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 2013 ROAD AND DRAIN IMPROVEMENTS

Project No. 014-9694

Bid Opening Date
Thursday, April 25, 2013, 2:30 p.m.

TABLE OF CONTENTS

	Page No.
NOTICE TO CONTRACTORS	N-1
BID PROPOSAL	P-1
BID SCHEDULE	P-2
PROPOSAL GUARANTEE "BID BOND" WITH NOTORIZED SHEETS	
PROPOSAL SIGNATURE SHEET	P-7
CONTRACT AGREEMENT FOR CONSTRUCTION	C-1
PAYMENT BOND	
PERFORMANCE BOND	
SPECIAL PROVISIONS	
GENERAL	S1
SECTION SP1 - TERMS, DEFINITIONS AND ABBREVIATIONS	S2
SECTION SP2 - BID PROPOSAL REQUIREMENTS	S2
SECTION SP3 - AWARD AND EXECUTION OF CONTRACT	S2
SECTION SP4 - PLANS AND SPECIFICATIONS (GENERAL)	S3
SECTION SP5 - CONTROL OF WORK AND MATERIALS	S4
SECTION SP6 - LEGAL RELATIONS AND RESPONSIBILITIES	
SECTION SP7 - EXISTING UTILITIES	S10
SECTION SP8 - PROGRESS OF WORK	S12
SECTION SP9 - MEASUREMENT AND PAYMENT	S14
SECTION SP10- NOT USED	S14
SECTION SP11- MISCELLANEOUS	S15
SECTION SP12- MOBILIZATION	S16
SECTION SP13- CONSTRUCTION AREA SIGNS	S23
SECTION SP14- TRAFFIC CONTROL	S24
SECTION SP15- DUST CONTROL	S27
SECTION SP16- CLEARING AND GRUBBING, TREE TRIMMING, AND TREE PRO	rection S28
SECTION SP17- EXISTING HIGHWAY FACILITIES	S30
SECTION SP18- AGGREGATE BASE	S37
SECTION SP19- GRIND, MIX, REGRADE AND COMPACT EXISTING ASPHALT CO PAVEMENT, BASE AND SUBGRADE MATERIAL	NCRETES38
SECTION SP20- EARTHWORK, ROADWAY EXCAVATION	S40

SECTION SP21-	CEMEN'	T TREATMENT OF PULVERIZED MATERIAL	S42
SECTION SP22-	ASPHAL	T CONCRETE	S45
SECTION SP23-	SHEETI	NG AND SHORING	S52
SECTION SP24-	CONCRI	ETE CONSTRUCTION	S53
SECTION SP25-	STORM	DRAINS	S56
		LOPE PROTECTION	
SECTION SP27-	TEMPO	RARY PAVEMENT DELINEATION	S60
SECTION SP28-	PAVEM	ENT STRIPING, MARKERS AND DELINEATION	S62
SECTION SP29-	SURVE	Y MONUMENT	S65
SECTION SP30-	SHOULI	DER BACKING AND RE-GRADE EARTH DITCH	S66
SECTION SP31-	RELOCA	ATE TRAFFIC SIGN	S68
APPENDIX A: APPENDIX B:		TE MANAGEMENT PLAN AND WASTE ASSESSMENT FORM ITY POTHOLE LOG & CA GOVERNMENT CODE 4216	
APPENDIX C:	STAN	DARD PLANS	
APPENDIX D:	STRE	ET CROSS SECTIONS	
	D-1	VIA ROBLE	
	D-2	FIORA PLACE	
	D-3	JENNIE COURT	
	D-4	LEROY WAY	
	D-5	MARGUERITE COURT	
	D-6	VALLECITO COURT	
	D-7	MANZANA PLACE	
	D-8	MARYOLA PLACE	
	D-9	MARS COURT	
	D-10	BUCKEYE COURT	

NOTICE TO CONTRACTORS

Sealed proposals will be accepted at the office of the City Clerk, 3675 Mt. Diablo Boulevard, Suite 210, Lafayette, California until 2:30 P.M., Thursday, April 25, 2013, at which time they will be publicly opened and read, for Construction of City of Lafayette, 2013 Road and Drain Improvements, Project No. 014-9694, including, but not limited to: mobilization; traffic control and construction signage; potholing utilities; clearing and grubbing including tree protection and trimming; removal and disposal of asphalt concrete pavement and subgrade, concrete and/or asphalt curb, gutter, driveways, brick pavers; pulverizing, mixing, excavating, grading and compacting pavement subgrade, and base materials; cement treatment of pulverized material; construction of storm drains, catch basins, manhole structures, concrete channels, concrete and/or asphalt curb, gutter, driveways, decorative pavers, asphalt concrete pavement, traffic stripes, markers, and markings; adjustment of utility covers; installation of survey monuments; and all other work as shown on the Plans and as described in the Specifications to provide a complete project.

The Engineer's cost estimate is \$1,050,000.00.

Contract documents, including the Plans and Specifications, may be obtained at the City of Lafayette Engineering Services Division. The cost of Plans and Special Provisions is \$50 per set. The cost of mailing is an additional \$8 per set. A link to electronic bid documents may be obtained free of charge by contacting the Engineering Secretary at (925)284-1951.

This project shall be constructed in accordance with the September 2002 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 \$15 per set. The cost of mailing is an additional \$7. If you already have the Standard Specifications (dated September, 2002), you do not need to purchase a new copy.

Bids shall be submitted in a sealed envelope titled "Proposal: City of Lafayette, 2013 Road and Drain Improvements, Project No. 014-9694".

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 Owner reserves the right to waive any informalities or to reject any or all bids.

The City Council has ascertained the General Prevailing Rates of Wages applicable to this work, and these rates are on file in the office of the City of Lafayette Engineering Services Division.

Time of completion allowed for this project will be **seventy (70) 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 Mike Moran, City Engineer's Office, (925) 299-3245.

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 page at http://www.ci.lafayette.ca.us (click on Capital Improvements under the Quick Links sidebar on the homepage). Or you may contact the Engineering Secretary at (925) 299-3217.

CITY OF LAFAYETTE

Date:	3/25/2013	By:
		Tony Coe, City Engineer

ADDENDUM #1

CITY OF LAFAYETTE

2013 Road and Drain Improvements Project Number 014-9694

The following changes, additions, and deletions shall become a part of the plans and specifications for the above project, and shall be bound by the General Provisions, Special Provisions, and all other conditions of the Bid Documents.

The "Unit" for Bid Item Numbers 24, "Curb and Gutter", 54, "Type 'A' Asphalt Dike/Berm", 55, "Type 'C' Asphalt Dike/Berm", and 56, "Type 'F' Asphalt Dike/Berm" of the Bid Schedule shall be changed from SF (square foot) to LF (linear foot).

CITY OF LAFAYETTE

Date: March 27, 2013

By: Mike Moran

Associate Engineer

2013 ROAD AND DRAIN IMPROVEMENTS PROJECT NUMBER 014-9694

BID SCHEDULE (Revised per Addendum #1)

ITEM NO.	ITEM DESCRIPTION		ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Mobilization	(SP-12)	1	LS		
2	Project Identification Signs (City Furnished)	(SP-12)	5	EA		
3	Construction Area Signs	(SP-13)	24	EA		
4	Traffic Control	(SP-14)	1	LS		
5	Clearing and Grubbing, Tree Trimming, and Tree Protection	(SP-16)	1	LS		
6	Lower Existing Manhole or Rodding Inlet Frame to Below Grading Plane	(SP-17)	30	EA		
7	Adjust Existing Manhole or Rodding Inlet Frame and Cover to Grade	(SP-17)	30	EA		
8	Lower Existing Utility Valve Frame and Cover Below Grading Plane	(SP-17)	18	EA		
9	Adjust Existing Water Valve Frame and Cover to Grade With G5 Box	(SP-17)	17	EA		
10	Adjust Utility Box to Grade	(SP-17)	3	EA		
11	Remove Fence	(SP-17)	90	LF		
12	Remove Drainage Inlet	(SP-17)	4	EA		
13	Remove Headwall (15 Square Feet)	(SP-17)	1	EA		
14	Remove Storm Drain Pipe (Various Sizes)	(SP-17)	258	LF		
15	Remove Asphalt Concrete Driveway, Pathway or Shoulder	(SP-17)	5622	SF		
16	Remove Decorative Paver Driveway or Pathway	(SP-17)	313	SF		
17	Remove Concrete Ditch or Concrete Channel	(SP-17)	48	SF		
18	Remove Concrete Curb and Gutter	(SP-17)	1793	LF		
19	Remove Overpour at Lip of Gutter	(SP-17)	23	LF		
20	Remove Concrete Driveway, Pathway, or Shoulder	(SP-17)	1174	SF		
21	Remove Concrete Valley Gutter	(SP-17)	290	SF		
	Relocate/Repair Sanitary Sewer Lateral	(SP-17)	12	LF		
23	Remove and Relocate Mailbox on New Post	(SP-17)	3	EA		
24	Concrete Curb and Gutter	(SP-24)	1613	LF		
25	Concrete Driveway or Pathway on Existing Base Material	(SP-24)	268	SF		
26	Concrete Driveway or Pathway on New Base material	(SP-24)	105	SF		
27	Concrete Ditch	(SP-24)	8	SF		
28	Concrete Collar	(SP-24)	4	EA		
29	Concrete Valley Gutter	(SP-24)	290	SF		
30	Reset Brick Paver Surfacing	(SP-24)	313	SF		
31	Remove and Replace Type 'C' Inlet Top	(SP-24)	1	EA		
32	Remove and Replace Type 'B' Inlet Top	(SP-24)	1	EA		
33	Install 12x12 Inlet with Cast Iron Grate	(SP-24)	1	EA		
34	Install Type 'A' Inlet			EA		
34	mount type is mee	(SP-24)	6	EA		l

2013 ROAD AND DRAIN IMPROVEMENTS PROJECT NUMBER 014-9694

BID SCHEDULE (Revised per Addendum #1)

ITEM NO.	ITEM DESCRIPTION		ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
35	Remove Type'A' Inlet Top and Replace with Type 'B' Inlet Top	(SP-24)	2	EA		
36	Install Type 'C' Inlet	(SP-24)	2	EA		
37	Install Type I Manhole	(SP-24)	1	EA		
38	Sheeting and Shoring	(SP-23)	1	LS		
39	8" SDR26 PIPE	(SP-25)	66	LF		
40	12" HDPE	(SP-25)	68	LF		
41	15" HDPE	(SP-25)	554	LF		
42	24" HDPE	(SP-25)	44	LF		
43	Connect Private Drain System to City Storm Drain	(SP-25)	7	EA		
44	Daylight Existing Drain Line Through Curb or to Edge of Pavement	(SP-25)	3	EA		
45	Rock Outfall with Facing Class Rock	(SP-26)	1	EA		
46	Pulverize, Mix, Regrade & Compact Existing AC Pavement, Base and Subgrade Material	(SP-19)	6967 (I	F) CY		
47	Roadway Excavation	(SP-20)		E) CY		
48	Asphalt Concrete Conform Grind	(SP-20)	487	SY		
49	Cement Treat Pulverized Base Material	(SP-21)	3739 (1	E) CY		
50	Asphalt Concrete Pavement	(SP-22)	3888	TONS		
51	AC Driveway, Pathway or Shoulder on Existing Base Material	(SP-22)	5048	SF		
52	AC Driveway, Pathway or Shoulder on New Base Material	(SP-22)	2141	SF		
53	Overlay AC Driveway, Pathway or Shoulder	(SP-22)	4433	SF		
54	Type 'A' Asphalt Dike/Berm	(SP-22)	589	LF		
55	Type 'C' Asphalt Dike/Berm	(SP-22)	2997	LF		
56	Type 'F' Asphalt Dike/Berm	(SP-22)	414	LF		
57	Temporary Pavement Delineation	(SP-27)	1	LS		
58	Detail 23 - Centerline	(SP-28)	2008	LF		
59	Detail 27B 4" White Thermoplastic Edge Stripe	(SP-28)	3282	LF		
60	12-Inch White Thermoplastic Stripe	(SP-28)	62	LF		
61	Thermoplastic Pavement Legends and Markings	(SP-28)	44	SF		
62	Two-Way Reflective Pavement Markers (Blue)	(SP-28)	7	EA		
63	Install New Monument	(SP-29)	19	EA		
64	Shoulder Backing	(SP-30)	4293	LF		
65	Re-grade Earth Ditch	(SP-30)	70	LF		
66	Relocate Traffic Sign	(SP-31)	1	EA		
	TOTAL BASE BID					

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

UNIT

ITEM

ITEM

CITY OF LAFAYETTE CALIFORNIA

BID PROPOSAL

2013 ROAD AND DRAIN IMPROVEMENTS PROJECT NO. 014-9694

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:

ESTIMATED

NO.		DESCF	RIPTIO	QUANT	<u>IIY</u>	UNII		PR	<u>ICE</u>		10	<u> IAL</u>			
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NOTES:	-	All u	•	es shall b	e co	onsidered	d the	prices	s for	prov	riding	a cc	mplete	e, in-pl	ace
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						000									
Bidder ac	kno	wledge	es the re	eceipt of th	ne fol	lowing a	ddend	la to th	ne dr	awing	gs ar	nd spe	cificati	ons.	
Addendu	m N	<u>o.</u>		<u>Date</u>		A	ddeno	lum N	<u>o.</u>			<u>D</u>	ate		
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2013 ROAD AND DRAIN IMPROVEMENTS PROJECT NUMBER 014-9694

BID SCHEDULE (Revised per Addendum #1)

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5	Clearing and Grubbing, Tree Trimming, and Tree Protection	(SP-16)	1	LS		
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19	Remove Overpour at Lip of Gutter	(SP-17)	23	LF		
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27	Concrete Ditch	(SP-24)	8	SF		
28	Concrete Collar	(SP-24)	4	EA		
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30	Reset Brick Paver Surfacing	(SP-24)	313	SF		
31	Remove and Replace Type 'C' Inlet Top	(SP-24)	1	EA		
32	Remove and Replace Type 'B' Inlet Top	(SP-24)	1	EA		
33	Install 12x12 Inlet with Cast Iron Grate	(SP-24)	1	EA		
34	Install Type 'A' Inlet			EA		
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47	Roadway Excavation	(SP-20)		E) CY		
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58	Detail 23 - Centerline	(SP-28)	2008	LF		
59	Detail 27B 4" White Thermoplastic Edge Stripe	(SP-28)	3282	LF		
60	12-Inch White Thermoplastic Stripe	(SP-28)	62	LF		
61	Thermoplastic Pavement Legends and Markings	(SP-28)	44	SF		
62	Two-Way Reflective Pavement Markers (Blue)	(SP-28)	7	EA		
63	Install New Monument	(SP-29)	19	EA		
64	Shoulder Backing	(SP-30)	4293	LF		
65	Re-grade Earth Ditch	(SP-30)	70	LF		
66	Relocate Traffic Sign	(SP-31)	1	EA		
	TOTAL BASE BID					

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

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

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

<u>NAME</u>	<u>ADDRESS</u>	WORK TO BE PERFORMED
1		
2.		
3.		
4		
5		
	000	
Bidder certifies that h Contractors as follows:		with an act providing for the registration of
License No.		Class

000

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.			

PROPOSAL GUARANTEE

BID BOND

2013 ROAD AND DRAIN IMPROVEMENTS PROJECT NO. 014-9694

KNOW ALL PERSONS BY THESE PRESENTS that, as SUBETY are held and firmly bound
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, 2013.
BIDDER
SURETY
Subscribed and sworn to this day of, 2013.
Subscribed and swort to this day of, 2010.
NOTARY PURLIC

PROPOSAL SIGNATURE SHEET

The completed proposal submitted herewith includes all sheets numbered "P-1 through P-7" at the bottom. The following required attachments have been executed and are included:

- a. Bid Proposal (with Addenda acknowledgement)
- b. Bid Schedule
- c. Proposal Guarantee "Bid Bond" with Notarized Signatures
- d. Proposal Signature Sheet

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:

CITY OF LAFAYETTE

CONTRACT A GREEMENT FOR CONSTRUCTION

THIS AGREEMENT is made and entered into as of	, 2013, 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 City of Lafayette, 2013 Road and Drain Improvements, Project No. 014-9694, including, but not limited to: mobilization; traffic control and construction signage; potholing utilities; clearing and grubbing including tree protection and trimming; removal and disposal of asphalt concrete pavement and subgrade, concrete and/or asphalt curb, gutter, driveways, brick pavers; pulverizing, mixing, excavating, grading and compacting pavement subgrade, and base materials; cement treatment of pulverized material; construction of storm drains, catch basins, manhole structures, concrete channels, concrete and/or asphalt curb, gutter, driveways, decorative pavers, asphalt concrete pavement, traffic stripes, markers, and markings; adjustment of utility covers; installation of survey monuments; and all other 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. <u>Employment by City</u>. 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. <u>Worker's Compensation</u>. 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. <u>Insurance</u>. 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. <u>Indemnity</u>. Contractor shall comply with the indemnification requirements contained in the General Provisions of the Standard Specifications.
- 7. <u>Assignment</u>. 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. <u>Non-discrimination</u>. Contractor shall not discriminate in the hiring of employees or I the employment of subcontractors on any basis prohibited by law.
- 9. <u>Independent Contractor</u>. 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. 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:		
(Ph)		

- 11. <u>Authorized Signature</u>. 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.
- 12. 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.

13. <u>Claims Procedure</u>. 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.

successors, and as caused this Contra	WHEREOF the parties hereto for themselves, their heirs, essigns do hereby agree to the full performance of the covenants act Agreement to be executed in duplicate by setting hereunto the y of 2013.	herein contained and have
Contractor:		
	<type business="" here="" name=""></type>	
	Name:	
	Title:	
Contractor's Licer	nse No	
	Agency Business License No.	
	Federal Tax Identification No.	
Subscribed and sv	worn to this day of 2013.	
Notary Public		
Aganav		
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 Contractor, a contract for the work descri	
2013 Road and Drain Improvements, Project traffic control and construction signage; potholize and trimming; removal and disposal of asphalt courb, gutter, driveways, brick pavers; pulverizing subgrade, and base materials; cement treatment of basins, manhole structures, concrete channels, copavers, asphalt concrete pavement, traffic stripes	No. 014-9694, including, but not limited to: mobilization; and utilities; clearing and grubbing including tree protection concrete pavement and subgrade, concrete and/or asphalt g, mixing, excavating, grading and compacting pavement of pulverized material; construction of storm drains, catch concrete and/or asphalt curb, gutter, driveways, decorative s, markers, and markings; adjustment of utility covers; work as shown on the Plans and as described in the
Specifications to provide a complete project.	
	to furnish a bond in connection with said contract, to secure laterials persons, and other persons as provided by law;
the sum of	ntractor and surety, are held firmly bound unto the Owner in Dollars (\$), for which payment well and truly utors and administrators, successors and assigns, jointly and
THE CONDITION OF THIS OBLIGATION IS	SUCH:
fail to pay any of the persons named in Civil C Insurance Code with respect to work or labor pe deducted, withheld, and paid over to the E employees of the Contractor and its subcont Insurance Code, with respect to such work and in any amount not exceeding the sum specified	Iministrators, successors, or assigns, or subcontractors, shall code Section 3282, or amounts due under the Unemployment erformed by any such claimant, or any amounts required to be imployment Development Department from the wages of tractors pursuant to Section 13020 of the Unemployment labor, that the surety or sureties herein will pay for the same in this bond, otherwise the above obligation shall be void. In arrety will pay a reasonable attorney's fee to the Owner in an
This bond shall insure to the benefit of any of right of action to such persons or their assigns in	the persons named in Civil Code Section 3181 as to give a nany suit brought upon this bond.
IN WITNESS WHEREOF, we have hereunto so 2013.	et our hands and seals on this day of,
CONTRACTOR:	SURETY
	NAME
	ADDRESS
	TELEPHONE

PERFORMANCE BOND

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

KNOW ALL PERSONS BY THESE PRESENTS:	
control and construction signage; potholing utilities; c trimming; removal and disposal of asphalt concrete pa gutter, driveways, brick pavers; pulverizing, mixing, e and base materials; cement treatment of pulverized ma manhole structures, concrete channels, concrete and/o	follows: for Construction of City of Lafayette, 2013 1994, including, but not limited to: mobilization; traffic clearing and grubbing including tree protection and element and subgrade, concrete and/or asphalt curb, excavating, grading and compacting pavement subgrade, atterial; construction of storm drains, catch basins, or asphalt curb, gutter, driveways, decorative pavers, d markings; adjustment of utility covers; installation of
AS WHEREAS, the Contractor is required to furnish the faithful performance thereof;	a bond in connection with said contract guaranteeing
the sum ofDollars (\$	or and surety, are held firmly bound unto the Owner in), to be paid to the Owner, its successors be made we bind ourselves, our heirs, executors and rerally, firmly by these presents.
THE CONDITION OF THIS OBLIGATION IS SUCI	H:
and abide by and well and truly keep and perform the contract and any alteration thereof made as therein p the time and in the manner therein specified and in and shall indemnify and save harmless the Owner, obligation shall become and be null and void; other case suit is brought upon this bond, the said surety amount to be fixed by the court. Surety, for value rechange, extension of time, alteration, or addition to performance required therein or thereunder, shall in and said surety does hereby waive notice of any such addition to said contract, and of any feature or item shall in any manner affect its obligations on or under any such amendment, change extension of time, alteritem or items of performance required therein or there item or items of performance required therein or there	
IN WITNESS WHEREOF, we have hereunto set our 2013.	hands and seals on this day of,
CONTRACTOR:	
Print Name:	
Title:	_ ADDRESS
	TELEPHONE

CITY OF LAFAYETTE SPECIAL PROVISIONS

GENERAL

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 September 2002, herein referred to as the "General Provisions of the Standard Specifications".
- The City of Lafayette Technical Provisions of the Standard Specifications dated September 2002, 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, dated May 2006, herein referred to as the "State Specifications" or "State Standard Specifications".
- The State of California Department of Transportation (Caltrans) Standard Plans, dated May 2006, 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 City of Lafayette Standard Specifications and supersede all sections of the 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.

TERMS, DEFINITIONS AND ABBREVIATIONS (NO BID ITEM)

The provisions of Section 1, "Terms, Definitions and Abbreviations", of the General Provisions of the Standard Specifications, shall apply in their entirety.

SPECIAL PROVISIONS SECTION SP-2

BID PROPOSAL REQUIREMENTS (NO BID ITEM)

The provisions of Section 2, "Bid Proposal Requirements", of the General Provisions of the Standard Specifications shall apply in their entirety.

SPECIAL PROVISIONS SECTION SP-3

AWARD AND EXECUTION OF CONTRACT (NO BID ITEM)

The provisions of Section 3, "Award and Execution of Contract", of the General Provisions of the Standard Specifications shall apply in their entirety and as supplemented herein.

SP3-01 PAYMENT

Full compensation for furnishing "Performance, Labor, and Materials Bonds" shall be considered as included in the lump sum price paid for "Mobilization" and no additional compensation shall be allowed therefore, even if the final contract price is increased up to 25% of the original base bid price

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; removal and disposal of asphalt concrete pavement and subgrade, concrete and/or asphalt curb, gutter, driveways, brick pavers and flagstones; pulverizing, mixing, excavating, grading and compacting pavement subgrade, and base materials; cement treatment of pulverized material; construction of storm drains, catch basins, manhole structures, concrete and/or asphalt curb, gutter, driveways, decorative pavers, asphalt concrete pavement, traffic stripes, markers, and markings; adjustment of utility covers; installation of survey monuments; and all other work as shown on the Plans and as described in these Specifications to provide a complete project.

SP4-02 AS-BUILT PLANS

Contractor is required to submit a marked-up set of As-Built Plans to the City at the completion of the project. The marked-up set shall note any plan changes that were made during construction. The City may retain a portion of the final retention until such time that the Contractor provides a complete set of As-Built Plans.

SP4-03 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.

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 concrete curb and gutter, and removal and replacement of concrete and asphalt driveways.

The City shall provide all construction survey staking for roadway alignment and grades, storm drains, catch basins, manholes, concrete curb, gutter, and other items which, in the opinion of the Engineer, require survey staking. The Contractor shall submit staking requests in writing, 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 by the Contractor's operations.

Survey stakes for roadway alignment and grade will be set on one side of the roadway only. These stakes will have offset distances and cuts or fills to the new crown (or control line near the center of the road) and where applicable new concrete curb, gutter, left and right edges of pavement.

SP5-02 MATERIAL SAMPLING AND TESTING

Compaction tests and/or material sampling and testing may be performed by the City's representatives on roadway subgrade, pulverized material, 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.

Testing is not a duty of the City and is solely at the discretion of the Engineer. Testing or non-testing by the City does not release the Contractor from his/her responsibility to perform all work in conformance with the Plans, Standard Specifications, and these Special Provisions.

If a test shows that the work in questions fails to meet the project specifications, retests shall be taken after the Contractor takes corrective measures. Retests shall be performed until a passing test is obtained. All costs that the City incurs for retesting shall be deducted from payment due the Contractor.

The Engineer shall be given at least twenty-four (24) hours advance notice for any testing.

SP5-03 SUBMITTALS

The Contractor shall provide a complete list of all submittals required by the Standard Specifications and these Special Provisions at the preconstruction meeting and prior to commencing any work. Any work shown on the Plans to be installed per manufacturer's specifications or directions shall require a submittal. All materials specified by manufacturer name, code, model number, etc. and their approved equals shall require a Submittal.

The Contractor shall submit the number of copies which the Contractor requires, plus one (1) copy which will be retained by the Engineer. Mark each copy to identify the applicable products, models, options, and any other data. Submit the product source, specifications, gradations, certifications, bulletins and literature in sufficient detail to demonstrate that the product is in compliance with the Contract.

At minimum, the Contractor shall provide the following submittals to the Engineer. Submittals shall be made in advance of the materials planned incorporation into the work, and shall allow the Engineer a minimum of five (5) working days to review the submittal and respond to the Contractor. No material shall be used in the work until written acceptance of the submittal has been made by the Engineer. The Contractor shall submit sufficient information, specifications, and product data to demonstrate compliance with the requirements of the Contract, including these Special Provisions, for:

- Aggregate Base Class 2 (provide material source)
- Asphalt Concrete Mix Designs
- Portland Cement Concrete Mix Designs for various items
- Cement Treatment of Subgrade
- Reinforcing Steel
- Storm Drain Inlet and manhole Frames, Grates and Covers
- Pavement Markers
- Thermoplastic Striping Material
- Survey Monument Frames and Covers
- Water Pollution Control Plan
- Waste Management Plan
- Traffic Control Plan and Certification of Qualified Personnel
- CAL/OSHA Excavation Permit

Additional submittals as noted in each section of these Special Provisions.

SP5-04 ORDER OF WORK

Unless otherwise directed by the Engineer, the following major items of work shall be performed in the following order.

- 1) Notify Underground Service Alert (USA) to have utilities marked.
- 2) Install construction area signs and project identification signs.
- 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 G) is submitted to the Engineer.
- 7) Clearing, grubbing, tree trimming and tree removal.
- 8) Sawcut driveway conforms.

- 9) Remove existing curb, gutter, concrete driveways, asphalt driveways, brick paver driveways, and construct new curb, gutter and driveway/walkway conforms adjacent to the new curb and gutter.
- 10) Remove and repair or modify existing storm drain facilities and construct new storm drain facilities.
- 11) Reference and/or adjust survey monuments, water valve frames, and storm drain and sewer manhole frames to below grade.
- 12) Remove driveways and shoulder as indicated on the Plans.
- 13) Pulverize, mix, excavate, regrade, cement treat subgrade material, compact treated subgrade material, finish grade subgrade material, and place asphalt base course.
- 14) Sawcut and remove conform pavement at transverse joints.
- 15) Place Asphalt Concrete finish course.
- 16) Place Asphalt Concrete berms.
- 17) Pave driveway conforms and road shoulders
- 18) Place temporary striping.
- 19) Raise/adjust water valve frames, and storm drain and sewer manhole frames to grade.
- 20) Install new monuments.
- 21) Place permanent striping, markers and legends.
- 22) Complete all other construction work and punch list items.
- 23) Remove tree protection, construction area signs and project identification signs.
- 24) Submit completed waste assessment summary report form.
- 25) Submit as-built plans.

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

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

SP5-05 SUPERVISION

Section 5-8 "Superintendence" of the General Provisions is superseded by the following:

Unless otherwise explicitly directed and authorized by the Engineer, <u>at all times</u> during the progress of the work the Contractor shall have a project representative present at the construction site who shall have complete authority to represent and to act for the Contractor. **The project representative may not be a subcontractor or an employee of the subcontractor.**

Before initial work is begun on the Contract, the Contractor shall file with the Engineer, address and telephone numbers where the project representative can be reached during all hours, including nights and weekends, when the work is not in progress. The Contractor's project representative shall: Supervise the work crews and subcontractors; coordinate all construction activities and operations including but not limited to traffic control;

progress payment, change orders, work by others (including utility companies) and public notifications. Lack of supervision shall be cause to suspend the work as provided for in Section 8-3 of the General Provisions.

When supervision is not provided as required, the Engineer has the discretion to allow work to proceed in the interest of progress of work. In that case the City may assess the Contractor for the lack of such supervision. The assessment shall be based on the current City of Lafayette hourly billing rate for engineering staff of \$125 per hour.

SP5-06 REUSE AND RECYCLING REQUIREMENTS

As a provision of this contract the Contractor must divert at least fifty (50) percent of waste materials from landfills. The contractor shall complete and submit the "Waste Assessment Form" found in **Appendix A** of these Special Provisions prior to the start of demolition work, demonstrating how this requirement will be fulfilled.

Upon completion of all items of work the Contractor shall fill out and return the "Waste Assessment Summary Report Form" found in **Appendix A** of these Special Provisions. Supporting documentation such as receipts and weight tags must be provided for all jobsite construction and demolition materials recycled, reused off-site, or disposed of in a landfill. Final release of retention will not be made until this information is submitted to the Engineer.

Failure to meet the 50 percent diversion requirement will result in the forfeiture of 40% of the project retention.

SP5-07 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.

<u>LEGAL RELATIONS AND RESPONSIBILITIES</u> (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

Resident Notifications:

The Contractor shall notify all residents within the project area of the pending work at least (1) week prior to the day the Contractor's forces move on the project site. The City shall provide the contractor with the text of the letter as well as resident mailing labels at the preconstruction meeting. The letters may be mailed or hung on the front door of each residence.

In addition the Contractor shall notify all residents within the project area of work that requires road closures and impacted residents of all work requiring driveway closures a minimum of (2) days in advance of the work occurring. Notifications shall be made in writing by the Contractor indicating the time, date and duration of the planned work. The Contractor's and Engineer's telephone number shall be provided for cases of extreme hardship due to the construction. Each notice shall be hand delivered or securely attached to the door of each residence when no one is home. Each notice that remains on the door the morning of construction will be retrieved and disposed of by the Contractor. A representative of the Contractor shall knock on each door to remind residents of the closure the afternoon immediately prior to the day of work or the morning of the planned work if no one answered the door the afternoon before. Notices for driveway closures must be issued each time driveway access is restricted and must indicate the specific date and time of the anticipated restricted access.

Emergency and All Other Notifications:

The Contractor shall notify all emergency, public transportation, post office, garbage/recycle collection, and school bus services by fax of the pending work, at least (1) week prior to the day the Contractor's forces move on the project site, unless otherwise approved in writing by the Engineer.

In addition the Contractor shall notify all emergency, public transportation, post office, garbage/recycle collection, and school bus services by fax of all work requiring road closures a minimum of (2) days in advance of the work occurring.

Contractor shall provide the engineer with written confirmation of notices being sent prior to commencing the work covered by the notice.

PH#925-283-3680	FAX#925-283-4126
PH#925-284-5010	FAX#925-313-2479
PH#925-941-3300	FAX#925-941-3309
PH#888-650-8514	FAX#888-887-6112
PH#925-676-7500	FAX#925-687-7471
PH#925-299-3216	FAX#925-283-2181
PH#925-686-3391	FAX#925-689-1540
PH#925-603-1144	FAX#925-685-4114
	PH#925-284-5010 PH#925-941-3300 PH#888-650-8514 PH#925-676-7500 PH#925-299-3216 PH#925-686-3391

Valley Waste Management United States Post Office PH#925-935-8900 PH#925-962-6955

FAX#1-877-575-3599 FAX#925-962-1970

SP6-02 PERMITS AND LICENSES

The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work.

SP6-03 CONTRACTORS LICENSING LAW

Contractor's License Classification: In accordance with the provisions of California Public Contract Code Section 3300, the owner has determined that the Contractor shall possess a valid Class "A" Contractor License at the time that the contract is awarded. Failure to possess the specified license shall render the bid as non-responsive and shall act as a bar to award of the contract to any bidder not possessing said license at the time of award.

SP6-04 CONTRACTOR'S COMPREHENSIVE GENERAL INSURANCE

Section 6-33.3, "Contractor's Comprehensive General Insurance", of the General Provisions of the Standard Specifications shall be modified to read:

These policies shall each provide the following minimum limits:

General Liability (Form CG00 01 12 07)

\$2,000,000 each occurrence

(Combined single limit for bodily injury and property damage)

Product – Completed Operation

\$2,000,000 each occurrence

Automobile Liability Insurance

\$1,000,000 per accident for bodily injury or disease

The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status: The City, its officers, officials, employees, agents, are to be covered as additional insured on the GL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor, including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance at least as broad as ISO Form CG 20 10 11 85 or, if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used.

Primary Coverage: For any claims related to this contract, the Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, and agents.

SP6-05 BLANK

SP6-06 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.

EXISTING UTILITIES (NO BID ITEM)

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

SP7-01 GENERAL

The Contractor shall coordinate and cooperate with the utility companies and schedule work in accordance with the order of work specified in Section SP5-04, "Order of Work", of these Special Provisions and the utility company work. In the event that utility coordination causes delays beyond the Contractor's control to the Contractor's controlling operation on the critical path, the Contractor shall notify the Engineer in writing and provide support documentation for the nature and magnitude of delay. The Engineer, upon concurrence with said delay notice, may grant additional Contract working days up to a number equal to the delay to the delay claimed by the Contractor. The Engineer's decision shall be final. Granting of additional Contract working days shall be the Contractor's sole remedy for delay, inconvenience, and loss of production caused by coordinating work with utility companies and no additional compensation shall be allowed therefor.

Utility locations, if shown on the Plans, are approximate. There is no guarantee that the utilities shown on the Plans will be the only utilities encountered. The Contractor is hereby notified that during construction, it may be necessary to coordinate his/her operations with utility providers that may have service or main lines obstructing construction.

The Contractor's attention is directed to the utility notification service provided by UNDERGROUND SERVICE ALTERT (USA). USA member utilities will provide the Contractor with the locations of their substructures in the construction area when the Contractor gives at least two (2) working days notice to the Underground Service Alert by calling 1-800-227-2600.

The Contractor shall assume that each property along each side of the project roadway has utility service lateral lines including, but not limited to, sewer, water, electric, cable TV, telephone and gas which are not necessarily shown on the Plans. The Contractor shall perform potholing as specified below and shall also comply with California Government Code Section 4216. A copy of the code is attached in **Appendix B**.

The Contractor shall verify, by potholing, the horizontal and vertical alignment of **all** existing utility main lines and service laterals, except sanitary sewer, prior to beginning any other work. The contractor shall fill out and submit a copy of the utility pothole results on the "Utility Pothole Log" form found in **Appendix B** prior to beginning any other work requiring excavation.

If utilities are found to be in conflict with construction activities, the Contractor shall immediately notify the Engineer. The City will notify the affected utility agencies of the conflict and arrange for the relocation of the utilities. 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.

Utility locations, if shown on the Plans, are approximate. There is no guarantee that the utilities shown on the Plans will be the only utilities encountered. Some known utilities have been "potholed" with approximate location and depth as shown on the Plans. The Contractor shall be responsible for verifying the location and elevations of the previously located utilities during his potholing operations.

The Contractor shall expose by hand tool digging methods, and protect and support all existing utility mains and service laterals that are within work areas.

The Contractor is hereby notified that during construction, it may be necessary to coordinate his/her operation specifically with Pacific Gas and Electric Company, AT&T, U.S. Sprint, East Bay Municipal Utility District, Central Contra Costa Sanitary District, Comcast, and the City of Lafayette for the rearrangement of obstructions as needed for the construction of this project. Also, the Contractor shall contact and coordinate all utility work with the owner of each utility prior to starting work. If the Contractor starts work without notifying the utility first, the Contractor may forfeit payment for said work.

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.

SP7-02 UTILITY PROTECTION, RELOCATION AND REARRANGEMENT

This project includes work on streets with overhead and buried utility and service lines. In some locations, these utility and service lines may have minimal clearance with existing and new facilities within the limits of work. It is the Contractor's responsibility to conduct his/her operations around the facilities such that the work is accomplished without damage to the utility lines. The Contractor shall notify each utility at least forty-eight (48) hours in advance of any work around these overhead and buried facilities, and shall satisfy all applicable requirements and safety standards for working in close proximity to these utility and service lines. The Contractor shall protect these utility facilities and arrange for supporting utility facilities, with the utility companies, when necessary.

The Contractor's attention is directed to the existence of underground utility lateral lines, not shown on the Plans. No additional compensation shall be allowed for delays caused by the existence of conflicting underground utility lateral lines. The existence of underground utility lateral lines will not be considered an unforeseen site condition. Existing sewer laterals that are in conflict with planned work shall be relocated or repaired by the Contractor and shall be paid per a separate bid item.

SP7-03 PAYMENT

No separate payment (except for the relocation of sewer laterals) 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.

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 Thursday, May 9, 2013 at 2:00 p.m. at the City Offices. 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.

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; and a traffic control plan.

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 each week during construction on or before Friday morning or as requested by the Engineer as the work progresses as stated in Section 8-2, "Progress Schedule", of the General Provisions of the Standard Specifications.

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

SP8-03 WORKING HOURS

Without prior written approval by the Engineer, and except for emergency work, work or activity of any kind shall be limited to the hours from 8:00 a.m. to 5:00 p.m. Monday through Friday. The Contractor's attention is directed to Section SP14-04, "Lane Closure Hours", of these Special Provisions.

SP8-04 TIME OF COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall complete the entire work in this contract within **seventy** (70) working days from the original start date including completion of all "Punch List" work. The Contractor's attention is directed to Section 8-10, "Liquidated Damages", of the General Provisions of the Standard Specifications. Liquidated damages shall be assessed per Section 8-10, "Liquidated Damages".

The count of working days for this project will start Monday, May 20, 2013.

Completion of contract work is defined as completion of all items listed in the Bid Schedule and any issued Contract Change Order for the project, regardless of substantial use or benefit of any work in progress or portion of the project. "Punch List" items are considered to be a part of work items on the Bid Schedule.

Contract working days shall continue to be counted for the purpose of determining time of completion and liquidated damages until the completion of contract work as defined above, including completion of "Punch List" work.

SP8-05 CONTRACT CHANGES, CHANGE ORDERS AND EXTRA WORK

Contractor's attention is directed to Section 8-6 of the General Provisions to the Standard Specifications and SP12-01 of these Special Provisions.

Section 9-3.4.7 "Markups" of the General Provisions to the Standard Specifications shall not apply to this contract. Extra work payment shall conform to Section 9-1.03, "Force Account Payment", of the State of California Department of Transportation Standard Specifications dated May 2006.

SP8-06 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.

MEASUREMENT AND PAYMENT (NO BID ITEM)

The provisions of Section 9, "Measurement and Payment", of the General Provisions of the Standard Specifications shall apply in their entirety except as noted in Section SP8-05 Contract Changes, Change Orders and Extra Work" and as supplemented herein.

SP9-01 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-10

NOT USED

MISCELLANEOUS (NO BID ITEMS)

SP11-01 PREVAILING WAGE.

The provisions of Section 7-1.01A(2)(3), "Prevailing Wage," of the State Standard Specifications shall apply in their entirety except as modified or supplemented herein.

The general prevailing wage rates determined by the Director of Industrial Relations, for the county or counties in which the work is to be done, are available at the City of Lafayette, 3675 Mount Diablo Boulevard, Suite 210, Lafayette, CA, 94549. State of California Prevailing Wage may be found on the City of Lafayette website http://www.ci.lafayette.ca.us (click on Capital Improvements under the Quick Links sidebar on the homepage).

The Contractor and each subcontractor shall keep an accurate record showing the names and occupations of all laborers, workers, and mechanics employed in connection with the execution of this Agreement and each subcontractor thereunder, and showing also the actual per diem wages paid to each of such workers. This record shall be open at all reasonable hours to the inspection of the City and the authorized entities of the State of California.

SP11-02 REMOVAL OF ASBESTOS AND HAZARDOUS SUBSTANCES

When the presence of asbestos or hazardous substances are not shown on the Plans or indicated in the specifications and the Contractor encounters materials which the Contractor reasonably believes to be asbestos or a hazardous substance as defined in Section 25914.1 of the Health and Safety Code, and the asbestos or hazardous substance has not been rendered harmless, the Contractor may continue work in unaffected areas reasonably believed to be safe. The Contractor shall immediately cease work in the affected area and report the condition to the Engineer in writing.

In conformance with Section 25914.1 of the Health and Safety Code, removal of asbestos or hazardous substances including exploratory work to identify and determine the extent of the asbestos or hazardous substance will be performed by separate contract.

If delay of work in the area delays the current controlling operation, the delay will be considered a right of way delay and the Contractor will be compensated for the delay in conformance with the provisions in Section 8-5, "Right of Way Delays," of the General Provisions.

SP11-03 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS

A prime contractor or subcontractor shall pay any subcontractor not later than 10 days of receipt of each progress payment in accordance with the provision in Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors, unless a longer period is agreed to in writing by all parties. Any delay or postponement of payment over 30 days may take place only for good cause and with the City's prior written approval. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanction, and other remedies of that section. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor.

MOBILIZATION (BID ITEM NOS. 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 INCREASE OR DECREASE IN BONDING

When the final contract price for which a Contractor has bonded, increases by over 25% of the original base bid price due to change orders and/or increases in the quantities of items incorporated into the project, the Contractor shall be entitled to payment for additional bonding costs that have been paid to the surety company due to this increase. Payment for this cost shall be made via change order and included on the final project billing statement provided the Contractor submits supporting documentation.

When the final contract price decreases by over 25% of the original base bid price due to change orders and/or decreases in the quantities of items incorporated into the project, the City shall be entitled to a reimbursement of the decrease in bonding costs paid by the Contractor. The refund of these costs shall be made via change order and deducted from the final payment for release of retention.

SP12-02 STAGING AREA

Parking. All existing parking spaces shall remain open and safe for public use if they are not directly in the area of actively on-going construction activity. Staging of equipment and materials on the street is allowed within the project limits when authorized by the Engineer and protected by barricades with flashers and caution tape. Where construction prohibits public parking, the Contractor shall provide notices per Section 6-12.2 "Public Parking", of the General Provisions.

Maintenance of Access. The Contractor shall be responsible for ascertaining and accommodating the access needs of residences and businesses affected by construction activities on a daily basis. Contractor shall notify the Engineer and affected parties about driveway or walkway closures 48 hours in advance of work requiring said prohibition. The Contractor's attention is directed to Section SP 6-01 "Public Notification," in these Special Provisions for additional notification requirements.

SP12-03 PROJECT IDENTIFICATION SIGN

The City of Lafayette shall provide the Project Identification sign panels to be used.

The Contractor shall install, and maintain the project identification signs. Upon completion of the project the Contractor shall remove and return the signs to the Engineer.

Signs shall be attached to portable Type III barricades and a minimum of one sign shall be posted on each street while Contractor is performing any work on the street. Signs shall be in place on the project site at least two (2) days prior to the start of work. The location for each sign shall be approved, in advance, by the Engineer.

SP12-04 SANITARY RESTROOM FACILITIES

Sanitary restroom facilities shall be provided and maintained, by the Contractor, on the project site. The Contractor's proposed locations for restroom facilities shall be reviewed with the Engineer prior to delivery of the restroom facility. If the Contractor and/or subcontractors are working at multiple sites simultaneously, then a restroom facility will be required at each site. Failure to provide sanitary restroom facilities is grounds for suspension of work. Contractor shall note that the count of working days will continue.

SP12-05 HAULING EQUIPMENT SIZE AND WEIGHT LIMITATIONS

Only 10-wheel type dump trucks. "transfer" type trucks with trailers, or smaller trucks will be allowed for off-hauling material from the jobsite or hauling material to the jobsite. 10-wheel trucks with extra axles or "super-dumps" shall not be allowed.

SP12-06 WATER POLLUTION CONTROL

Water pollution control work shall conform to the provisions in Section 7-1.01G, "Water Pollution", of the State Specifications and these Special Provisions.

Water pollution control work shall conform to the requirements in the "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual" and the "Construction Site Best Management Practices (BMPs) Manual," and addenda thereto issued up to, and including, the date of advertisement of the project. These manuals are hereinafter referred to respectively as the "Preparation Manual" and the "Construction Site BMPs Manual", and collectively, as the "Manuals". Copies of the Manuals may be obtained from the Department of Transportation, Material Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916) 445-3520, and may also be obtained from the Department's Internet website at: http://www.dot.ca.gov/hq/construc/stormwater/stormwater

The Contractor shall know and fully comply with applicable provisions of the Manuals, and Federal, State, and local regulations and requirements that govern the Contractor's operations and storm water and non-storm water discharges from both the project site and areas of disturbance outside the project limits during construction. Attention is directed to Sections 7-1.01, "Laws to be Observed", and 7-1.12, "Indemnification and Insurance", of the State Standard Specifications.

Water pollution control requirements shall apply to storm water and non-storm water discharges from areas outside the project site which are directly related to construction activities for this contract including, but not limited to, staging areas, storage yards and access roads. The Contractor shall comply with the Manuals for those areas and shall implement, inspect and maintain the required water pollution control practices. Installing, inspecting and maintaining water pollution control practices on areas outside the project limits not specifically arranged and provided for by the City for the execution of this contract, will not be paid for.

The Contractor shall be responsible for penalties assessed or levied on the Contractor or the City as a result of the Contractor's failure to comply with the provisions in this section "Water Pollution Control" including, but not limited to, compliance with the applicable provisions of the Manuals, and Federal, State and local regulations and requirements as set forth therein.

Penalties as used in this section shall include fines, penalties and damages, whether proposed, assessed, or levied against the City or the Contractor, including those levied under the Federal Clean Water Act and the State Porter-Cologne Water Quality Control Act, by governmental agencies or as a result of citizen suits. Penalties shall also include payments made or costs incurred in settlement for alleged violations of the Manuals,

or applicable laws, regulations, or requirements. Costs incurred could include sums spent instead of penalties, in mitigation or to remediate or correct violations.

SP12-06.01 RETENTION OF FUNDS

Notwithstanding any other remedies authorized by law, the City may retain money due the Contractor under the contract, in an amount determined by the City, up to and including the entire amount of penalties proposed, assessed, or levied as a result of the Contractor's violation of the Manuals, or Federal or State law, regulations or requirements. Funds may be retained by the City until final disposition has been made as to the penalties. The Contractor shall remain liable for the full amount of penalties until such time as they are finally resolved with the entity seeking the penalties.

Retention of funds for failure to conform to the provisions in this section, "Water Pollution Control", shall be in addition to the other retention amounts required by the contract. The amounts retained for the Contractor's failure to conform to provisions in this section will be released for payment on the next monthly estimate for partial payment following the date when an approved WPCP has been implemented and maintained, and when water pollution has been adequately controlled, as determined by the Engineer.

When a regulatory agency identifies a failure to comply with the Manuals, or other Federal, State or local requirements, the City may retain money due the Contractor, subject to the following:

A. The City will give the Contractor seventy two (72) hours notice of the City's intention to retain funds from partial payments which may become due to the Contractor prior to acceptance of the contract. Retention of funds from payments made after acceptance of the contract may be made without prior notice to the Contractor.

During the first progress payment period after that the Contractor fails to conform to the provisions in this section, "Water Pollution Control", the City may retain an amount equal to 25 percent of the estimated value of all contract work performed on the entire contract.

The Contractor shall notify the Engineer immediately upon request from the regulatory agencies to enter, inspect, sample, monitor, or otherwise access the project site or the Contractor's records pertaining to water pollution control work. The Contractor and the City shall provide copies of correspondence, notices of violations, enforcement actions or proposed fines by regulatory agencies to the requesting regulatory agency.

SP12-06.02 WATER POLLUTION CONTROL PROGRAM PREPARATION, APPROVAL AND AMENDMENTS

As part of the water pollution control work, a Water Pollution Control Program (WPCP) is required for this contract. The WPCP shall conform to the provisions in Section 7-1.01G, "Water Pollution", of the State Specifications, the requirements in the Manuals, and these Special Provisions. Upon the Engineer's approval of the WPCP, the WPCP shall be considered to fulfill the provisions in Section 7-1.01G, "Water Pollution", of the State Standard Specifications for development and submittal of a Water Pollution Control Program.

No work having potential to cause water pollution, shall be performed until the WPCP has been approved by the Engineer. Approval shall not constitute a finding that the WPCP complies with applicable requirements of the Manuals and applicable Federal, State and local laws, regulations, and requirements.

The Contractor shall designate a Water Pollution Control Manager. The Water Pollution Control Manager shall be responsible for the preparation of the WPCP and required modifications or amendments, and shall be responsible for the implementation and adequate functioning of the various water pollution control practices employed. The Contractor may designate different Water Pollution Control Managers to prepare the WPCP and to implement the water pollution control practices. The Water Pollution Control Managers shall serve as

the primary contact for issues related to the WPCP or its implementation. The Contractor shall assure that the Water Pollution Manager(s) have adequate training and qualifications necessary to prepare the WPCP, implement and maintain water pollution control practices.

Within ten (10) working days after the approval of the contract, the Contractor shall submit two (2) copies of the draft WPCP to the Engineer. The Engineer will have ten (10) working days to review the WPCP. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the WPCP within ten (10) working days of receipt of the Engineer's comments. The Engineer will have five (5) working days to review the revisions. Upon the Engineer's approval of the WPCP, one (1) approved copy of the WPCP, incorporating the required changes, shall be submitted to the Engineer. In order to allow construction activities to proceed, the Engineer may conditionally approve the WPCP while minor revisions are being completed. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for resulting losses, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays", of the State Specifications.

The WPCP shall incorporate water pollution control practices in the following categories:

- A. Soil stabilization.
- B. Sediment control.
- C. Wind erosion control.
- D. Tracking control.
- E. Non-storm water management.
- F. Waste management and materials pollution control.

The Contractor shall develop a Water Pollution Control Schedule that describes the timing of grading or other work activities that could affect water pollution. The Water Pollution Control Schedule shall be updated by the Contractor to reflect changes in the Contractor's operations that would affect the necessary implementation of water pollution control practices.

The Contractor shall prepare an amendment to the WPCP when there is a change in construction activities or operations which may affect the discharge of pollutants to surface waters, ground waters, municipal storm drain systems, or when the Contractor's activities or operations violate Federal, State or local regulations, or when directed by the Engineer. Amendments shall identify additional water pollution control practices or revised operations, including those areas or operations not identified in the initially approved WPCP. Amendments to the WPCP shall be prepared and submitted for review and approval within a time approved by the Engineer, but in no case longer than the time specified for the initial submittal and review of the WPCP.

The Contractor shall keep one copy of the approved WPCP and approved amendments at the project site. The WPCP shall be made available upon request by a representative of the Regional Water Quality Control Board, State Water Resources Control Board, United States Environmental Protection Agency, or the local storm water management agency. Requests by the public shall be directed to the Engineer.

No adjustment in compensation will be made for ordered changes to correct WPCP work resulting from the Contractor's own operations or from the Contractor's negligence.

If requested by the Contractor and approved by the Engineer, changes to the water pollution control plan, including addition of new water pollution control practices, will be allowed. Changes shall be included in the approved amendment of the WPCP. If the requested changes result in a net cost increase to the lump sum price for water pollution control, an adjustment in compensation will be made without change to the water pollution control item. The net cost increase to the water pollution control item will be paid for as extra work as provided in Section 4-1.03D, "Extra Work", of the State Specifications.

SP12-06.03 WPCP IMPLEMENTATION

Unless otherwise specified, upon approval of the WPCP, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting, maintaining, removing, and disposing of the water pollution control practices specified in the WPCP and in the amendments. Unless otherwise directed by the Engineer, the Contractor's responsibility for WPCP implementation shall continue throughout any temporary suspension of work ordered in conformance with the provisions in Section 8-1.05, "Temporary Suspension of Work", of the State Specifications. Requirements for installation, construction, inspection, maintenance, removal, and disposal of water pollution control practices shall conform to the requirements in the Manuals and these special provisions.

If the Contractor or the Engineer identifies a deficiency in the implementation of the approved WPCP or amendments, the deficiency shall be corrected immediately. The deficiency may be corrected at a later date and time if requested by the Contractor and approved by the Engineer in writing, but shall be corrected prior to the onset of precipitation. If the Contractor fails to correct the identified deficiency by the date agreed or prior to the onset of precipitation, the project shall be in nonconformance with this section. Attention is directed to Section 5-1.01, "Authority of Engineer", of the State Specifications, and to "Retention of Funds" of this section for possible nonconformance penalties.

If the Contractor fails to conform to the provisions of this section, "Water Pollution Control", the Engineer may order the suspension of construction operations until the project complies with the requirements of this section.

Implementation of water pollution control practices may vary by season. The Construction Site BMPs Manual and these special provisions shall be followed for control practice selection of year-round, rainy season and non-rainy season water pollution control practices.

Year-Round Implementation Requirements

The Contractor shall have a year-round program for implementing, inspecting and maintaining water pollution control practices for wind erosion control, tracking control, non-storm water management, and waste management and materials pollution control.

The National Weather Service weather forecast shall be monitored and used by the Contractor on a daily basis. An alternative weather forecast proposed by the Contractor may be used if approved by the Engineer. If precipitation is predicted, the necessary water pollution control practices shall be deployed prior to the onset of the precipitation.

Disturbed soil areas shall be considered active whenever the soil disturbing activities have occurred, continue to occur or will occur during the ensuing 21 days. Nonactive areas shall be protected as prescribed in the Construction Site BMPs Manual within 14 days of cessation of soil disturbing activities or prior to the onset of precipitation, whichever occurs first.

Rainy Season Implementation Requirements

Soil stabilization and sediment control practices conforming to the requirements of these special provisions shall be provided throughout the rainy season, defined as between October 15th and April 15th.

An implementation schedule of required soil stabilization and sediment control practices for disturbed soil areas shall be completed no later than 20 days prior to the beginning of each rainy season. The implementation schedule shall identify the soil stabilization and sediment control practices and the dates when the implementation will be 25 percent, 50 percent and 100 percent complete, respectively. For construction

activities beginning during the rainy season, the Contractor shall implement applicable soil stabilization and sediment control practices.

Non-Rainy Season Implementation Requirements

The non-rainy season shall be defined as days outside the defined rainy season. The Contractor's attention is directed to the Construction Site BMPs Manual for soil stabilization and sediment control implementation requirements on disturbed soil areas during the non-rainy season. Disturbed soil areas within the project shall be protected in conformance with the requirements in the Construction Site BMPs Manual with an effective combination of soil stabilization and sediment control.

SP12-06.04 MAINTENANCE

To ensure the proper implementation and functioning of water pollution control practices, the Contractor shall regularly inspect and maintain the construction site for the water pollution control practices identified in the WPCP. The construction site shall be inspected by the Contractor as follows:

- A. Prior to a forecast storm.
- B. After a precipitation event which causes site runoff.
- C. At 24 hour intervals during extended precipitation events.
- D. Routinely, a minimum of once every two weeks outside of the defined rainy season.
- E. Routinely, a minimum of once every week during the defined rainy season.

The Contractor shall use the Storm Water Quality Construction Site Inspection Checklist provided in the Preparation Manual or an alternative inspection checklist provided by the Engineer. One copy of each site inspection record shall be submitted to the Engineer within 24 hours of completing the inspection.

SP12-06.05 REPORTING REQUIREMENTS

If the Contractor identifies discharges into surface waters or drainage systems in a manner causing, or potentially causing, a condition of pollution, or if the project receives a written notice or order from a regulatory agency, the Contractor shall immediately inform the Engineer. The Contractor shall submit a written report to the Engineer within seven (7) days of the discharge event, notice or order. The report shall include the following information:

- A. The date, time, location, nature of the operation, and type of discharge, including the cause or nature of the notice or order.
- B. The water pollution control practices deployed before the discharge event, or prior to receiving the notice or order.
- C. The date of deployment and type of water pollution control practices deployed after the discharge event, or after receiving the notice or order, including additional measures installed or planned to reduce or prevent reoccurrence.
- D. An implementation and maintenance schedule for affected water pollution control practices.

SP12-07 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, including, but not limited to, furnishing all specified contract bonds and insurance certificates, public notification, transporting equipment, establishing a storage area, sanitary restroom facilities, water pollution control plan and implementing water pollution control, and all other work as specified in the Standard Specifications and these Special Provisions and as directed by the Engineer and no additional compensation will be allowed therefor.

Compensation for providing and complying with the requirements for the water pollution control, including furnishing all labor, supervision, materials, tools, equipment, and incidentals, and for doing all the work involved in installing, constructing, maintaining, removing, and disposing of water pollution control practices, including non-storm water management, and waste management and materials pollution water pollution control practices, and other necessary work shall be considered as included in the contract lump sum price paid for "Mobilization" and no additional compensation will be allowed therefor.

The contract price paid for each "Project Identification Sign" 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.

CONSTRUCTION AREA SIGNS (BID ITEM NO. 3)

SP13-01 GENERAL

Construction area signs as shown on the plans shall be furnished, installed, maintained, and removed when no longer required, in accordance with the provisions in Section 12-3.06, "Construction Area Signs", of the State Specifications and these Special Provisions.

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.

All excavations required to install construction area signs shall be performed by hand tool excavation methods without the use of power equipment. The bottom of the mounted sign panel shall be seven (7) feet above existing grade.

SP13-02 SIGNS, PANELS, AND POSTS

Construction area sign panels shall be metal, with reflective coating, black lettering on orange background, and mounted on one 4" x 4" wood posts and shall conform to Sectionn12-3.06A, "Stationary Mounted Signs", of the State Specifications. Signs shall be kept clean and in good repair.

SP13-03 MEASUREMENTS AND PAYMENT

Construction area signs shall be counted and paid for 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.

TRAFFIC CONTROL (BID ITEM NO. 4)

SP14-01 GENERAL

Traffic control shall conform to the requirements of Section 6-12, "Traffic Control", of the General Provisions of the Standard Specifications, Sections 7-1.08, "Public Convenience", 7-1.09, "Public Safety", and 12, "Construction Area Traffic Control Devices", of the State Specifications and these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from his/her responsibilities as specified in said sections.

All signs, barriers, barricades, steel plates, and other traffic control devices shall be furnished and maintained, including all needed repairs, by the Contractor. Work shall conform to the latest edition of the "California Manual on Uniform Traffic Control Devices" and Section 12, "Construction Area Traffic Control Devices", of the State Specifications. All necessary signs and traffic control devices shall be furnished, installed and maintained, and removed when no longer needed, by the Contractor.

SP14-02 SUPERVISION

Supervision for traffic control shall be per Section 6-12.7 "Supervision", of the General Provisions of the Standard Specifications.

SP14-03 LANE CLOSURES

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

SP14-04 LANE CLOSURE HOURS

Lane closures will be allowed between the hours of 8:00 A.M. and 5:00 P.M., 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.

SP14-05 ROAD CLOSURE AND HOURS

Road closures shall only be permitted during the pulverization, grading, cement treating and paving phases of work. Road closure hours for those phases of work shall be 8:00 a.m. to 5:00 p.m. and will require a minimum of three working days notice to all impacted residents. Contractor shall make every effort to complete each phase of work (i.e., pulverizing or cement treating) performed during a road closure in one day per street, except Via Roble, to minimize the number of days drivers are impacted by the road closures. Contractor shall be allowed two road-closure days per each phase of work for Via Roble.

The Contractor may work under lane closure conditions specified in Section SP14-4 "Lane Closure Hours" before and after the specified road closure hours.

The Contractor shall coordinate road closures with garbage and recycling collection as well as accommodate residents with medical, health, or safety-related needs (doctor appointments, emergency access, and access requirements due to physical disabilities).

The full width of the traveled way shall be open for use by public traffic at all other times. Emergency vehicles shall be provided immediate access through the construction area at all times. If work is not in progress during allowed closure hours, the Engineer may order the road opened to public traffic.

SP14-06 MAINTAINING TRAFFIC AND DRIVEWAY ACCESS

Pedestrian access shall be provided at all times through the construction areas.

Vehicular access to private properties shall be maintained during construction except during the specified road closure hours or, under certain conditions. Contractor may interrupt driveway access when construction directly impacts the driveway being closed. All driveway closures shall be coordinated with the property owner and the Engineer. In such cases, the Contractor shall obtain permission from the Engineer in advance, and provide written notification to the affected parties forty-eight (48) hours in advance. The Contractor shall further give one (1) hour notice to affected parties prior to restricting vehicular access. At the end of each working day, access for all driveways shall be restored. Driveway access should be across the total width of the existing driveway and may be via a safe ramp made of base material, asphalt, cutback, or other suitable material.

SP14-07 TRAFFIC CONTROL PLAN

Prior to starting work, the Contractor shall prepare and submit a detailed proposed traffic control plan to the Engineer. The traffic control plan shall provide sufficient information and details to show typical lane closures, channelizing, locations and usage of flagmen, construction zone signing, and provisions for pedestrians, for each street and location of work. The traffic control plan shall show in detail, the proposed sequencing of the work together with the proposed traffic control system for each work task. The proposed traffic control system shall, in all respects, satisfy the requirements of these Special Provisions. The Engineer will review the proposed traffic control plan and return it to the Contractor for any necessary revisions or corrections. The Contractor shall revise and resubmit the plan to the Engineer, and this process shall be repeated, until the proposed traffic control plan is accepted by the Engineer. The Contractor will not be permitted to perform any lane closures or implement any part of the traffic control plan until it has been accepted by the Engineer.

SP14-08 FAILURE TO COMPLY

Failure to comply with the requirements and provisions in this section 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 of the Standard Specifications. In the event the Engineer orders a suspension of the work due to the failure of the Contractor to comply with the requirements of this section, the days on which the suspension order is in effect shall be considered as working days if such days are working days as set forth in Section 8-9, "Time of Completion", of the General Provisions of the Standard Specifications. The Contractor will not be permitted to resume the work until such time as he/she has satisfactorily demonstrated to the Engineer his/her ability to perform the work in accordance with the provisions of the Contract.

SP14-09 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, barricades, steel plates, traffic control plan, maintaining traffic, lane closures, flagmen and all other traffic control devices; and all other work as shown on the State 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 full costs of furnishing all flaggers under the provisions of this section and Sections 7-1.08, 7-1.09, and 12-2.02 of the State Specifications will be borne by the Contractor and shall be considered as included in the price paid for "Traffic Control" and no additional compensation shall be allowed therefor.

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

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 properties and vehicles.

Whenever the Engineer deems dust control to be necessary, the Contractor shall furnish and apply dust control measures to alleviate the problem. Once streets are pulverized (and particularly cement-treated) the contractor will be required to keep the street moist and dust controlled using a water truck, water buffalo or other equipment to moisten the street a minimum of four times each day (including weekends) and more often as needed to control the dust. If, in the opinion of the Engineer, the presence of dust has become a problem, the Engineer will specify a dust palliative or control measure in accordance with the provisions of the Standard Specifications, which the Contractor shall furnish and apply. Additionally, if the road becomes too wet and vehicles track material onto adjacent streets, or the wet conditions poses a hazard to drivers, the Contractor shall modify their dust control activities accordingly.

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.

CLEARING AND GRUBBING, TREE TRIMMING, AND TREE PROTECTION (BID ITEM NO. 5

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

SP16-01 GENERAL

Clearing and grubbing work under this section shall consist of removing and disposing of existing trash; debris; rocks; vegetation; leaves; roots; tree remains; and other rubbish from the work area, and trimming or removing existing trees, shrubs, ground cover and roots, and disposing of all resulting materials. This item shall also include removing and/or relocating landscape borders and decorative rock that conflicts with any of the planned work. Contractor shall return landscape rocks to property owner by placing in a neat stack at the edge of owner's property.

The cleared areas shall be approved by the Engineer before further grading is started. The final subgrade shall be approved by the Engineer for complete clearing and grubbing before new improvements are placed.

Vegetation, debris and trash shall be cleared and grubbed to a point 6 inches behind the existing back of curb or new edge of pavement and to achieve a vertical clearance of 14.5 feet within the project limits.

Not all areas requiring clearing are specifically noted on the plans; however, clearing shall be sufficient to allow unobstructed access for all Contractor's equipment, particularly dump trucks, pulverizers, grinders, breakdown rollers, and finish rollers. All existing vegetation, outside the areas to be cleared and grubbed, shall be protected from injury or damage resulting from the Contractor's operations.

SP16-02 TREE AND SHRUB TRIMMING, AND TREE PROTECTION

Tree and shrub trimming and removal shall conform to the requirements of Section 21, "Tree Trimming and Removal", of the Technical Provisions of the Standard Specifications.

This project includes work on streets with mature trees adjacent to the work area. In some locations, the tree canopy may extend over the roadway or work area. It is the responsibility of the Contractor to conduct his/her operations around said tree canopy such that the work is accomplished without damage to trees. The Contractor shall inspect and determine required clearance for all equipment and vehicles and perform pruning as necessary with the approval of the Engineer prior to the start of work. The Contractor may, with the Engineer's approval, trim trees and shrubs in order to better facilitate his/her construction operations. No trimming of trees or shrubs is allowed without specific permission from the Engineer. Any trimming that may be required must be approved at least two (2) working days in advance.

When tree trimming is permitted by the Engineer for the Contractor's convenience, tree trimming shall be performed under the direction of a certified arborist and in accordance with *Pruning Standards* published by the Western Chapter of the International Society of Arboriculture. The Certified Arborist shall be provided by the Contractor. Tree trimming, that requires direction of an arborist, shall be done in the presence of the Engineer.

SP16-03 PROTECTION OF EXISTING TREES

Prior to the start of construction the Contractor shall provide the following minimum protective measures:

- a) Have on site a minimum of one yard of mulch and ten square feet of burlap material to cover any exposed tree roots that are found during the removal and excavation operations.
- b) Contractor shall place a continuous band of straw wattle material coiled around all tree trunks greater than 6 inches in diameter that are within 5 feet of any anticipated excavation location to a height of 6 feet from the base of the trunk.
- c) Contractor shall make all personnel on site aware of the tree protection requirements. Failure of any worker to observe these requirements or to operate equipment with sufficient care to avoid damaging trees is grounds for their removal from the project by the Engineer.

Excavation

The Contractor shall use extreme care when excavation operations occur in the proximity of trees. At no time shall the Contractor strike trees with excavation equipment. Trees less than 6 inches in diameter that are damaged by the Contractor shall be mitigated by the replacement of said tree in kind with regards to size and species. Trees larger than 6 inches that are damaged by the Contractor shall be mitigated on a case by case basis but shall include efforts to salvage the tree including keeping the ground and roots of the tree moist and pruning to balance and to further protect the tree from additional damage. If the tree fails, the Contractor shall be responsible for removal of the failed tree, including stump and roots to 24 inches below ground surface, and planting three replacement trees.

When tree roots less than 4 inches in diameter are exposed, while excavating near existing trees to be protected, the roots shall be trimmed to a neat, clean cut with a sharp pruning saw and covered with wet mulch and burlap immediately. Tree roots larger than 4 inches in diameter shall be covered with wet mulch and burlap immediately and the Engineer notified. The Engineer will inspect these roots and direct the Contractor to trim the roots, or arrange for the trimming by a certified arborist at no cost to the Contractor. Root trimming or removal with mechanized excavation equipment shall not be permitted. The Contractor should note that coordination for the trimming by an arborist of the larger roots may take up to three working days. Contractor shall allow for this coordination in his schedule and sequence of work and shall make no claims for additional compensation for lost production or delays.

SP16-04 MEASUREMENT AND PAYMENT

The contract lump sum price paid for "Clearing & Grubbing, Tree Trimming, and Tree Protection" shall

include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals, and for doing all the work involved in clearing and grubbing and tree trimming, and tree protection including, but not limited to, the removal and disposal of all existing trash, debris, rocks, shrubs and vegetation; trimming of shrubs, trees of diameters less than 6" and other vegetation; tree protection, removing and/or relocating landscape borders, removing and/or relocating decorative rock or pavers 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.

EXISTING HIGHWAY FACILITIES (BID ITEM NO. 6 THROUGH 23)

SP17-01 GENERAL

The work performed in connection with various existing highway facilities shall conform to the 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, and Section 15, "Existing Highway Facilities", of the State Specifications, these Special Provisions, and as directed by the Engineer.

The Contractors attention is directed to Section SP-7, "Existing Utilities" as well as this section, for raising/adjusting sewer and water utilities to grade, and locating and protecting existing utilities.

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.

The work shall consist of removing, abandoning, relocating or protecting existing facilities which interfere with construction. Removed facilities shall be disposed of, salvaged or relocated as specified in these Special Provisions, as shown on the Plans, or as directed by the Engineer.

Material shown on the Plans or designated in these Special Provisions which is to be salvaged or used in the reconstruction work and which has been damaged or destroyed as a result of the Contractor's operations, shall be repaired or replaced by the Contractor, at his expense.

The Contractor shall cooperate and coordinate all utility adjustments with the various utility owners who will be adjusting their facilities. In addition, the Contractor shall arrange with the utility owners, in a timely manner, the adjustments of their facilities.

SP17-02 REMOVALS

Existing highway facilities to be removed under this section and as shown on the Plans shall include, but are not limited to, removing: fencing; drainage inlets; headwall; storm drain pipes; asphalt concrete driveway, pathway, and shoulder; decorative paver driveway or pathway; concrete ditch; concrete channel; concrete curb and gutter; over-pour at lip of concrete gutter; concrete driveway, pathway, or shoulder; concrete valley gutter; and landscape rocks. These items shall be removed and disposed of in accordance with Section 6-16, "Disposal Outside Project Limits", of the General Provisions of the Standard Specifications unless noted on the plans to stack removed material and leave for property owner.

All concrete items to be removed shall be sawcut at the nearest joint or score line except as directed by the Engineer. Also, all sawcut lines shall be approved by the Engineer prior to sawcutting. Curb and gutter, driveway, pathway, and shoulder removals shall include removing enough existing native or base material to allow for placement of 6 inches of new base material.

All asphalt concrete driveways, pathways, and shoulders shall be sawcut to a clean line. All sawcut lines shall be approved by the Engineer prior to sawcutting.

Whenever existing curb and gutter or other concrete or asphalt materials are removed, the Contractor shall place Type II barricades with flashing lights at the location of the removed facility. Spacing for Type II barricades shall be no greater than ten (10) feet on center for curb and gutter. Caution tape shall be attached to the barricades if needed to delineate the area.

After any removals, excavations which are within the limits of new improvements or are in the roadway area shall be backfilled to conform to surrounding grades with Class II aggregate base, conforming to Section SP-18, "Aggregate Base", of the Technical Provisions of the Standard Specifications and these Special Provisions. Aggregate base shall be compacted to 95% relative compaction.

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

Fencing removed as part of this project shall be removed and the materials shall be neatly stacked for re-use by the property owner if the property owner wishes to re-use them, otherwise, these items shall be removed and disposed of in accordance with Section 6-16, "Disposal Outside Project Limits", of the General Provisions of the Standard Specifications. Contractor shall disassemble all mesh screening and lagging materials and shall excavate around the base of each fence post or otherwise remove each fence post to retain the concrete footing and full length of the existing posts.

Markers, stripes, or legends which are removed by other construction activities shall be replaced with temporary markers, stripes, and legends prior to opening the roadway to vehicular or pedestrian traffic. Attention is directed to Section SP-27, "Temporary Pavement Delineation", of these Special Provisions.

SP17-03 MONUMENTS AND PROPERTY CORNERS

Unless noted on the plans for removal and replacement, existing survey monuments shall be preserved, referenced or replaced pursuant to the requirements of State of California Streets and Highways Code Sections 732.5, 1492.5, and 1810.5 and Business and Professions Code Section 8771 and the following:

The Contractor shall not disturb permanent survey monument or bench mark. The Contractor shall bear the expense of replacing and recording with the County any monument or benchmark that may be disturbed without permission. Replacement shall be done only with the direction of and in the presence of the Engineer or a licensed surveyor.

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

SP17-04 BLANK

SP17-05 REFERENCING EXISTING FACILITIES

Work by the Contractor shall include locating existing facilities and referencing, and setting sufficient marks prior to any excavation to enable their subsequent retrieval by the Contractor or utility company. The Contractor shall reference and set marks for all survey points, storm drain manholes, Central Contra Costa Sanitary District (CCCSD) sewer manholes, rodding inlets, and cleanouts, East Bay Municipal Utility District

(EBMUD) water valves, and Pacific Gas and Electric (PG&E) gas valves. The Contractor shall submit a plan to the Engineer at least forty-eight (48) hours in advance of excavation operations showing all reference points and offset distances set for each storm drain manhole, and utility facilities. All facilities shall have a minimum of two reference points that are clearly marked so that the City or any utility can quickly locate and uncover the facility if required without the use of any electronic device.

All reference points made by the Contractor for CCCSD, PG&E, EBMUD and telephone facilities shall be protected and remain undisturbed until project completion. The Contractor shall cooperate with all utility companies and shall coordinate the paving schedule with the CCCSD and the EBMUD.

SP17-06 REMOVE AND RELOCATE MAILBOX

Existing mailboxes shall be removed and reset on new posts or reset with the existing post as shown on the Plans. The reset mailboxes shall be relocated to the location designated by the Engineer. The new installation shall be installed in accordance with contra Costa County Detail CA90i, "Mailbox Details", except that post, footings and mailboxes shall be at least equal in all respects (including size and color) to the existing mailbox installation. Contractor may choose to temporarily set mailbox in a 5-gallon bucket with dirt, stone or concrete until the final paving is completed provided the mail carrier has clear access to the mailbox and the carrier approves of the temporary location.

Mailboxes damaged by the Contractor shall be replaced by the Contractor at the Contractor's expense. Mailboxes shall be removed and reset during the same work period (day). Resulting holes shall be backfilled with Class II aggregate base and compacted to 90% relative compaction.

SP17-07 LOWERING AND ADJUST STORM DRAIN MANHOLE AND EXISTING UTILITY MANHOLE COVERS AND RODDING INLETS TO GRADE

This work shall consist of lowering and adjusting storm drain, sanitary sewer and other utility manhole covers and sanitary sewer rodding inlets to grade.

Manhole structures and rodding inlets located within repaving areas shall be lowered to a point below the planed surface prior to excavation of the existing pavement. If a manhole or rodding inlet is unable to be lowered to a depth below the planed surface, then the utility shall be lowered as much as it can practically be lowered, and then the contractor shall take care not to damage the utility during construction of the new road. Adjustments below the planed surface shall include placement of temporary false bottoms in sewer manholes, removal of existing concrete collars, salvaging the existing frames and covers, removal of riser rings as required, placing and securing an acceptable temporary steel cover below subgrade elevations, and placement of temporary asphalt concrete over and around the temporary lid or cover as required to allow for the passage of vehicular traffic prior to and following excavation. The false bottoms shall be constructed of two pieces of plywood or similar material that is hinged together so that they can be folded in half to fit through the manhole opening. The false bottoms shall be set near the bottom of the manhole structure but over the sewer flowline so that any gravel or material that inadvertently makes its way into the manhole structure will not impeded the flow in the sewer main. For rodding inlets, the adjustment shall include placing a temporary plug in the riser pipe and covering the pipe with a temporary steel lid. The plug shall be a mechanical type plug. Inflatable plugs shall not be allowed.

The Contractor shall raise existing manhole frames and rodding inlets to grade located within asphalt concrete overlay and inlay areas. Manholes and rodding inlets located within the pavement area shall be raised following the placement of the final lift of asphalt concrete.

Work by the Contractor shall include locating manholes and rodding inlets and referencing and setting sufficient marks prior to placement of the overlay to enable their subsequent retrieval by the Contractor. The Contractor shall submit a plan to the Engineer at least forty-eight (48) hours in advance of any asphalt concrete paving showing all reference points and offset distances set for manholes.

Manhole and rodding inlet frames shall be raised by removing the existing concrete collar, raising the frame and cover to finished grade using riser rings, and constructing a new concrete collar and asphalt concrete patch paving. For all rodding inlets, the maximum distance between the new street elevation and the top of the riser pipe shall be eight (8) inches. If the distance to the top of the riser pipe is greater than eight (8) inches, the riser shall be extended with a new section of pipe connected with a 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.

For all raised structures, the top surface of the raised facility shall be within 1/8-inch of the adjacent finished grade. Raised manhole collars shall conform to Contra Costa County Standard Plan CD30i, "Precast Manhole Type I Base Frame and Cover".

Frames and covers for sanitary sewer manholes may be re-used if they are in good condition and if the manhole covers have a diameter of twenty-five (25") inch nominal. Existing frames and covers that have manhole covers greater than twenty-five (25") inches in diameter shall be replaced. In this case, the Central Contra Costa Sanitary District shall provide the new twenty-five (25") inch diameter frames and covers. In some cases the existing CCCSD sewer rodding inlets will also be replaced with a new standard rodding inlet. CCCSD will provide the replacement rodding inlet frames and covers. Contractor shall coordinate this work with the Sanitary District representative.

This work shall also include placement of temporary asphalt concrete around the raised manholes if the permanent asphalt concrete patching cannot be placed the same day the facility is raised to grade with a concrete collar.

The work associated with the lowering and raising of utility manhole covers and rodding inlets may be partially or totally eliminated if the utility agencies owning the facilities elect to perform these adjustments themselves.

SP17-08 RELOCATE/REPAIR SANITARY SEWER LATERAL

The Contractor shall repair any sanitary sewer lateral that is damaged by the installation of storm drain pipes or any other project work and relocate any sewer lateral that is in conflict with proposed storm drain facilities. Repaired or relocated sewer laterals shall be constructed as detailed in the Central Sanitary District's standard drawing number SEC 28-35, "Side Sewer Repairs". The Contractor shall obtain a repair permit from Central Contra Costa Sanitary District and assist the District in inspecting the repair. Full compensation for repairs to existing sewer laterals shall be considered as included in the contract price paid per linear foot for "Relocate/Repair Sanitary Sewer Lateral", and no separate payment shall be made therefor.

No building shall be without sanitary sewer service for more than four (4) hours.

SP17-09 LOWERING AND ADJUST EXISTING UTILITY VALVE COVERS TO GRADE

This work shall consist of lowering and adjusting existing utility valve covers to grade. In pavement inlay or reconstruction areas the utility valve frames shall be lowered to a point below the planed surface prior to excavation of the existing pavement. In pavement inlay or reconstruction areas the water valve covers shall be adjusted to grade using a new G5 box as shown in the detail in Appendix A. The G5 boxes to be used will be provided by EBMUD free of charge. The contractor is responsible for picking up the G-5 covers at the

EBMUD storage facility or for arranging their delivery. In pavement inlay or reconstruction areas, any other non-EBMUD covers, shall be adjusted with a concrete collar and their existing riser and cover materials after final paving.

Contractor shall phase his work so that all water valves are lowered a maximum of 20 calendar days. In the event that the Contractor fails to adjust the gate valve pot covers to grade and make them fully accessible within twenty (20) calendar days from the initial lowering of the gate valves, 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 gate valves.

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

This work shall also include placement of temporary asphalt concrete around the raised water valves if the permanent asphalt concrete patching cannot be placed the same day the facility is raised to grade. This work may be eliminated if the associated utility agency elects to perform these adjustments themselves.

SP17-10 ADJUST UTILITY BOX TO GRADE

At locations shown on the plans or where utility boxes are encountered within the limits of the planned work, Contractor shall adjust utility boxes to the grade of the new construction. Contractor shall obtain new utility boxes from EBMUD if the utility box covers a water meter. All boxes shall be placed on a compacted base and secured in native material, asphalt concrete, or concrete as applicable. The boxes shall be set so that they are accessible by utility personnel and so that they will not settle to below the new finished grade.

SP17-11 MEASUREMENT AND PAYMENT

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

The contract unit prices paid per each for "Lower Existing Manhole or Rodding Inlet Frame to Below Grading Plane", and "Lower Existing Utility Valve Frame and Cover Below Grading Plane" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to lower the frames and covers; including, but not limited to, locating, referencing, and setting marks; and for lowering the facility to a point below the grading plane, constructing false bottoms in manholes, placing temporary covers, excavation, placement of temporary and permanent asphalt concrete, and all other work as specified in these Special Provisions, and as directed by the Engineer and no additional compensation will be allowed therefor. Some of this item may be eliminated from the contract and the work performed by the various utilities. No adjustment in the bid item price will be allowed due to an increase or decrease in quantities.

The contract unit prices paid per each for "Adjust Existing Water Valve Frame and Cover to Grade with G5 Box" shall include full compensation for removing riser rings and new G5 boxes and for all required excavation, backfilling and compaction work and for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to adjust water valve covers; including, but not limited to, locating,

referencing, and setting marks; and for raising the facility to finished grade following placement of the top layer of asphalt concrete complete and in place, including placement of temporary and permanent asphalt concrete around the raised valves prior to opening the roadway to public traffic, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer and no additional compensation will be allowed therefore. This item may be eliminated from the contract and the work performed by EBMUD.

The contract unit prices paid per each for "Adjust Existing Manhole or Rodding Inlet 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; including, but not limited to, locating, referencing, and setting marks; and for raising the facility to finished grade following placement of the top layer of asphalt concrete complete and in place, including placement of concrete collars and temporary and permanent asphalt concrete around the raised structure prior to opening the roadway to public traffic, 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. Some or this entire item may be eliminated from the contract and the work performed by the various utilities.

The contract unit prices paid per each for "Adjust Utility Box to Grade" shall include full compensation for relocating and or adjusting existing utility boxes to grade, including installing a new box as required, and for all required excavation, backfilling, compaction, asphalt concrete, concrete collar 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. This item may be eliminated from the contract and the work performed by EBMUD.

The contract price paid per linear foot for "Relocate/Repair Sanitary Sewer Lateral" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment, and incidentals necessary to repair/relocate existing residence sewer laterals including, but not limited to, permits, sawcutting, excavation, cutting, sewer lateral pipe and couplings, bedding, compaction, backfill, restoring existing improvements, and all the work necessary to provide a working system and as specified by the CCCSD requirements, and as directed by the Engineer and no additional compensation shall be allowed therefor. A minimum of five (4) linear feet shall be paid for each location that a relocation or repair of a sanitary sewer lateral is required.

The contract price paid per each for "Remove and Relocate Mailbox on New Post" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to remove and reset mailboxes in their original and in-kind condition or better, including, but not limited to, backfilling resulting holes, excavation, new posts, new concrete footings and all other work, 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 linear foot for "Remove Storm Drain Pipe (Various Sizes)" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to remove and dispose of the pipes including, but not limited to, sawcutting; excavation; loading, removal, off-haul, and disposal; backfill; 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 prices paid per square foot for "Remove Concrete Driveway, Pathway, or Shoulder", "Remove Asphalt Concrete Driveway, Pathway or Shoulder", "Remove Concrete Ditch or Concrete Channel", and "Remove Concrete Valley Gutter" shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to sawcut, remove, dispose of existing improvements and any additional excavation required 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 prices paid per square foot for "Remove Decorative Paver Driveway or Pathway" shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to remove, dispose, and/or salvage and deliver existing decorative pavers and landscape rocks to property owner 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 prices paid per linear foot for "Remove Fence" shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to remove, dispose, and/or salvage and deliver existing fence materials to property owner 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 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, asphalt pavement to accommodate form boards and underlying and adjacent material to install new improvements including new base material 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. Some of this item may be eliminated from the contract and the work performed by the home owners. No adjustment in the bid item price will be allowed due to an increase or decrease in quantities.

The contract prices paid per linear foot for "Remove Overpour at Lip of Gutter" shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to sawcut, remove, and dispose of the overpour or uneven sections of the existing concrete gutter where noted or shown on the plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

The contract prices paid per each for "Remove Drainage Inlet" and "Remove Headwall" shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to remove and dispose of existing inlet, inlet top, headwall and all other work 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.

Full compensation for locating and marking utilities and utility reference point plans shall be considered as included in the contract price paid for various contract items of work and no additional compensation shall be allowed therefor.

Full compensation for protecting existing overhead and buried utilities, shall be considered as included in the prices paid for various contract items of work and no additional compensation shall be allowed therefore.

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.

SP18-01 GENERAL

This work shall consist of furnishing and placing Class 2 Aggregate Base to the lines, grades and compaction requirements shown on the Plans and specified in these Special Provisions. The Contractor's attention is directed to Section SP12-5, "Hauling Equipment Size and Weight Limitations", of these Special Provisions.

SP18-02 MATERIALS

Class 2 Aggregate Base shall conform to the 3/4-inch maximum grading and quality requirements as specified in Section 8, "Aggregate Base", of the Technical Provisions of the Standard Specifications.

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

SP18-03 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.

PULVERIZE, MIX, REGRADE AND COMPACT EXISTING ASPHALT CONCRETE PAVEMENT, BASE AND SUBGRADE MATERIAL (BID ITEM NO. 46)

SP19-01 GENERAL

This work shall consist of mixing, by pulverizing, the existing asphalt concrete, base material, and subbase material to the depth and dimensions shown on the Plans. After mixing, the pulverized material shall be excavated to the lines and grades shown on the plans and the cross sections (located in the specifications), and compacted and prepared for cement treatment.

All excavated subgrade areas shall have pulverized base material installed and compacted by the end of each day and prior to opening the roadway to public traffic.

The pulverized material shall be moisture conditioned to obtain optimum moisture content and compacted to a relative compaction of not less than 95%. The pulverized material shall be graded to within 0.05' of the grades shown on the Plans. All excess pulverized materials shall be removed. In the event additional material is required due to over excavation of the native subbase or pulverized material, the contractor shall provide Class II aggregate base to achieve design grades at no expense to the City. Class II aggregate base shall comply with SP18, "Aggregate Base", of these Special Provisions.

All pulverized areas that are to be cement treated shall be cement treated and base paved within 8 working days of pulverizing work being performed. The roadway shall be opened to public traffic at the end of each working period (day). Each day after the 8-working day period shall be considered a violation under Section 4-4 "Penalty for Non Compliance" of the Technical Provisions to the Standard Specifications. In addition the engineer may require the implementation of additional dust control measures as outlined in Section SP15 "Dust Control" of these Special Provisions.

Excavation and removal of pulverized material shall be in accordance with Section SP20, "Earthwork", of these Special Provisions.

SP19-02 PULVERIZING AND MIXING

Pulverizing and mixing shall be performed using a pulverizing machine (a grinding machine shall not be acceptable) at the locations and to the depth and dimensions shown on the Plans. Any asphalt concrete dikes that are within the pulverizing limits shall be removed with the pulverizer and included in the pulverizing pay item. The existing asphalt concrete, base and subgrade material shall be pulverized and mixed in one full depth pass of the pulverizing machine during which the material shall be pulverized and mixed to create a homogeneous mixture. Pulverizer shall be operated at a speed slow enough to assure that the asphalt material from the top of the street is uniformly mixed throughout the entire depth being pulverized and that the size of the material after pulverizing is less than two inches in its greatest dimension. If test pits dug in the pulverized material show that the material is not uniformly mixed and/or that there is a material larger than two inches, then a second pass of the pulverizer shall be required. The second pass shall be at the Contractor's expense and no additional payment shall be made therefor, except as already included in the payment item for "Pulverize, Mix, Re-grade & Compact Existing AC Pavement, Base, and Subgrade Material". Visible material greater than 2-inches in greatest dimension shall be removed from the roadway prior to and during grading and compacting of the pulverized material.

Per Section SP7, "Existing Utilities", the Contractor shall pothole to confirm all utilities are below the designed street pulverization depth and that utilities will not be damaged while pulverizing and mixing the existing asphalt concrete, base and subgrade material. Sewer manholes and rodding inlets that the Contractor has lowered to the existing cone (or lowest grade possible), but that are still within the designed pulverizing grade, shall be protected. However, the Contractor shall still pulverize over the lowered facility at a depth approximately two inches above the lowered utility.

SP19-03 BLANK

SP19-04 TEMPORARY RAMPS AND PUBLIC SAFETY

All excavated subgrade areas shall have pulverized base material graded and compacted by the end of each day and prior to opening the roadway to public traffic.

Prior to opening the road to traffic, the Contractor shall ensure that no vertical joints or drop-off remain in areas open to vehicles. The Contractor shall provide all necessary temporary ramps at driveways, side streets, longitudinal and transverse joints, and at roadway conforms. Temporary ramps shall be placed to conform to the elevation of the adjacent existing improvement and tapered on a slope of 12:1 or flatter for driveway ramps and per the Plan Details for all other ramps. The ramps shall be compacted to produce a smooth riding surface. Temporary ramps shall be removed prior to cement treating of the pulverized material.

During all phases of work the roadway surface shall be bladed to a smooth surface suitable for vehicular traffic at the end of each day. Utility structures that protrude above the graded surface shall be ramped along all edges to allow for the safe passage of vehicles. Placement of barricades, cones, and other traffic warning devices around these facilities will not be acceptable as a means to allow safe traffic passage.

SP19-05 MEASUREMENT AND PAYMENT

The final pay contract price paid per cubic yard for "Pulverize, Mix, Re-grade & Compact Existing AC Pavement, Base and Subgrade Material" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals, and for doing all the work, including, but not limited to: potholing, pulverizing, asphalt dike removal within the pulverizing limits, mixing, moisture conditioning, grading, and compacting pulverized material, including furnishing the material for and constructing, maintaining, removing, and disposing of temporary ramps, dust control 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 quantities shown for "Pulverize, Mix, Re-grade & Compact Existing AC Pavement, Base and Subgrade Material" on the Bid Schedule shall be a "Final Pay Quantity" in accordance with the provisions of Section 9-1.015 of the State Standard Specifications.

EARTHWORK, ROADWAY EXCAVATION

(BID ITEM NO. 47 and 48)

The provisions of Section 3, "Earthwork", of the Technical Provisions of the Standard Specifications are modified as follows:

SP20-01 DEFINITION

Excavation and backfill for all pipes and structures are defined as structure excavation and structure backfill. Structure backfill shall be as shown on the Plans. All other excavation, of any type, is defined as "unclassified".

Work related to "Roadway Excavation" includes the excavation and disposal of pulverized materials determined by the Contractor to be excess. Said excavation and disposal shall be to achieve the structural section as shown on the plans and in these Special Provisions.

Work related to "Asphalt Concrete Conform Grind" shall include cold planing, milling, or grinding at all streets adjacent to the new paving and on the shoulder on the station-left side of Via Roble per the depths and at the locations shown on the Plans and Details.

SP20-02 GENERAL

Pavement cores were done to determine the existing pavement section thickness and subgrade material. The recent cores for this project did not find any concrete in the areas to be excavated. The coring log information is shown on the project plans.

The quantity of excavation calculated includes all materials to be removed, of all kinds, except for the items specifically listed in the bid proposal to be removed and paid as separate items, such as storm drain structures and surface features.

There is no separate measurement or payment for earthwork involved with pipes, drainage structures, curb and gutter, pathways, walkway, stairs and driveways. All excavation and backfill necessary to construct these items, except as specifically provided for in other sections of these Special Provisions, shall be considered as included in the contract prices paid for the various items of work.

The Contractor's attention is directed to Section SP12-03, "Hauling Equipment Size and Weight Limitations", of these Special Provisions.

The excess pulverized/mixed material removed from the roadway, which is not used as base material in fill areas or not suitable for shoulder backing, shall be 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.

Excess pulverized/mixed material will consist of asphalt concrete, base material and native material. The pulverized/mixed material 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 will be reusable or recyclable. No additional compensation shall be allowed to the Contractor if the pulverized material is not reusable or recyclable. Any testing, if required, by the disposal site shall be arranged and paid for by the Contractor.

SP20-03 ROADWAY EXCAVATION

This work shall include the removal of excess pulverized/mixed material from the roadway after the street has been pulverized/mixed sufficiently enough to allow vehicle traffic. The excess material shall be removed with a grinding (or milling) machine conveying excess material directly into dump trucks which immediately off-haul the material from the work-site.

SP20-04 MEASUREMENT AND PAYMENT

The contract price per cubic yard for "Roadway Excavation" shall be a final pay quantity and shall include full compensation for all labor, materials, tools, equipment and incidentals, and all work involved, including, but not limited to, grinding, sawcutting, excavating, loading, hauling, testing (if needed) and disposing of excess pulverized material, existing asphalt concrete, aggregate base, or subbase required to construct the new improvements including furnishing the materials for constructing, maintaining, removing, and disposing of temporary 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 shall be allowed therefor.

The quantities shown for "Roadway Excavation" on the Bid Schedule shall be a "Final Pay Quantity" in accordance with the provisions of Section 9-1.015 of the State Standard Specifications.

The contract price per square yard for "Asphalt Concrete Conform Grind" shall include full compensation for all labor, materials, tools, equipment and incidentals, and all work involved, including, but not limited to, grinding, sawcutting, excavating, loading, hauling, testing (if needed) and disposing of all grinding material, existing asphalt concrete, aggregate base, or subbase required to construct the new improvements including furnishing the materials for constructing, maintaining, removing, and disposing of temporary 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 shall be allowed therefor.

CEMENT TREATMENT OF PULVERIZED MATERIAL (BID ITEM NO. 49)

SP21-01 GENERAL

This work shall consist of spreading cement; mixing, grading, shaping, trimming and compacting the mixture of pulverized and mixed asphalt concrete, base material and cement; as shown on the Plans, as specified in these Special Provisions and as directed by the Engineer.

All cement treated areas shall be paved with the asphalt concrete base course within 5 working days after the minimum cure time and within 8 working days of the initial pulverizing phase. All base failures that develop after this time shall be repaired by the Contractor per Section SP21-07 "Proof Rolling and Base Repair" at no cost to the City.

SP21-02 CEMENT ADDITIVE

Cement additive used for the recycled asphalt concrete and base material stabilization shall be Portland Cement Type II, conforming to Section 90-2.01, "Portland Cement", of the State Specifications and the requirements of ASTM C-150 test method.

SP21-03 SPREADING AND MIXING CEMENT

Cement treatment work shall not be allowed while the atmospheric temperature is below 50 degrees Fahrenheit.

Cement shall be distributed on the pulverized material in the amount that can be mixed, compacted and finish graded within the same working period (day). Driveways shall be ramped at the end of each work day and as requested of the public if they have a special hardship during the working day.

Cement to be mixed with pulverized base and surfacing material shall be furnished in bulk and spread by computer controlled mechanical equipment. Cement shall be added to the pulverized material at the rate of five (5) pounds per cubic foot of the pulverized mixture. The cement shall be added in a dry state and every precaution shall be taken to prevent dust. The rate of cement spread shall not vary more than \pm five (5) percent from the above designated rate.

Tailgate spreading of the cement will not be permitted. The spreader truck shall demonstrate the ability to maintain a constant computer controlled spread rate over variable travel speeds. A pan test shall be conducted by the Contractor, in the presence of the Engineer, to demonstrate and verify the spread rate and the computer's calibration. The pan shall be provided by the contractor and will be 1x3 feet in size.

No traffic other than the mixing equipment or other related construction equipment will be allowed to pass over the spread Portland Cement until after completion of mixing.

The mixer machine shall be a cross-shaft type mixer capable of providing a uniform homogeneous mixture throughout the material to the depth and grade indicated on the Plans.

The mixed material shall be placed such that after compaction only minor trimming is needed to achieve the finished grade shown on the Plans. Extensive shifting of material from high areas to low areas will not be allowed.

The mixing machine shall be capable of automatically adjusting itself to maintain a constant depth. On the initial mix, the water truck must have a solid connection to the mixing machine. The water shall be injected directly into the mixing chamber and shall produce a homogenous blend free from streaks or pockets of dry cement. Leakage of water from equipment will not be permitted. Care shall be exercised to avoid the addition of any excessive water.

Once cement is spread, a minimum of two (2) mixing passes will be required.

The entire mixing operation shall be completed within 2 hours of the initial spreading of cement, unless otherwise permitted by the Engineer.

When mixed material, exclusive of one (1) inch or larger clods, is sprayed with phenolphthalein alcohol solution, areas showing no color reaction shall be considered evidence of inadequate mixing.

SP21-04 COMPACTING AND FINISH GRADING

After cement has been added and the materials have been satisfactorily mixed, compaction shaping and finish grading shall begin immediately. The mixture shall be bladed, shaped and compacted to ninety-five (95) percent relative compaction. Compaction shall be accompanied by sufficient blading to eliminate all irregularities.

Initial compaction shall be by means of a sheepsfoot vibratory roller that weighs a minimum of 10 tons, no other compaction equipment shall be allowed for initial compaction. Initial compaction shall immediately be followed with final grading and compaction by rolling with steel drum rollers.

The finished surface of the material shall not vary more than 0.05-foot above or below the grade established by the Engineer. All excess material above the grade tolerance specified shall be trimmed from the grade prior to final compaction of the treated material. No loose material shall be left on the finished plane.

All trimmed surfaces shall receive finish rolling consisting of at least one (1) complete coverage with steel drum rollers. Vibratory rollers shall not be allowed.

SP21-05 FINAL GRADING

Final grading shall be completed within 3 hours after compaction requirement has been achieved. The excavation and removal of any excess treated material required to achieve subgrade shall conform to the provisions of Section SP-20, "Earthwork" of these Special Provisions. Contractor shall complete all grading of treated areas on the same day of treatment. The Contractor shall micro crack the treated material with a 10 ton smooth drum roller 24 hours after final compaction.

SP21-06 CURING

After final finish grading of the cement treated material, the grade shall be kept moist until the asphalt concrete paving operation begins. The grade shall be cured for a minimum period of forty-eight (48) hours before asphalt concrete paving can begin. The Contractor shall carefully monitor the curing operation to prevent over saturation of the base material, and keep the surface moist enough to minimize dust resulting from vehicle traffic.

When the cement treated surface is left exposed over weekends or holidays, the contractor shall provide at his

own costs suitable equipment and personnel to monitor and maintain proper moisture levels on the treated surface to allow for proper curing and dust control.

The staging and storing of equipment and materials on the cement treated base shall not be permitted. The Contractor shall make every effort to stage his work to minimize construction equipment and garbage and recycling truck impacts on the treated material.

SP21-07 PROOF ROLLING AND BASE REPAIR

Following completion of final grading and compaction and prior to paving, the finished surface shall be proof-rolled by the Contractor, using a loaded water truck, to detect and locate unstable (pumping) areas. Unstable areas shall be excavated to a depth of 6 inches and backfilled with asphalt concrete prior to paving.

Asphalt concrete shall be mix Type I, 3/4" maximum size aggregate installed per SP-22 of these Special Provisions.

SP21-08 MEASUREMENT AND PAYMENT

The contract price paid per cubic yard for "Cement Treat Pulverized Base Material" shall be a final pay quantity and shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals for doing all work involved including, but not limited to, furnishing, spreading and mixing cement; water; grading; excavation; shaping; compaction; trimming; curing; monitoring and maintenance over weekends and holidays; dust control; proof-rolling and all other work, complete in place, as shown on the Plans, as specified in the State Specifications and these Special Provisions, and as directed by the Engineer and no additional compensation shall be allowed therefor.

Payment for excavating, loading, offhauling and disposal of unstable material shall be paid as extra work at the contract item price per cubic yard for "Roadway Excavation" and shall conform to the provisions of Section SP-20, "Earthwork", of these Special Provisions. Payment for backfilling unstable areas with asphalt concrete as base repairs shall be paid at the contract item price per ton for "Asphalt Concrete Pavement" and shall conform to the provisions of Section SP-22, "Asphalt Concrete", of these Special Provisions and no additional compensation shall be allowed therefor.

The quantities shown for "Cement Treat Pulverized Base Material" on the Bid Schedule shall be a "Final Pay Quantity" in accordance with the provisions of Section 9-1.015 of the State Standard Specifications.

ASPHALT CONCRETE (BID ITEM NO. 50 THROUGH 56)

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.

SP22-01 GENERAL

The Contractor's attention is directed to Section SP12-05, "Hauling Equipment Size and Weight Limitations", of these Special Provisions.

All asphalt concrete shall be placed at the locations and in accordance with the details shown on the Plans and as specified in these Special Provisions.

Asphalt concrete shall be mix Type "II", 1/2-inch maximum size aggregate (MSA) for the following:

- All finish courses
- · Driveways, pathways, and paved shoulders

Asphalt concrete shall be mix Type "I", 3/4-inch maximum size aggregate, as specified in Section 9, "Asphalt Concrete", of the Technical Provisions of the Standard Specifications for the following:

Base courses and base repairs

References to Aged Residue (AR) asphalt binders within Section 9-1, "General", of the Technical Provisions of the Standard Specifications are hereby amended to the use of Performance Grade (PG) asphalt binders. PG 64-10 asphalt binder shall be used for all applications.

Attention is directed to Section 39-5.01, "Spreading Equipment", of the State Specifications. All layers shall be spread with a self-propelled paving machine. The substitution of motor graders or loaders with paving attachments for paving machines will not be allowed. The use of pickup machines will only be allowed when the subgrade, on which asphalt concrete pavement is to be placed, is asphalt concrete or cement treated base material. The use of a pickup machine will not be allowed when the subgrade, on which asphalt concrete pavement is to be placed, is untreated aggregate base or aggregate subbase, sand or native material.

Section 9, "Asphalt Concrete", Subsection 9-8, "Certificate of Compliance", of the Technical Provisions of the Standard Specifications shall be amended to include the following addition:

Mix Design - The certificate accompanying the mix design submitted by the Contractor shall indicate that said mix design is able to achieve a minimum compaction equal to 96% of theoretical density, or a maximum of 4% air voids, in lab tests.

At least forty-eight (48) hours prior to starting any paving operations, the Contractor shall submit to the Engineer a plan outlining his/her proposed sequencing of paving the roadway. The Contractor shall specify the width of spread (the location of longitudinal joints) and the proposed overlap of each course. The Contractor shall not commence paving operations until approved to do so by the Engineer. The sequence of paving shall be such as to avoid paving a lane width with cold joints.

The Contractor shall not perform paving operations when the weather is rainy, foggy or when the atmospheric

temperature is below 50°F. It shall be the Contractor's responsibility, based on weather predictions, to schedule his/her paving operations to avoid paving in the rain or fog. If the day's operations are canceled because of predicted rain or fog, a non-working day will be allowed regardless of actual working conditions. Asphalt concrete shall not be placed on any surface which contains ponded water or excessive moisture in the opinion of the Engineer. If paving operations are in progress and rain or fog forces a shut down, loaded trucks in transit shall return to the plant and no compensation will be allowed therefor.

Prior to placing asphalt concrete, a paint binder (tack coat) of RS-1 or SS-1h shall be applied to the vertical surfaces of all existing pavement, gutters, dikes, and curb surfaces against which the new pavement is to be placed, and on all existing roadway pavement surfaces. The rate of application shall be enough to thoroughly cover the surface receiving the binder and shall be approved by the Engineer.

The area to which paint binder of RS-1 or SS-1h has been applied shall be closed to public traffic. Care shall be taken to avoid tracking binder material onto existing pavement surfaces beyond the limits of construction. Payment for paint binder shall be included in the various pay items of work, and no additional compensation shall be allowed therefor.

Asphalt concrete base course(s) shall cool to below 160°F prior to placing the next lift of asphalt concrete. If second lift of asphalt is not placed the same day, Contractor shall apply a tack-coat binder to the asphalt concrete surface prior to placement of second or final lift of asphalt concrete.

The Contractor shall furnish and use <u>canvas tarpaulins</u> to cover <u>all</u> loads of asphalt concrete from the time that the mixture is loaded until it is discharged from the delivery vehicle. Tarpaulins shall cover the entire asphalt concrete load. Failure to comply with this requirement may result in the rejection of the asphalt by the Engineer.

Batch data and load slips shall be presented to the Engineer as asphalt is delivered to the project site to allow verification of location and use. Failure to do so may result in non-payment for disputed quantities.

The Contractor's asphalt paving equipment shall utilize electronics or a ski device (minimum length of such device shall be thirty (30) feet) to assure smooth longitudinal paving. The ski device shall be a rigid, one-piece unit and the entire length shall be utilized in activating the sensor.

Handwork, raking, and repetitive handling of any asphalt concrete shall be minimized. Any asphalt concrete material which has fallen onto the adjacent roadway surface shall be removed from the site. Failure to comply with this requirement may result in the rejection of the finished paving by the Engineer.

The contractor shall initially roll (or break down) the asphalt concrete when the asphalt concrete is a minimum of 250 degrees Fahrenheit. Contractor shall use a roller that is a minimum of 10 tons for initial rolling. Following initial rolling or breakdown, Contractor shall make three complete-coverage passes with a vibratory roller while the temperature of the new asphalt mat is above 160 degrees Fahrenheit.

When a straightedge twelve (12) feet long is laid on the finished surface and parallel with the center line, the surface shall not vary more than 0.01 foot from the lower edge of the straightedge. The transverse slope of the finished surface shall be uniform to a degree such that no depressions greater than 0.02 foot are present when tested with a straightedge twelve (12) feet long laid in a direction transverse to the centerline.

The finished pavement surface shall be smooth and free of cracks, shoving, displacement, and segregation of coarse and fine materials. Paving shall be to a clean neat joint with existing grade. Paving with evidence of poor workmanship such as rock pockets, ripples, voids, or out of tolerance as defined above, shall be removed. At the discretion of the Engineer, finished pavement not meeting these specifications may require a fog seal in accordance with Section 37 of the State Specifications.

The Contractor shall be responsible for any damage and liquid asphalt staining to existing facilities and

landscaping. Such damage and staining shall be repaired by the Contractor, at his/her cost, to the satisfaction of the Engineer.

If the finished surface of the final asphalt concrete layer does not meet the required surface tolerance, it shall be brought within tolerance by either (1) abrasive grinding with equipment utilizing diamond blades (with fog seal coat on the areas which have been ground), (2) removal and replacement, or (3) placing an overlay of asphalt concrete. The method will be selected by the Engineer. The corrective work shall be at the Contractor's expense.

If abrasive grinding is used to bring the finished surface to specified surface tolerances, additional grinding with equipment utilizing diamond blades shall be performed as necessary to extend the area ground in each lateral direction so that the lateral limits of grinding are at a constant offset from, and parallel to the nearest lane line or pavement edge, and in each longitudinal direction so that the grinding begins and ends at lines normal to the pavement centerline, within any ground area.

All ground areas shall be neat rectangular areas of uniform surface appearance. Abrasive grinding shall conform to the requirements in the third, fourth, fifth and sixth paragraphs in Section 42-2.02, "Construction", of the State Specifications.

At the end of each work period (day), the Contractor shall construct temporary asphalt concrete ramps at all transverse joints, side streets, and existing driveway locations and crosswalks where drop-offs exist. The asphalt concrete ramps shall be tapered on a slope as shown on the contract Plans.

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

After the asphalt concrete has been placed and prior to opening the roadway to public traffic, the Contractor shall furnish and place temporary pavement delineation in conformance with the provisions of Section 26 "Temporary Pavement Delineation", of these Special Provisions.

SP22-02 ASPHALT DRIVEWAYS, PATHWAYS AND SHOULDERS ON EXISTING BASE MATERIAL

At the contractors option suitable pulverized material of less than 2 inches in size or Class II AB may be placed and compacted to 95% relative compaction to reduce the required asphalt thickness to a minimum of 3-inches at driveways, pathways and shoulders shown to be repaved with 3-inches minimum asphalt. Contractor may also place multiple layers of asphalt concrete for thicknesses greater than 3 inches.

SP22-03 ASPHALT DRIVEWAYS, PATHWAYS AND SHOULDERS ON NEW BASE MATERIAL

The subgrade on driveways, pathways and shoulders shown on the plans to be reconstructed shall be excavated to the required depth to allow for the construction of a structural section consisting of 3-inches of asphalt pavement over 6-inches of Class II AB compacted to 95% relative compaction. Suitable pulverized material of less than 2 inches in size may be used in lieu of Class II AB if approved by the Engineer prior to use.

SP22-04 ASPHALT DRIVEWAYS, PATHWAYS AND SHOULDERS TO BE PAVED AFTER THE FINAL LIFT ON ROADWAY

The asphalt driveways, shoulders, and pathways that are shown on the plans to be constructed after the final lift of roadway paving (overlay) shall be constructed at the locations shown on the plans, and per the details shown

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

Asphalt driveway, pathway and shoulder limits are approximate, the Engineer will paint actual conform lines prior to the start of conform paving work.

A paint binder (tack coat) of RS-1 or SS-1h asphaltic emulsion shall be applied to the surfaces of all existing pavement, gutters, dikes, and curb surfaces against which the new pavement is to be placed. The rate of application shall be approved by the Engineer.

SP22-05 AC DIKE/BERM

Section 9 "Asphalt Concrete" of the Technical provisions and Section 39, "Asphalt Concrete," of the State Specifications shall apply except as herein modified or supplemented.

Asphalt concrete for AC berms shall be mix Type "III", 3/8" Maximum, Medium grading.

The work consists of installing Type "A", Type "C", and Type "F" asphalt concrete dikes at the locations shown on the Plans. The asphalt concrete dikes shall be in accordance with the detail shown on applicable Caltrans Standard Plan A87B, "Asphalt Concrete Dikes".

Prior to placement of the berm, the pavement shall be thoroughly cleaned and a tack coat of asphaltic emulsion, RS-1 or SS-1h, 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. Dikes that are damaged before curing or dikes that slough or fall apart before curing shall be completely removed and replaced at the Contractor's expense. If a section of dike looks "patched" it shall be entirely removed and replaced with a dike that is smooth, meets the full dimensions of the intended dike, and is uniform in appearance.

Berms shall be reduced to 2-inches in height (Type "C") 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 dikes shall be placed and compacted at the same time as the dikes to make the dike and the conform paving monolithic.

The ends of new dikes shall be painted white (two coats) for a minimum of one foot in length and a Type "C" pavement marker shall be placed on top of the dike.

All dikes shall be backed with either asphalt concrete (paid as conform paving), select fill, pulverized material, aggregate base, topsoil, existing gravel (if protected for re-use) or other material that matches the existing shoulder material (paid as shoulder backing).

SP22-06 RECLAIMED ASPHALT CONCRETE

At the Contractor's option, the Contractor may produce asphalt concrete using reclaimed asphalt pavement (RAP). Asphalt concrete using RAP may only be used in the roadway base course layer. RAP shall not be used for any asphalt concrete finish course. Asphalt concrete produced using RAP shall conform to the provisions for asphalt concrete in Section SP-22, "Asphalt Concrete", of these Special Provisions. The Contractor may substitute RAP for a portion of the virgin aggregate in asphalt concrete in an amount not exceeding fifteen percent (15%) of the asphalt concrete dry aggregate weight.

Virgin aggregate shall conform to the provisions for aggregates in Section SP-22, "Asphalt Concrete" of these

Special Provisions.

RAP shall be processed from asphalt concrete removed from pavement surfaces. RAP stockpiles shall consist only of homogeneous RAP. The Contractor may process and stockpile RAP throughout the project's life. Processing and stockpiling operations shall prevent material contamination and segregation.

The Contractor shall determine the amount of asphalt binder to be mixed with the combined virgin aggregate and RAP in conformance with the requirement sin California Test 367 amended by Lab Procedure-9 (LP-9), "Hot Mix Asphalt (HMA) Using Up to 15% Reclaimed Asphalt Pavement (RAP)". LP-9 is available at:

http://www.dot.ca.gov/hq/esc/Translab/ofpm/fpmlab.htm

At least twenty-one (21) days before starting production of asphalt concrete using RAP, the Contractor shall submit a proposed asphalt concrete mix design in writing to the Engineer. The mix design submittal shall consist of the following:

A. RAP:

- a. Processed stockpile locations
- b. LP-9 test results
- c. Correlation factor for aggregate gradations from California Test 382 and LP-9
- d. Three (3) 70-pound samples of processed RAP representing the material to be used. The three (3) samples shall be split from the sample the Contractor uses to determine the mix design. The Contractor shall obtain and split the samples in conformance with the requirements in California Test 125 and LP-9.
- e. The substitution rate for virgin aggregate and percent RAP
- B. Virgin aggregate and supplemental fine aggregate blend:
 - a. Target values for each sieve size
 - b. Aggregate quality tests results
 - c. Each aggregate source to be used including producer, location and California Mine Identification number
 - d. Percentage of each aggregate stockpile, cold feed, and hot bin to be used
 - e. Gradation of each aggregate stockpile, cold feed, and hot bin to be used

C. Asphalt binder:

- a. Source
- b. Material Safety Data Sheets

D. Antistrip additives, if used:

- a. Name of product
- b. Name of manufacturer
- c. Manufacturer's designation and proposed rate
- d. Location and method of addition
- e. Material Safety Data Sheets

E. Asphalt concrete

- a. A completed mix design that reflects the percent of RAP to be used including the electronic worksheet identified in LP-9
- b. In graphical format, stability and air voids versus asphalt binder percentage of asphalt in conformance with the requirements in CTM 367

Asphalt concrete production using RAP shall not begin until the Engineer approves the mix design.

If proposing a change in the RAP substitution rate, the Contractor shall notify the Engineer. If the substitution rate changes more than five (5) percent by dry aggregate weight in the asphalt concrete mixture, the Contractor shall submit a new mix design.

The aggregate gradation for the asphalt concrete produced with RAP shall be calculated based on the mathematical combination of the virgin aggregate gradation during production and the daily RAP gradation. RAP shall be sampled and gradation shall be determined in conformance with the requirements in LP-9. RAP gradations shall be:

- A. Determined daily be the Contractor
- B. Used for the mathematical combination of that day's concrete production
- C. Reported to the Engineer

The Contractor shall perform quality control testing of the RAP source each day asphalt concrete using RAP is produced.

Daily, the Contractor shall submit to the Engineer:

- A. Results for RAP gradation and the asphalt binder content in RAP determined in conformance with the requirements in LP-9. The Contractor shall sample RAP from the weigh hopper or pug mill.
- B. Mathematical calculation of the gradation of the virgin aggregate and RAP aggregate blend
- C. Correlation factor for RAP burn-off determined in conformance with the requirements in LP-9

RAP proportioning shall conform to the provisions for aggregate proportioning specified in Section 39-3.03, "Proportioning", of the State Standard Specifications and these Special Provisions. The Contractor's mixing equipment shall have a device that safely provides a sample representative of the virgin aggregate and RAP incorporated into the asphalt concrete. The Contractor shall sample in conformance with the requirements in California Test 125 and LP-9.

The temperature of asphalt concrete using RAP shall not exceed 330° F.

If batch mixing is used, RAP shall be kept separate from the virgin aggregate until both ingredients enter the weigh hopper or pug mill. After introduction to the pug mill and before asphalt binder is added, the mixing time for the virgin aggregate and RAP shall not be less than five (5) seconds. After asphalt binder is added, the mixing time shall not be less than thirty (30) seconds.

If continuous mixing is used, the RAP shall be protected from direct contact with the burner flame with a device such as a shield, separator, or second drum.

SP22-07 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; sawcutting; 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; and any necessary corrective abrasive grinding or fog coat, 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 prices paid per square foot for "AC Driveway, Pathway or Shoulder on Existing Base Material", and "Overlay AC Driveway, Pathway or Shoulder" 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, subgrade preparation, cleaning, tack coat, furnishing, placing, spreading, and compacting the asphalt concrete to the specified depth, and all other work as shown on the Plans, as specified in the Standard Specifications, the State Specifications and 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 New Base Material" 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, providing, placing and compacting base material, subgrade preparation, cleaning, tack coat, furnishing, placing, spreading, and compacting the asphalt concrete to the specified depth, and all other work as shown on the Plans, as specified in the Standard Specifications, the State Specifications and 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 "Asphalt Dike/Berm (Various Types)" 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, barricades, asphalt concrete, tack coat binder, compaction, painting dike ends white, placing markers on dike ends, placing and compacting fill or backing material behind dikes (select fill, pulverized material, aggregate base, top soil, existing gravel), 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.

There shall be no separate measurement or payment for furnishing the asphalt concrete used in the construction of asphalt driveways, pathways, shoulders and berms. Full compensation shall be considered as included in the contract unit price paid for these items of work.

SHEETING AND SHORING (BID ITEM NO. 38)

SP23-01 GENERAL

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

Attention is called to Article 6 of "Construction Safety Orders" of the California Division of Industrial Safety, which applies to all open excavations made in the earth's surface, including trenches.

All trenches shall be evaluated by the Contractor's "responsible person" for stability prior to personnel entering the trench. The Contractor shall comply with the California Occupational Safety and Health Administration (CAL/OSHA) requirements pertaining to trench safety and trench shoring. The Contractor shall submit a copy of his/her excavation permit, to the Engineer, at the preconstruction meeting.

The Contractor shall be aware that in no case should slope height, inclination, and excavation depths exceed those specified in local, state, or federal safety regulations. Specifically, the Contractor shall be aware of the current OSHA Health and Safety Standards for Excavation, 29CFR Part 1926. The Contractor's "responsible person", as defined in 29CFR Part 1926, shall evaluate all soil exposed in excavations as part of the Contractor's safety procedures.

The Contractor shall furnish, install, and maintain sheeting and shoring for the protection of workers and the public from movement of the ground and the element of danger to life, property, or to existing improvements, this requirement shall be the responsibility of the Contractor.

Additional supports requested by the Engineer shall in no way relieve the Contractor of his/her responsibility for the sufficiency of necessary precautions.

Damages resulting from the Contractor's operations shall be repaired or replaced at the Contractor's expense. All repairs shall be completed within two (2) working days of the damage occurring.

SP23-02 MEASUREMENT AND PAYMENT

The contract lump sum price paid per for "Sheeting and Shoring" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals for doing all the work involved in sheeting and shoring as specified in the Standard Specifications, the Construction Safety Orders, the California Occupational Safety and Health Administration, and these Special Provisions, and as directed by the Engineer and no additional compensation shall be allowed therefor.

(BID ITEM NO. 24 THROUGH 37)

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.

SP24-01 GENERAL

All new curb, gutter, driveways, and storm drain structures shown on the contract Plans shall conform to the latest applicable Contra Costa County (CCC) Public Works Department "Standard Plans" unless otherwise shown or specified. This work shall also include placing and compacting new aggregate base under new concrete construction.

All new concrete work shall be placed on a minimum of a six (6) inch thick layer of Class 2 aggregate base, compacted to 95% relative compaction.

Any full driveway closure shall be approved in advance by the property owner and the Engineer.

Inlet excavations shall be backfilled the same day or covered with steel plates. Steel plates shall be placed in accordance with the provisions of Section 6-11.2, "Trenching", of the General Provisions of the Standard Specifications.

All new inlets shall have a City-provided placard stating "No Dumping – Drains to Creek" affixed to the curb or other logical nearby location.

Aggregate base shall be Class 2 aggregate base conforming to Section SP-18, "Aggregate Base", of these Special Provisions.

All concrete shall receive a light broom finish.

For new storm drain inlets only, the contractor may use pre-cast storm drain inlets at his own risk. No additional payment shall be made for modifications to the pre-cast structures due to grade changes, storm drain alignment modification or other reason.

Forms for drain inlets and manhole structures that are cast-in-place in the field shall be inspected and approved prior to placing concrete.

Inlet frames, and grates shall be galvanized.

The void between the back of new concrete curbs, inlets, and driveways and the surrounding terrain shall be filled with material to <u>match existing surrounding material</u>. 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.

SP24-02 CONCRETE REQUIREMENTS

Concrete used for all items on this project shall be Class 560-C3250 or stronger. The maximum slump shall be four (4) inches.

Concrete work shall not be backfilled within seventy-two (72) hours of placement.

SP24-03 MINOR CONCRETE STRUCTURES

The work herein shall consist of, but not be limited to, constructing new curb and gutter, driveways and driveway aprons, valley gutters, and reconstruction of brick and paver surfacing. The work shall include grading and preparing the subgrade, doweling to existing improvements, and placing and compacting aggregate base.

Curb and gutter shall be Type S1-6 and shall conform to CCC Standard Plan CA71i except that concrete mix shall be as specified in these special provisions, 6 inches of base rock shall be placed under new curb and gutter, and the maximum slope of the gutter pan shall be 5 percent (a maximum catch of 7/8" instead of 1 1/4").

Concrete valley gutters and concrete ditch (Mars Court) shall conform to CCC Standard Plan CA73i except the concrete shall be as specified in these special provisions and 6 inches of base rock shall be placed under the new concrete.

Remove and replace Type "B", and Type "C", inlet tops; remove Type "A" inlet and replace with a Type "B" inlet; or install Type "A" inlet, Type "B" inlet, or Type "C" inlet shall be per Contra Costa County (CCC) Public Works Department Standard Plans CD20i, CD21i, and CD22i. Where shown on the plans, Contractor shall remove tops from existing inlets in any manner that is safe and protects the base of the inlets and their associated storm drain pipes. New inlet tops shall be cast in place and dowelled into the existing inlet base. Dowels shall have a maximum spacing of 8 inches. Each new inlet shall include two 3-inch diameter PVC sleeves through the back of the inlet to allow private drainage to be tied into the inlet by others. The sleeves shall be a minimum of 16 inches long and shall be capped on the exposed end. Contractor shall verify the exact location of the sleeves with the Engineer prior to pouring the inlet.

Connections of storm drain pipes to existing drain inlets shall use a concrete collar with rebar and a mastic seal per the Plan Detail "Pipe Connection to Existing Structure".

Where shown on the plans, Contractor shall install a 12-inch by 12-inch concrete drain inlet with a cast iron grate. The inlet will provide a junction box at the pivot point in the new 8-inch storm drain at the end of Manzana Place. This inlet may be cast-in-place and shall have wall and floor thicknesses of 4 inches, or it may be a precast inlet.

Where shown on the plans, Contractor shall install a Type I manhole per Contra Costa County (CCC) Public Works Department Standard Plans CD30i except that the eccentric cone shall be replaced with a flat-top riser to allow the manhole frame and grate to be installed at the new street grade.

Concrete driveway or pathway shall be constructed to the width and dimensions as shown on the contract plans and/or as painted in the field by the Engineer. Driveways shall conform to CCC Standard Plan CA72i, except as modified as shown on the contract plans to fit actual field conditions as shown on the Plans and as directed by the Engineer.

Dowels, #4x12" long shall be installed at the junction between new and existing facilities. The dowels shall be in drilled holes, grouted and spaced in conformance with the details shown on CCC Standard Plan CA74i and

these special provisions. All dowels shall have a minimum 1 ½" concrete cover. Full compensation for furnishing and installing dowels shall be considered as included in the various concrete items of work and no additional compensation will be allowed therefor.

The contractor shall remove and salvage brick pavers to be reused in the reconstruction of brick paver surfacing as shown on the plans and as directed by the Engineer. Reconstructed paver surfaces shall be bedded on a minimum of 6" of class II base rock compacted to 95% relative compaction and a maximum one inch layer of sand. The excavation of subgrade material sufficient to provide base rock and sand bedding shall be considered as included in the unit price paid for installation of brick paver surfacing.

The Contractors attention is directed to the existence of private irrigation facilities located behind the existing curb and gutter or at drain inlet locations. In some cases the irrigation systems may run directly behind the existing curb and gutter and it may become necessary to relocate a portion of the system to prevent damage during the removal and or installation of new concrete improvements. If any portion of an irrigation system is damaged due to construction activities, the contractor shall repair these systems the same day they are damaged. The Contractor shall test the system after the repair is completed to ensure the system is fully functional. Relocating or repairing irrigation system work shall be considered as included in the bid item price paid for the various concrete items.

SP24-04 BLANK

SP24-05 MEASUREMENT AND PAYMENT

The contract price paid per linear foot for "Concrete Curb and Gutter", and the contract price paid per square foot for "Concrete Driveway or Pathway on Existing Base Material", "Concrete Driveway or Pathway on New Base Material", "Reset Brick Paver Surfacing", "Concrete Ditch" and "Concrete Valley Gutter" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to complete the work including, but not limited to, concrete; sawcutting; excavation; loading; hauling; disposal; forming; dewatering; backfill, including driveway backfill to finish grade; steel plates; reinforcement; dowels; frames; grates; galvanizing; aggregate base; compaction; repair and/or relocation of irrigation facilities; and all other work necessary to construct the facility complete, in place as shown on the plans as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer and no additional compensation shall be allowed therefor.

The contract price paid per each for "Remove and Replace Type 'C' Inlet Top", "Remove and Replace Type 'B' Inlet Top", Install Type 'A' Inlet", "Install Type 'C' Inlet, "Install Type I Manhole", "Concrete Collar", "Install 12x12 Inlet with Cast Iron Grate", Remove Type 'A' Inlet Top and Replace with Type 'B' Inlet Top" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals for doing all work involved in constructing all drainage facilities including, but not limited to, concrete; sawcutting; excavation; loading; hauling; disposal; forming; pouring; finishing; dewatering; backfill; steel plates; reinforcement; dowels; frames; grates; PVC sleeves; repair and/or relocation of irrigation facilities; galvanizing; aggregate base; compaction and all other work necessary to construct the facilities complete, in place as shown on the Plans as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer and no additional compensation shall be allowed therefor.

Payment for constructing concrete aprons, including the attached curb, for inlets shall be paid per the linear foot price paid for "Concrete Curb and Gutter" and no additional compensation shall be allowed therefor.

STORM DRAINS (BID ITEM NO. 39 THROUGH 44)

SP25-01 GENERAL

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.

SP25-02 EXCAVATION, BACKFILL AND BEDDING

Storm drain work shall include all excavation and backfill work necessary to install the storm drain at the locations shown on the plans. Storm drains shall be backfilled in accordance with the details shown on the plans.

Work shall include open trench excavation and backfill as necessary to install storm drain facilities at the locations and to the grades and details as shown on the plans in conformance with Section 18 "Storm Drains" of the Technical Provisions. In existing roadway areas the Contractor shall resurface the trench with a temporary asphalt payement having a minimum thickness of two (2) inches.

All storm drain and storm drain catch basin excavations shall be backfilled by the end of each day or covered with steel plates. Steel plates shall be placed in accordance with the provisions of Section 6-11.2, "Trenching" of the General Provisions of the Standard Specifications.

Backfill material and compaction shall conform to the details shown on the plans. Backfill material shall be placed and compacted in lifts not exceeding eight (8) inches in thickness. Backfill shall be mechanically compacted; ponding and jetting will not be allowed.

New storm drain trench excavations shall be backfilled with aggregate base the same day that they are excavated, to the existing pavement surface grade, and/or covered with steel plates by the end of each work period. All other storm drain excavations, and all catch basin and manhole excavations, shall be backfilled by the end of each work period or covered with steel plates. Steel plates shall be placed and paid in accordance with the provisions of Section 6-11.2, "Trenching", of the General Provisions.

Pipe bedding shall be ¾-inch crushed drain rock. Aggregate base backfill shall be Class 2, conforming to the provisions of Section 8, "Aggregate Base", of the Technical Provisions. Alternatively, and with the Engineer's approval, new storm drain pipe may be placed on drain rock bedding and then encased and backfilled with slurry cement backfill at no additional cost to the City. Slurry backfill shall be per Section 19-3.062 "Slurry Cement Backfill" of the State Standard Specifications.

Filter fabric shall be Caltrans underdrain filter fabric conforming to Section 88 "Engineering Fabrics" of the State Standard Specifications. Filter fabric shall wrap drain rock and pipe as shown on the Plans.

The interior of the pipe shall be clean and free from dirt and foreign material of any kind as the work proceeds. Failure to meet this requirement shall result in the Contractor flushing and cleaning the pipe at the completion of the work to the satisfaction of the Engineer and at no additional cost to the City. In this case, the Contractor shall install a water and debris trap at the most downstream structure and flush the entire length of pipe until all debris are collected in the structure. The collection of silt and debris shall be placed into a suitable container and legally disposed of by the Contractor outside of the project limits. The Contractor shall provide proof of disposal of these materials.

Storm drain alignment and grade may be adjusted in the field by the Engineer to provide required clearances from existing utilities.

Storm drains shall be the size, type, and class shown on the Plans or as specified in these Special Provisions.

The Contractor shall protect and support all existing utility lines crossing or parallel to proposed new storm drains. The Contractor shall also locate, by potholing all existing buried utility lines prior to starting storm drain excavation. The Contractor shall place fine sand around all utilities exposed while installing new storm drain facilities to provide separation between the utility and new storm drain.

All storm drain pipe shall be placed starting at the downstream end with pipe placement proceeding upstream. The spigot end shall face downstream.

SP25-03 HIGH DENSITY POLYETHYLENE PIPE (HDPE)

At the locations shown on the Plans, the Contractor shall install High Density Polyethylene Pipe (HDPEP). HDPEP shall be smooth interior, Type "S" corrugated, conforming to the provisions of Section 18-3.6.1, "Plastic Pipe", of the Technical Provisions of the City Standard Specifications. HDPEP shall be bell and spigot design and shall include a rubber gasket meeting the requirements of ASTMF-477.

SP25-04 POLYVINYL CHLORIDE (PVC) STANDARD DIMENSION RATIO (SDR) PIPE

At the locations shown on the Plans, the Contractor shall install polyvinyl chloride (PVC) pipe standard dimension ratio (SDR) series. PVC pipe installed shall be 8" SDR 26 pipe. Pipe shall be manufactured in strict accordance to the requirements of ASTM D2241 or physical dimensions and tolerances. Pipe shall be bell and spigot design and shall include a rubber gasket.

SP25-05 CONNECT PRIVATE DRAIN SYSTEM TO CITY STORM DRAIN

At the locations shown on the Plans, and possibly at additional locations if unseen private drains are encountered during storm drain installation, private drain pipes shall be tied to the City Storm Drain. Piping and connections shall be per Plan Details. Work shall include excavation, pipe, fittings, grate, connectors, backfill with native material, compaction and all other work to install a complete functional drain that outfalls to the City storm drain system.

SP25-06 EXTEND EXISTING DRAIN PIPE THROUGH FACE OF CURB

At locations shown on the plans, and at any curb and gutter removal location where an existing private drain pipe extends through the curb, Contractor shall extend a pipe through the new curb and connect the pipe to the existing private drain. Pipe shall be PVC, ADS, or cast iron and shall have a maximum diameter of 3 inches nominal. New pipe extended through the curb must extend out the back of the curb a minimum of 6 inches to allow connection to the existing private drain. Work shall include excavation, pipe fittings, backfill with native material, compaction and all other work to install a complete functional drain that outfalls through the new curb.

SP25-07 MEASUREMENT AND PAYMENT

The length of pipe to be paid for shall be the slope length of the pipe actually installed, measured along the centerline of the pipe. If pipes are cut to fit a structure, the length of pipe to be paid for shall be the slope length of the pipe actually installed, measured from the inside walls of the structure along the centerline of the pipe and rounded up to the nearest one (1) foot even increment.

The contract prices paid per linear foot for "8"SDR26 Pipe", "12" HDPE", "15" HDPE", "24" HDPE" and per each for "Connect Private Drain System to City Storm Drain", and "Daylight Existing Drain Line Through Face of Curb or to Edge of Pavement" shall be considered as full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to perform all work, including but not limited to, sawcutting; removal and disposal of asphalt concrete and base; sand around existing utilities; dewatering; potholing; excavation; steel plates; loading; off-haul and disposal of materials; high density polyethylene pipe; polyvinyl chloride SDR26 pipe, PVC pipe, ADS pipe, cast iron pipe, rubber gasket joints; fittings; backfill; aggregate base; temporary asphalt concrete paving; compaction; coordination of utility work; 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.

ROCK SLOPE PROTECTION (BID ITEM NO. 45)

SP26-01 GENERAL

The provisions of Section 72, "Slope Protection", of the State Standard Specifications shall apply in their entirety except as modified or supplemented herein.

The Contractor shall construct and maintain gravel bag dams and temporary pipe bypass systems to temporarily divert any stream flows past the construction area. The Contractor shall take all necessary precautions to prevent the transportation of sediment downstream.

SP26-02 ROCK OUTFALL WITH FACING CLASS ROCK

The rip rap outfall with facing class rock shall be installed near 3921 Leroy Way in accordance with the contract Plans and Detail. This work shall include the removal of concrete, vegetation, roots, and loose material from the outfall area; placing filter fabric and rocks; and any necessary grading of the surrounding terrain to provide a smooth conform to the surrounding terrain.

Rocks for rock rip-rap shall be "Facing Class" as specified in Section 72-2.02, "Materials", of the State Specifications.

Placement shall be by "Method B Placement" as specified in Section 72-2.03, "Placing", of the State Specifications.

Filter fabric shall be placed in accordance with the details shown on the Plans. The fabric shall be a non-woven fabric consisting of polymeric filaments formed into a stable network. The fabric shall be inert to commonly encountered chemicals, rot-proof and resistant to ultra-violet light exposures, insects and rodents. The fabric must be free of any chemical coating that may reduce permeability.

The filter fabric shall be TYPAR 3601, or equal, and have a minimum grab tensile strength of 100 pounds in any direction as measured in accordance with ASTM D1682, a Mullen burst strength of at least 200 pounds per square inch per ASTM D3786, an Equivalent Opening Size (EOS) no larger than U.S. Standard Sieve Number 50 as determined by U.S. Corps of Engineers Specification CW-02215, a minimum coefficient of normal permeability of 1 x 10-1cm/sec as determined by EM 110-2-1906.

SP26-02 MEASUREMENT AND PAYMENT

The contract lump sum price paid for "Rock Outfall with Facing Class Rock" shall be considered as full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary to perform all work including, but not limited to, dewatering; removal of concrete, vegetation, and soil, excavation, loading, grading, off-haul, disposal, filter fabric, rock, placement, grading and all other work to complete, in place as shown on the Plans and Details, as specified in the State Specifications and in these Special Provisions and as directed by the Engineer, and no additional compensation shall be allowed therefor.

TEMPORARY PAVEMENT DELINEATION (BID ITEM NO. 57)

SP27-01 GENERAL

Temporary pavement delineation shall be furnished, placed, maintained and removed in accordance with the provisions in Section 12-3.01, "General", of the State Specifications and these Special Provisions. Nothing in these Special Provisions shall be construed as to reduce the minimum standards specified in the "Manual of Uniform Traffic Control Devices" and the California Supplement or as relieving the Contractor from his/her responsibility as provided in Section 7-1.09, "Public Safety", of the State Specifications.

Whenever the work causes obliteration of pavement delineation, temporary or permanent pavement delineation shall be in place prior to opening the traveled way to public traffic.

Temporary pavement delineation placed on the asphalt concrete base course shall be temporary raised markers for lane lines and paint for legends. Temporary permanent delineation placed on the final pavement surface shall be temporary raised markers. The Contractor shall install all temporary pavement delineation including lane lines and all other delineation at the same layout, size and width and following the same or equivalent striping patterns or details as the obliterated pavement delineation it is replacing or as the planned permanent striping shown on the Plans. Failure by the Contractor to satisfy this requirement shall be sufficient cause for the City to have the required temporary delineation installed and all costs for this work, including a 50% administrative markup, will be deducted from any progress payments due to the Contractor. The intent of this requirement is to have a complete temporary pavement delineation installation in place on any traveled way open to public traffic.

Surfaces to receive temporary pavement delineation shall be dry and free of dirt and loose material. Temporary pavement delineation shall not be applied over existing pavement delineation or other temporary pavement delineation. Temporary pavement delineation shall be maintained until superseded or replaced with a new pattern of temporary pavement delineation or permanent pavement delineation.

Temporary pavement delineation that is damaged from any cause during the progress of work shall be immediately repaired or replaced by the Contractor at his/her own expense.

SP27-02 TEMPORARY PAVEMENT DELINEATION - TAPE AND MARKERS

All temporary pavement delineation to be placed on the top layer of new asphalt pavement or on existing pavements to remain, shall be temporary raised reflective pavement markers and temporary removable traffic tape. Painted striping or markings in place of temporary markers and tape is not allowed. The temporary markers and tape shall be in place prior to opening the traveled way to the public.

The minimum lane line, shoulder line and centerline delineation to be provided shall be temporary reflective raised pavement markers placed at longitudinal intervals of not more than twenty (20) feet. Existing double yellow stripes shall be delineated with two (2) reflective raised pavement markers placed side-by-side at not more than twenty (20) foot intervals. The temporary reflective raised pavement markers shall be the same color as the lane line or centerline the markers replace. Temporary reflective raised pavement markers shall be, at the option of the Contractor, one of the temporary pavement markers listed for short term day/night use (14 days or less) or long term day/night use (6 months or less) in the latest listing of "Prequalified and Tested Signing and Delineation Materials" maintained by Caltrans.

Temporary pavement markers for long term day/night use (6 months or less)

• Vega Molded Products "Temporary Road Marker" (3" x 4")

Temporary pavement markers for short term day/night use (14 days or less)

- Apex Universal, Model 932
- Bunzl Extrusion, Model T.O.M., T.R.P.M. and "HH" (High Heat)
- Hi-Way Safety, Inc., Model 1280/1281
- Glowlite, Inc., Model 932

Removable type traffic tape and pavement marking tape shall be one of the temporary removable construction grade types listed in the latest listing of "Prequalified and Tested Signing and Delineation Materials" maintained by Caltrans.

Temporary removable striping and pavement marking tape

- Advanced Traffic Marking, ATM Series 200
- Brite-Line, Series 100
- Garlock Rubber Technologies, Series 2000
- P.B. Laminations, Aztec, Grade 102
- Swarco Industries, "Director-2"
- Trelleborg Industries, R140 Series
- 3M, Series 620 "CR", and Series A750
- 3M, Series A145, Removable Black Line Mask (Black Tape: for use only on Asphalt Concrete Surfaces)
- Advanced Traffic Marking Black "Hide-A-Line"
 (Black Tape: for use only on Asphalt Concrete Surfaces)
- Brite-Line "BTR" Black Removable Tape (Black Tape: for use only on Asphalt Concrete Surfaces)
- Trelleborg Industries, RB-140
 (Black Tape: for use only on Asphalt Concrete Surfaces)

Removable type traffic tape shall be applied in accordance with the manufacturer's installation instructions and shall be rolled slowly with a rubber tired vehicle or roller to ensure complete contact with the pavement surface. Traffic stripe tape shall be applied straight on tangent alignments and on a true arc on curved alignments. Traffic stripe tape shall not be applied, when the air or pavement temperature is less than 50°F, unless the installation procedures to be used are approved by the Engineer, prior to beginning installation of the tape.

Removable type traffic tape and temporary raised pavement markers shall be removed and disposed of by the Contractor when, as determined by the Engineer, they are no longer required for the direction of public traffic, or the permanent pavement markers and striping have been installed.

SP27-03 MEASUREMENT AND PAYMENT

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

PAVEMENT STRIPING, MARKERS AND DELINEATION (BID ITEM NO. 58 THROUGH 62)

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.

SP28-01 GENERAL

Traffic stripes and pavement markings shall conform to the provisions of Section 84, "Traffic Stripes and Pavement Markings", of the State Specifications, the Standard Specifications, and these Special Provisions. Traffic striping shall be placed in accordance with the applicable details as shown on State Standard Plan A20A through A20D. Pavement markings shall be placed in accordance with the applicable details of State Standard Plans A24A. Detail numbers shown on the Plans and the contract bid proposal refer to details shown in the State Standard Plans.

Pavement striping and markings shall be placed at the locations shown on the Plans. Contractor shall notify the Engineer a minimum of twenty-four (24) hours in advance of all striping phases. A striping phase shall be any separate day of work and any separate crew including: layout, paint, thermoplastic, buttons or any other crew required to complete work. The Contractor shall provide the name and cell phone number for the striping foreman and the foreman's planned starting time and location. All striping crews must meet on-site each day with the Engineer or the Engineer's representative prior to starting any work.

No payment will be made for any striping performed without notification to the City as stated above.

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

Permanent traffic stripes, pavement markers and pavement markings shall be placed on new asphalt concrete surfacing not less than seven (7) days and not more than fourteen (14) days after the asphalt concrete overlay or final lift has been placed.

During pavement striping and marking operations, the Contractor shall use traffic control as specified in Section 14, "Traffic Control", of these Special Provisions.

SP28-02 THERMOPLASTIC TRAFFIC STRIPES AND PAVEMENT LEGENDS AND MARKINGS

All limit lines, centerline stripes, shoulder stripes, and legends shall be thermoplastic unless otherwise indicated on the Plans or directed by the Engineer.

Thermoplastic traffic stripes and pavement marking shall conform to the provisions of Section 84-2, "Thermoplastic Traffic Stripes and Pavement Markings", of the State Specifications, and these Special Provisions.

The State Specifications No. 8010-11E-22 (Type II) for glass beads in Section 84-2.02, "Materials", of the Standard Specifications is amended to read "8010-21C-22 (Type II)".

Thermoplastic material shall conform to the requirements of State Specifications No. 8010-21C-19. Thermoplastic material for traffic stripes shall be applied at a minimum thickness of 0.070 inches.

During thermoplastic placement, the Contractor shall use traffic control as specified in Section 14, "Traffic Control", of these Special Provisions.

SP28-03 PAVEMENT MARKERS

Pavement markers shall conform to the provisions in Part 2, Section 11-1 of the State Specifications, Section 85, "Pavement Markers", of the State Specifications, the State Standard Plans, the Standard Specifications, and these Special Provisions.

Non-reflective pavement markers shall be ceramic.

Adhesive shall be hot melt bituminous adhesive conforming to Section 85, "Pavement Markers", of the State Standard Specifications.

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

A blue reflector shall be installed in the center of the traffic lane adjacent to each fire hydrant on all streets within the limits of work. It is the Contractor's responsibility to locate each fire hydrant.

During the pavement marker placement operations, the Contractor shall use traffic control as specified in Section 14, "Traffic Control", of these Special Provisions.

SP28-04 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 Caltrans Standard Plans.

The contract prices paid per linear foot for various thermoplastic stripes and striping details shown on the bid proposal shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in placing thermoplastic traffic stripes and pavement markers including any necessary cat tracks, dribble lines and layout work, cleaning and preparing surfaces to receive striping thermoplastic stripes, pavement markers, adhesive, and all other work as shown on the Plans, the State Standard Plans, and 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 price paid per square foot for "Thermoplastic Pavement Legends & Markings" shall include full compensation for doing all work involved in placing thermoplastic pavement markings and legends, including any necessary layout work and marks 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 price paid per each for "Two-Way Reflective Pavement Markers (Blue)" shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in placing the markers, as shown on the Plans, the State Standard Plans as specified in the Standard

Specifications, the State Spec additional compensation shall	Provisions, and as	directed by the Engineer and no

(BID ITEM NO. 63)

SP29-01 SURVEY MONUMENT

New survey monuments shall be set at locations shown on the Plans or as designated by the Engineer in the field in accordance with the details shown on County Standard Plan CC105, "Street Survey Monument". Frames, covers, collars, concrete cores and brass markers shall be furnished and installed by the Contractor.

The Contractor shall deliver brass markers to the Engineer, a minimum of (5) working days, prior to construction of the survey monuments for stamping the land surveyors license number on the disks.

The survey monument shall be installed after the final lift of paving is completed and after the City Surveyor has set temporary straddle survey points. If permanent asphalt concrete paving cannot be placed the same day the frame and collar is installed, the Contractor shall place temporary asphalt concrete and maintain the temporary asphalt concrete until the permanent pavement is placed. The City will set reference points, prior to the start of construction, for existing survey points.

SP29-02 MEASUREMENT AND PAYMENT

The contract price paid per each for "Install New Monument" shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals necessary; including, but not limited to, excavation; removing asphalt concrete pavement; concrete cores; brass markers; monument frame and cover; new asphalt concrete pavement and concrete collar; and placement of temporary asphalt concrete around the monument, prior to opening to public traffic, 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.

SHOULDER BACKING AND RE-GRADE EARTH DITCH (BID ITEM NO. 64, 65)

SP30-01 GENERAL

This work shall consist of placing select fill, native material, or pulverized material behind the asphalt berm, concrete curbing, and edge of road to conform the surrounding terrain to the new improvements.

SP30-02 SHOULDER BACKING

The Contractor shall construct shoulder backing against the finished edge of the top layer of asphalt concrete or asphalt berm the entire length of the new paving so that all new pavement edges and berms (that do not conform to a driveway or paved shoulder) are confined with backing material. Backing material (shoulder backing) shall be select fill, pulverized material, aggregate base, topsoil, existing gravel (if protected for re-use) or other material that matches the existing shoulder material (paid as shoulder backing). The void between the back of new dikes and the native-material slopes shall be backfilled to the top of the dike and sloped to match the terrain with a maximum slope of 3 horizontal to 1 vertical. Select fill material shall be compacted to 90% relative compaction. Aggregate base and pulverized material shall be compacted to 95% relative compaction. Select fill and pulverized material shall be free of organic material and free of rocks larger than 2-inches in greatest dimension.

Work shall include, furnishing, placing, grading, compacting, and finishing the shoulder backing as shown on the Plans, as specified in these special provisions, and as directed by the Engineer.

Shoulder backing shall be placed and compacted the same day the material is placed.

In areas where existing gravel driveways will be disturbed by the construction of new improvements. The Contractor shall reserve sufficient existing driveway gravel to allow for the restoration of the gravel driveway to the new improvements or shall import new material in kind.

Shoulder backing width will vary between 1 foot and 4 feet wide and shall be the depth required to fully back the edge of the new pavement or new dike per the Plan Details and these Special Provisions.

SP30-03 RE-GRADE EARTH DITCH

At the location shown on the Plans and at locations designated by the Engineer, the Contractor shall re-grade the existing earth ditch, removing all earth, vegetation, and roots to provide a minimum bank height of 18 inches on both sides of the ditch.

SP30-04 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, watering, and compacting aggregate base, pulverized material, select fill, topsoil, rock, or other material to match roadway shoulders, 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 will be allowed therefor.

The Contract price paid per linear foot for "Re-grade Earth 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, disposal, and re-grading 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.

(BID ITEM NO. 66)

SP31-01 GENERAL

Existing roadside signs, to be relocated shall be removed and installed in the locations shown on the plans or as directed by the Engineer. Signs shall be installed in conformance with the provisions in Section 16-12 "Removal and Relocation of Existing Signs" of the Technical Provisions to the Standard Specifications and these special provisions.

Existing posts to be removed shall be completely removed and the excavation backfilled with native material.

Replacement of signs damaged by the contractors operations or lost while in the contractor's possession shall be replaced by the contractor at no additional cost to the City.

Signs posts shall be galvanized 1 2/4" Ulti-Mate square post systems or approved equal.

All new sign posts shall be installed using Anchor-Mate anchor systems or approved equal driven into the ground a depth of 27 inches.

Sign brackets shall have a 12" long channel and signs shall be held in place using set screws.

All signs shall be installed with a minimum of 7' of vertical clearance below the lowest point of the sign.

All posts, anchor systems and mounting hardware may be purchased from Western Highway Products (714)761-4811 x254.

SP31-02 MEASUREMENT AND PAYMENT

The contract price paid per each for "Relocate Traffic Sign" 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, disposal of existing posts and foundations, and installing existing signs and new posts complete in place, including mounting hardware, and all other work as shown on the Plans, specified by these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.