LS		
41	Temporary Pavement Delineation (SP-14)	1	LS		
42	Detail 21- Centerline (SP-25)	105	LF		
43	Detail 22- Centerline (SP-25)	9,607	LF		
44	Detail 27B (Fog Line) (SP-25)	18,774	LF		
45	Detail 38 (SP-25)	50	LF		
46	12-Inch Thermoplastic Stripe (SP-25)	1,049	LF		
47	Thermoplastic Pavement Legends and Markings (SP-25)	507	SF		
48	Two-Way Reflective Pavement Markers (Blue) (SP-25)	10	EA		
49	Adjust or Install New Monument Frame and Cover (SP-26)	14	EA		
50	Metal Beam Guard Railing (Reconstruct with Re-used Railing) (SP-27)	1,019	LF		
51	Metal Beam Guard Railing (New) (SP-27)	24	LF		
52	3/4 Wrap Guard Rail End Seciton (SP-27)	1	EA		
53	Object Marker (SP-28)	1	EA		
54	Relocate Sign(s) on New Post (SP-28)	2	EA		
55	Pathway Header Board with Steel Stakes or Attached to Fence Posts (SP-28)	46	LF		
56	Shoulder Backing (SP-28)	6,651	LF		
57	Install Vehicle Detection Loop (SP-29)	2	EA		
	TOTAL BASE BID				

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.	_____	_____	_____	_____

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

License No. _____ Class _____

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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.

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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

2020 ROAD RESURFACING PROJECT

PROJECT NO. 014-9724

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 _____, 2020.

BIDDER _____

SURETY _____

Subscribed and sworn to this ____ day of _____, 2020.

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 _____, 2020, 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 **2020 Road Resurfacing Project, Project No. 014-9724**, including, but not limited to: mobilization; traffic control and construction signage; potholing utilities; clearing and grubbing including tree protection, trimming, and removal; removal and disposal of asphalt concrete pavement and subgrade, concrete and asphalt curb, gutter, flatwork; construction of minor concrete structures, concrete and/or asphalt curb, gutter, driveways, asphalt concrete pavement, storm drain facilities, vehicle detection loops, traffic stripes, markers, and markings; adjustment of utility covers; installation of survey monuments; 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 _____ 2020.

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 _____ 2020.

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 **2020 Road Resurfacing Project, Project No. 014-9724**, including, but not limited to: mobilization; traffic control and construction signage; potholing utilities; clearing and grubbing including tree protection, trimming, and removal; removal and disposal of asphalt concrete pavement and subgrade, concrete and asphalt curb, gutter, flatwork; construction of minor concrete structures, concrete and/or asphalt curb, gutter, driveways, asphalt concrete pavement, storm drain facilities, vehicle detection loops, traffic stripes, markers, and markings; adjustment of utility covers; installation of survey monuments; 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 _____, 2020.

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 **2020 Road Resurfacing Project, Project No. 014-9724**, including, but not limited to: mobilization; traffic control and construction signage; potholing utilities; clearing and grubbing including tree protection, trimming, and removal; removal and disposal of asphalt concrete pavement and subgrade, concrete and asphalt curb, gutter, flatwork; construction of minor concrete structures, concrete and/or asphalt curb, gutter, driveways, asphalt concrete pavement, storm drain facilities, vehicle detection loops, traffic stripes, markers, and markings; adjustment of utility covers; installation of survey monuments; 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 _____, 2020.

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 including, but not limited to: mobilization; traffic control and construction signage; potholing utilities; clearing and grubbing including tree protection, trimming, and removal; removal and disposal of asphalt concrete pavement and subgrade, concrete and asphalt curb, gutter, flatwork; construction of minor concrete structures, concrete and/or asphalt curb, gutter, driveways, asphalt concrete pavement, storm drain facilities, vehicle detection loops, traffic stripes, markers, and markings; adjustment of utility covers; installation of survey monuments; 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, driveway paving conform limits, removal and replacement of pavement, curb, gutter, and driveways of all kinds.

The City shall provide all construction survey staking for alignment and grades of roadway, curb, gutter, storm drain, 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.

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 and pathway 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.

If a test shows that materials or work in question fails to meet the Specifications, retests shall be taken after the Contractor takes corrective measures. Retests shall be repeated until a passing test is obtained. All costs incurred by the City in retesting shall be deducted from the money due to the Contractor.

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 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
- Detectable Domes for Curb Ramps
- Storm Drain Inlet Grates and Covers
- Pipes
- Retaining Wall Lagging
- Fence Lumber
- Pavement Markers
- Thermoplastic Striping Material
- Sign and Post Materials
- Survey Monument Frames and Covers

- Water Pollution Control Plan
- Waste Management Plan
- Traffic Control Plan and Certification of Qualified Personnel
- CAL/OSHA Excavation Permit

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) Notify Underground Service Alert (USA) to have utilities marked
- 2) Install construction area signs and project identification signs one week in advance of the start of work on a specific street or work area
- 3) Install water pollution control measures
- 4) Install tree protection
- 5) Submit waste management plan prior to commencing any demolition work
- 6) Perform utility potholing work to confirm depths of existing utility lines. No additional excavation work will be permitted until Contractor's Utility Pothole Log (Appendix C to Standard Specifications) is submitted to the Engineer
- 7) Clearing, grubbing, tree trimming and tree removal
- 8) Sawcut driveway conforms
- 9) Remove, repair, modify, and/or construct storm drain facilities
- 10) Remove, replace, and/or construct concrete curb, gutter, sidewalk, driveways, and other flatwork
- 11) Excavate and remove shoulder area
- 12) Sawcut and remove pavement at transverse conform joints at limits of paving.
- 13) Conform grinding and wedge grinding
- 14) Pavement repairs, inlay and widening
- 15) Crack Sealing
- 16) Reference survey monuments, manhole covers, and valve covers
- 17) Place asphalt concrete finish course
- 18) Place temporary roadway delineation
- 19) Place asphalt concrete berms and speed bumps
- 20) Pave driveway conforms and road shoulders
- 21) Raise/adjust all existing monument and utility frames and covers to final grade. Install new monuments

- 22) Place permanent striping, markers and legends
- 23) Complete all other construction work and punch list items
- 24) Remove tree protection, construction area signs and project identification signs
- 25) Submit completed waste assessment summary report form
- 26) Submit as-built plans

The Contractor's attention is directed to Section SP-8-2, "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 must be issued each time a driveway access is restricted and must indicate the specific date and time of the anticipated restricted access.

Contractor shall note that Valley Waste Management, listed in Section 6-10, is no longer a service provider for Lafayette properties. The new solid waste company is Republic Services and they may be reached at (925) 685-4711.

SP6-02 CORDINATION WITH WASTE/RECYCLING OPERATIONS

The Contractor shall not impair or impede waste hauler and recycling operations scheduled to be conducted within the project area. It is the Contractor's responsibility to determine which waste haulers and recycling operators are scheduled to operate within the project area and to develop a project schedule that will not impair or impede the waste haulers or recycling operations. Contractor acknowledges that he is aware that various haulers and operators operate on different days on different streets within the project area.

SP6-03 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.

Contractor shall pothole all existing utilities that may be in conflict with the proposed work and shall document the location and depth of these utilities on the Utility Pothole Log, included in the Appendix of these Special Provisions.

The Contractor shall confirm all utilities are below the designed storm drain line. Contractor shall take precautions to protect manholes, valves, and similar facilities within areas to receive pavement grinding.

If the Contractor determines that utilities are in conflict with the proposed storm drain line the Contractor shall notify the Engineer immediately.

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 rearrange the obstructions for the construction of the proposed improvements, the Contractor shall assume responsibility for notifying the City and for coordination of this work. In either case, no additional compensation shall be allowed to the Contractor for delays or inconveniences. The Contractor may request the City to adjust the contract working days by an equal number of days that it takes to resolve the obstructions, if the controlling item of work is delayed.

SP7-01 UTILITY CONTACTS

At the time of writing of these Specifications, at least the following agencies are known to have facilities within the limits of the Project. Their phone numbers are provided for the Contractor's convenience. It is the Contractor's responsibility to verify the contact information and perform the coordination as required by Contract.

A. Central Contra Costa Sanitary District	925.228.9500
B. East Bay Municipal Utility District	510.287.0834
	866.403.2683
C. AT&T	415.542.9000
D. Pacific Gas and Electric	
Emergency	800.743.5000
Gas	510.784.3211
Electric	510.784.3236
E. Consolidated Fire Protection District	925.930.5531
F. Comcast Cable	925.349.3300
G. Sprint	650.513.2545

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 on **Tuesday, July 28 at 2:00 p.m.** at the City Offices located at 3675 Mount Diablo Boulevard, 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 is 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;
- Review of traffic control procedures;
- At the preconstruction meeting the Contractor shall provide a Cal/OSHA trenching permit;

SP8-02 PROGRESS SCHEDULE

The Contractor shall submit the construction progress schedule to the Engineer at the pre-construction 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 6:00 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 **sixty (60)** 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 count of working days for this project will start no later than Monday, August 3, 2020.

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 AND 2)

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 and incidentals, and for all the work involved in mobilization of forces, equipment, materials, and meeting all general conditions and provisions of Contract Documents and as directed by the Engineer, and no additional compensation will be allowed therefor.

The Contract Price paid for each "**Project Identification Sign (City Furnished)**" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals, and for doing all the work involved in coordinating with the City to obtain the sign, transporting, installing signs on barricades, maintaining signs, removing signs and barricades, and returning signs to the City as specified in the Standard Specifications and these Special Provisions and as directed by the Engineer and no additional compensation will be allowed therefor.

SPECIAL PROVISIONS SECTION SP-13

CONSTRUCTION AREA SIGNS

(BID ITEM NO. 3)

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 on each street. 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: 1-800-227-2600), 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.

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 sign posts installed.

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. 4)

TEMPORARY PAVEMENT DELINEATION

(BID ITEM NO. 41)

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.

SP14-02 LANE CLOSURES AND LANE CLOSURE HOURS

“Traffic Lane” shall be defined as that portion of the roadway for the movement of a single line of vehicles.

“Lane Closure” shall be defined as the temporary closure of a portion or the full width of an existing traffic lane. The temporary shifting of an existing traffic lane to shoulders, parking areas, medians or other areas of the roadway shall be considered a lane closure.

At least one ten (10) foot wide vehicular traffic lane must be open to the public traffic at all times, when work is in progress, for all contract work. A minimum of two (2) flagmen are required when lane closures result in only one (1) open lane for two-directional traffic. The Contractor shall provide communication equipment, approved by the Engineer for flagmen.

Lane closures will be allowed between the hours of **9:00 am and 5:00 PM**, Monday through Friday. Emergency vehicles shall be provided with immediate access through the construction area at all times. If work is not in progress during allowed lane closure hours and a traffic lane is closed, the Engineer may order the lane opened to public traffic.

CMS (changeable message signs) shall be placed at each end of the project street 1 week in advance of the start of grinding, pavement repair and paving work. The changeable message signs shall remain in full, continuous operation until such time asphalt berms have been installed. The initial message shall read:

Road Repaving Work

Date –Date

9:00 am – 5:00 pm M-F

Expect Delays

SP14-03 FAILURE TO COMPLY

Contractor’s attention is directed to Standard Specifications General Provision Section 6-12.9 “Failure to Comply”, which shall be augmented as follows.

If the Contractor fails to provide traffic control measures in conformance with the submitted traffic control plan, the Engineer may at his sole discretion issue a written warning to the Contractor. The warning shall indicate the location, date, and time of the failure to provide adequate traffic control. After the Second written warning, any violation of the traffic control provisions of the contract documents shall constitute grounds for the City to levy a penalty against the Contractor in the amount of \$500 per incident. Each hour of contract work activity occurring without traffic control as required by contract shall constitute a separate incident for the purpose of assessing the penalty. Contractor shall note that the above provisions are in addition to remedies and enforcement actions specified in Section 6-12.9 referenced above. This penalty shall be deducted from any money due to the Contractor under the Contract.

SP14-04 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 signs, changeable message signs, barricades, steel plates, traffic control plan, maintaining traffic, lane and road closures, flagmen 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.

The contract lump sum price paid for "**Temporary Pavement Delineation**" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals and for doing all the work necessary to lay out, place, maintain, and remove temporary pavement striping, legends, arrows, glue down delineators, markers and markings, and all other work 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.

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 GENERAL

Whenever the presence of dust becomes a problem, the Contractor shall furnish and apply dust control measures including street sweeping to alleviate the problem. If, in the opinion of the Engineer, the presence of dust has become a problem, the Engineer will specify a dust palliative in accordance with the provisions of the Standard Specifications, which the Contractor shall furnish and apply.

The contract work occurs adjacent to existing residences. Contractor shall undertake all reasonable measures to minimize the presence and impacts of dust in the work area and on the adjacent residences.

Leaf blowers shall not be used to remove debris from the project streets. Debris removal shall be performed in such a way as to minimize dust.

SP15-02 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 TRIMMING, TREE REMOVAL AND PROTECTION**

(BID ITEM NO. 5 and 6)

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

The limits of clearing and grubbing shall be of sufficient area and depth to allow unobstructed access to Contractor's workers and equipment to complete the contract work and to provide clear visibility to signs and similar facilities that require clear sight lines for intended users.

In addition to requirements of the Standard Specifications, clearing and grubbing work shall also include removing and/or relocating landscape borders, decorative rocks, 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.

Tree removal shall include grinding the remaining stump to a depth of 18" below finish grade or as necessary to clear other improvements and removal and disposal of resulting debris. Trees to be removed with a diameter less than 6-inches measured 1 foot off the ground shall be paid as Clearing and Grubbing and shall not be considered in the payment for Tree Removal.

SP16-02 MEASUREMENT AND PAYMENT

The contract lump sum price paid for "**Clearing & Grubbing, Tree Trimming, and Tree Protection**" and per each for "**Remove Tree and Stump**" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals, and for doing all the work involved in implementing tree protection measures, clearing and grubbing, tree trimming, removal and all other work as shown on the Plans, as specified in the Standard Specifications, these Special Provisions, and

as directed by the Engineer, and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-17

EXISTING HIGHWAY FACILITIES

(BID ITEM NO. 7-18 and 40)

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.

All excavation resulting from removals shall be backfilled with Class II aggregate base and compacted to 90% relative compaction.

SP17-02 REMOVALS

Contractor's attention is directed to Section 6-11, "General Safety," of the Standard Specifications General Provisions, and Section SP-27, "Temporary Pavement Delineation," of these Special Provisions.

Removals of existing road facilities not considered to be included in other Contract Work include—concrete, paver, or asphalt concrete driveway, pathway, sidewalk, shoulder, and other flatwork; concrete curb and gutter; asphalt berms, speed bumps, storm drain pipes, and structures. 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.

Where existing curb and gutter is to be removed and replaced, and the adjacent pavement is intended to remain, removal work shall include the removal of said curb and gutter and a sufficient

area of the adjacent pavement to a proper depth to allow the forming and construction of the replacement new curb and gutter.

For removals that involve sawcutting, all sawcut lines shall be approved by the Engineer prior to sawcutting. Sawcutting of 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 inches below the surface of the final condition required by Contract.

Storm drain facilities adjoining those designated to be removed shall be protected. Except where Contract Work requires a replacement facility, or otherwise directed by the Engineer, openings leading to/from the facility to be removed shall be plugged per Section 2-5 of the Technical Provisions of the Standard Specifications.

Where existing facilities such as pavers, flagstones, 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 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.

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.

SP17-04 REMOVE AND RELOCATE MAILBOX

Existing mailboxes shall be removed and reset on a new redwood post, or existing post if the owner of the mailbox prefers to salvage and re-use a painted or decorative post. Mailbox removal locations shall be as shown on the Plans or any location that an existing mailbox interferes with contract work. The exact relocation shall be designated by the Engineer or mail carrier. Mailboxes shall be removed and reset during the same work day. The new installation shall be in accordance with Contra Costa County Detail CA90i, "Mailbox Details," or matching the existing condition (post, footing, mailbox, size, color), whichever is of a higher quality or more expensive construction in current dollars. To coordinate with other construction, Contractor may set a mailbox in a temporary condition acceptable to the Engineer and the mail carrier.

SP17-05 ADJUSTING MANHOLE COVERS AND RODDING INLETS TO GRADE

Work involves storm drain and sanitary sewer and similar utility manhole covers and sanitary sewer rodding inlets. Work consists of paving over the facilities and subsequently raising them to the finished grade in conformance with Section 22-9 of the Technical Provisions of the Standard Specifications and in conformance with Central Contra Costa Sanitary District (CCCSD) Standard Plans and Specifications.

Contractor shall then coordinate his construction equipment, means, and methods to avoid damage to the existing facility during construction.

Manhole covers and rodding inlets to be paved over shall be carefully referenced out using spray chalk or similar non-permanent marking media prior to placing the overlay. Utility cover locations shall be painted on the pavement surface immediately after paving to ensure they can be found in an emergency.

Manholes and rodding inlets located within new paving limits shall be raised to finished grades per Section 22-9.2 and Section 22-9.3 of the Standard Specifications, Technical Provisions, following the placement of the final lift of asphalt concrete. For all rodding inlets, the maximum distance between the finished pavement grade and the top of the riser pipe shall be six (6) inches. If the distance to the top of the riser pipe is greater than six (6) inches, the riser shall be extended with a new section of pipe connected with a mechanical fitting that produces a smooth interior with no offset or obstruction. The adjusted sanitary sewer manholes and rodding inlets shall conform to all utility company standards and requirements.

Frames and covers for sanitary sewer manholes may be re-used if they are in good condition and if the manhole covers have a nominal diameter dimension of twenty-five inches (25"). Existing frames and covers that exceed this dimension shall be replaced. In this case, the Central Contra Costa Sanitary District shall provide new frames and covers to be installed by Contractor. At its discretion CCCSD may also elect to provide new sewer rodding inlet frames and covers to be installed by Contractor. Contractor shall coordinate the delivery and integration of materials to be furnished by CCCSD with the District representative.

CCCSD at its sole discretion may elect to adjust its own facilities. In that case, the quantities shown on the Bid Schedule shall be adjusted accordingly, and Contractor shall comply with Section 22-9.3 of the Standard Specifications Special Provisions.

SP17-06 ADJUSTING EXISTING UTILITY FRAMES AND COVERS TO GRADE

Work shall consist of protecting the existing utility frames, covers and riser pipe in place and shall include all work necessary to work around the existing facilities during all phases of work. Contractor shall adjust all frames, covers and riser pipes to finished grade in conformance with Section 22-9 of the Technical Provisions of the Standard Specifications. Extension of a riser pipe shall be made using

material similar to the existing, and the two pipes shall be mechanically connected to provide a smooth interior with no offset or obstruction.

Water valves shall be adjusted to grade using a new "G5" box as shown in the detail in Appendix B. The G5 boxes will be provided by the East Bay Municipal Utility District (EBMUD) free of charge. Contractor shall coordinate the delivery or pick-up and integration of materials to be furnished by EBMUD with District representatives. All other frames and covers, shall be adjusted reusing the existing riser and cover with a concrete collar and that is topped with asphalt concrete per the detail in Appendix B.

Utility covers to be paved over shall be carefully referenced out using spray chalk or similar non-permanent marking media prior to placing the overlay. Utility cover locations shall be painted on the pavement surface immediately after paving to ensure they can be found in an emergency.

The Contractor shall phase his work so that all water valves are adjusted to finished grade within a maximum of 20 calendar days. In the event that Contractor fails to adjust said valves to grade and make them fully accessible within twenty (20) calendar days, Contractor expressly agrees to defend, indemnify, and hold harmless City of Lafayette, EBMUD and their Directors, officers, agents, and employees from and against any and all loss, liability, expense, claims, suits, and damages, including attorneys' fees, arising out of or resulting from the inability to operate said valves.

EBMUD at its sole discretion may elect to adjust its own facilities. In that case, the quantities shown on the Bid Schedule shall be adjusted accordingly, and Contractor shall comply with Section 22-9.3 of the Standard Specifications Technical Provisions.

SP17-07 UTILITY BOX ADJUSTMENTS

Where utility boxes are encountered within the limits of the planned work, Contractor shall adjust utility boxes to the new finished grade. Said adjustment shall include relocation of boxes to a new location as necessary to accommodate new construction. Relocation shall require Contractor to modify and extend the associated existing plumbing to the new location.

For water meters, Contractor shall coordinate with EBMUD to obtain new utility boxes and integrate them into the Work. 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. The boxes shall be set so that they are accessible by utility personnel.

EBMUD at its sole discretion may elect to adjust its own facilities. In that case, the quantities shown on the Bid Schedule shall be adjusted accordingly, and Contractor shall comply with Section 22-9.3 of the Standard Specifications Special Provisions.

SP17-08 NOT USED**SP17-09 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 lump sum contract price paid for **“Remove Pavement Markers and Thermoplastic Stripes and Markings”** shall be considered full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in removing stripes, markings, markers, and delineation of all kinds to construct the pavement overlay, and areas where existing or temporary markers and markings are in conflict with those shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensations shall be made therefor.

The Contract Prices paid per linear foot for **“Remove Concrete Curb and Gutter”** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to remove and dispose of existing concrete curb and gutter, adjacent asphalt pavement or other paving as necessary to accommodate form boards, and all excavation and backfill as 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. No adjustment in the bid item price shall be allowed due to any change in contract quantities.

The Contract Prices paid per square foot for **“Remove Concrete Driveway, Sidewalk or Shoulder,” “Remove Paver Driveway or Pathway,” “Remove Asphalt Concrete Driveway, Pathway, or Shoulder,”** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to sawcut, remove, dispose of and/or salvage 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 Speed Bump”** and the contract price paid per linear foot for **“Remove Asphalt Berm”** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to remove and dispose of existing asphalt speed humps, and berms to install new improvements as shown on the contract plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

The Contract Price paid per each for **“Relocate Mailbox on New Post”** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to perform the demolition, removal, disposal or salvaging as directed, remove and reset mailboxes, including, but

not limited to all excavation and backfill, temporary installations, new mailbox posts and concrete footings, and all other work as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

The Contract Price paid per each for **“Remove Object Marker”** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment, and incidentals, and for doing the work involved in removing existing object markers where designated and all other work as shown on the Plans, as specified by 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 **“Adjust Existing Manhole or Rodding Inlet Frame and Cover to Grade”** and **“Adjust Existing Utility Valve Frame and Cover to Grade”** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to raise the frames and covers to meet CCCSD and City of Lafayette standards, including but not limited to- locating, referencing, and setting marks; all coordination work; raising the facility to finished grade; placement of concrete collars and temporary and permanent asphalt concrete; and all other work 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. Contract quantities may be reduced or eliminated based on work to be performed by others. No adjustment in the bid item price shall be allowed due to any change in contract quantities.

The contract unit prices paid per each for **“Adjust Water Meter Box to Grade”** shall include full compensation for relocating and or adjusting existing water meters boxes to grade, including installing a new box as required, and for all required excavation, backfilling and compaction work and for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in adjusting the facilities to grade complete in place, as shown on the plans and/or 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. These items may be eliminated from the contract and the work performed by EBMUD.

The Contract Prices paid per linear foot for **“Remove Storm Drain Pipe (Various Sizes)”** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to excavate, sawcut, remove, and dispose of the existing facilities, including shoring and backfill where required, and all other work as noted on the plans, as specified by these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-18

PAVEMENT GRINDING

(BID ITEM NO 29)

SP18-01 GENERAL

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.

Work includes milling pavement in areas to receive an asphalt concrete inlay. Cold planing of areas to receive inlay include grinding to correct the grades and cross-slope of the existing roadway. In some areas Contractor may be required to make multiple passes to achieve the desired grades.

Cold planing shall be performed so as not to produce fumes or smoke. The cold planing machine shall be capable of planing the pavement without requiring the use of a heating device to soften the pavement during or prior to the planing operation. The depth, width, and shape of the cut shall be as indicated on the typical cross sections or as directed by the Engineer. The final cut shall result in a uniform surface conforming to the typical cross sections or details. The outside lines of the planed area shall be neat and uniform. The road surfacing and PCC gutters to remain in place shall not be damaged in any way by the planing.

Cold planing at pavement conforms and wedge grinding, on each street, shall be done within seventy-two (72) hours of the start of the asphalt concrete overlay paving operation.

SP18-02 TEMPORARY ASPHALT CONCRETE RAMPS

Where transverse joints are planed in the pavement at conform lines, and at driveways and side streets, no drop-off shall remain between the existing pavement and the planed area when the pavement is opened to traffic. If asphalt concrete has not been placed to the level of existing pavement before the pavement is opened to traffic, a temporary hot-mix asphalt concrete ramp shall be constructed to the level of the existing pavement and tapered on a slope of 30:1 or flatter to the level of the planed area or as shown on the plans. 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 conform cold planning, wedge grinding, and inlay operations.

SP18-03 MATERIAL REMOVAL

The material planed from the roadway surface and parking areas, including material deposited in existing gutters or on the adjacent traveled way, shall be removed and disposed of outside the street right-of-way in accordance with the provisions of Section 6-16, "Disposal Outside Project Limits", of the General Provisions of the Standard Specifications. Removal operations of planed material shall be concurrent with planing operations, unless otherwise directed by the Engineer. The Contractor shall provide and operate a street sweeper during all cold planing activities to ensure the planed surface is free of all loose material. The Contractor shall immediately remove any incidental pavement

grindings resulting from the cold planing from roadway areas open to public traffic. At locations where all existing asphalt concrete is removed by cold planing, the Contractor shall compact the exposed subgrade to 95% relative compaction to 0.50' below the grading plane.

Cold planed material from this project or any other source shall not be used on this project unless otherwise allowed in these Special Provisions and approved by the Engineer. Cold planed excavation material will consist of asphalt concrete, base material and native material. The material to be excavated by cold planing may contain reinforcing fabric and/or other particles that are a by-product of asphalt concrete. The City makes no guarantee that the material excavated by cold planing will be reusable or recyclable. No additional compensation shall be allowed to the Contractor if the cold planed material is not reusable or recyclable. Any testing (if required) by the disposal site shall be arranged and paid for by the Contractor.

SP20-04 MEASUREMENT AND PAYMENT

The quantities to be paid will be measured irrespective to the number of passes required to cold plane the areas to the specified measurement as shown on the Plans.

The contract prices paid per square foot for **“Conform and Wedge Grind Asphalt Pavement”**, 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, wedge grinding, leveling grinding, loading, hauling, disposing of planed material, and street sweeping, including furnishing the asphalt concrete for and constructing, maintaining, removing, and disposing of temporary asphalt concrete ramps and all other work as shown on the Plans, as specified in the Standard Specifications, the State Specifications, and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

SPECIAL PROVISIONS SECTION SP-19

AGGREGATE BASE **(NO BID ITEM)**

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.

For certain installations, in lieu of Class II aggregate base, Contractor may be allowed to use pulverized material with maximum-size aggregates less than two (2) inches, generated from Project Work. The pulverized material shall be free of organic and other deleterious debris. The Engineer shall determine whether the material is suitable as a substitution based on inspection. The Engineer’s decision shall be at his sole discretion, shall be final, and shall not constitute a contract change.

SP19-01 MEASUREMENT AND PAYMENT

There shall be no separate measurement or payment for furnishing and placing the aggregate base used in the construction of the 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 (NOT USED)

SPECIAL PROVISIONS SECTION SP-21

CRACK SEALING
(BID ITEM NO. 30)

SP21-01 GENERAL

The provisions of Section 12-2, "Crack Fill Repairs," of the Technical Provisions of the Standard Specifications shall apply in their entirety except as modified or supplemented herein.

SP21-02 MATERIALS

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

Crack sealing will be performed on the portion of the roadway that will not receive the SAMI-R treatment.

The asphalt-rubber shall be heated to a minimum temperature of 325°F, but not greater than 390°F, or as specified by the manufacturer and as approved by the Engineer. The material shall be held in the mixing tank at application temperature until very little separation of the rubber and asphalt occurs when a bead of sealant material is placed on the pavement. Sealant material may be added to the mix as long as the minimum temperature of 325°F is maintained. Asphalt rubber binder shall be applied when atmospheric temperature is between 60°F and 105°F, and pavement surface temperature is between 75°F and 140°F.

Sand used to cover sealed cracks for opening to traffic shall be black "Kleen Blast" sand as available from White Cap Construction Supply, Concord, CA, or approved equal.

Cracks greater than 1 inch in width shall be repaired with fine hot-mix asphalt Type B, No. 4 filler, conforming to State Specifications. Contractor shall submit a mix design for this material for approval prior to use.

SP21-03 MEASUREMENT AND PAYMENT

The lump-sum Contract Price paid for “**Crack Seal Pavement**” shall be considered as full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in crack sealing, including, but not limited to, routing, blowing, crack filling, sanding and clean-up, 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-22**ASPHALT CONCRETE**
(BID ITEM NO. 31-39)

The provisions of Section 5, “Street Failed Area Repair,” of the Technical Provisions of the Standard Specifications shall apply in their entirety except as modified or supplemented herein.

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. Failed pavement area repair shall conform to Section 5, “Street Failed Area Repair,” of said Technical Provisions.

Asphalt Concrete shall be placed in accordance with section 9-5 “Placement” of Technical Provisions of the Standard Specification. Type I, 3/4” maximum sized aggregate (MSA) asphalt mix shall be used for all pavement repairs and skin patches.

SP22-01 PAVEMENT REPAIR, INLAY, AND ROAD WIDENING AREAS

Paint markings delineating the approximate size and location of the pavement repair areas have been made in the field on streets included in this Contract. The Contractor shall submit a request for any re-marking in writing five (5) working days in advance of beginning pavement repair work. Actual quantities may be greater or less than the quantities shown on the Bid Schedule.

In areas designated for “Pavement Repair”, “Inlay”, and “Road Widening” as marked in the field by the Engineer, the existing base and bituminous surfacing shall be removed by cold planing, or sawcutting and excavating to the depth shown on the contract plans. Pavement repair areas shall be a minimum of 4-feet in width. Pavement removed beyond the limits designated by the Engineer shall be considered to be for the Contractor’s convenience and shall be at no additional expense to the City. The excavated area shall be backfilled with asphalt concrete, compacted, and finished as shown on the Plans and as specified in these Special Provisions.

SP22-01 DRIVEWAYS, PATHWAYS, SPEED BUMP, AND SHOULDER CONFORM PAVING

Asphalt driveway, pathway, speed bump, and shoulder conform limits are approximate. The Engineer will delineate actual conform lines prior to the start of work. Substrate conditions for conform paving

differ depending on the project location as shown on the Plans. Conform paving may be installed on existing pavement, on existing base, or on new subbase. In all cases, a paint binder (tack coat) conforming to Standard Specification Technical Provision Section 9-11 shall be required. When conform paving is installed on unpaved base materials, the minimum thickness of finish asphalt concrete paving is three (3) inches.

Where asphalt concrete thickness is required to be three (3) inches minimum, Contractor may install asphalt concrete in multiple lifts to a total thickness greater than three (3) inches to meet the design or conform grades. At Contractor's option, suitable backfill materials may be used to prepare the subgrade such that the finish asphalt concrete paving meets the three (3) inch minimum. Suitable backfill may be Class II Aggregate Base conforming to SP-19 or pulverized material, having maximum-size aggregates less than two (2) inches, generated from Contract Work and determined to be suitable by the Engineer.

Where a new subbase is required per the Contract Plans, the subgrade shall be excavated and compacted to the required depth to accommodate the design structural section. New subbase shall be six (6) inches minimum, consisting of Class II aggregate base conforming to SP-19 and compacted to 95% relative compaction.

All asphalt conforms shown adjacent to a berm of any type shall be paved at the same time as the berm placement and shall be compacted with a vibraplate, small roller, or similar compactor, at the time of placement.

SP22-02 ASPHALT BERM (DIKE)

Berms, or dikes, shall be in accordance with applicable details shown on State Standard Plans. Berm locations include those shown on the Plans.

Prior to placement of the berm, the underlying pavement shall be thoroughly cleaned and a tack coat per Standard Specifications Technical Provisions Section 9-11 shall be applied to the pavement surface. The berm shall be placed and compacted utilizing a self-propelled mechanical extruding machine capable of achieving the lines and grades shown on the Plans and the finished dimensions for the specified type of berm. The Contractor shall protect newly-placed berm to allow sufficient time for curing. Berms that slough, fall apart, or otherwise become damaged before curing shall be completely removed and replaced at the Contractor's expense. If a section of berm looks "patched," it shall be entirely removed and replaced with a conforming berm that is smooth and uniform in appearance.

Berms shall be reduced to 2-inches in height at driveways. The top of the berm at driveways shall be compacted with a vibraplate, or similar compactor, at the time of placement. Driveway and shoulder conforms adjacent to any asphalt concrete berms shall be placed and compacted at the same time as the berms to achieve a monolithic construction.

The ends of new Type 'A' berms shall be painted white with two coats of traffic paint for a minimum

length of one foot, and a Type “C” pavement marker shall be placed on top of the berm where it tapers to end.

Private drain lines terminating near the edge of the existing road shall be extended through the face of new Type ‘A’ asphalt berm using 3” diameter schedule 40 PVC pipe. Contract Work for the installation of new asphalt berms shall include extending said drain lines to the new face of berm and integrating them into the new construction.

All berms shall be backed with either asphalt concrete conform paving, select fill, pulverized material, aggregate base, topsoil, gravel, or other material that matches the existing surrounding shoulder material.

SP22-03 MEASUREMENT AND PAYMENT

The contract unit price paid per ton for **“Asphalt Concrete Pavement”** shall be considered as full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals to complete the necessary work, including but not limited to- cleaning existing pavement; furnishing, transporting, placing, spreading and compacting asphalt concrete; tack coat binder; constructing, maintaining, removing, and disposing of temporary asphalt concrete ramps; all roadway conform paving; any necessary corrective measures; and all other work 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 unit prices paid per square foot for **“AC Driveway, Pathway, or Shoulder on Existing Base Material”**, **“AC Driveway, Pathway or Shoulder on 6” Class II AB”**, and **“Overlay AC Driveway, Pathway or Conform Paving”** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals and for doing all work involved including but not limited to- excavation required to install required structural section; 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 these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

The contract unit prices paid per linear foot for **“Type ‘A’ Asphalt Dike/Berm”** and **“Type ‘C’ Asphalt Dike/Berm”** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to construct the asphalt concrete dike including but not limited to- cleaning; tack coat binder; placing, compacting, and protecting; white traffic paint and Type “C” markers on Type ‘A’ berm ends; incidental extension of private drain pipes to be incorporated into the berm construction; and all other work 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 unit price paid per square foot for **“Pavement Repair (6-inch)”** and **“Road Widening and Inlay (0.3’)”** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals and for doing all the work involved including, but not limited to, cold planing, sawcutting, excavating, loading, off hauling, disposing of materials, subgrade preparation and

compaction, tack coat, and 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, the State Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

The contract unit price paid per each for **“Asphalt Speed Bump”** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals and for doing all work involved including, but not limited to, preparation, cleaning, asphalt emulsion, furnishing, placing, spreading, and compacting the asphalt concrete to the specified depths, and all other work as shown on the Plans, as specified in the Standard Specifications, the State Specifications and these Special Provisions, and as directed by the Engineer and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-23

CONCRETE CONSTRUCTION

(BID ITEM NO. 19-24)

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. Section 17-7 of said Technical Provisions shall also apply to construction of storm drain inlets.

SP23-01 GENERAL

All new curb, gutter, and storm drain structures 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.

All new inlet tops shall have a City-furnished sticker, stating “No Dumping – Drains to Creek.” affixed to the curb or other logical nearby location.

All new storm drain connections to new or existing storm drain inlets or manholes shall include a weep hole to drain the pipe backfill. Weep holes shall only be required where new storm drains enter the structure.

All new storm drain inlets shall have one 4” PVC schedule 40 pipe stubbed into the structure for future private drain connections. Pipe shall extend a minimum of 6 inches beyond the outside wall of the structure and as directed by the engineer. Pipe shall be capped with a PVC cap.

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, 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.

SP23-02 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. The maximum slump shall be four (4) inches.

Slurry backfill for trenches shall conform to Section 19-3.02G, "Controlled Low-Strength Material," of the State Specifications. Material shall have a minimum compressive strength of 100 pounds per square inch.

SP23-03 MINOR CONCRETE CONSTRUCTION

Curb and gutter shall match existing curb and gutter configuration except that 6 inches of base rock shall be placed under new curb and gutter and gutter cross slopes greater than 5 percent shall be flattened to 5 percent where feasible. Engineer shall provide field direction for adjusting cross slopes.

Where curb drains exist in curb and gutter to be removed and replaced, Contract Work for the replacement new curb and gutter shall include extending said drain lines to the new face of curb and integrating them into the new construction conforming to the details shown on the Plans or various Standard Plans.

Dowels used in connections between new and existing facilities shall be #4 rebars, 12" long. The dowels shall be in drilled holes, secured with epoxy, and spaced in conformance with the details shown on CCC Standard Plan CA74i and these Special Provisions. All dowels shall have a minimum 1½" 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 7 of the Standard Specifications General Provisions. Contractor shall repair any damage on the same day that it is caused by his activities, to a fully functional condition.

SP23-04 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 B, 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).

SP23-05 CONFORM PAVING

Unless otherwise specifically provided elsewhere in these Special Provisions, conform paving adjacent to new concrete construction, such as curb, gutter, inlets and associated aprons, and valley gutter shall be considered to be included in the Contract Work to construct those items. Asphalt concrete for conform paving shall conform to SP-22.

SP23-06 MEASUREMENT AND PAYMENT

The Contract Price paid per linear foot for **"Concrete Curb and Gutter"**, **"Modified A1-6 Curb"** per square foot for **"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- sawcutting; excavation and preparing subbase; dewatering; loading, hauling, and disposal of spoils; forming, placing, and finishing concrete; backfill; conform paving; 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.

The Contract Price paid per each for **"Type 'G' Inlet"** and **"Type 'J' Inlet"** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals for doing all work involved, including but not limited to- sawcutting; removals where needed; excavation and preparing subbase; dewatering; loading, hauling, and disposal of spoils; forming, placing, and finishing concrete; installing frames and grates; backfill; doweled connections; 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.

The contract unit price paid per each for **"Concrete Collar"** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment, and incidentals for doing all the work involved in modifying the storm drain system as shown on the plans, as specified in these

Specifications, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

“Concrete Curb Ramp with Detectable Panel” shall be measured as the ramp area up to the outer most groove line defining the ramp, up to and including the adjacent retaining curb where it exists,

Concrete inlet aprons, regardless of size, are measured and paid per linear foot as “Concrete Curb and Gutter.”

SPECIAL PROVISIONS SECTION SP-24

STORM DRAINS

(BID ITEM NO. 25-26)

The provisions of Section 18, “Storm Drains”, of the Technical Provisions of the Standard Specifications shall apply in their entirety except as modified or supplemented herein.

SP24-01 CONNECTIONS

Connections between new and existing storm drain pipes and structures shall be made with a concrete collar per details shown on the Project Plans. Openings in existing structures shall be made with care so as to minimize damage to the structure wall, with the minimum clearance practicable to properly seat the connecting pipe into the opening. The connection point shall be grouted smooth. Extensive damage that is deemed by the Engineer to compromise the integrity of the structure shall be repaired by replacing the structure or the entire wall face. Concrete shall conform to the requirements of SP-23 of these Special Provisions.

SP24-02 MEASUREMENT AND PAYMENT

The Contract Prices paid per linear foot for **installation of various pipe classes** shall be considered as full compensation for furnishing all labor, supervision, materials, tools, equipment, sheeting and shoring and incidentals necessary to perform all work, including but not limited to- potholing; sawcutting; excavation; installing various pipes with fittings; concrete collar connections; bedding and backfill; compaction; temporary asphalt concrete paving; coordination with, protecting, and supporting existing utilities; and all other work as shown on the Plans, as specified in the Standard Specifications, these Special Provisions, and as directed by the Engineer; and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-25

PAVEMENT STRIPING, MARKERS AND DELINEATION

(BID ITEM NO. 42-48)

The provisions of Section 15, "Pavement Striping, Markers, and Delineation", of the Technical Specifications of the Standard Specifications shall apply in their entirety except as modified or supplemented herein.

SP25-01 GENERAL

Contractor's attention is directed to notification requirements in Section 15-2 of the Standard Specifications Technical Provisions. No payment shall be made for any striping work performed without notification to the City conforming to the above.

During pavement striping and marking operations, the Contractor shall implement traffic control as specified in SP-14 of these Special Provisions.

SP25-02 MEASUREMENT AND PAYMENT

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

Measurement for legends and markings shall be per the areas shown on State Standard Plans.

The Contract Prices paid per linear foot for **various stripes and striping details**, per square foot for **"Thermoplastic Pavement Legends & Markings,"** and per each for **"Two-Way Reflective Pavement Markers (Blue)"** 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-26

SURVEY MONUMENT

(BID ITEM NO. 49)

SP26-01 GENERAL

Existing survey monument frame, cover and concrete collars shall be removed while protecting the existing monuments where shown on the plans or as directed by the Engineer. When the plans call for the adjustment of monument frame and cover to grade, a new monument frame and cover shall be used for the adjustment. Monument frame and cover adjustments and installation of new frame and covers over monuments shall be in accordance with the details shown on County Standard Plan CA40, "Street Survey Monument." Frames, covers, and concrete collars shall be furnished and installed by the Contractor.

For monuments requiring resetting due to disturbance by the Contractor's operation, a licensed land surveyor shall perform the work and all costs shall be at the Contractor's expense.

Survey monument adjustments shall be made after the final surface treatment has been installed. If permanent asphalt concrete paving cannot be placed the same day that the monument frame and collar are installed, Contractor shall place and maintain temporary asphalt concrete until the permanent pavement is placed.

SP26-02 MEASUREMENT AND PAYMENT

The Contract Price paid per each for **"Adjust or Install New Monument Frame and Cover"** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary; including but not limited to- excavation; removing and restoration of asphalt concrete pavement; protecting existing monuments; removing concrete collar and existing frame and cover; constructing new concrete collar; installation of new monument frame and cover, placement, maintenance, and removal of temporary asphalt concrete around the monument, and all other work to completely install the monument 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.

SPECIAL PROVISIONS SECTION SP-27

METAL BEAM GUARD RAILING

(BID ITEM NO. 50-52)

SP27-01 GENERAL

All work shall conform to the requirements of Section 83, "Railing and Barriers", of the State Specifications, applicable Standard Plans, and as shown on the Plans and as directed by the Engineer.

SP27-02 MATERIALS

The Contractor shall furnish and install all new wood posts, blocks, corten-treated railing and all hardware, except existing corten-treated railing shall be salvaged and reused. All existing posts, blocks and hardware shall be removed and disposed of.

At the time of construction, if railing to be salvaged has been damaged, the Contractor shall provide new corten-treated railing as directed by the Engineer. Payment for damaged rail sections shall be made at the contract item price for "Replace Damaged Guard Railing (Corten)".

All hardware (nuts, bolts, washers), posts, and blocks shall conform to the requirements of Section 83, "Railing and Barriers". All hardware shall be galvanized and shall conform to the specifications of ASTM Designation: A242. Bolt heads and washers shall be painted brown to match the corten-treated railing.

SP27-03 LAYOUT

The MBGR layout shall conform to the existing layout. Replacement end sections shall be Type SFT Cable Anchor Terminal System with ¾ wrap end section, as shown on the State Standard Plan A77L3, “Metal Beam Guard Railing Reconstruct Installation”. All post shall be new 8”x8”x7’ long as shown on the State Standard Plan A77N1.

The exact location of MBGR, flares and end sections will be determined in the field by the engineer.

SP27-04 INSTALLATION

The Contractor shall notify USA at (800) 227-2600 prior to the start of MBGR work and pothole, as necessary, to verify the location and depth of underground utilities.

All materials needed to complete the MBGR construction shall be in the Contractor’s possession before beginning the guard railing work.

Whenever existing MBGR is removed, the Contractor shall place Type II barricades with flashing lights at the location of the removed MBGR. Spacing for Type II barricades shall be no greater than twenty-five (25) feet on center.

SP27-05 MEASUREMENT AND PAYMENT

The contract prices paid per linear foot for “**Metal Beam Guard Railing (New)**”, and “**Metal Beam Guard Railing (Reconstruct with Re-Used Railing)**” and price per each for “**3/4 Wrap Guard Rail End Section**” shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals needed to complete the work, including, but not limited to, potholing for utilities, removing and disposing of existing posts, blocks and hardware, removing and reinstalling salvaged railing, furnishing and installing posts, blocks, railing, hardware, end sections, SFT cable anchor terminal systems, paint, barricades, and all other work as shown on the Plans and as specified in the State Standard Specifications, the State Standard Plans and these Special Provisions, and as directed by the Engineer.

SPECIAL PROVISIONS SECTION SP-28

MISCELLANEOUS CONSTRUCTION

(BID ITEM NO. 27-28 and 53-56)

SP28-01 GENERAL

Miscellaneous work covered under this section includes:

- Shoulder backing
- Re-grade earth ditch
- Clean paved ditch
- Object Marker
- Relocate Sign(s) on New Post
- Pathway Header Board with Steel Stakes or Attached to Fence Posts

SP28-02 SHOULDER BACKING

Contractor shall place shoulder backing along the edge of the finish course of all new asphalt concrete paving that is not confined by a concrete gutter or other paving. Shoulder backing shall also be placed behind curbs and berms, and other similar vertical edges of construction or void space to either buttress the improvement or conform the work to surrounding grades. Shoulder backing shall consist of clean native material, select fill, aggregate base, or pulverized material to best match the existing surrounding condition. Prior to placing shoulder backing all deleterious material such as leaves and mulch shall be removed from the area to be covered with shoulder backing. Select fill and pulverized materials shall have maximum-size aggregates less than two (2) inches and be free of organic particles. Aggregate base shall be Class II conforming to SP-19.

Shoulder backing along unconfined edges of pavement is typically 4 feet wide, placed to the top of pavement finished grade, and sloped to match adjacent grades at a maximum slope of 3 to 1, horizontal to vertical. Shoulder backing behind tops of berms and curbs shall be within half an inch of top of curb/berm, and sloped to match adjacent grades as described above. Materials shall be appropriately moisture-conditioned prior to placement. Select fill shall be compacted to 90% relative compaction. Aggregate base and pulverized material shall be compacted to 95% relative compaction. Shoulder backing shall be trimmed neatly and compacted in place on the same day that the material is placed.

Conform between new pavement or improvements and decorative gravel driveways or shoulders shall be treated as shoulder backing. When disturbing such driveways and shoulders, Contractor shall salvage sufficient existing gravel to allow for the construction of conforms. If necessary, Contractor shall import new material in kind.

SP28-03 RE-GRADE EARTH DITCH

At the location shown on the Plans and at locations designated by the Engineer, Contractor shall grade the existing earth ditch, removing all earth, vegetation, and root matter to restore positive drainage and provide a neatly-trimmed, well-defined, compacted, and stable embankment on both sides of the ditch.

SP28-04 CLEAN ASPHALT DITCH

At the location shown on the Plans and at locations designated by the Engineer, Contractor shall remove all dirt and debris from the existing paved ditch to restore the full width of the paved ditch to a serviceable condition.

SP28-05 PATHWAY HEADERBOARD WITH STEEL STAKES OR ATTACHED TO FENCE POSTS

Timber members shall be installed in accordance with the details shown on the Plans and in shall conform to applicable provisions of Section 57, "Timber Structures", and Section 58, "Preservative Treatment of Lumber, Timber and Piling", of the State Specifications, these Special provisions and as directed by the Engineer.

All timber members to be used as header boards shall be Ground Contact Rated, Pressure Treated Douglas Fir.

Pressure treatment shall conform to AWPAC2 (for ground contact), and shall be marked with an AWPAC, or AWPB stamp. All field cuts shall be field treated in accordance with AWPAC M4.

SP28-06 OBJECT MARKER

Object markers shall be Type "P" in accordance with the details shown on State Standard Plan A73B. "Object Markers".

The Contractor shall notify USA at (800) 227-2600 prior to commencing any excavation for object marker.

SP28-07 RELOCATE TRAFFIC SIGN

The provisions of Section 16, "Traffic Signs," of the Technical Specifications of the Standard Specifications shall apply in their entirety except as modified or supplemented herein.

To relocate signs, existing posts to be removed 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.

Sign posts shall be galvanized 1 3/4" Ulti-Mate square post systems or approved equal.

All road signs shall be installed with a minimum of 7' of vertical clearance measured from the lowest point of the sign panel to the ground surface.

SP28-07 MEASUREMENT AND PAYMENT

The contract price paid per linear foot for **“Shoulder Backing”** shall be considered as full compensation for furnishing all labor, tools, equipment, and incidentals and for doing all work involved, including but not limited to- providing, placing, and compacting fill material, and all other work 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 unit price paid per lineal foot for **“Pathway Header Board with Steel Stakes or Attached to Fence Posts”** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals for doing all work involved in constructing the header board, complete in place, including treated timber, fasteners, steel stakes, splice boards, and all other hardware and connection, as shown on the plans, as specified in the State Specification and these Special Provisions, and as directed by the Engineer.

The contract price paid per each for **“Object Marker”** shall include full compensation or furnish all labor, supervision, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing and installing object markers as shown on the Plans, the County Standard Plans, the Standard Specifications, these Special Provisions, and as directed by the Engineer and no additional compensation shall be allowed therefor.

The Contract price paid per linear foot for **“Re-grade Earth Ditch”**, and **“Clean Paved Ditch”** shall include full compensation for furnishing all labor, tools, equipment, and incidentals and for doing all work involved, including but not limited to- removing vegetation, excavation, hauling and disposal of spoils, grading, and all other work 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 Price paid per each for **“Relocate Traffic Sign(s) on New Post”** shall include full compensation for furnishing all labor, supervision, materials, tools, equipment, and incidentals, and for doing the work involved in removing existing signs and posts where designated, disposal of said existing posts and foundations, backfilling excavations, installing signs on new posts complete in place, including mounting hardware and new sign panels where required, and all other work as shown on the Plans, as specified by these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefor.

SPECIAL PROVISIONS SECTION SP-29**VEHICLE DETECTION LOOPS**

(BID ITEM NO. 57)

SP29-01 GENERAL

Loop wire shall be Type 1. Stop bar and bike lane 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.

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.

The seventh paragraph of Section 86-5.01A(4), "Installation Details", of the 2018 Caltrans Standard specifications is amended to read:

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.

The Contract price paid per each for "**Vehicle Detection Loops**" shall include full compensation for furnishing all labor, tools, equipment, and incidentals and for doing all work involved, including but not limited to- all sawcutting; wires, conduit; making connections of all kinds; and all other work to construct a functional system as intended 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.

APPENDICES

APPENDIX A

WASTE MANAGEMENT PLAN INSTRUCTIONS



Planning & Building Department

3675 Mt. Diablo Boulevard, Suite 210
Lafayette, CA 94549-1968
Tel. (925) 284-1976 • Fax (925) 284-1122
<http://www.ci.lafayette.ca.us>

WASTE MANAGEMENT PLAN INSTRUCTIONS CONSTRUCTION AND DEMOLITION DEBRIS RECYCLING

GENERAL

The City of Lafayette is mandated by the State of California to divert 50-percent of all solid waste from landfills either by salvage or recycling. To help meet this goal, the City requires completion of a Waste Management Plan (WMP) for covered projects identifying how at least 50-percent of project waste materials will be diverted from the landfill. A “covered project” is defined as:

1. Construction, renovation, and demolition projects where the total costs are projected to be equal to or greater than \$50,000; and/or
2. Construction or renovation projects equal to or greater than 1,000 sq. ft.; and/or
3. Demolition projects equal to or greater than 300 sq. ft.

All phases of a project and all related projects taking place on single or adjoining parcels are considered a single project.

GREEN HALO SYSTEMS

For a covered project, applicants are required to submit their WMP to the City using Green Halo Systems. Green Halo is a free web-based service for waste diversion and recycling tracking. Through Green Halo, applicants can establish, monitor and document their waste management plan and compliance online. Applicants can set-up a Green Halo account at www.greenhalosystems.com. For applicants who do not have access to the internet, Green Halo can set-up an account over the phone at 1-888-525-1301. Once an applicant has created a Green Halo account, they can track and manage multiple projects for different jurisdictions on their account.

PROCEDURE

Prior to issuance of a grading, demolition, and/or building permit for a covered project:

1. Submit a non-refundable administrative fee, payable to the City of Lafayette. See “[Planning Fees](#)” handout for current rate.
2. Submit a WMP to the City using Green Halo that includes the following:
 - a) Identification of all the **materials** you estimate will be recycled, salvaged, or disposed; and
 - b) Identification of which [certified C&D facilities](#) the various material types will go.
3. Green Halo will notify the City that a WMP has been submitted. The City will review the submitted WMP on Green Halo. The WMP will only be approved when all of the following conditions have been met:
 - a) The WMP provides all information noted above; and
 - b) The WMP indicates that at least 50% of all construction and demolition debris generated by the project will be diverted.
4. The WMP will be approved or not approved. If the WMP is incomplete and/or fails to meet the required diversion rate, the WMP will not be approved and the applicant will be notified about the reasons for non-approval. No grading, building, and/or demolition permit will be issued until the WMP is approved.

INFEASIBILITY EXEMPTION

If an applicant for a covered project experiences unique circumstances that make it infeasible to comply with the diversion requirement, the applicant may apply for an exemption at the time the WMP is submitted. Increased costs to the applicant generally will not be a sufficient basis for an exemption. The applicant shall indicate on the WMP the minimum rate of diversion he/she believes is feasible for each material and the specific circumstances that he/she believes make it infeasible to comply with the diversion requirement.

UPON COMPLETION OF THE PROJECT

Prior to the final inspection of a grading, demolition, and/or building permit and within 30 days after project completion, the applicant shall submit their WMP to the City through Green Halo for final review. The goal of the final review is to provide documentation to the City showing that the diversion requirement has been met. The WMP submitted for final review shall include the following:

1. Receipts from the certified facilities that collected or received each material showing the actual volume or weight of the material received and how the material was disposed of; and
2. Any additional information the applicant believes is relevant to determining its efforts to comply in good faith with the diversion requirement.

Through Green Halo, the City will review the WMP and documentation noted above and a determination will be made if the applicant has complied with the diversion requirement as follows:

1. **Full compliance** - If the applicant has fully complied with the diversion requirement.
2. **Good Faith Effort to Comply** - If the diversion requirement has not been achieved, the City will determine on a case-by-case basis whether the applicant has made a good faith effort to comply with the diversion requirement. In making this determination, the City will consider the availability of markets for the C&D debris landfilled, the size of the project and the documented efforts of the applicant to divert the C&D debris.
3. **Noncompliance** - If the City determines that the applicant has not complied with the diversion requirement, the City may withhold final project approval until full compliance can be established.

No hold on final shall be released, until the WMP has been provided to and approved by the City as either full compliance or good faith effort to comply.

NONCOMPLIANCE

Please note that if the required documentation is not submitted and approved by the City, or the applicant has not made a good faith effort to comply, the applicant is in noncompliance status and is in violation of the Lafayette Municipal Code (LMC) and is liable for a civil penalty, or any other remedy provided in the LMC. This violation makes the property owner liable to the City for a civil penalty of \$1,000 or one percent (1%) of the project cost, whichever is less. The project will not be approved and holds will not be released, until the project is in full compliance, meets the good faith effort to comply, or the civil penalty has been paid.

APPEAL

Appeal of the determination made by the City shall be made to the City Council within 30 days of the City's determination. To appeal, an applicant must submit a letter to the city manager concisely stating the facts of the case and the grounds of appeal. The city manager will schedule a meeting before the city council and notify the applicant of the date, time, and place. The decision of the city council is final. Appeals shall be limited to:

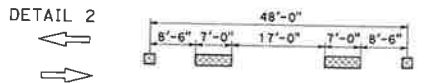
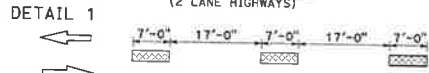
1. The granting or denial of an exemption; or
2. Whether the applicant has made a good faith effort to comply with the WMP.

NOTE: The applicant and property owner are responsible for the actions of their contractors or other agents with regard to the diversion requirement. Therefore, when reviewing proposals from project managers, contractors, site cleanup, vendors, and other building professionals, all aspects of the proposal should be considered and not just the cost.

APPENDIX B

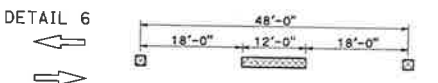
STANDARD PLANS

CENTERLINES (2 LANE HIGHWAYS)



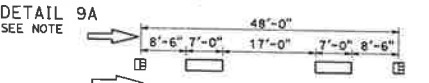
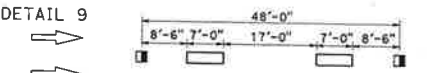
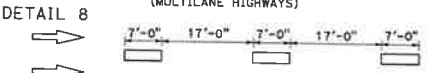
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~~DETAIL 7~~ ~~DETAIL 7 DELETED~~

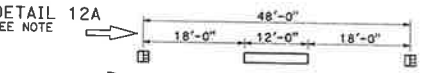
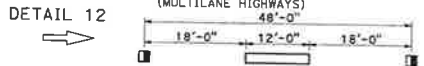
LANELINES (MULTILANE HIGHWAYS)



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LANELINES (Cont) (MULTILANE HIGHWAYS)

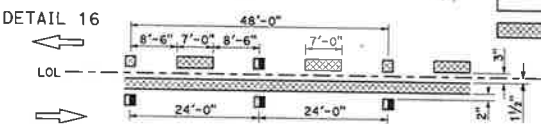
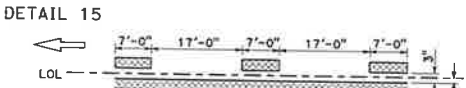


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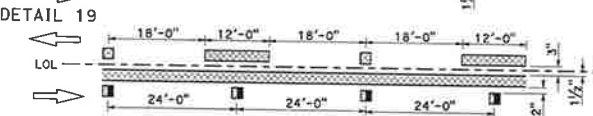
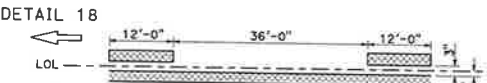
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~~DETAIL 14A~~ ~~DETAIL 14A DELETED~~

NO PASSING ZONES-ONE DIRECTION

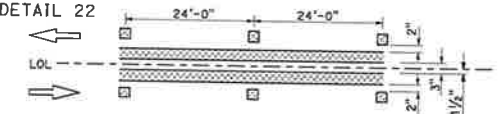
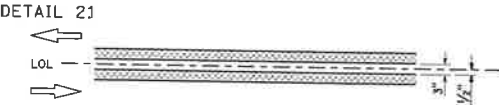


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NO PASSING ZONES-TWO DIRECTION



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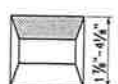
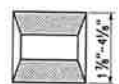
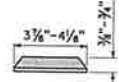
LEGEND

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

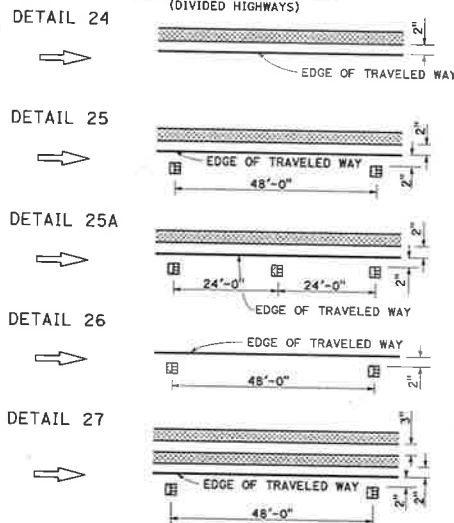
A20A

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

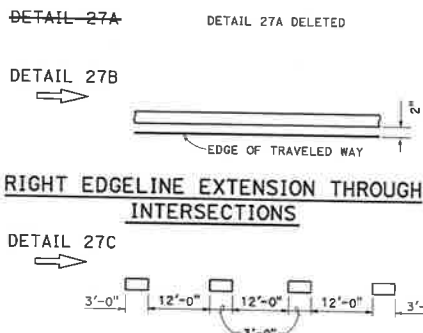
Atifero Ferroz
REGISTERED CIVIL ENGINEER
No. 5-31-19
CIVIL
MAY 31, 2018
PLANS APPROVAL DATE

THE SCALE OF CALCULATIONS ON THIS SHEET OR THE HEIGHTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SHOWN TYPES OF THIS PLAN SHEET.

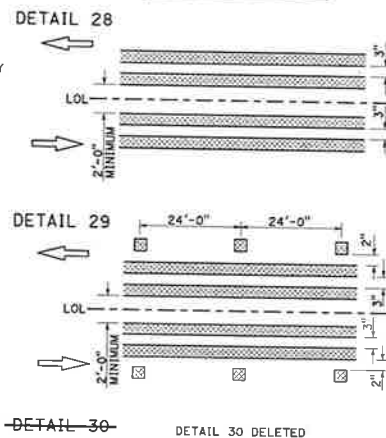
LEFT EDGELINES



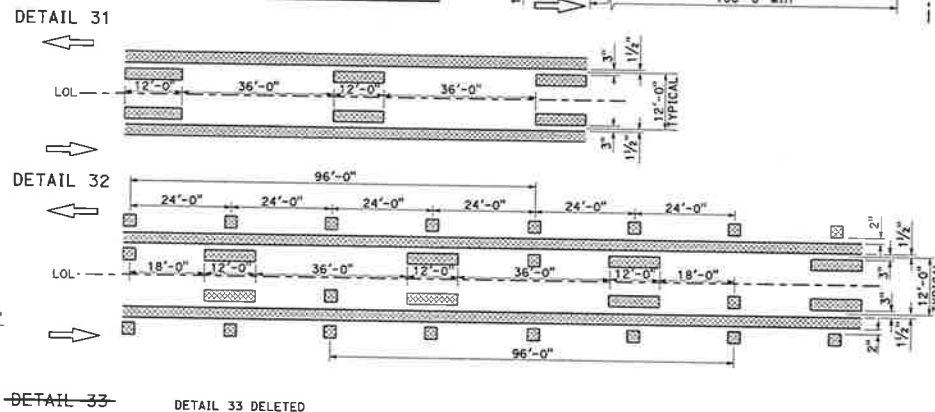
RIGHT EDGELINES



MEDIAN ISLANDS



TWO-WAY LEFT TURN LANES



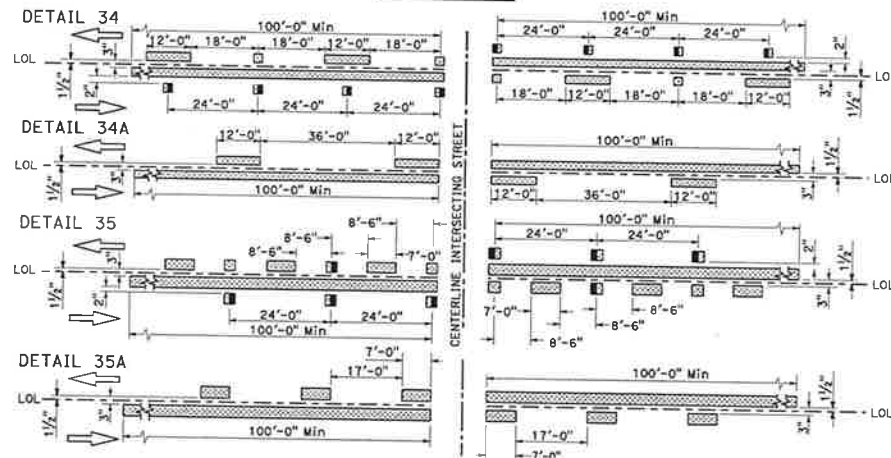
LEGEND

- MARKERS
- TYPE D TWO-WAY YELLOW RETROREFLECTIVE
 - TYPE H ONE-WAY YELLOW RETROREFLECTIVE
 - TYPE RY RED-YELLOW RETROREFLECTIVE

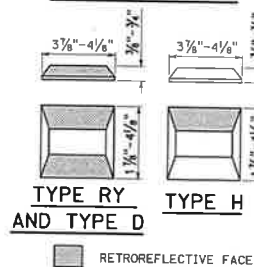
LINES

- 6" WHITE
- 6" YELLOW

INTERSECTION TREATMENTS



MARKER DETAILS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

NO SCALE

A20B

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

Atifa Ferouz
REGISTERED CIVIL ENGINEER
C80402

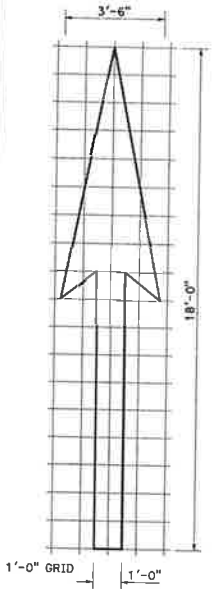
May 31, 2018
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF DIMENSIONS SHOWN ON THIS PLAN SHEET.

Atifa Ferouz
C80402
Exp. 2-31-19
SITE

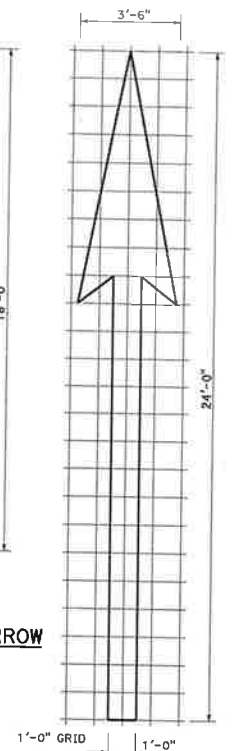
2018 STANDARD PLAN A20B

17



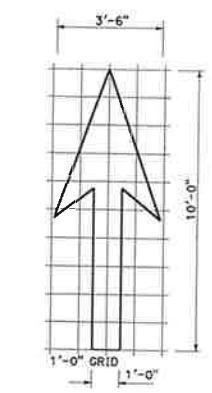
TYPE I 18'-0" ARROW

$A=25 \text{ ft}^2$



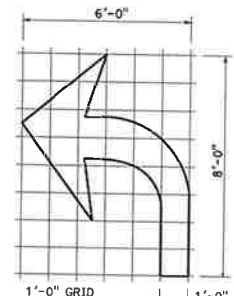
TYPE I 24'-0" ARROW

$A=31 \text{ ft}^2$



TYPE I 10'-0" ARROW

$A=14 \text{ ft}^2$

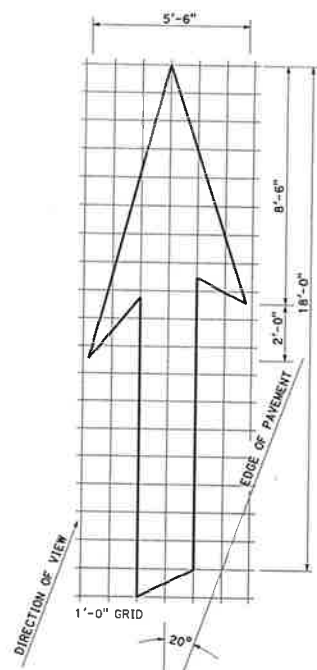


TYPE IV (L) ARROW

$A=15 \text{ ft}^2$

(For Type III (R) arrow, use mirror image)

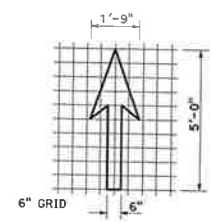
NOTE:
Minor variations in dimensions may be accepted by the Engineer.



TYPE VI ARROW

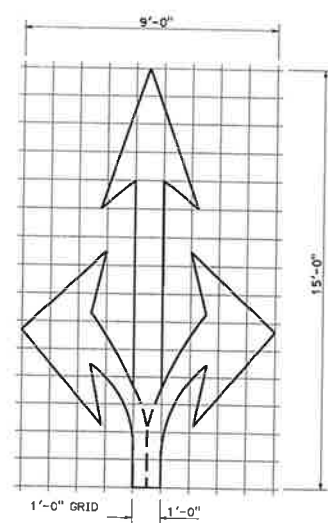
$A=42 \text{ ft}^2$

Right lane drop arrow
(For left lane, use mirror image)



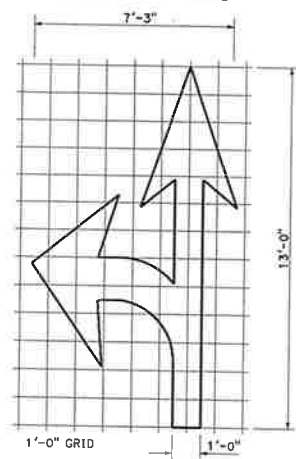
BIKE LANE ARROW

$A=3.5 \text{ ft}^2$



TYPE VIII ARROW

$A=36 \text{ ft}^2$

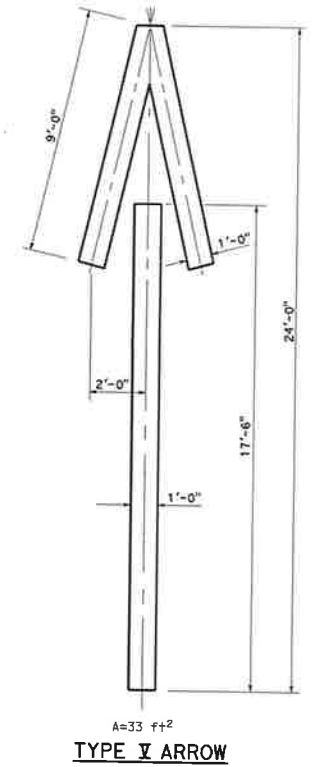


TYPE VII (L) ARROW

$A=27 \text{ ft}^2$

(For Type III (R) arrow, use mirror image)

DIST.	COUNTY	ROUTE	POST MILE	SPALE	TOTAL
<p><i>Atife Ferouz</i> REGISTERED CIVIL ENGINEER</p> <p>May 31, 2018 PLANS APPROVAL DATE</p> <p>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</p>					
<p>PROFESSIONAL SEAL Atife Ferouz C-4022 3-31-18 CIVIL ENGINEER STATE OF CALIFORNIA</p>					



TYPE V ARROW

$A=33 \text{ ft}^2$

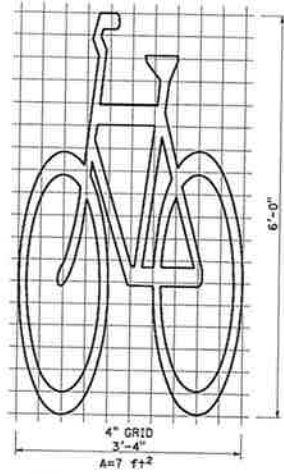
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**

NO SCALE

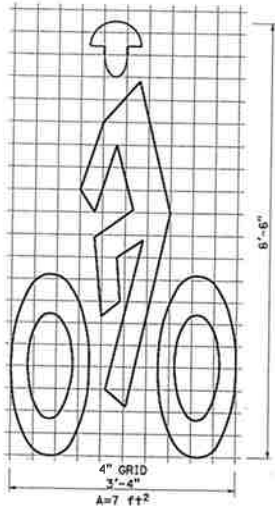
A24A

2018 STANDARD PLAN A24A

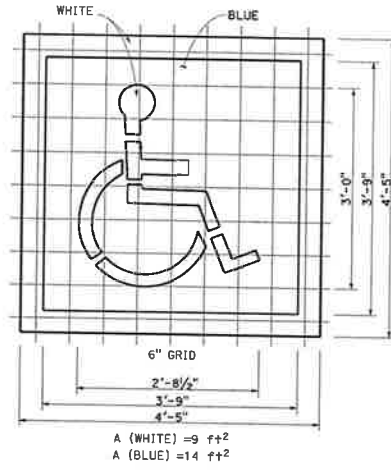
Return to Table of Contents



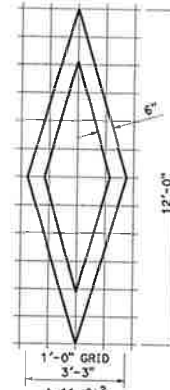
**BIKE LANE SYMBOL
WITHOUT PERSON**



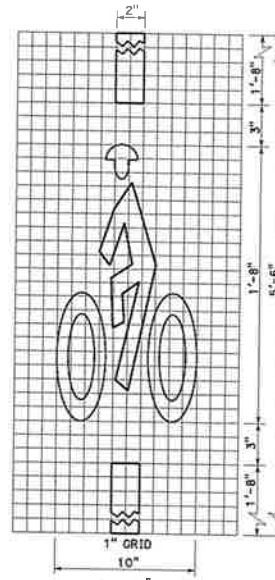
**BIKE LANE SYMBOL
WITH PERSON**



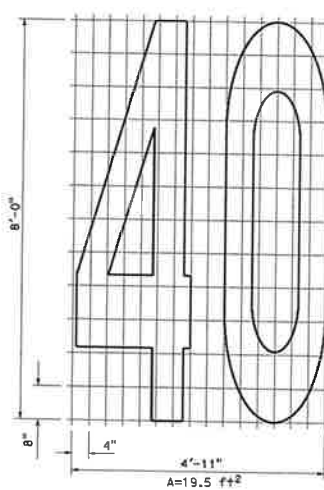
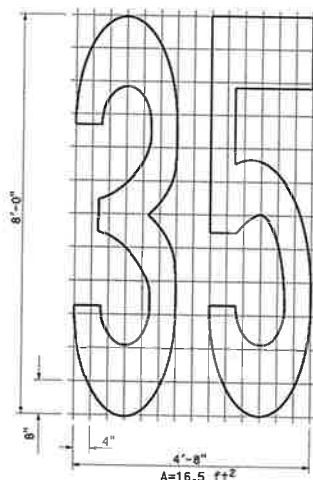
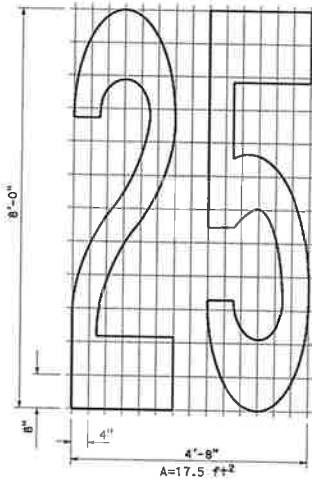
**INTERNATIONAL SYMBOL
OF ACCESSIBILITY (ISA) MARKING**



DIAMOND SYMBOL



**BICYCLE LOOP
DETECTOR SYMBOL**



NUMERALS

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

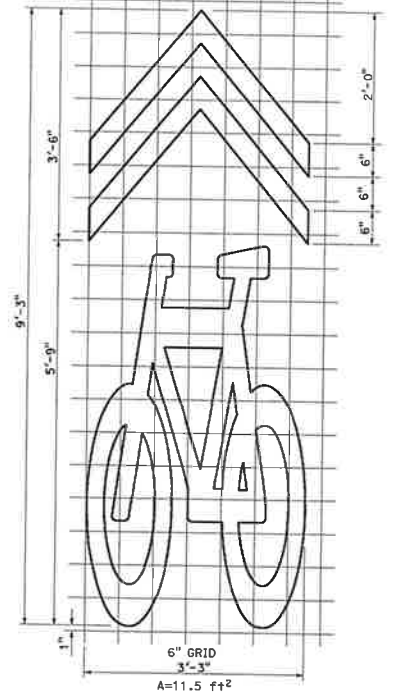
Atifa Farooq
REGISTERED CIVIL ENGINEER

May 31, 2018
PLANS APPROVAL DATE

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Atifa Farooq
C80402
3-31-19
EXPL.
STATE OF CALIFORNIA

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



SHARED ROADWAY BICYCLE MARKING

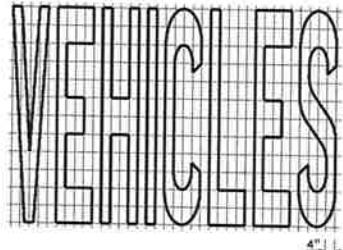
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
SYMBOLS AND NUMERALS**

NO SCALE

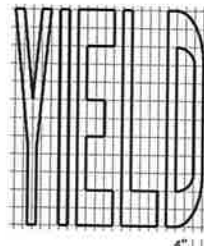
A24C



A=43 ft²



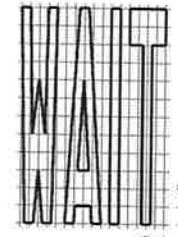
A=42 ft²



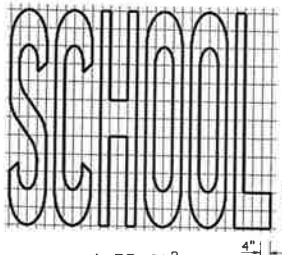
A=24 ft²



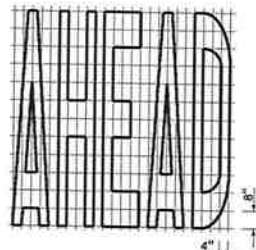
A=23 ft²



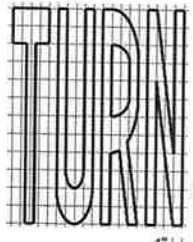
A=19 ft²



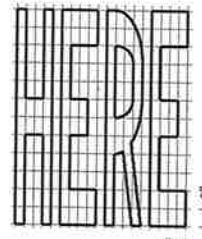
A=35 ft²



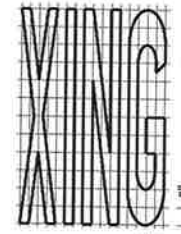
A=31 ft²



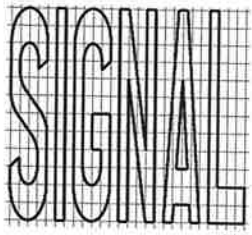
A=24 ft²



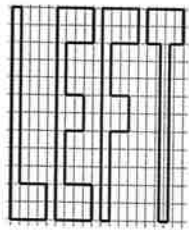
A=26 ft²



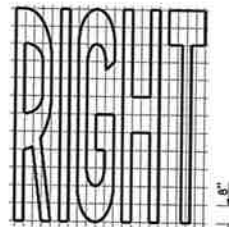
A=21 ft²



A=32 ft²



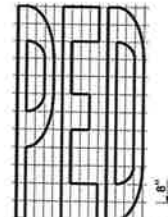
A=19 ft²



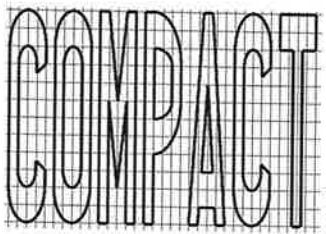
A=26 ft²



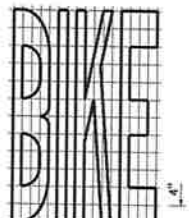
A=22 ft²



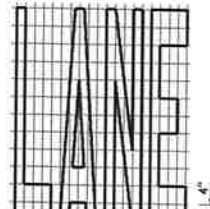
A=18 ft²



A=10 ft²



A=5 ft²



A=6 ft²

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

Atifa Ferouz
REGISTERED CIVIL ENGINEER

May 31, 2018
PLANS APPROVAL DATE

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NOTES:

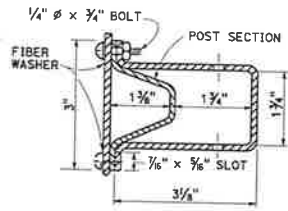
1. If a message consists of more than one word, it must read "up", i.e., the first word must be nearest the driver.
2. The space between words must be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced 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	RUNAWAY	43
LANE	6	TURN	24	LEFT	19	VEHICLES	42
RIGHT	26	HERE	26				

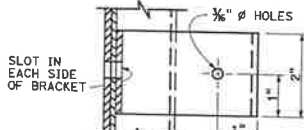
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
WORDS**

NO SCALE

A24D



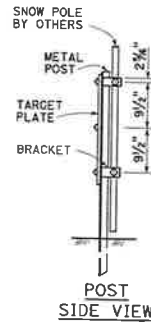
TOP VIEW



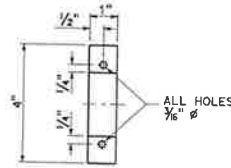
Bracket to be 1/8" x 2" mild steel galvanized after fabrication

SIDE VIEW

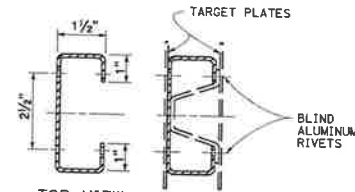
SNOW POLE BRACKET



POST SIDE VIEW



SIDE VIEW

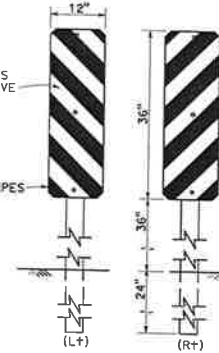


TOP VIEW

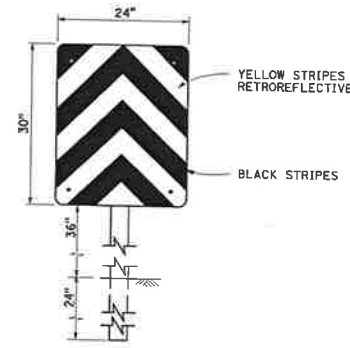
TWO PLATE POST MOUNT

Material: Aluminum 0.050" thick (3003-H14 Alloy)

YELLOW STRIPES RETROREFLECTIVE



TYPE P (CA)



TYPE R (CA)

TYPE N-1 (CA), N-2 (CA), N-3 (CA)

N-1(CA). Yellow retroreflective.
N-2(CA). Red retroreflective.
N-3(CA). Orange retroreflective.

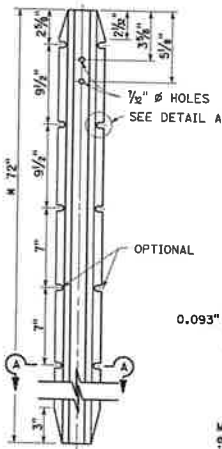
OBJECT MARKERS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MARKERS

NO SCALE

A73B

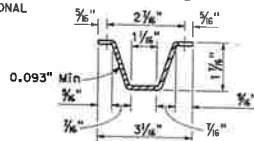


* 8'-0" for Type P object marker

METAL POST DETAIL

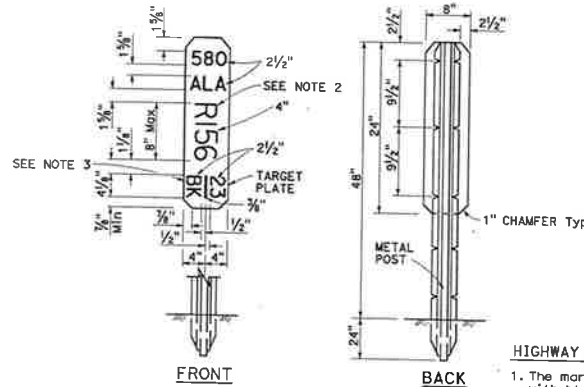


DETAIL A



SECTION A-A

Metal post to be as shown except that minor variations in design and dimensions will be permitted to meet manufacturer's standards.



FRONT

BACK

HIGHWAY POST MARKER

HIGHWAY POST MARKER NOTES:

1. The marker shall be white (non-reflective) target plate with black Series D numerals and letters.
2. A post mile prefix, such as "R", shall apply only when directed by the Engineer.
3. "BK"(Back), "AH" (Ahead), or a blank space shall apply as directed by the Engineer.
4. All information shall be in U.S. Customary units (miles).

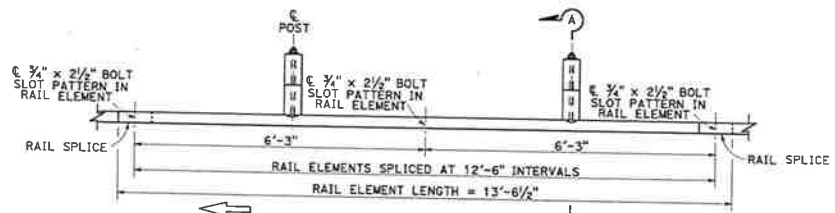
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Donald E. Howe
 REGISTERED CIVIL ENGINEER
 No. 231-19
 State of California
 May 31, 2018
 PLANS APPROVAL DATE
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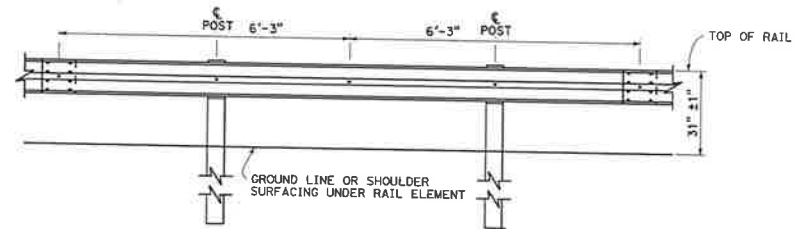
NOTES:

- A. See Std Plan A73A for additional object markers.
- B. Type P(CA) and R(CA) markers shall have orange and white retroreflective stripes in work zones.
- C. Diagonal stripes on Type P(CA) markers shall be sloped down in the direction of travel.

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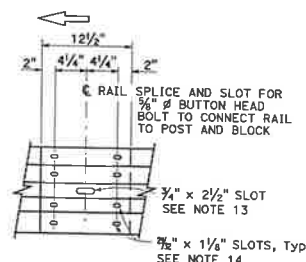


PLAN



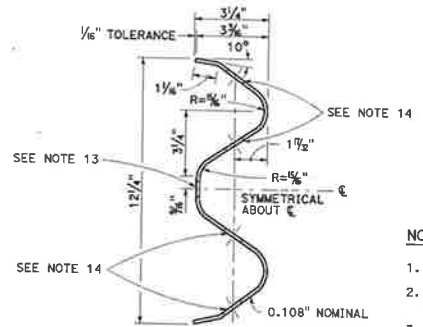
ELEVATION

MIDWEST GUARDRAIL SYSTEM WITH WOOD POST AND BLOCKS

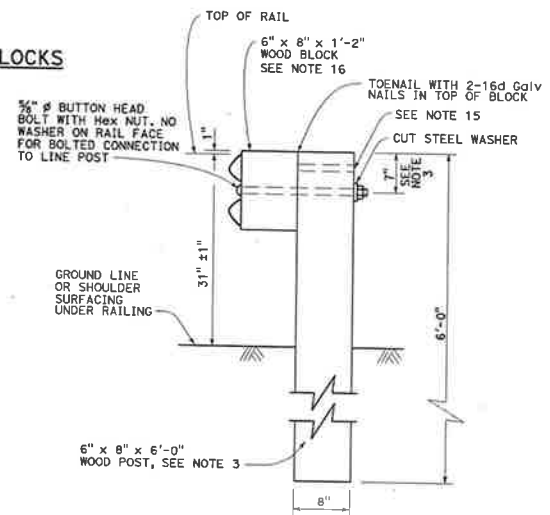


ELEVATION
RAIL ELEMENT SPLICE DETAIL

- a) Connect the overlapped end of the rail elements with $\frac{3}{8}$ " ϕ x $1\frac{1}{2}$ " button head oval shoulder splice bolts inserted into the $\frac{3}{4}$ " x $1\frac{1}{4}$ " slots and bolted together with $\frac{3}{8}$ " ϕ recessed hex nuts. Recess of hex nut points toward rail element. A total of 8 bolts and nuts are to be used at each rail splice connection.
- b) The ends of the rail elements are to be overlapped in the direction of traffic (see details).
- c) Where end cap is to be attached to the end of a rail element, a total of 4 of the above described splice bolts and nuts are to be used.



SECTION THRU
RAIL ELEMENT



SECTION A-A
TYPICAL WOOD LINE
POST INSTALLATION

See Note 4

DIST.	COUNTY	ROUTE	SHEET NO.	TOTAL SHEETS
			10	10

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 31, 2018
PLANS APPROVAL DATE

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Randell B. Kopp
C50200
Exp. 6-30-19
STATE OF CALIFORNIA

NOTES:

1. For details of steel post installations, see Standard Plan A77L2.
2. For details of standard hardware used to construct MGS, see Standard Plan A77M1.
3. For details of wood posts and wood blocks used to construct MGS, see Standard Plan A77N1.
4. For additional installation details, see Standard Plan A77N3.
5. MGS post spacing to be 6'-3" center to center, except as otherwise noted.
6. For MGS typical layouts, see the A77P, A77O and A77R Series of Standard Plans.
7. If railing is connected to terminal system end treatment, use 31" height terminal system end treatment.
8. For MGS end anchor details, see Standard Plans A77S1 and A77T2.
9. For details of MGS transition to bridge railing, see Standard Plan A77U4.
10. For additional details of MGS connection to bridge railing, see Standard Plans A77U1, A77U2 and A77V1.
11. For MGS connection details to abutments and walls, see Standard Plan A77U3.
12. For typical MGS delineation and dike positioning details, see Standard Plan A77N4.
13. Slotted hole for bolted connection of rail element to block and post.
14. Slotted holes for splice bolts to overlap ends of rail element.
15. Additional hole in uppermost portion of line post is for potential future adjustments of railing height. See Standard Plan A77N1.
16. 6" x 12" x 1'-2" block must be used with 6" dike.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

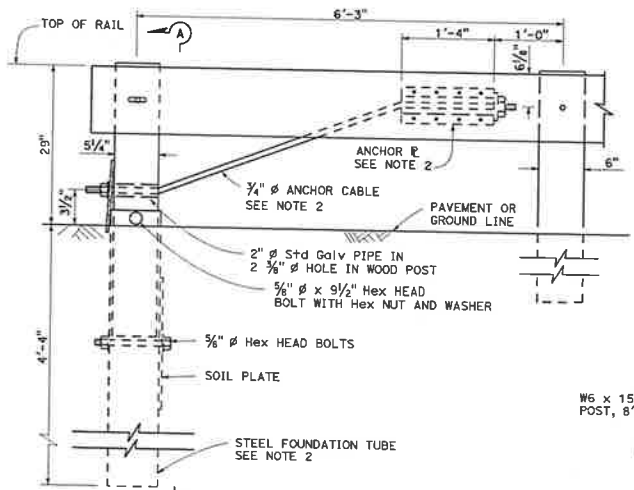
**MIDWEST GUARDRAIL SYSTEM
STANDARD RAILING SECTION
(WOOD POST WITH
WOOD BLOCK)**

NO SCALE

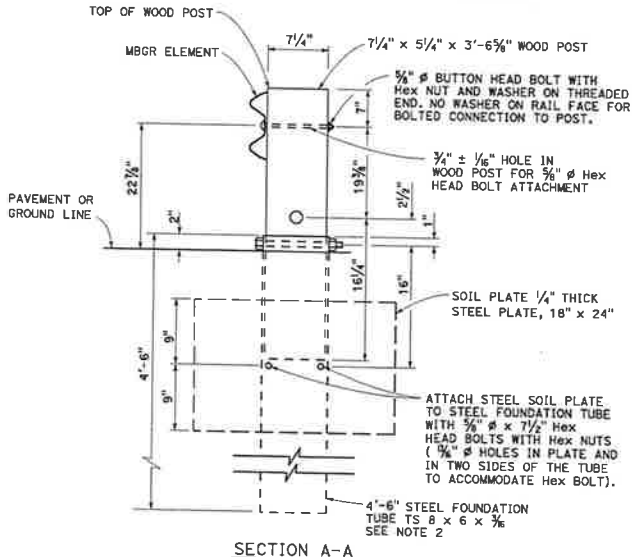
A77L1

2018 STANDARD PLAN A77L1

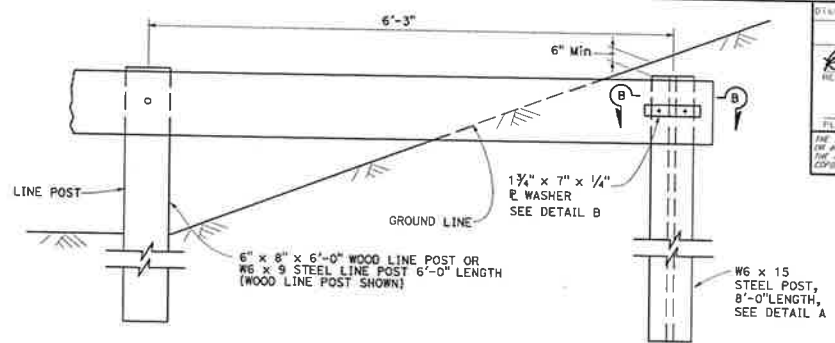
59



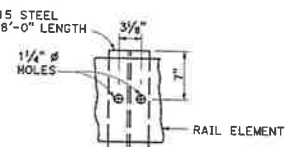
**ELEVATION
END ANCHOR
ASSEMBLY (TYPE SFT)**



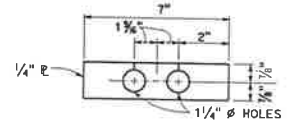
SECTION A-A



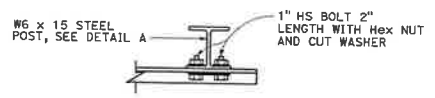
BURIED POST END ANCHOR



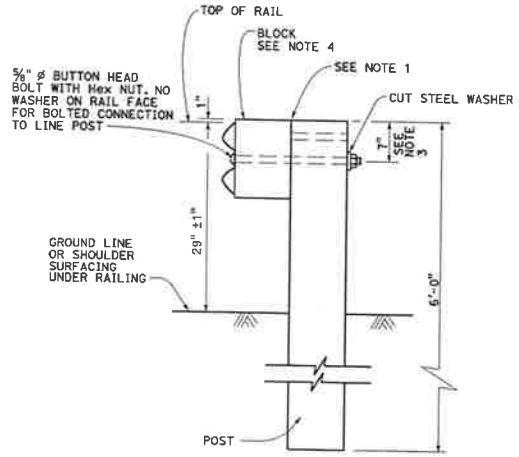
DETAIL A



DETAIL B



SECTION B-B



**TYPICAL LINE
POST INSTALLATION**

NOTES:

1. For wood post and wood block, toenail with 2-16d Galv nails in top of block. For steel post and notched wood or plastic block, notched face of block faces steel post.
2. A 6'-0" Length steel foundation tube, TS 8 x 6 x 3/8, without a soil plate, may be furnished and installed in place of the 4'-6" length steel foundation tube and soil plate shown. Minimum embedment of the 5'-0" length tube shall be 5'-9". A 5/8" Hex head bolt and nut shall be installed in the hole in the 6'-0" length tube to keep the wood post from dropping into the tube.
3. To connect railing to 27" terminal system end treatment, transition the top of railing height at a ratio of 120:1 to terminal system and treatment height plus one 12'-6" standard railing section at the transitioned height for a horizontal connection to the end treatment.
4. See Standard Plans A77N1 and A77N2 for details.

DIST.	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Randell D. Hiatt
REGISTERED CIVIL ENGINEER
May 31, 2018
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA ON ITS OFFICERS AND AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-19
STATE OF CALIFORNIA

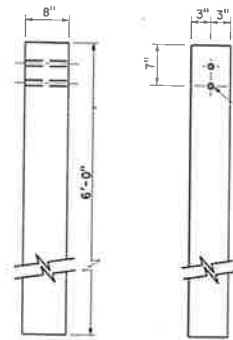
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**METAL BEAM GUARD RAILING
RECONSTRUCT INSTALLATION**

NO SCALE

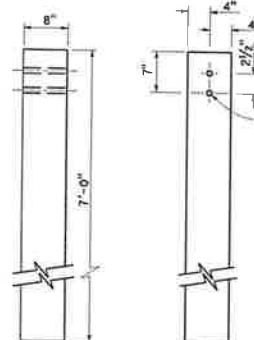
A77L3

2018 STANDARD PLAN A77L3

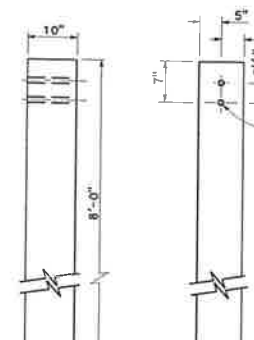
Return to Table of Contents



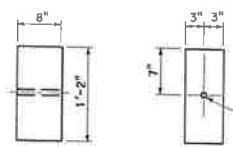
6" x 8" WOOD POST
See Note 3



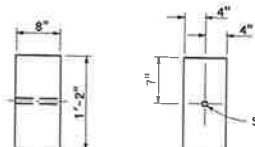
8" x 8" WOOD POST
See Note 4



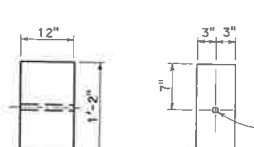
10" x 10" WOOD POST
See Note 5



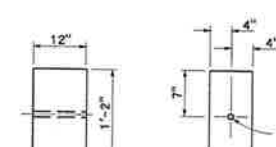
6" x 8" WOOD BLOCK
See Note 6 and Note 3



8" x 8" WOOD BLOCK
See Note 6 and Note 4



6" x 12" WOOD BLOCK
See Note 8



8" x 12" WOOD BLOCK
See Note 7

SEE NOTE 1

SEE NOTE 1

SEE NOTE 1

SEE NOTE 1

SEE NOTE 1

SEE NOTE 1

SEE NOTE 1

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
Randell D. Hiatt REGISTERED CIVIL ENGINEER No. C-56000 Exp. 6-30-19 CHS STATE OF CALIFORNIA					
May 31, 2018 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNER COPIES OF THIS PLAN SHEET.</small>					

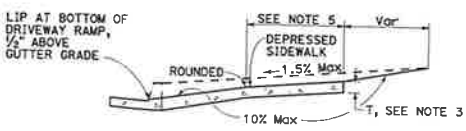
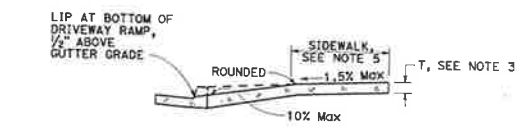
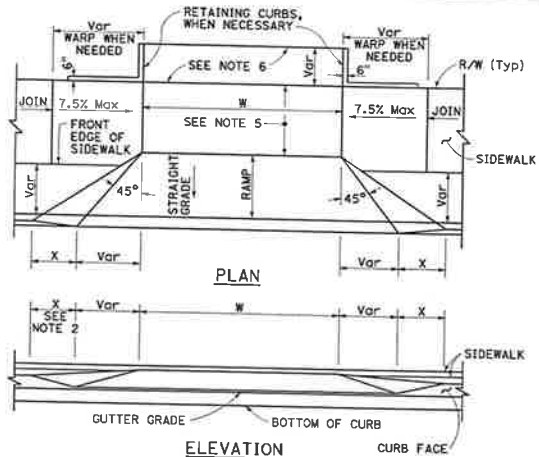
NOTES:

1. All holes in wood posts and blocks shall be 3/4" Dia ± 1/16".
2. Dimensions shown for wood post are nominal.
3. This post and block combination used for standard line post sections of MGS.
4. This post and 8" x 12" block combination used for line post sections of MGS on narrow roadways.
5. This post and 8" x 12" block combination is typically used where strengthened line post sections of MGS are warranted to shield fixed objects.
6. See Standard Plan A77L3 for use of 6" x 8" and 8" x 8" wood blocks.
7. To be used with 8" x 8" x 7'-0" wood post if installed with 6" height dike.
8. To be used with 6" x 8" x 6'-0" wood post if installed with 6" height dike.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
WOOD POST AND
WOOD BLOCK DETAILS**

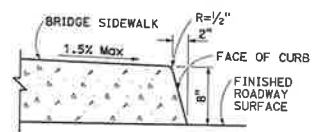
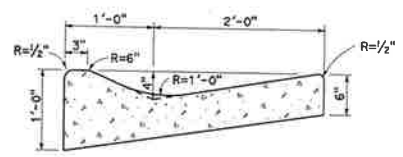
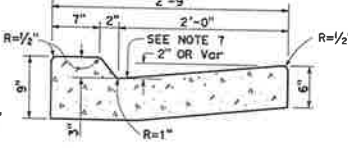
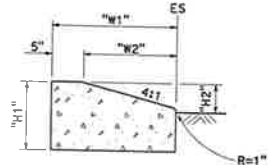
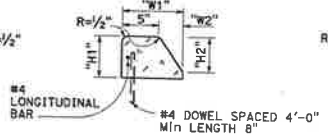
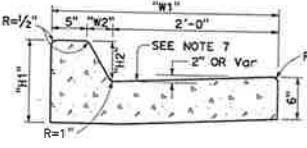
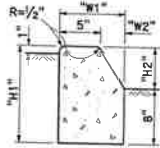
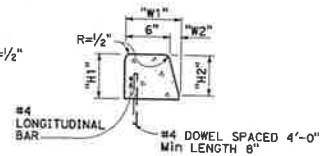
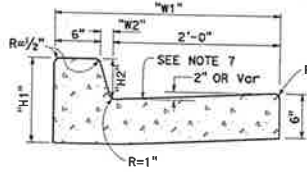
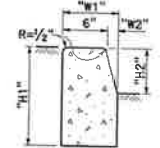
NO SCALE

A77N1



SECTIONS

DRIVEWAYS



CURBS

NOTES:

- Case A driveway section typically applies.
- X=3'-0" except for curb heights over 10" where 4:1 slopes shall be used on curb slope.
- Sidewalk and ramp thickness "T" at driveway shall be 4" for residential and 6" for commercial.
- Difference in slope of the driveway ramp and the slope of a line between the gutter and a point on the roadway 5'-0" from gutter line shall not exceed 15%. Reduce driveway ramp slope, not gutter slope, where required.
- Minimum width of clear passageway for sidewalk shall be 4'-2".
- Retaining curbs and acquisition of construction easement may be necessary for narrow sidewalks or curb heights in excess of 6".
- Across the pedestrian route at curb ramp locations, the gutter bar slope shall not exceed 1" of depth for each 2'-0" of width.

TABLE A

CURB TYPE	DIMENSIONS			
	"H1"	"H2"	"W1"	"W2"
A1-6	1'-2"	6"	7 1/2"	1 1/2"
A1-8	1'-4"	8"	8"	2"
A2-6	1'-2"	6"	2'-7 1/2"	1 1/2"
A2-8	1'-2"	8"	2'-8"	2"
A3-6	6"	5"	7 1/4"	1 1/4"
A3-8	8"	7"	7 3/4"	1 3/4"
B1-4	1'-0"	4"	7 1/2"	2 1/2"
B1-6	1'-2"	6"	9"	4"
B2-4	1'-0"	4"	2'-7 1/2"	2 1/2"
B2-6	1'-0"	6"	2'-9"	4"
B3-4	4"	3"	7"	2"
B3-6	6"	5"	8 1/2"	3 1/2"
D-4	10"	4"	1'-6"	1'-1"
D-6	1'-0"	6"	2'-2"	1'-9"

CURB QUANTITIES

TYPE	CUBIC YARDS PER LINEAR FOOT
A1-6	0.02585
A1-8	0.03084
A2-6	0.05903
A2-8	0.06379
A3-6	0.01036
A3-8	0.01435
B1-4	0.02185
B1-6	0.02930
B2-4	0.05515
B2-6	0.06171
B3-4	0.00641
B3-6	0.01074
B4	0.05709
D-4	0.04083
D-6	0.06604
E	0.06661

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

H. David Collier
REGISTERED CIVIL ENGINEER

May 31, 2018

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA ON ITS OFFICIAL SEAL AND RECORDS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
Hector David Collier
No. 51512
Exp. 3-31-20

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
CURBS AND DRIVEWAYS
NO SCALE

A87A

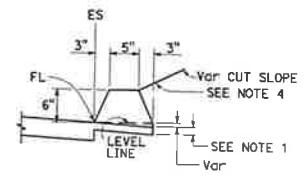
DIST.	COUNTY	ROUTE	POST MILE	SHEET NO.	TOTAL SHEETS

H. David Carter
REGISTERED CIVIL ENGINEER

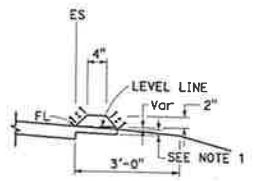
May 31, 2018
PLANS APPROVAL DATE

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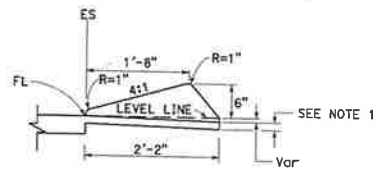
REGISTERED PROFESSIONAL ENGINEER
Hector Garcia
No. 041957
Exp. 3-31-20
STATE OF CALIFORNIA



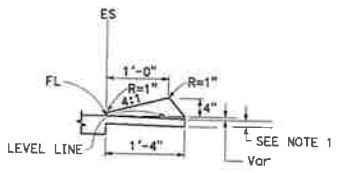
TYPE A
See Notes 3 and 5



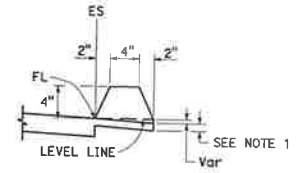
TYPE C



TYPE D

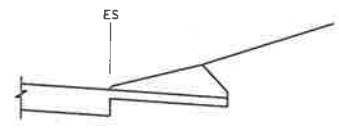


TYPE E

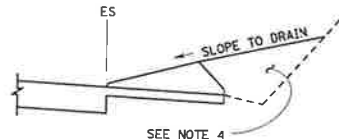


TYPE F
See Note 5

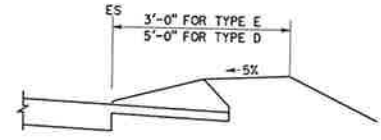
DIKES



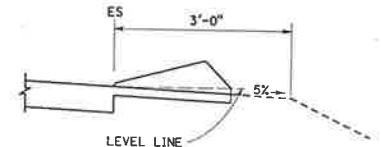
CASE C-1
Cut Slope



CASE C-2
Cut Slope



CASE F



CASE R
See Note 2

TYPE D AND E BACKFILL DETAILS

NOTES:

1. For HMA shoulders only, extend top layer of HMA placed on the shoulder under dike with no joint at the ES. For projects with OGFC shoulders, do not extend OGFC under dike. See project plans for modified dike detail.
2. Case R applies to retrofit only projects where restrictive conditions do not provide enough width for Case F backfill.
3. Type A dike only to be used where restrictive slope conditions do not provide enough width to use Type D or Type E dike.
4. Fill and compact with excavated material to top of dike.
5. Use Type A or F dike, where dike is required with guardrail installations. See Standard Plan A77N4 for dike positioning details. See Standard Plan A77N3 for hinge point offsets with guardrail.

DIKE QUANTITIES

TYPE	PER LINEAR FOOT	CUBIC YARDS
A	0.0135	
C	0.0038	
D	0.0293	
E	0.0130	
F	0.0066	

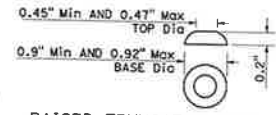
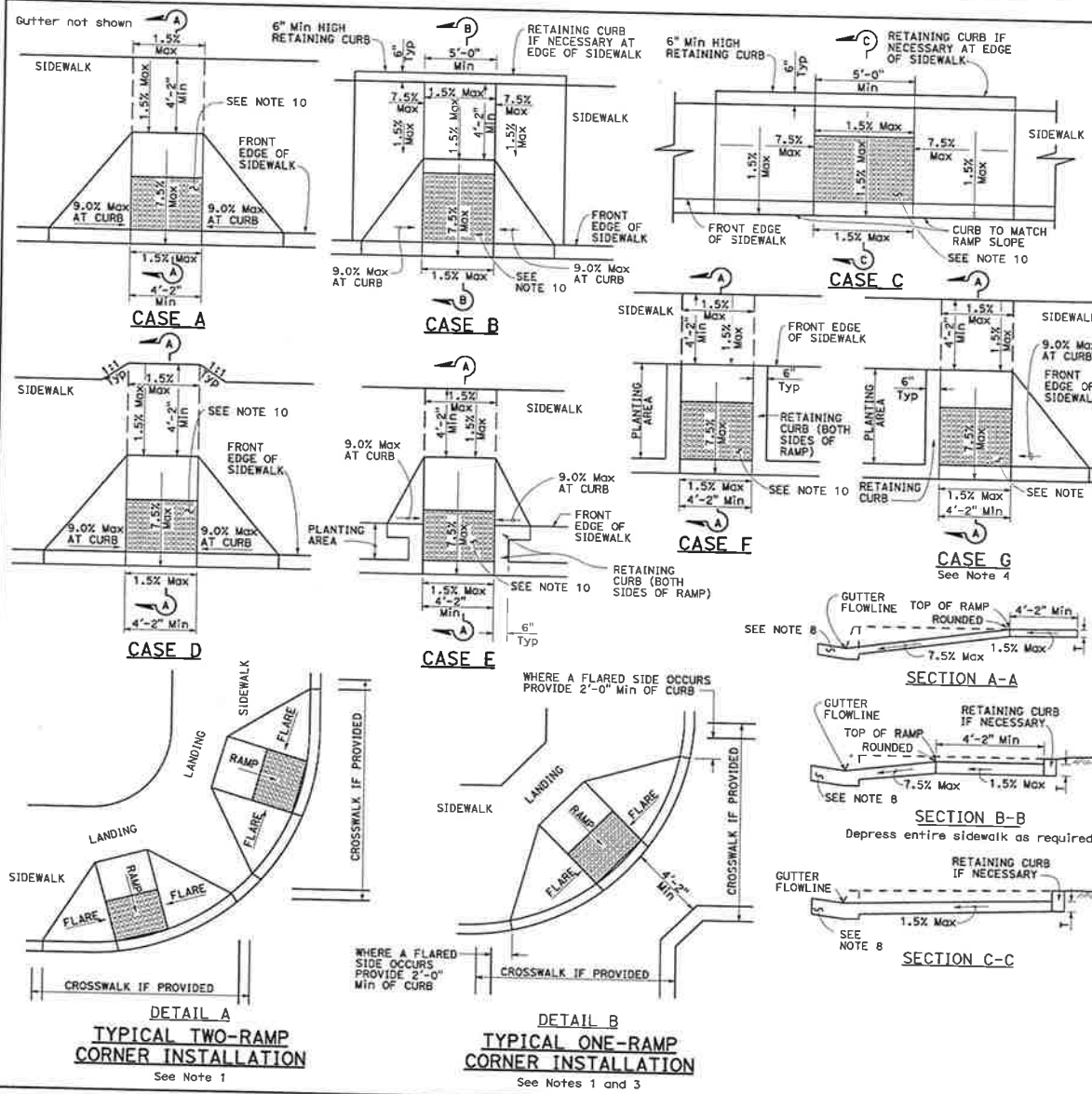
Quantities based on 5% cross slope.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
HOT MIX ASPHALT DIKES

NO SCALE

A87B

2018 STANDARD PLAN A87B

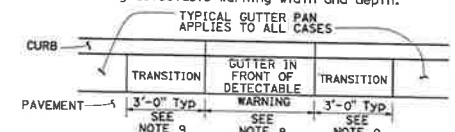


RAISED TRUNCATED DOME

2.3" Min AND 2.4" Max CENTER TO CENTER SPACING

RAISED TRUNCATED DOME PATTERN (IN-LINE) DETECTABLE WARNING SURFACE

- NOTES:** See Note 10
1. As 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. For specific site condition 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, the sidewalk 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 shall be constructed in reversed position.
 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 conform with longitudinal sidewalk slope adjacent to top of the ramp, except in Case C and Case F.
 7. The adjacent surfaces at transitions at 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 1V:20H (5.0%). 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 match 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'-0" depth of the ramp. Detectable warning surfaces shall extend the full width of the ramp except warning surfaces shall conform to the requirements in the Standard Specifications.
 11. Sidewalk and ramp thickness, "T", shall be 3/4" minimum.
 12. Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp will be relocated or adjusted to grade 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.



GUTTER PAN TRANSITION

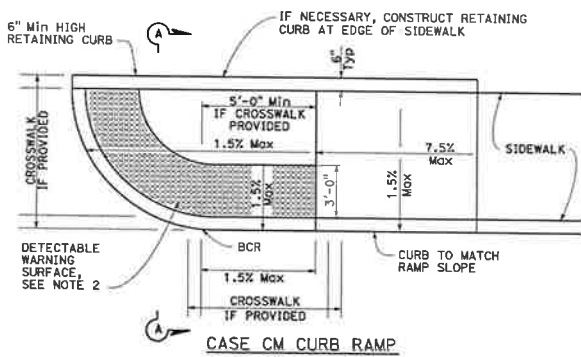
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
CURB RAMP DETAILS
NO SCALE

DATE	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

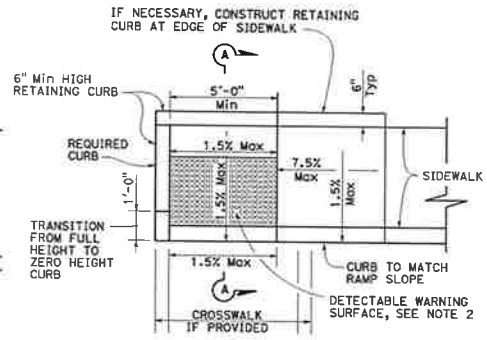
REGISTERED CIVIL ENGINEER
Rebecca Lynn Mowry
CS4415
May 31, 2018
PLANS APPROVAL DATE

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Gutter not shown



CASE CM CURB RAMP



CASE CH CURB RAMP

NOTES:

1. Sidewalk, ramp and passageway thickness, "T", shall be 3/2" minimum.
2. For details of detectable warning surfaces, see Standard Plan A88A.
3. Where an island passageway length is greater than or equal to 6'-0", but less than 8'-0", each detectable warning surface shall extend the full width and 2'-0" depth of the passageway length. Where an island passageway length is greater than or equal to 8'-0", each detectable warning surface shall extend the full width and 3'-0" depth of the passageway length. Detectable warning surfaces shall extend the full width of the island passageway except a maximum gap of 1 inch is allowed on each side of the passageway.
4. The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.
5. Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp will be relocated or adjusted to grade by the owner prior to, or in conjunction with, curb ramp construction.
6. Detectable warning surface may have to be cut to allow removal of utility covers while maintaining detectable warning width and depth.
7. For additional curb ramp details, see Standard Plan A88A.
8. The detectable warning surface will be a rectangle as shown at the face of curb, unless modified in the Project Plans.

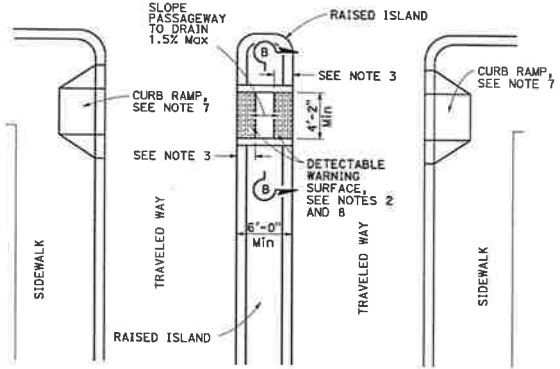
DATE	COUNTY	ROUTE	POST MILE	SHEET NO.	TOTAL SHEETS

Remove
 REGISTERED CIVIL ENGINEER
 License No. 12-31-19
 State of California

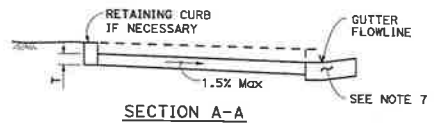
May 31, 2018
 PLANS APPROVAL DATE

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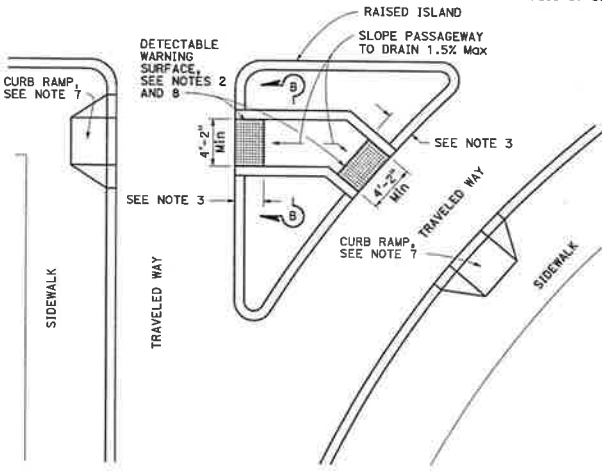
151



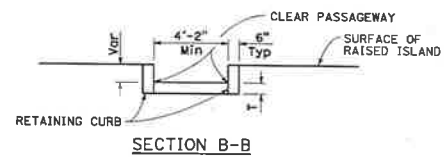
TYPE A PASSAGEWAY



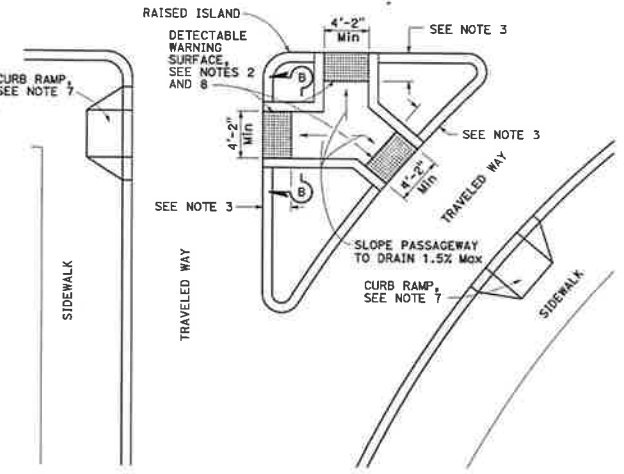
SECTION A-A



TYPE B PASSAGEWAY



SECTION B-B



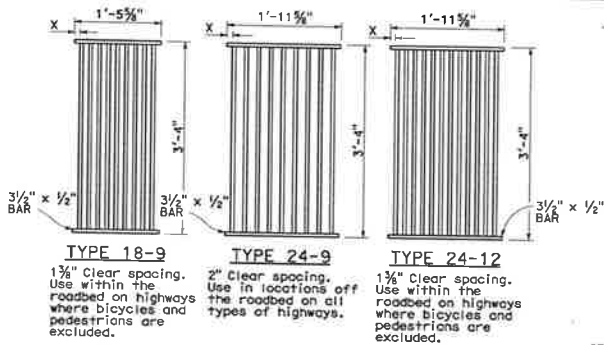
TYPE C PASSAGEWAY

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CURB RAMP AND
 ISLAND PASSAGEWAY DETAILS**
 NO SCALE

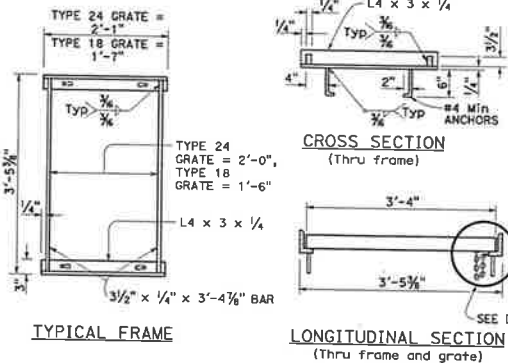
A88B

2018 STANDARD PLAN A88B

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RECTANGULAR GRATE DETAILS
(See table below)



TYPICAL FRAME

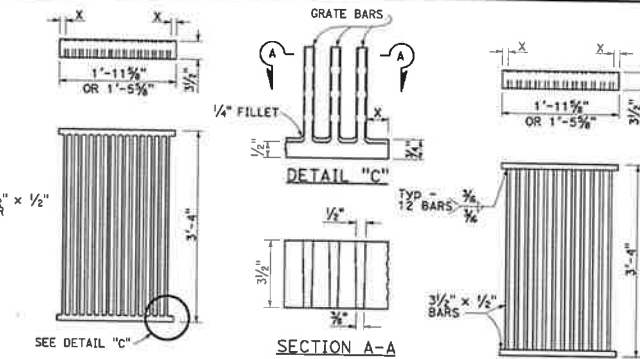
RECTANGULAR FRAME DETAILS
(For all rectangular grates)

GRATE BAR SPACING TABLE

TYPE	No. OF BARS	CLEAR BAR SPACING	X
18-9	9	1 1/2"	1 1/4"
24-9	9	2"	1 1/4"
24-12	12	1 1/2"	1 1/4"

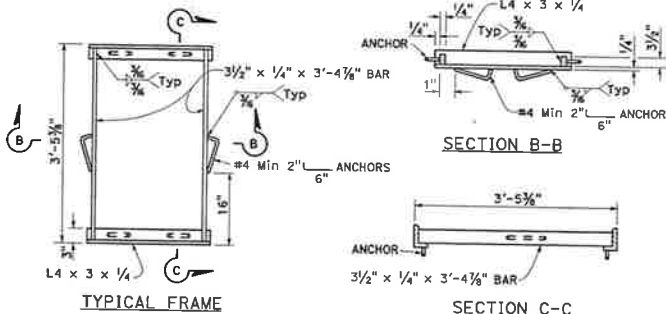
INLET TYPE	COVER TYPE	WEIGHT LB
OS	PLATE	174
OL-7	PLATE	170
OL-10	PLATE	170
OL-14	PLATE	170
OL-21	PLATE	170
OCPI	PLATE	112
OCPI	PLATE	112
OCPI	REDWOOD	42
OMP	PLATE	177
OMP1	PLATE	177

BASIS FOR Misc IRON & STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS
(See Note 6)



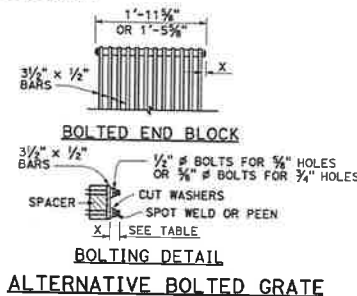
ALTERNATIVE CAST DUCTILE IRON GRATE OR CAST CARBON STEEL GRATE

ALTERNATIVE WELDED GRATE

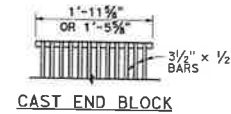


ALTERNATIVE ANCHOR FOR RECTANGULAR FRAME
(For details not shown, See Rectangular Frame Details)

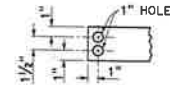
INLET TYPE	GRATE TYPE	No. OF GRATES	WEIGHT LB
G00	24-12	2	634
G0L-7	24-12	1	326
G0L-10	24-12	1	326
G00,G1,G2,G3,G4 (TYPE 24)	24-9	1	263
	24-12	1	326
G4 (TYPE 18),G5,G6	18-9	1	249
GT1	18-9	2	498
GT2	18-9	2	498
GT3	24-12	2	652
GT4	24-12	2	652
TRASH RACK			22
GRATE CHAIN			3



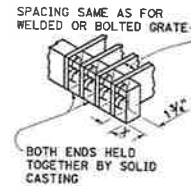
ALTERNATIVE BOLTED GRATE



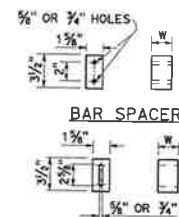
CAST END BLOCK



END OF BAR

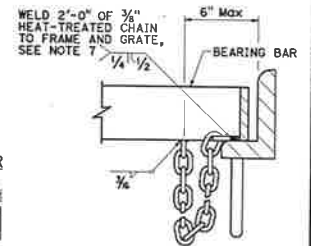


ALTERNATIVE CAST DUCTILE IRON OR CAST CARBON STEEL END BLOCK GRATE



BAR SPACER

ALTERNATIVE SPACER
W = 1 1/2" or 2"



DETAIL "D"
(Steel grates only)

Dist. COUNTY ROUTE POST MILE PROJECT SHEET NO. TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 31, 2018
PLANS APPROVAL DATE

BRUCE D. SWANER
661257
6-30-19
STATE OF CALIFORNIA

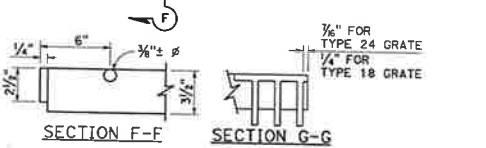
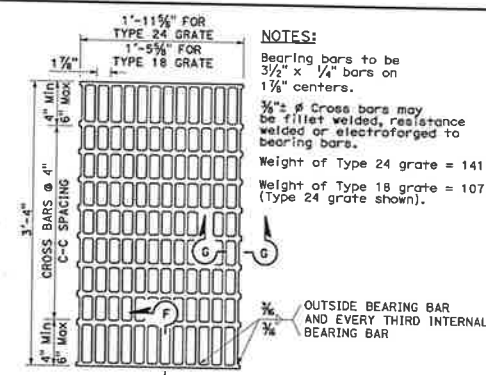
THE STATE OF CALIFORNIA OR ITS OFFICERS AND AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ENGINEER'S NOTES ON THIS PLAN SHEET.

NOTES:

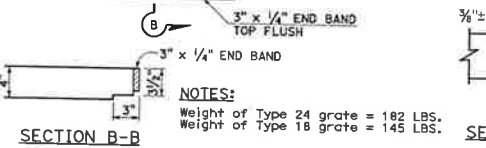
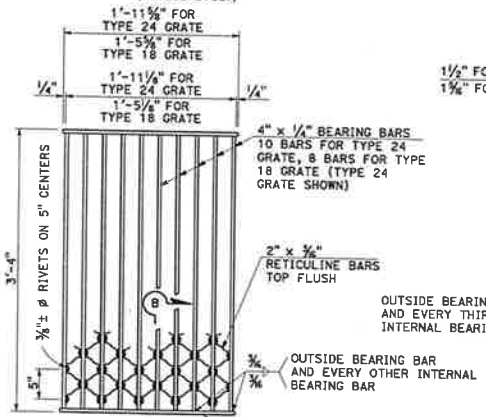
1. Grate type numbers refer to approximate width of grate in inches and number of bars, respectively.
2. Rounded top of bars optional on all grates.
3. Pipe inlets with a grate shall be placed so that bars parallel direction of principle surface flow.
4. Complete joint penetration butt welds may be substituted for the fillet welds on all anchors.
5. Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
6. Grate and frame weights are based on welded grates (weights of face angles, steps, protection bars, etc. are not included).
7. Connect chain to grate and frame only at locations shown on the plans. When chain is required, do not use cast ductile iron grates.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
GRATE DETAILS No. 1
NO SCALE

D77A

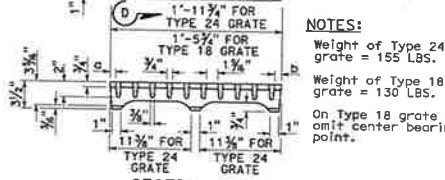
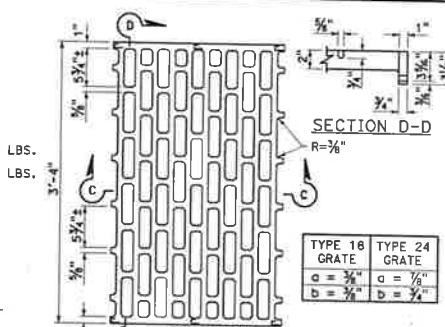


TYPE 18-10 AND 24-13 GRATE
(Welded Steel)



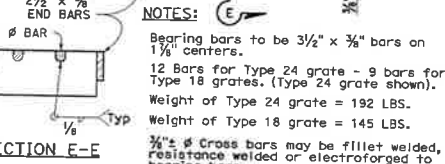
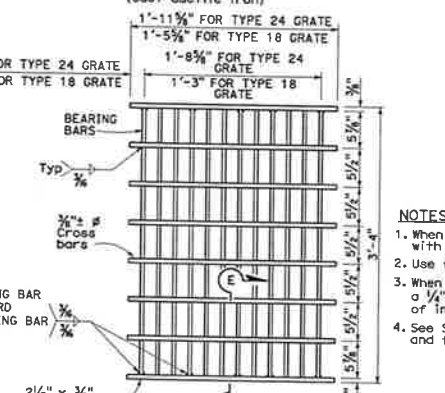
TYPE 18-8S AND 24-10S GRATE
(Welded Steel) Reticuline type

NOTES:
Bearing bars to be 3/2" x 1/4" bars on 1 1/4" centers.
3/8" ϕ Cross bars may be fillet welded, resistance welded or electroforged to bearing bars.
Weight of Type 24 grate = 141 LBS.
Weight of Type 18 grate = 107 LBS. (Type 24 grate shown).



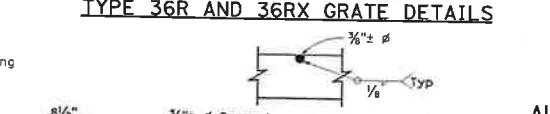
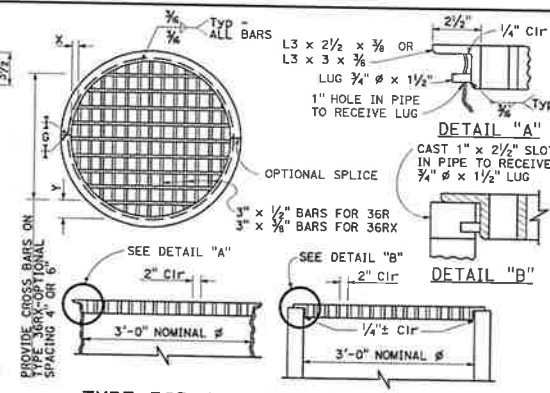
TYPE 18-8C AND 24-10C GRATE
(Cast ductile iron)

NOTES:
Weight of Type 24 grate = 155 LBS.
Weight of Type 18 grate = 130 LBS.
On Type 18 grate omit center bearing point.

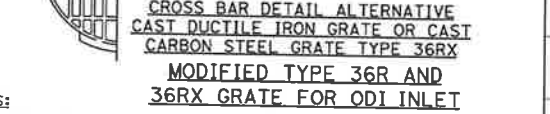
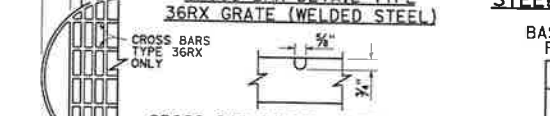


TYPE 18-9X AND 24-12X GRATE
(Welded Steel)

NOTES:
Bearing bars to be 3/2" x 3/8" bars on 1 1/4" centers.
12 Bars for Type 24 grate - 9 bars for Type 18 grates. (Type 24 grate shown).
Weight of Type 24 grate = 192 LBS.
Weight of Type 18 grate = 145 LBS.
3/8" ϕ Cross bars may be fillet welded, resistance welded or electroforged to bearing bars.



TYPE 36R AND 36RX GRATE DETAILS



NOTES:
1. When alternative grates are allowed - Final pay based on alternative with the lesser weight.
2. Use frame shown on Standard Plan D74A, D74B or D77A as appropriate.
3. When Type 24-10S, 24-12X or 24-13 grates are used with GDO inlets, a 1/4" x 3 1/2" x 3'-4 3/8" steel bar shall be welded across the center of inlet frame to separate the individual grates.
4. See Standard Plan D77A for connecting chain to welded grate and frame. When chain is required, do not use cast ductile iron grate.

GRATE BAR SPACING TABLE

TYPE	NO. OF BARS	CLEAR BAR SPACING	X	Y		Z
				4" SPACING	6" SPACING	
36R	13	2"	2 1/4"	-	-	-
36RX (STEEL)	15	2"	3/8"	3 3/4"	5 1/4"	-
36RX (CAST)	13	2"	2 1/4"	3 3/4"	5 1/4"	-
36R Mod	12	2"	2 1/4"	-	-	5 1/4"
36RX Mod (STEEL)	13	2"	3/8"	3 3/4"	5 1/4"	5 1/4"
36RX Mod (CAST)	12	2"	2 1/4"	3 3/4"	5 1/4"	5 1/4"

PROJECT COUNTY ROUTE TOTAL PROJECT TOTAL SHEETS

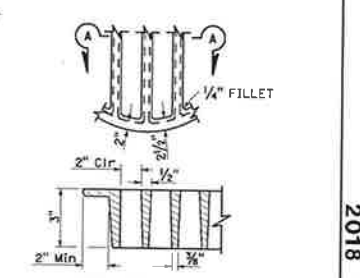
REGISTERED CIVIL ENGINEER

May 31, 2018

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

BRUCE C. SWANSON
C61257
6-30-19
STATE OF CALIFORNIA



ALTERNATIVE CAST DUCTILE IRON GRATE OR CAST CARBON STEEL GRATE TYPE 36R AND 36RX

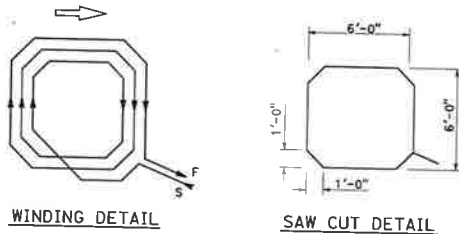
BASIS FOR Misc IRON AND STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS

INLET TYPE	GRATE TYPE	NO. OF GRATES	WEIGHT LB
GDO (SEE NOTE 4)	24-10C	2	391
	24-10S	2	456
	24-12X	2	473
G0,G0L,G1,G2,G3,G4 (TYPE 24)	24-13	2	374
	24-10C	1	202
GT1,GT2	24-10S	1	229
	24-12X	1	239
	24-13	1	168
G4 (TYPE 18)	18-8S	1	187
	18-9X	1	187
G5,G6	18-10	1	149
	18-8S	2	374
GT1,GT2	18-9X	2	374
	18-10	2	298
GT3,GT4	24-10C	2	404
	24-10S	2	458
	24-12X	2	478
ODI	24-13	2	376
	36RX (Mod)	1	196
GMP,GCP,GCPI	36RX	1	215
	36R (Mod)	1	220
TRASH RACK	36R	1	236
			22
GRATE CHAIN			3

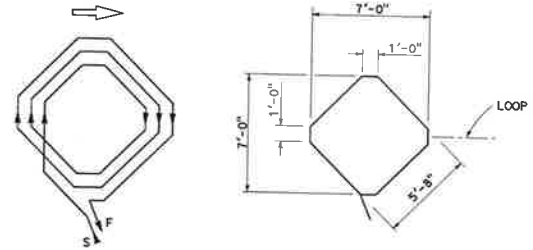
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
GRATE DETAILS No. 2
NO SCALE

D77B

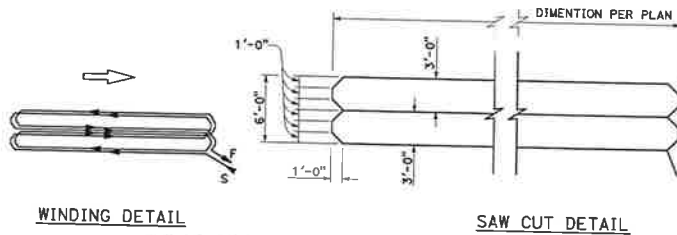
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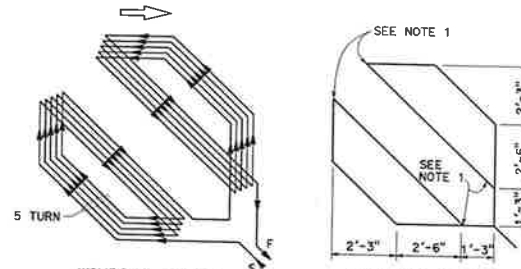
TYPE A LOOP DETECTOR CONFIGURATION



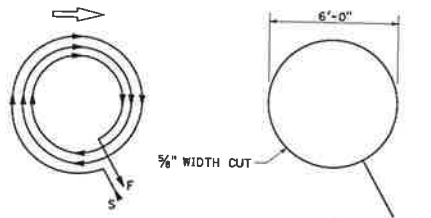
TYPE B LOOP DETECTOR CONFIGURATION



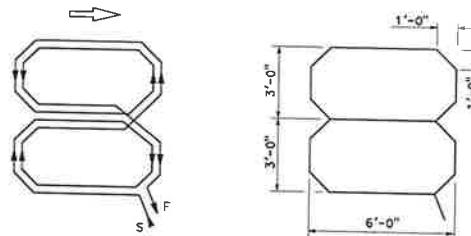
TYPE C LOOP DETECTOR CONFIGURATION



TYPE D LOOP DETECTOR CONFIGURATION



TYPE E LOOP DETECTOR CONFIGURATION



TYPE Q LOOP DETECTOR CONFIGURATION

NOTES:

1. Round corners of acute angle saw cuts to prevent damage to conductors.
2. Typical distance separating loops from edge to edge is 10' for Type A, B, D, and E installation in single lane.
3. Use Type D loops for limit line detection and bicycle lanes.

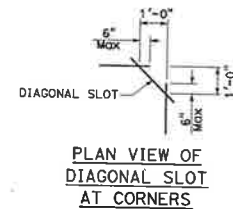
BLDG.	COUNTY	ROUTE	POST MILED	SHEET	TOTAL
			FOTAL PROJECT	NO.	SHEET(S)

H.R.T.
REGISTERED ELECTRICAL ENGINEER

May 31, 2018
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA ON ITS OFFICIAL AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

Professional Engineer Seal: Harold Zortogian, License No. E15636, Exp. 12-31-19, State of California.

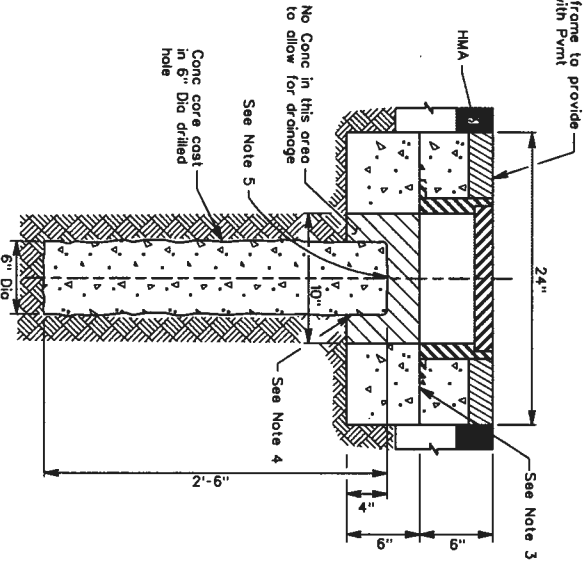
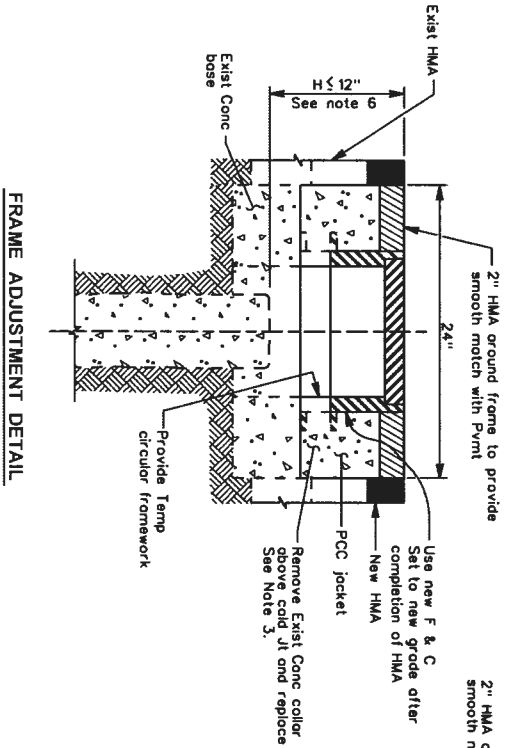
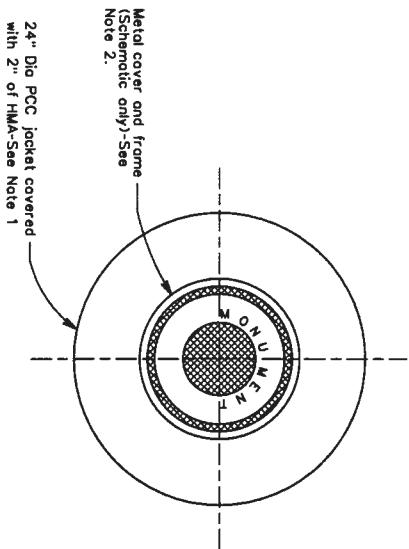


STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(DETECTORS)**
NO SCALE

ES-5B

2018 STANDARD PLAN ES-5B

Return to Table of Contents



NOTES:

1. Concrete for jacket and core shall contain not less than 590 lbs of cementitious material per cubic yard, 1/2" maximum aggregate grading, in conformance with Section 90, "Concrete", of the California Department of Transportation's Standard specifications.
2. Approved covers and frames are those manufactured by Chrisp Co Casting Part No. 9277N or 9279 or "Monument" shall be non-rocking and designed for a 15000 lb. wheel load.
3. 30# felt or 1/4" layer of sand to create a "cold joint".
4. 6" diameter collar formed with 30# felt or non-metallic form tube (may be left in place).
5. Solid brass marker (2" to 2 1/2" diameter top and 2" minimum shank) with distinctive punch and R.E. or L.S. number.
6. When "H" exceeds 12", a complete reconstruction of monument is required.

Julia R. Bluren
 PUBLIC WORKS DIRECTOR
 March 11, 2014
 PLANS APPROVAL DATE

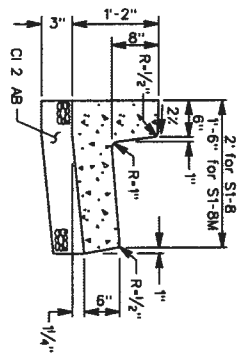
THE COUNTY OF CONTRA COSTA or its officers or agents
 in witness whereof I have hereunto set my hand and
 the seal of said County at the City of Martinez, California
 this 11th day of March, 2014.

NO.	DATE	REVISION DESCRIPTION

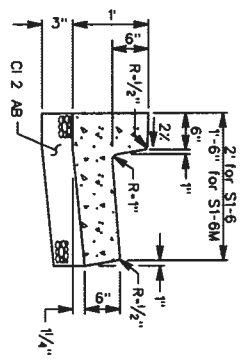
COUNTY OF CONTRA COSTA
PUBLIC WORKS DEPARTMENT
 MARTINEZ, CALIFORNIA
 STANDARD PLAN

STREET SURVEY MONUMENT

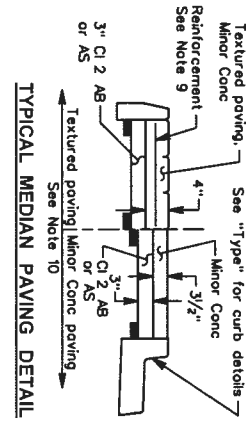
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 DRAWN BY: L. COSTA PLAN NO.: CA40
 CHECKED BY: R. ZWERNER



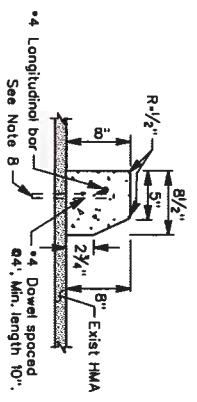
TYPE S1-8 & S1-8M



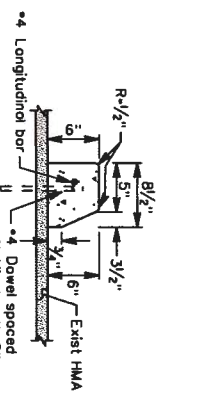
TYPE S1-6 & S1-6M



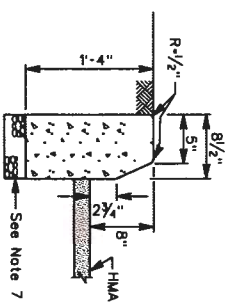
TYPICAL MEDIAN PAVING DETAIL



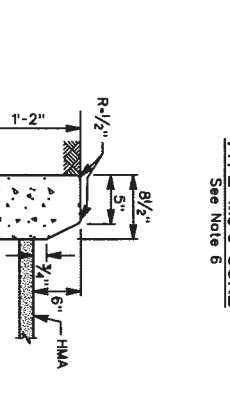
TYPE M3-8 CURB



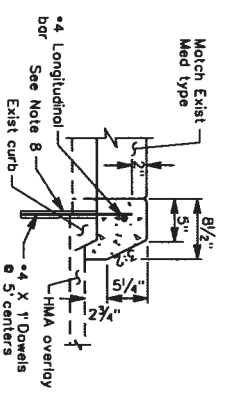
TYPE M3-6 CURB



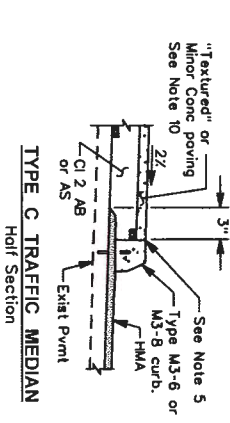
TYPE M1-8 CURB



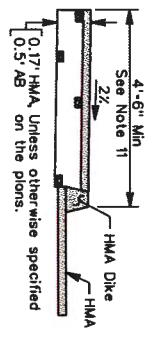
TYPE M1-6 CURB



MODIFIED TYPE M3-8 CURB



TYPE B TRAFFIC MEDIAN



HMA PATH WITH HMA DIKE

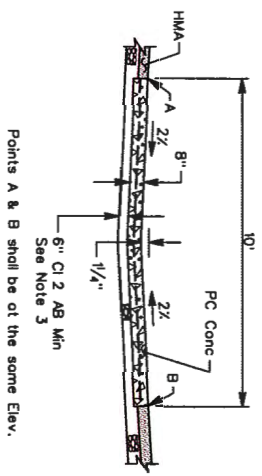
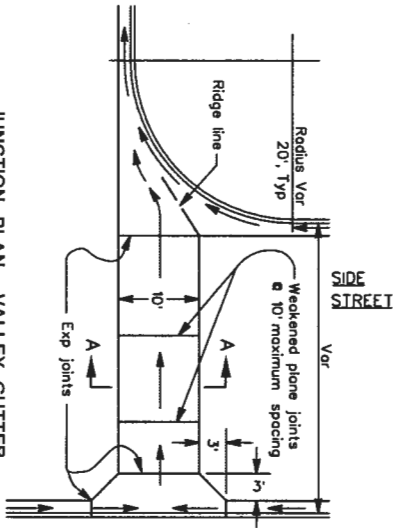
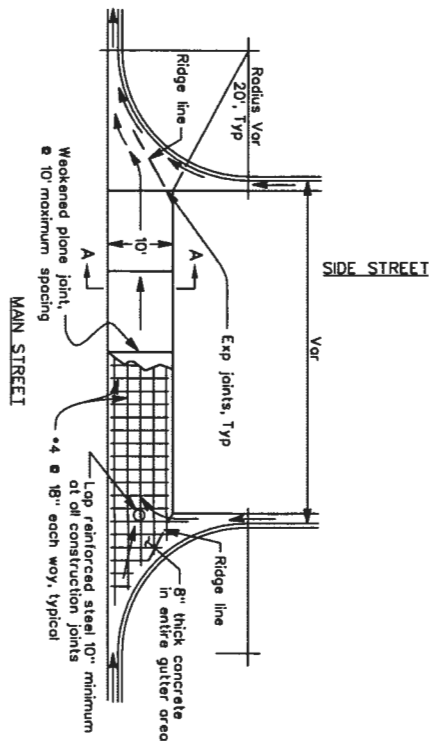
NOTES:

1. Minor Concrete in conformance with Section 90-2, "Minor Concrete" of 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 dowelled 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.
5. Paving of 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.
6. 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.
7. Type M3 curb shall be used only when placed on existing or overlaid pavement.
8. 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.
9. Reinforcement shall be #4 bars at 18" OC each way or #4 grout. Omit dowels when curb is extruded.
10. Pave dowels in 1" diameter drilled hole filled with 1:1 sand grout. Omit dowels when curb is extruded.
11. Width of HMA path shall be a minimum of 4'-6" measured from top face of curb or dike.

JULIA R BURDET
 No. 37937
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 PUBLIC WORKS DIRECTOR
 PLANNING APPROVAL DATE: *March 17, 2014*
 THE COUNTY OF CONTRA COSTA, on the certificate or signature of the undersigned, certifies that the undersigned is a duly licensed and competent professional engineer of the State of California.

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

NO.	DATE	REVISION DESCRIPTION



Points A & B shall be at the same Elev.

SECTION A-A

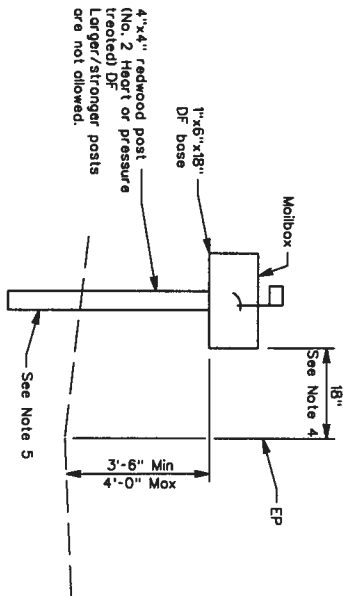
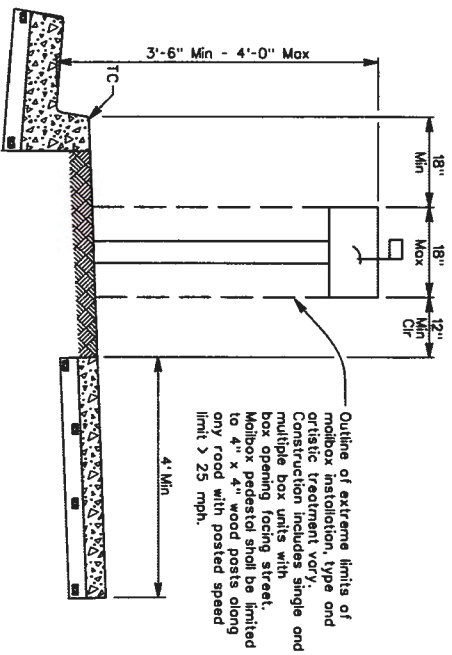
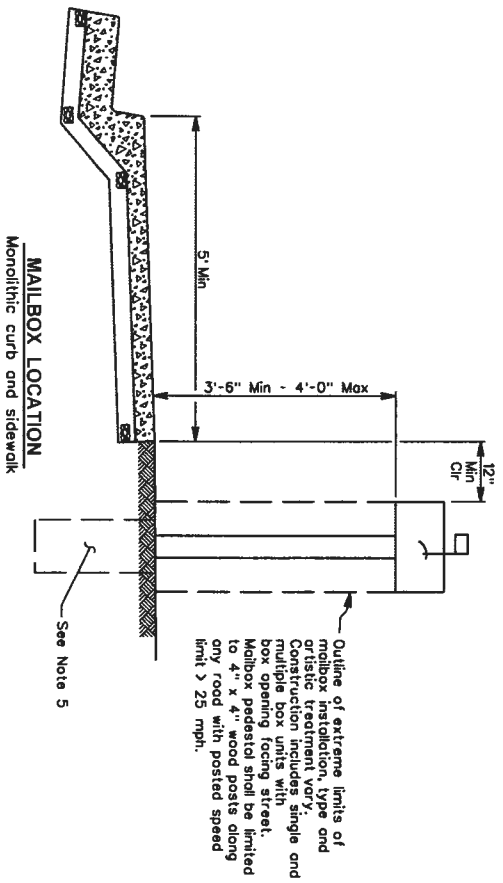
Julia R. Buerge
 PUBLIC WORKS DIRECTOR
 COUNTY OF CONTRA COSTA
 PLANS APPROVAL DATE: 06/20/14
 REGISTERED PROFESSIONAL ENGINEER
 JULIA R. BUERGE, INC.
 No. 379,37
 CIVIL
 STATE OF CALIFORNIA

NOTES:

1. Valley gutters shall only be used on local roads or roads with a low volume of traffic as approved by the Public Works Department.
2. Concrete to be used for all construction shown on this plan and shall contain a minimum of 590 lbs per cubic yard of cementitious material, 1" maximum aggregate grading in conformance with Section 90, "Concrete" of the California Department of Transportation Standard Specifications.
3. If total pavement structural section thickness of side street exceeds 14", aggregate base thickness shall be increased to match total side street pavement structural section thickness.
4. For weakened plane joint and expansion joint details, see details on Standard Plan CA70.

NO.	DATE	REVISION DESCRIPTION	BY

COUNTY OF CONTRA COSTA
 PUBLIC WORKS DEPARTMENT
 MARTINEZ, CALIFORNIA
 STANDARD PLAN
CONCRETE VALLEY GUTTER DETAILS
 SCALE: NO SCALE
 DRAWN BY: H. HUSSEY
 CHECKED BY: M. HOLLINGSWORTH
 DATE: 3/14
 PLAN NO. **CA73**



RURAL MAILBOX DETAIL

NOTES:

- Distances are established by Postal regulations and may vary depending on jurisdiction. Check with local Post Office for current regulations.
- Encroachment permit is required if mailbox is to be installed in existing sidewalk, or if installation requires modification of dimensions shown on this plan.
- See Standard Plan CA70 & CA71 for sidewalk and curb details.
- Where AC dike or curb is placed at edge of pavement, the minimum distance is measured from the face of curb or dike.
- Post depth shall be as required to adequately support mailbox to be installed. Minimum 2' depth with compacted soil backfill, no PCC backfill.

JULIA R. BUEREN

 REGISTERED PROFESSIONAL ENGINEER

 No. 37937

 STATE OF CALIFORNIA

PUBLIC WORKS DIRECTOR

 JULIA R. BUEREN

 PLANS APPROVAL DATE: March 11, 2014

 The County of Contra Costa or the engineer or engineer-in-charge shall be responsible for the completeness of electronic copies of this plan sheet.

MAILBOX LOCATION
Separated sidewalk with planting strip

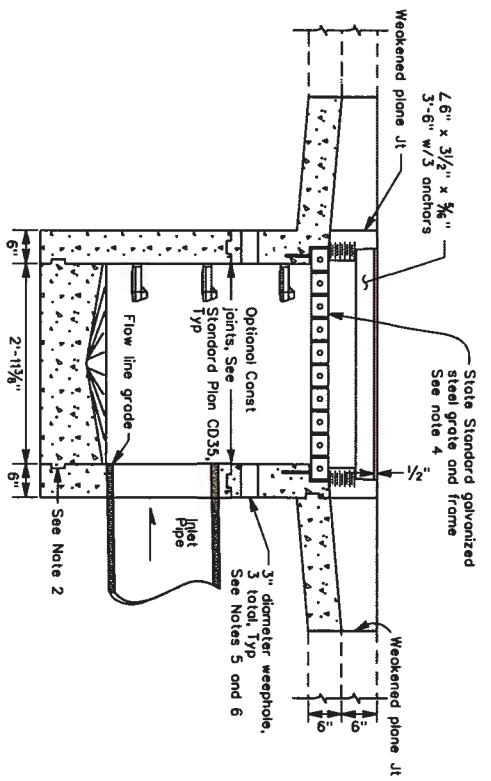
NO.	DATE	REVISION DESCRIPTION

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

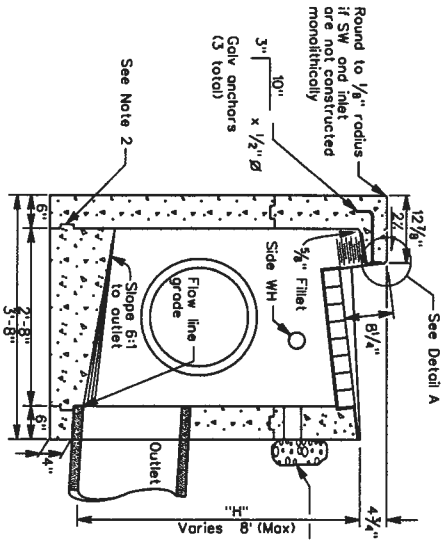
MAILBOX DETAILS

SCALE: NO SCALE
 DRAWN BY: H. HUSSEY
 CHECKED BY: W. HOLMESWORTH

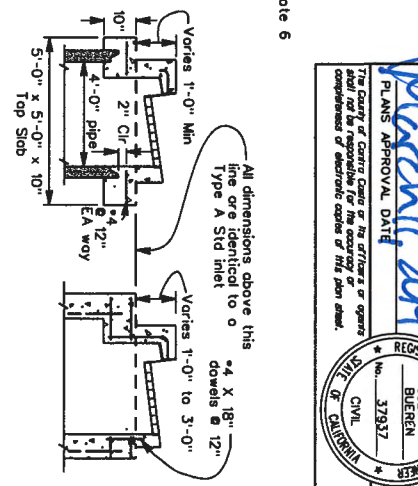
DATE: 3/14
 PLAN NO: CA90



SECTION A-A
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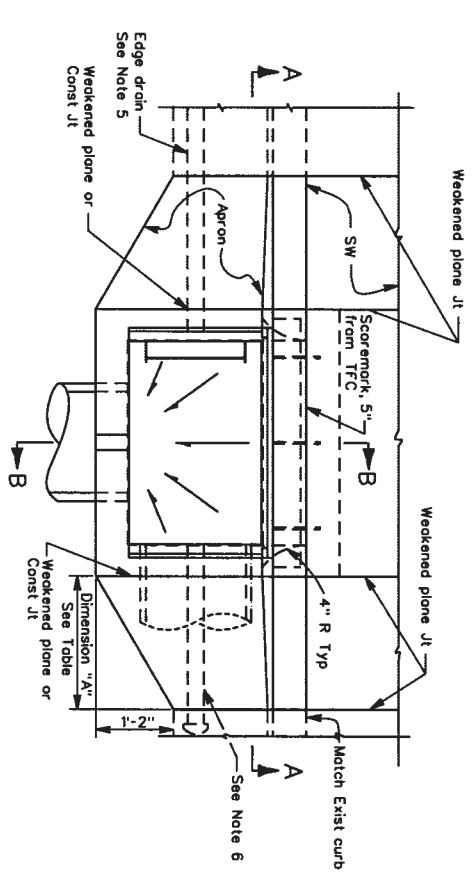


SECTION B-B
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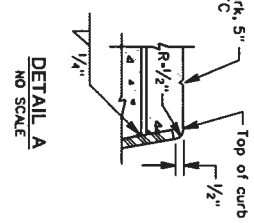


SECTION OF TYPE A OPENING ON PRECAST MANHOLE BARREL SEE STANDARD PLAN CD30

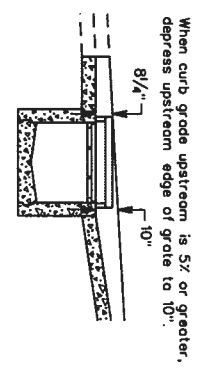
SECTION OF TYPE A OPENING ON MANHOLE BASE SEE STANDARD PLAN CD31 OR CD32



PLAN
NO SCALE
GRATE NOT SHOWN



DETAIL A
NO SCALE



DETAIL FOR STEEP CURB SLOPE

TABLE

DIMENSION "A" (in)	UPSTREAM CURB GRADE 2% and less	UPSTREAM CURB GRADE 2% and less	"A" DOWNSTREAM
24	36	36	24
36	48	48	36
48	60	60	48
60	72	72	60
72	84	84	72
84	96	96	84
96	108	108	96
108	120	120	108

See "DETAIL FOR STEEP CURB SLOPE"

NOTES:

1. For Inlet General Notes and Details, see Standard Plan CD35.
2. Construction joints are optional where shown, other locations are subject to the approval of the Public Works Department. Key dimensions - 3/4" x 3".
3. When dimension "H" exceeds 6'-0", use a manhole base with Type "G" inlet top.
4. See Caltrans Standard Plan D77A for inlet frame and Caltrans Standard Plan D77B for type 24-10S inlet grate.
5. If edge drains are specified by Public Works Department or shown on the plans, see Standard Plan CD08 for edge drain (ED) details.
6. See Standard Plan CD35 for weephole drainage details unless edge drain is shown on plans or as specified by Public Works Department. For edge drain details, see Standard Plan CD08.

NO.	DATE	REVISION DESCRIPTION

SCALE: NO SCALE DATE: 3/14

DRAWN BY: L. COSTA PLAN NO. CD27

CHECKED BY: M. HOLLINGSWORTH

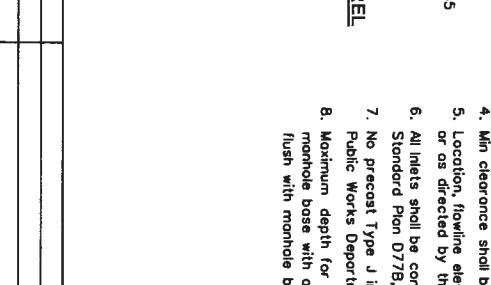
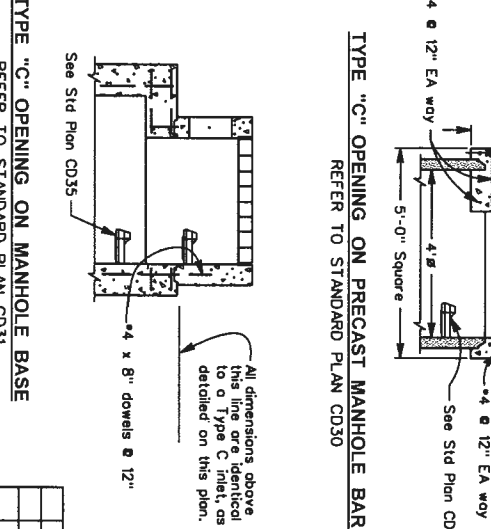
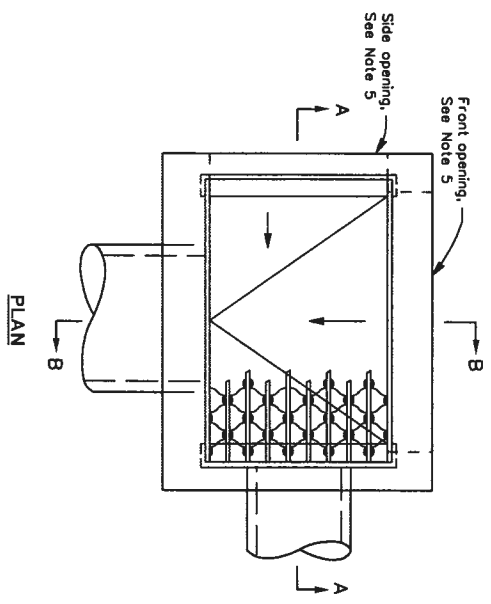
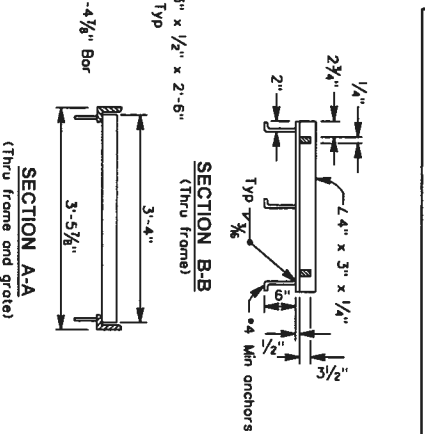
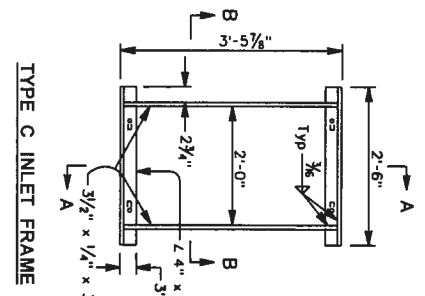
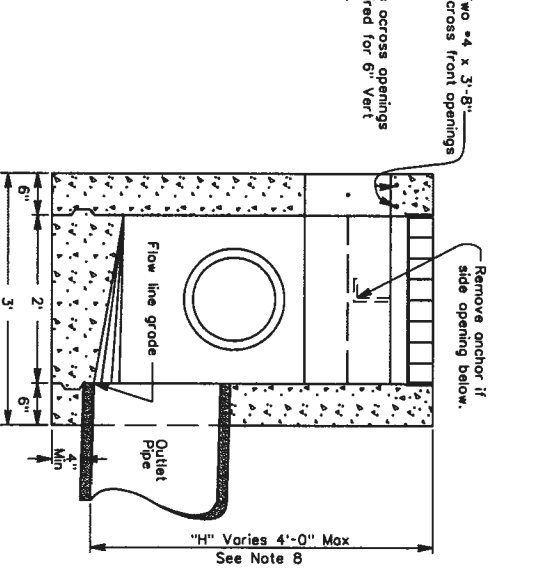
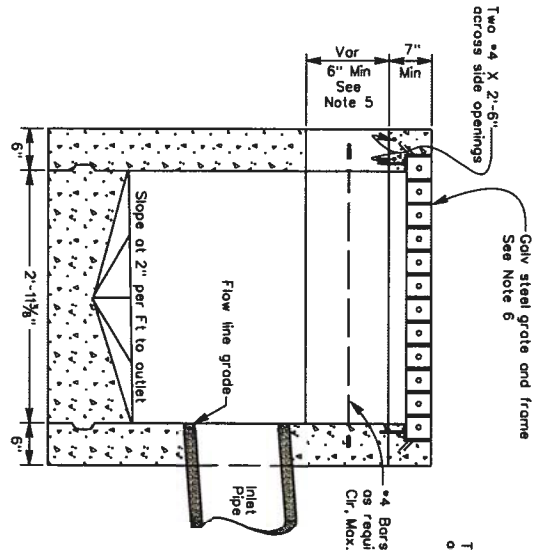
COUNTY OF CONTRA COSTA
PUBLIC WORKS DEPARTMENT
MARTINEZ, CALIFORNIA
STANDARD PLAN

TYPE "G" INLET

REGISTERED PROFESSIONAL ENGINEER
JULIA R. BLUREN
No. 37937
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE: 3/14/2014

Public Works Director
MARTINEZ, CALIFORNIA



NOTES:

1. See Standard Plan CD35 for Inlet General Drainage Notes.
2. Type J inlets shall not be used in pedestrian areas.
3. Construction joints are optional where shown. Other locations are subject to the approval of the Public Works Department. Key Dimensions are 3/4" x 2 1/2".
4. Min clearance shall be 2" for all reinforcing steel.
5. Location, flowline elevation and size of side openings to be as shown on plans, or as directed by the Public Works Department.
6. All inlets shall be constructed with Caltrans Type 24-T05 grates, see Caltrans Standard Plan D77B, and Type J inlet frame shown on this plan.
7. No precast Type J inlets are allowed without prior approval of the Public Works Department.
8. Maximum depth for Type J inlet shall be 4'. For depths greater than 4' use a manhole base with a Type J top. The Type J inside wall with steps shall be flush with manhole base inside wall below.

FABRILIO WORKS DIRECTOR
 PLANS APPROVAL DATE: 11/20/2011
 REGISTERED PROFESSIONAL ENGINEER
 JULIA R. BLEREN
 No. 37937
 CIVIL
 STATE OF CALIFORNIA

NO.	DATE	REVISION DESCRIPTION	BY

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

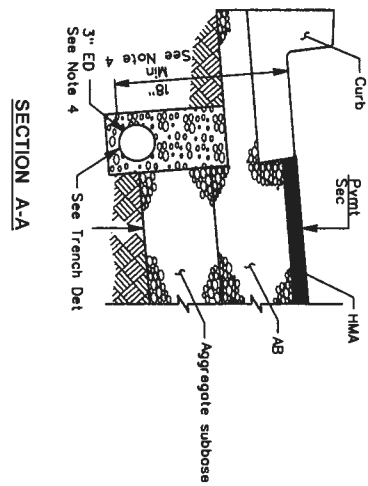
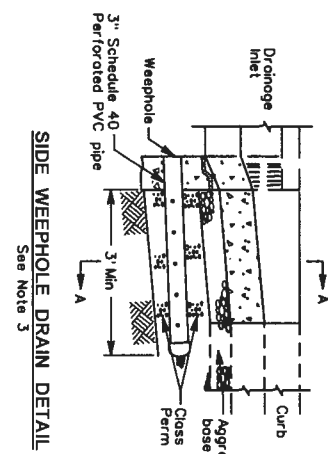
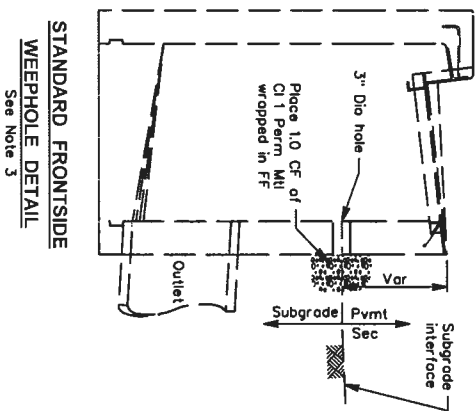
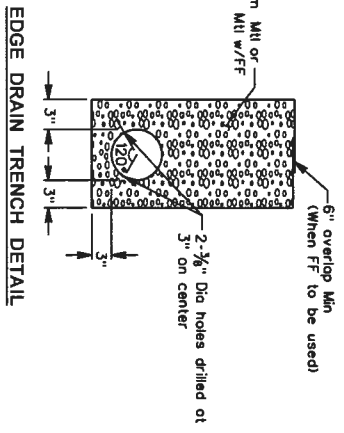
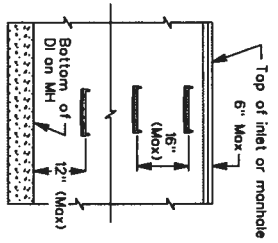
TYPE "J" INLET

SCALE: NO SCALE
 DRAWN BY: L. COSTA
 CHECKED BY: M. HOLLINGSWORTH

DATE: 3/14
 PLAN NO. **CD29**

NOTES:

1. All inlets shall have a County approved "anti-pollution" plastic marker attached to the inlet as directed by the Inspector or Resident Engineer. The marker shall be applied following manufacturer's recommendations. PCC surfaces shall be mechanically cleaned just prior to attaching the marker. The marker and adhesive may be furnished by the Public Works Department, check your permit conditions or contact Special Provisions.
2. Steps shall be steel reinforced polypropylene plastic, M.A. Industries, Inc. No. PS2-PF or equivalent. Steps to be cast in place or press fitted into holes per manufacturer. Install steps with lowest rung 12" maximum above the floor and highest rung not more than 6" below top of inlet. The spacing between steps shall not exceed 16" and shall be uniform throughout the length of the wall. Place steps in the wall without an opening. Steps shall not be installed on inlet back wall. No steps required where distance from floor of inlet to top of grate is 4' or less. See "Step Detail".
3. Weephole elevation varies depending on the depth of the adjoining pavement section. It shall be 0.1' or slightly below, the pavement section subgrade elevation with a minimum depth of 18" below the curb inlet grate elevation; the side weephole detail shall be used at all ramp locations. Edge drain (Standard Plan CD08), or side weephole drains detail at other locations may be required as shown on the construction plans or by the Public Works Department. Where the side weephole detail or edge drains are not required, these weepholes shall conform to the front face weephole details shown on this plan.
4. 3" edge drain per Standard Plan CD08, when shown on the plans or specified by the Public Works Department.
5. Concrete shall conform to Section 90, "Concrete", of California Department of Transportation's Standard Specifications and the following:
 - A. Construction joints shown on standard plans are permitted when top portion of inlet is to be constructed monolithically with curb and sidewalk. Key dimensions- $2\frac{1}{2}$ " x 3".
 - B. Concrete construction joint shall be located 12" to 18" below top of curb elevation.
 - C. Concrete above construction joint shall contain a minimum of 505 lbs of cementitious material per cubic yard, 1" maximum aggregate grading.
 - D. Concrete below construction joint shall contain a minimum of 590 lbs of cementitious material per cubic yard, 1" maximum aggregate grading.
 - E. When inlet is constructed as a single unit concrete shall comply with item D, described above.
6. Type "III" manhole (Std Pin CD30) bases are for use with pipes to 24" in diameter and where there is sufficient cover to use minimum length manhole barrel, eccentric cone, and cover frame. Use Type "III" manhole bases (Std Pin CD31) with pipes to 42" in diameter. Type "III" manhole bases (Std Pin CD32) for 60" in diameter. Use Type "V" manhole bases (Std Pin CD34) for pipes up to 96" in diameter. For pipe larger than 96" in diameter, a special manhole base design is required.
7. Unless otherwise noted on Standard Plans all concrete shall contain not less than 590 lbs. of cementitious material per cubic yard, 1" maximum grading in conformance with Section 90, "Concrete" of California Department of Transportation's Standard Specifications. Invert paving concrete shall contain not less than 505 lbs per cubic yard of cementitious material, 1" maximum grading, in conformance with said Standard Specifications.
8. Inlet and outlet pipes shall not intercept a manhole base through a corner. If skew angle is too great to permit the opening to be made in a single wall face, use a Type "III" manhole base. (See Std Pin CD32).

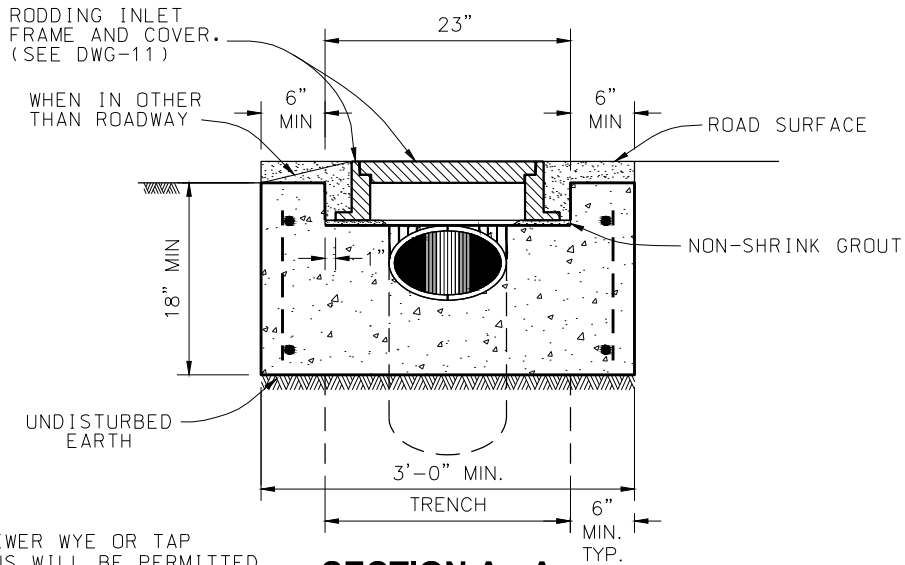


PUBLIC WORKS DIRECTOR
 COUNTY OF CONTRA COSTA
 PLANS APPROVAL DATE: 11/20/14
 The County of Contra Costa or its officers or agents accept these plans and specifications as the basis of construction of the works shown on these plans and specifications.

COUNTY OF CONTRA COSTA PUBLIC WORKS DEPARTMENT MARINER CALIFORNIA STANDARD PLAN		
STD INLET/MANHOLE PLAN GENERAL NOTES & DETAILS		
SCALE: NO SCALE	DATE: 3/14	
DRAWN BY: H. HUSSEY	PLAN NO. CD35	
CHECKED BY: M. HOLMESWORTH		
NO.	DATE	REVISION DESCRIPTION

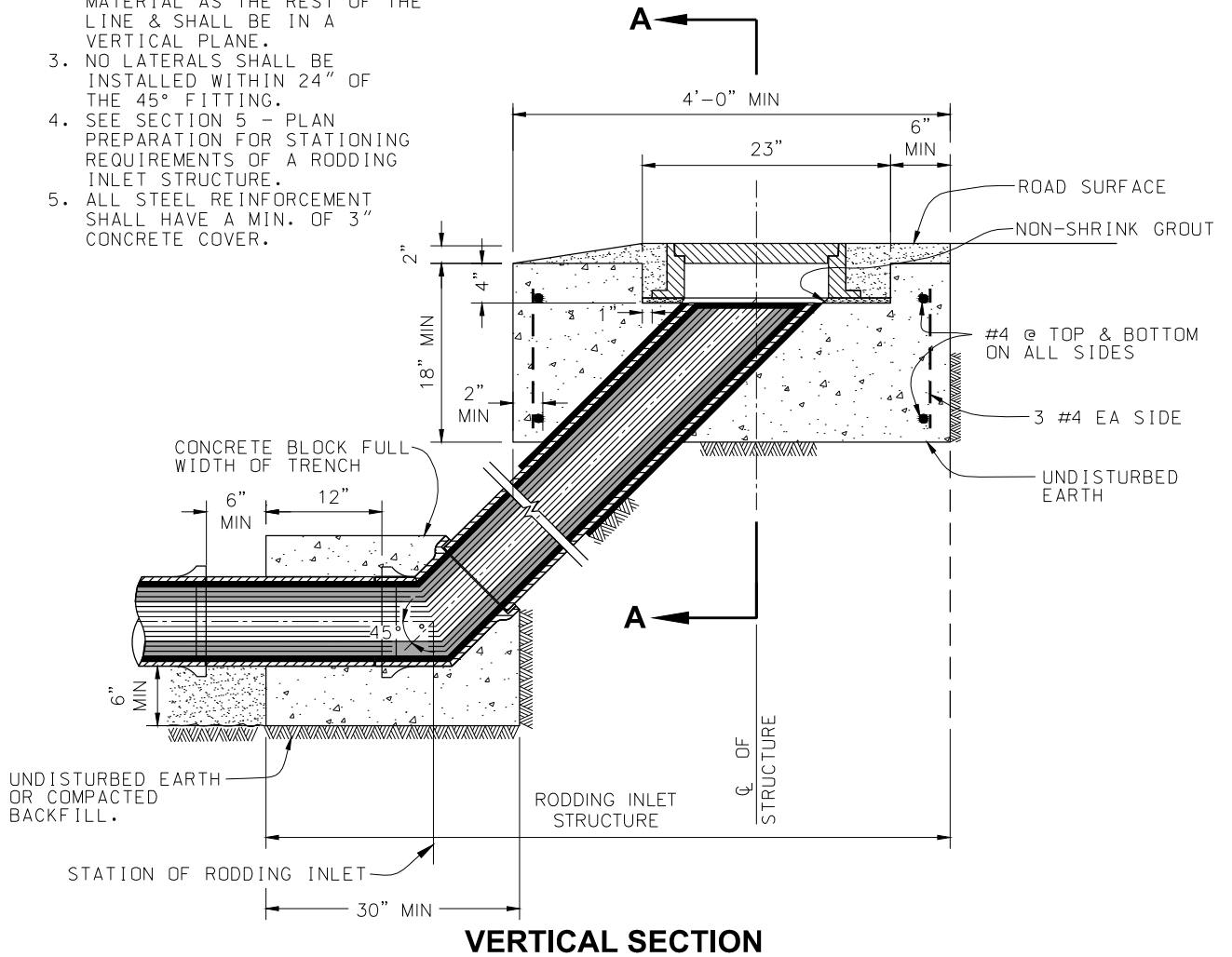
CENTRAL CONTRA COSTA SANITARY DISTRICT MARTINEZ, CALIFORNIA

RODDING INLET



NOTES:

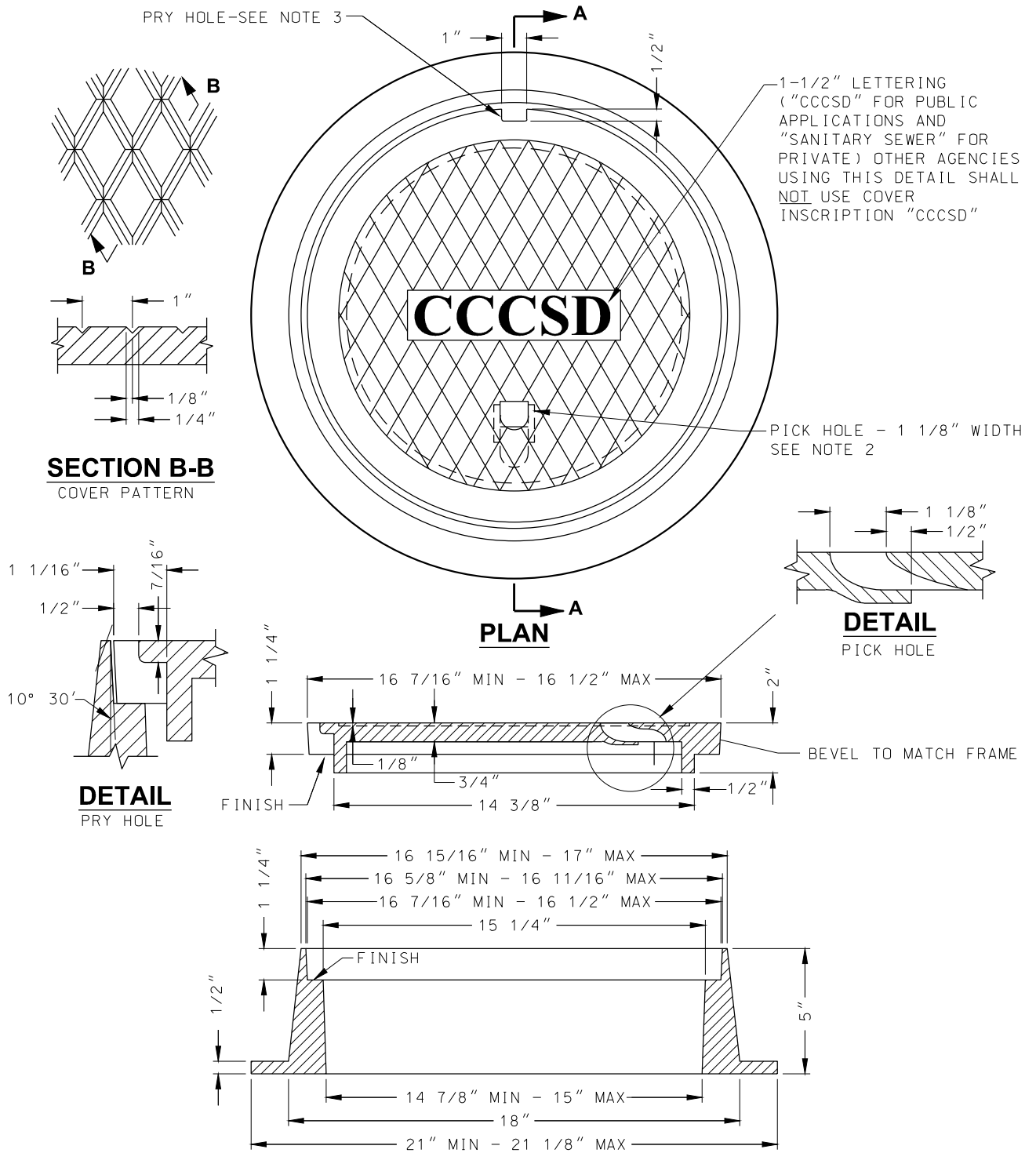
1. NO SIDE SEWER WYE OR TAP CONNECTIONS WILL BE PERMITTED IN RISER PIPE.
2. RISER PIPE SHALL BE THE SAME MATERIAL AS THE REST OF THE LINE & SHALL BE IN A VERTICAL PLANE.
3. NO LATERALS SHALL BE INSTALLED WITHIN 24" OF THE 45° FITTING.
4. SEE SECTION 5 - PLAN PREPARATION FOR STATIONING REQUIREMENTS OF A RODDING INLET STRUCTURE.
5. ALL STEEL REINFORCEMENT SHALL HAVE A MIN. OF 3" CONCRETE COVER.



08-Jul-2014 K:\Projects_standardSpecs\colsys10_RoddingInlet.dwg

CENTRAL CONTRA COSTA SANITARY DISTRICT MARTINEZ, CALIFORNIA

RODDING INLET FRAME & COVER

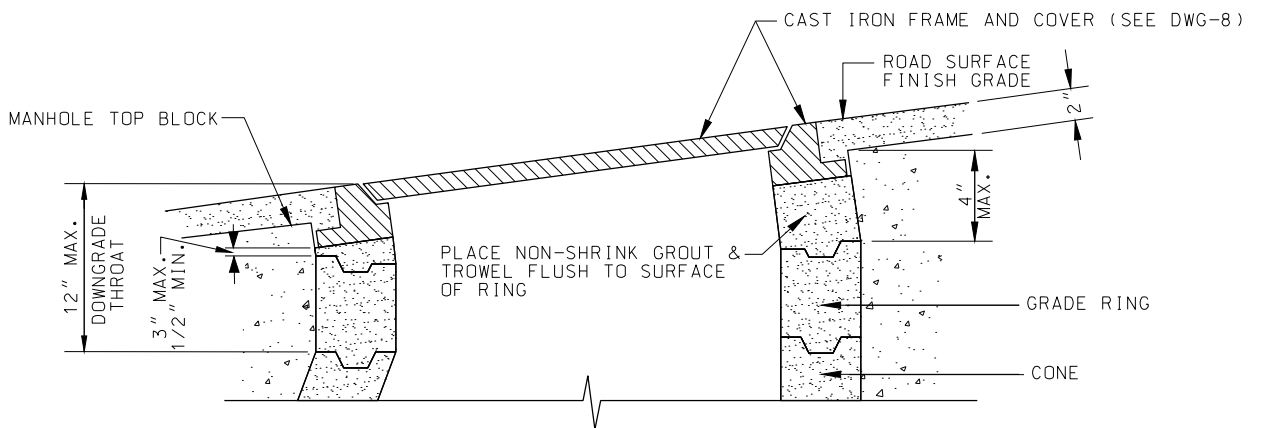
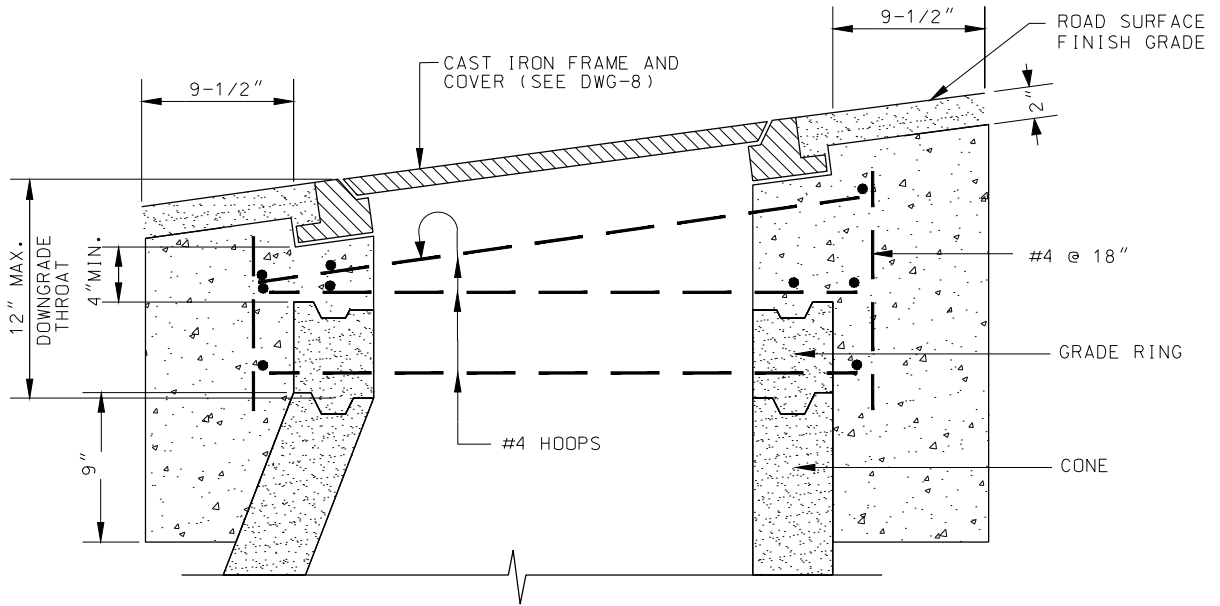


NOTES:

1. COVER SHALL BE DESIGNED FOR HS-20 HIGHWAY LOADING.
2. PICK HOLE SHALL BE OPEN AND FIT A STANDARD PICK.
3. PRY HOLE SHALL BE LOCATED AT TOP CENTER OF THE RODDING INLET COVER AS SHOWN.

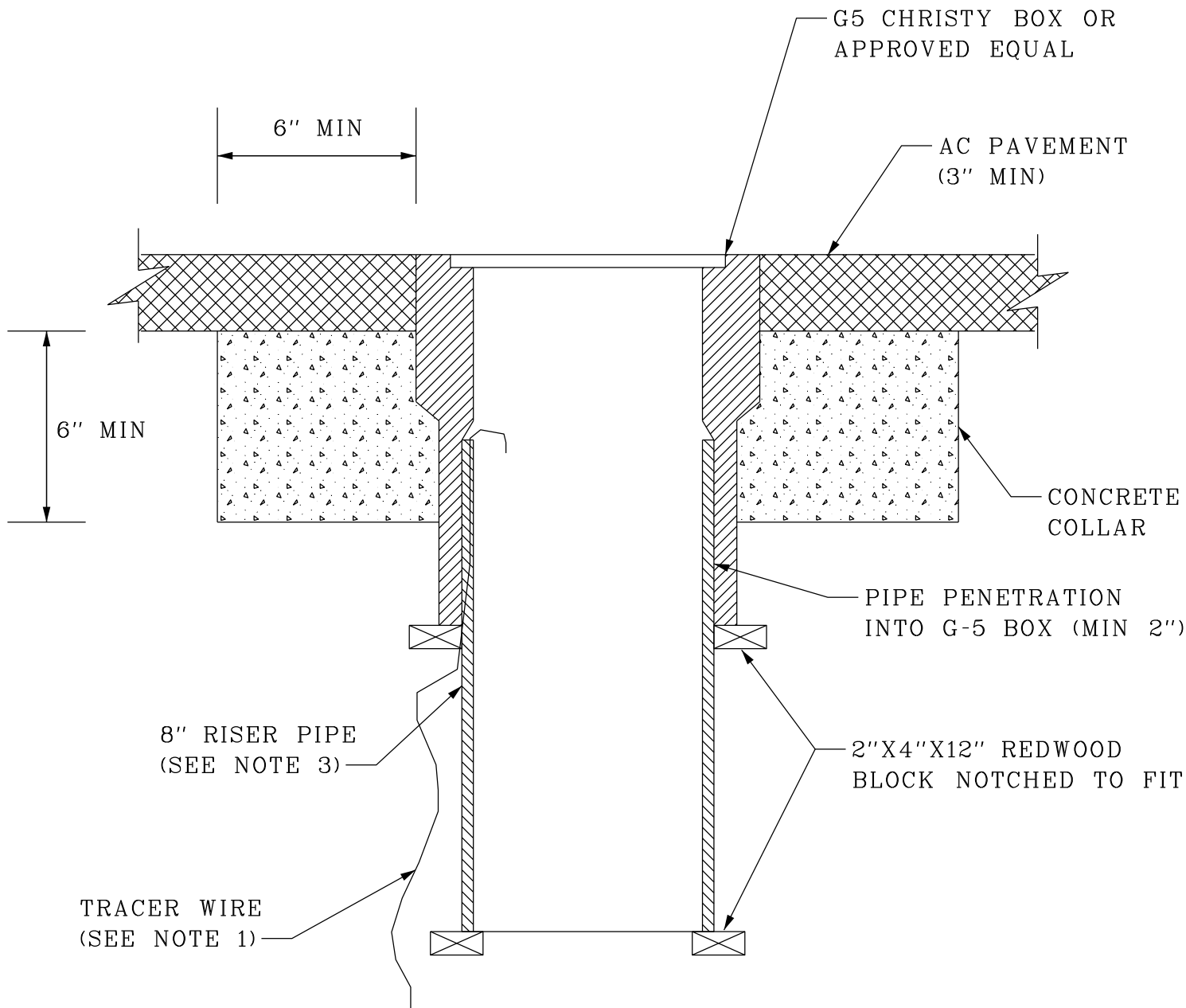
CENTRAL CONTRA COSTA SANITARY DISTRICT MARTINEZ, CALIFORNIA

MANHOLE ADJUSTMENT TO FINISH GRADE PAVED AREAS



NOTE:

1. SEE DWG-1 FOR TOP BLOCK DETAILS



NOTES:

1. AC PAVEMENT TO COMPLY WITH STREET PAVEMENT REQUIREMENTS
2. FOR VALVE BOXES INSTALLED IN NON TRAFFIC AREAS, CONCRETE COLLAR SHALL BE EXTENDED TO FINISH GRADE AND SLOPED TO DRAIN AWAY FROM LID.
3. RISER PIPE TO BE ONE CONTINUOUS PIECE, APPROVED PVC CLASS 150, 200 OR STEEL PIPE WITH A MIN 10 GA WALL THICKNESS
4. IF TRACER WIRE IS OF SUFFICIENT LENGTH RE-ROUTE AS SHOWN

G5
VALVE BOX WITH CAST IRON TRAFFIC LID
NTS

APPENDIX C

CONTRACTORS POTHOLE LOG FORM

Utility Pothole Log

(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
2685 Sample Street	10+53	2' from North Gutter Lip, in Street	PG&E (Gas Service)	36"

*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 Contractors Representative: _____

Date: _____

Signature of City of Lafayette Representative: _____

Date: _____