

CITY OF SAUSALITO

NOTICE TO CONTRACTORS, SPECIAL PROVISIONS, CONTRACT, AND PROPOSAL

FOR

BRIDGEWAY TO FERRY LANDING IMPROVEMENTS

CAPITAL IMPROVEMENT PROJECT NMTP 5098 (010)

NOVEMBER, 2011

TODD TEACHOUT CITY ENGINEER

CITY OF SAUSALITO 420 LITHO STREET SAUSALITO, CALIFORNIA

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CAPITAL IMPROVEMENT PROJECT BRIDGEWAY TO FERRY LANDING IMPROVEMENTS

NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN that the City of Sausalito will receive sealed bids for the performance of the Work shown and described in the Plans, Specifications and Contract Documents prepared for the above-designated project. Such sealed bids shall be received at the Office of the City Clerk of the City of Sausalito, 420 Litho Street, Sausalito, California 94965 until <u>December 1, 2011</u>, at <u>10:00 AM</u>, at which time they will be publicly opened and read. On a date to be determined later, such bids shall be tabulated and submitted to the City Council for consideration and action consistent with the provisions of Public Contract Code Division 2, Part 3, Chapter 1, Article 4.

GENERAL DESCRIPTION OF WORK: The project provides for demolition of existing asphalt pavement, concrete curb, gutter and sidewalk, clearing and grubbing of existing landscape areas, removal of existing trees and removal, preservation and transport of existing parking meters and street signage to Citydesignated storage area. The construction of concrete curb, gutter and sidewalk, installation of new AC pavement and striping, and modification of existing catch basins and storm drain manholes. The installation of irrigation system, landscape vegetation and landscape area pathways.

BIDDERS' REQUIREMENTS: Each Bid shall be made in accordance with the Plans, Specifications and Contract Documents prepared therefore, available at the Office of the City Engineer where they may be examined and copies thereof be obtained at no cost for the first set. A non-refundable cost of twenty-five dollars (\$25.00) will be charged for each additional set of plans and specifications. Call (415) 289-4106 to check availability status. Digital copies of the plans and specifications will be available on the City website at http://www.ci.sausalito.ca.us/Index.aspx?page=706

Bids shall be submitted only upon proposal forms furnished by the City Engineer. The award of the Contract will be based on the responsible Bidder submitting the lowest qualified responsive Bid. The Bids will be opened by the City Clerk, or a designated representative, at the time and place above stated and a report will be made the City Council at a meeting of the Council following the date of opening of the bids.

WORKING DAYS 45 (SEE SECTION 4, PAGE SP-9)
UDBE GOAL 14.3% (SEE SECTION 2, PAGE SP-4)
LIQUIDATED DAMAGES \$350/CALENDAR DAY (SEE SECTION 4. PAGE SP-9)

Each Bid must be accompanied by a Proposal Guarantee in the form of a certified or cashier's check, currency or Bid Bond, equal to ten percent (10%) of the aggregate amount of the Bid. The check or Bond shall be made payable to the City of Sausalito. Any Bid not accompanied by a Bid Security may be rejected. Such amount accompanying the Bid shall be given as a guarantee that the Bidder will enter into the contract if awarded thereto and the Bidder will file the Contract Bonds and other requisite documents required within the specified time period in accordance with the Instruction to Bidders.

All Bids must be addressed to the City Engineer of the City of Sausalito and shall bear the title or name of the work to be constructed.

The City Council reserves the right to reject any and all Bids, and to waive any irregularity in any Bid received.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county, or counties, in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project, available at City of Sausalito address and available from the California Department of Industrial Relations' Internet web site at http://www.dir.ca.gov.

Bids will only be accepted from a contractor who is licensed in accordance with the provisions of Chapter 9, Division III of the California Business and Professions Code (BPC). The license required to perform

this project is a class A (GENERAL ENGINEERING) BPC Subsection 7000 et seq; Subsection 7028.15; 7059.

The time for completion of the Bridgeway to Ferry Landing Improvements is <u>45</u> Working Days after the start date noted on the NOTICE TO PROCEED. LIQUIDATED DAMAGES for completion after the date prescribed for completion will be <u>Three hundred and fifty Dollars</u> (\$ 350.00) PER CALENDAR DAY. Bidders should have fully inspected the project site in all particulars and become thoroughly familiar with the terms and conditions of the Contract Documents and local conditions affecting the performance and costs of the work prior to submitting a bid. Submission of a Bid by Bidder warrants that Bidder has visited the site of the Project and is thoroughly familiar with the work required of the Contract Documents.

BONDS: Upon award of the contract, the successful bidder shall furnish a bond for faithful performance in the amount of one hundred percent (100%) of the total bid; it shall also furnish a labor and material bond to secure the payment of all claims of labor and material in the amount of one-hundred percent (100%) of the total bid (CC Section 3247). A warranty bond in an amount equal to twenty-five percent (25%) of the total bid shall be required and shall have a term for one year after the City formally accepts the work as complete. Such bonds shall be secured from a surety company satisfactory to the City of Sausalito. No bid or bid security may be withdrawn for 60 calendar days after the bids are opened.

Payment, Performance and Warranty Bonds are required to be filed and approved by the <u>City Engineer</u> before the Contractor begins the Work.

Securities eligible for substitution of Bonds shall be limited to those listed in Government Code Section 16430 or to bank or savings and loan certificates of deposit. Contractor shall be the beneficial owner of any securities so substituted for monies withheld and shall receive any interest or income thereon. Any escrow agreement entered into pursuant to this Section shall contain, as a minimum, the following provisions:

- a) The amount of securities to be deposited.
- b) The terms and conditions of conversion to cash in case of the default of the Contractor; and
- c) The termination of the escrow upon completion of contract.

RETENTION: Contract amounts to be paid under this contract will be subject to a retention to ensure performance. Pursuant to and subject to the provisions of Public Contract Code (PCC) Subsection 22300, the Contractor shall be entitled to substitute securities for retained monies. The value of any securities so substituted shall be valued by the City's Finance Director, whose decision on the valuation of the securities shall be final.

By order of the City Engineer of the City of Sausalito, County of Marin, State of California.

Dated: _____

CITY OF SAUSALITO

by: _____

Todd Teachout, City Engineer

(DO NOT DETACH)

PROPOSAL TO THE CITY OF SAUSALITO

COMMUNITY DEVELOPMENT DEPARTMENT

CONTRACT NO. - NMTP 5098 (010)

NAME OF BIDDER			
BUSINESS STREET AD	DRESS		
	(Please include even if P.O. Box used)		
CITY, STATE, ZIP			
TELEPHONE NO:			
FAX NO: AREA CODE ()			
CONTRACTOR LICENS	E NO		

The work for which this proposal is submitted is for construction in conformance with the special provisions (including the payment of not less than the State general prevailing wage rates or Federal minimum wage rates), the project plans described below, including any addenda thereto, the contract annexed hereto, and also in conformance with the California Department of Transportation Standard Plans, dated May, 2006, the Standard Specifications, dated May, 2006, and the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished.

The plans and special provisions for the work to be done were approved and are titled:

CAPITAL IMPROVEMENT PROJECT BRIDGEWAY TO FERRY LANDING IMPROVEMENTS

Bids are to be submitted for the entire work. The amount of the bid for comparison purposes will be the total of all items.

The bidder shall set forth for each unit basis item of work a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except if the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;

If this proposal shall be accepted and the undersigned shall fail to enter into the contract and furnish the 2 bonds in the sums required by the State Contract Act, with surety satisfactory to the CITY OF SAUSALITO within 8 days, not including Saturdays, Sundays and legal holidays, after the bidder has received notice from the CITY OF SAUSALITO that the contract has been awarded, the CITY OF SAUSALITO may, at its option, determine that the bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of the security accompanying this proposal shall operate and the same shall be the property of the CITY OF SAUSALITO.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he

has carefully examined the location of the proposed work, the annexed proposed form of contract, and the plans therein referred to; and he proposes, and agrees if this proposal is accepted, that he will contract with the *CITY OF SAUSALITO*, in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that he will take in full payment therefore the following prices, to wit:

THIS SPACE INTENTIONALLY LEFT BLANK – SEE BID ON FOLLOWING PAGES

CONTRACTOR'S BID CITY OF SAUSALITO GENERAL CAPITAL IMPROVEMENT PROJECTS BRIDGEWAY TO FERRY LANDING IMPROVEMENTS

Proposal of	(hereinafter called "BIDDER"), organized
and existing under the laws of the State of, doing (hereinafter called "OWNER").	business as *to the CITY OF SAUSALITO
In compliance with your Advertisement for Bids, BIDDER hereby construction of Project No. NMTP 5098 (010) in strict accordance with time set forth therein, and at the prices stated below.	
By submission of this BID, each BIDDER certifies, and in the case of a his own organization, that this BID has been arrived at independent agreement as to any matter relating to this BID with any other BIDDER or a substitution of the substitution	ly, without consultation, communication, or
BIDDER hereby agrees to commence WORK under this contract within specified in the NOTICE TO PROCEED and to fully complete the PI working days. BIDDER further agrees to pay as liquidated damages working day thereafter as provided in Section 4 of the Special Provisions	ROJECT within forty-five (45) consecutive , the sum of \$350.00 for each consecutive
BIDDER acknowledges receipt of the following ADDENDUM:	

BIDDER agrees to perform the work described in the CONTRACT DOCUMENTS for the unit prices or lump sum prices stated on the attached BID SCHEDULE.

* Insert "a corporation" or "a partnership" or "an individual" as applicable.

NO.	t "a corporation" or "a partnership" or "an individual" as a	QUANTITY	UNIT	S	UNIT PRICE		TOTAL PRICE
1	Mobilization	1	L.S.	@		_ = _	
2	Traffic Control	1	L.S.	@		=	
3	Sawcut, Remove and Dispose up to 8" thick AC	21,912	S.F.	@ _		_ = _	
4	Remove and Dispose of AB Roadbase (up to 12")	21,912	S.F.	@ _		_ = _	
5	Remove and Dispose Curb and Gutter	910	L.F.	@ _		_ = _	
6	Remove and Dispose Sidewalk	6,927	S.F.	@			
7	Remove and Transport Signs, Parking Equipment, Benches, Ad Stands and Trash Receptacles	1	L.S.	_			
8	Remove and Dispose SD Catch Basins	7	EACH	@ _		_ = _	
9	Remove and Dispose Trees	5	EACH	@ _		_ = _	
10	Clear and Grub Landscape Areas	1	L.S.	@		=	
11	Install 4" AC	21	TONS	@ _		_ = _	
12	Install Type A2 Curb and Gutter	1,000	L.F.	@ _		_ = _	
13	Install Type a1 Curb	114	L.F.	@ _		_ = _	

NO.	ITEM	QUANTITY	UNIT	S	UNIT PRICE	TOTAL PRICE
14	Install Concrete Sidewalk – 4" Thick					
15	Install Concrete Sidewalk – 6" Thick	4,777	S.F.	@ _		. =
16	Overexcavate and Recompact 10" Thick Subgrade	300	S.F.	@ _		. =
	everexeduate and recompast to thick edagrade	20,000	S.F.	@ _		
17	12" Class 2 Aggregate Base at 95% R.C.	950	C.Y.	@ _		. =
18	Adjust Utility Box to Grade(Public)	12	EACH	@		=
19	Relocate Utility Box (Public)	1	EACH	@		=
20	Adjust SSMH to Grade(Public)	1	EACH			=
21	Adjust SDMH to Grade(Public)		-	@ _		. ¯
22	Adjust Caps to Grade(Public)	1	EACH	@ _		· =
23	(e.g. – Survey Monuments)	1	L.S.	@ _		. =
	Install Access Ramp	14	EACH	@ _		. =
24	Install 16" RCP Pipe	10	L.F.	@ _		. =
25	New Storm Drain Catch Basin	7	EACH	@		=
26	Install Concrete Collars	2	EACH	@		
27	Install Blue Pavement Marker	1	EACH			=
28	Install Thermoplastic Pavement Markings and Striping		-	@ _		
29	Remodel Manhole	1	L.S.	@		=
30		1	EACH	@		=
31	Erosion Control – Installation (Allowance)	1	L.S.	@ _		. =
31	Install Permanent Catch Basin Filters	7	EACH	@		=
32	Irrigation	2,310	S.F.	@		=
33	Truncated Dome Pavers	500	S.F.	@		
34	Soil Prep, Backfill & Amendments	2,310	S.F.	@		=
35	Trees – 36" Box (including stakes & root barrier)	5	EACH	@		=
36	Shrubs – 5 GC	264	EACH	@		=
37	Shrubs – 1 GC	159	EACH	@		=
38	Steel Edging	75	L.F.	@		=
39	Gravel (a.k.a Rock Mulch)	250	S.F.	@		=
40	Benches (Refinished & Relocated)	6	EACH	@		=
41	Bike Rack (Relocated)	_1	EACH	@		=
42	Wood Posts & Header	28.5	L.F.	@		=
43	Trash Receptacles	8	EACH	@		=
44	Dog Bag Dispenser (Relocated)	_1	EACH	@		=
45	Boulders (Relocated)	_13	EACH	@		=

NO.	ITEM	QUANTITY	UNITS	UNIT PRICE		TOTAL PRICE
46	Adjust Utility Box to Grade(Private)	_ 12	EACH @		=	
47	Relocate Utility Box(Private)	1	EACH @		=	
48	Adjust SSMH to Grade(Private)	1	EACH @		=	
49	Adjust SDMH to Grade(Private)	1	EACH @		= _	
50	Adjust Caps to Grade(Private) (e.g. – Gas/Electric)	1 SUBTOTAL	L.S. @ LITMES 1 TH	ROUGH 50	= \$	
			10% CONT	ΓINGENCY:	\$	
Respe	ctfully submitted (Please type or print):			TOTAL	\$	
Signa	ature					
Addre	ess					
Title						
Date						
Licen	se Number (if applicable)					
Telep	phone Number					
SEAL	_ – if BID is by a Corporation					
		atte	est			

The Bidder shall list the name and address of each subcontractor to whom the Bidder proposes to subcontract portions of the work, as required by the provisions in Section 2-1.054, "Required Listing of Proposed Subcontractors," of the Standard Specifications and Section 2-1.01, "General," of the Special Provisions.

LIST OF SUBCONTRACTORS

Description of Portion of Work Subcontracted
<u> </u>
<u> </u>
<u> </u>
<u> </u>

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

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

The	bidder	, proposed
subcor	ntractor	_, hereby certifies that he has, has
not	, participated in a previous contract or subcontract subject to the	equal opportunity clauses, as required by
Execut	ive Orders 10925, 11114, or 11246, and that, where require	d, he has filed with the Joint Reporting
Commi	ittee, the Director of the Office of Federal Contract Compliance	ce, a Federal Government contracting or
admini	stering agency, or the former President's Committee on Equal	Employment Opportunity, all reports due
under t	the applicable filling requirements.	
Note:	The above certification is required by the Equal Employment O Labor (41 CFR 60-1.7(b) (1)), and must be submitted by bidd connection with contracts and subcontracts, which are subject the and subcontracts which are exempt from the equal opportunit (Generally only contracts or subcontracts of \$10,000 or under are Currently, Standard Form 100 (EEO-1) is the only report resimplementing regulations. Proposed prime contractors and subcontractors who have partice subject to the Executive Orders and have not filed the required (1) prevents the award of contracts and subcontracts unless such delinquent period or such other period specified by the Federal Office of Federal Contract Compliance, U.S. Department of Labor The Bidder must place a check mark after "has" or "has not" in or	ders and proposed subcontractors only in o the equal opportunity clause. Contracts y clause are set forth in 41 CFR 60-1.5. e exempt.) quired by the Executive Orders or their pated in a previous contract or subcontract reports should note that 41 CFR 60-1.7(b) ch contractor submits a report covering the Highway Administration or by the Director, r.

PUBLIC CONTRACT CODE

Public Contract Code Section 10285.1 Statement

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares
under penalty of perjury under the laws of the State of California that the bidder has, has notbeen
convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud
bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with
the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code
Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the
University of California or the Trustees of the California State University. The term "bidder" is understood to include
any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as
referred to in Section 10285.1.
Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.
Public Contract Code Section 10162 Questionnaire
In conformance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the
following questionnaire:
Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder,
ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local
government project because of a violation of law or a safety regulation?
Yes No
If the answer is yes, explain the circumstances in the following space.

Public Contract Code 10232 Statement

In conformance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

NONCOLLUSION AFFIDAVIT

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

To the CITY OF SAUSALITO COMMUNITY DEVELOPMENT DEPARTMENT

In accordance with Title 23 United States Code Section 112 and Public Contract Code 7106 the bidder declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Note: The above Noncollusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Noncollusion Affidavit.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

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

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

If there	are any exceptions to this certification, insert the exceptions in the following space.
	ons will not necessarily result in denial of award, but will be considered in determining bidder responsibility. exception noted above, indicate below to whom it applies, initiating agency, and dates of action.
Notes:	Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

NONLOBBYING CERTIFICATION FOR FEDERAL-AID CONTRACTS

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

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

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

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

DISCLOSURE OF LOBBYING ACTIVITIES

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

1. Type of Federal Action: a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance 4. Name and Address of Reporting Entity Subawardee Tier, if known	/application a. initial a. material change
Congressional District, if known	Congressional District, if known
6. Federal Department/Agency:	7. Federal Program Name/Description:
	CFDA Number, if applicable
8. Federal Action Number, if known:	9. Award Amount, if known:
10. a. Name and Address of Lobby Entity (If individual, last name, first name, MI)	 b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI)
(attach Continuation SI	neet(s) if necessary)
11. Amount of Payment (check all that apply)	13. Type of Payment (check all that apply)
\$ actual planned 12. Form of Payment (check all that apply): a. cash	a. retainer b. one-time fee c. commission d. contingent fee
b. in-kind; specify: naturevalue	e deferred f. other, specify

14. Brief Description of Services Performed or to be performed and Date(s) of Service, including officer(s), employee(s), or member(s) contacted for Payment Indicated in Item 11:					
(attach Continuation	n Sheet(s) if necessary)				
15. Continuation Sheet(s) attached: Yes	No 🗌				
16. Information requested through this form is authorized by Title 31 U.S.C. Section 1352. This disclosure of lobbying reliance was placed by the tier above when his transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to Congress semiannually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: Print Name: Title: Telephone No.: Date:				
Federal Use Only:	Authorized for Local Reproduction Standard Form - LLL				

Standard Form LLL Rev. 09-12-97

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

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

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

officer(s) or employee(s) contacted or the officer(s) employee(s) or Member(s) of Congress that were contacted.

- 15. Check whether or not a continuation sheet(s) is attached.
- 16. The certifying official shall sign and date the form, print his/her name title and telephone number.

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

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

Accompanying	g this proposal is	
	(NOTICE: INSERT THE WORDS "CASH(\$	S
	"CERTIFIED CHECK," OR "BIDDER'S	BUND," AS THE CASE MAY BE.)
in amount equ	al to at least ten percent of the total of the b	id.
The names of	all persons interested in the foregoing prop	osal as principals are as follows:
IMPORTA	NT NOTICE	
the presid		tate legal name of corporation, also names of ereof; if a copartnership, state true name of firm, n; if bidder or other interested person is an
	conformance with an act providing for the re	
License No	Classificati	on(s)
<u>ADDENDA</u> -	number/s	the changes to the contract included in addenda be been received and insert, in this Proposal, any eived as part of the addenda.)
California, that 10232 and 102 Section 8103 of California Adm under the laws required by Tit	ninistrative Code). By my signature on this p s of the State of California and the United Si	s of Public Contract Code Sections 10162, er has complied with the requirements of hission Regulations (Chapter 5, Title 2 of the proposal I further certify, under penalty of perjury ates of America, that the Noncollusion Affidavit Public Contract Code Section 7106; and the
Date:		
	 Sign	
	Here	
		Signature and Title of Bidder
	Business Address	
	Place of Business	
	Place of Residence	
By: Bidder	r's Signature	

CONTRACTOR'S LICENSING STATEMENT

The undersigned is licensed in accordance with the laws of the State of California providing for the registration of Contractors.

Contractor's License Number Name of Individual Contractor (Print or Type): Signature of Owner Business Address and Telephone Number	
Name of Firm Business Address and Telephone Number	
Signature, title, and address of members signing o	n behalf of the partnership:
Name	_ Title
Address Name	_ Title
Address Name of Corporation Business Address and Telephone Number	or
Corporation organized under the laws of the State	of
Signature of President of Corporation	
Signature of Secretary of Corporation	

CONTRACTOR'S EXPERIENCE STATEMENT

The following outline is a record of the undersigned Bidder's experience in construction of a type similar magnitude and character to that contemplated under this Contract. Additional numbered pages outlinithis portion of the bid may be attached. Include the name, address and phone number of the owner each project listed and the name of the individual to contract.	in ng of

DESIGNATION OF INSURANCE AGENT OR BROKER

It is proposed that the following insurance agent or broker will provide policies of insurance or insurance certificates as are required by the General Provisions.

Insurance Agent or Broker		
Street_		
City, Zip		
Telephone		

STATEMENT OF BIDDER

Please state whether you, or any officer interest in your bid, have ever been discompleting a federal, state, or local government.	squalified, removed, or otherwise pr	revented from bidding on or
YES NO	<u></u>	
If your answer is yes, explain the circums	stances.	
I declare under penalty of perjury that the	e foregoing information is true and co	rrect.
Executed at	on	, 20
By:		

CITY OF SAUSALITO COMMUNITY DEVELOPMENT DEPARTMENT

BIDDER'S BOND

We,	
	as Principal, and
the penal sum of ten percent (10%) of the	resalito, State of California, hereafter referred to as "Obligee", in total amount of the bid of the Principal submitted to the Obligee nent of which sum we bind ourselves, jointly and severally,
THE CONDITION (OF THIS OBLIGATION IS SUCH, THAT:
WHEREAS, the Principal is submitted to the	ne Obligee, for
	,
(Copy here the exact description of	of work, including location as it appears on the proposal)
for which bids are to be opened at	on ce where bids will be opened) (Insert date of bid opening)
(Insert plac	ce where bids will be opened) (Insert date of bid opening)
under the specifications, after the prescribed written contract, in the prescribed form, in one to guarantee faithful performance of	warded the contract and, within the time and manner required ribed forms are presented to him for signature, enters into a conformance with the bid, and files two bonds with the Obligee, the contract and the other to guarantee payment for labor and bligation shall be null and void; otherwise, it shall remain in full
	d by the Obligee and judgement is recovered, the Surety shall uch suit, including a reasonable attorney's fee to be fixed by the
Dated:	, 20
	Principal
	Surety By
	ByAttorney-in-fact
CERTIFICA	ATE OF ACKNOWLEDGEMENT
State of California City/County of	SS
as the attorney-in-fact of	in the year 20 before me, Attorney-in-fact, personally known to me (or proved to to be the person whose name is subscribed to this instrument, and acknowledged to me that he (she) subscribed the ty, and his (her) own name as attorney-in-fact.
(SEAL)	Notary Public

BIDDER'S LIST OF SUBCONTRACTORS (DBE and NON-DBE)- PART I

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

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

Distribution: 1) Original - Local Agency File

BIDDER'S LIST OF SUBCONTRACTORS (DBE and NON-DBE)- PART II

The bidder shall list all subcontractors who provided a quote or bid but were not selected to participate as a subcontractor on this project. This is required for compliance with Title 49, Section 26 of the Code of Federal Regulations. Photocopy this form for additional firms.

Firm Name/ Address/ City, State, ZIP	Phone/ Fax	Annual Gross Receipts	Description of Portion of Work to be Performed	Local Agency Use Only (Certified DBE?)
Name	Phone	< \$1 million		☐YES
		☐ < \$5 million		□NO
Address		□ < \$10 million		If YES list DBE #:
City State 71D	Fax			A of Firms (Vir.)
City State ZIP		□ > \$15 million		Age of Firm (Yrs.)
Name	Phone	☐ < \$1 million		□YES
		☐ < \$5 million		□NO
Address		< \$10 million		If YES list DBE #:
	Fax	☐ < \$15 million		
City State ZIP		> \$15 million		Age of Firm (Yrs.)
Name	Phone	☐ < \$1 million		□YES
		☐ < \$5 million		□NO
Address		< \$10 million		If YES list DBE #:
	Fax	☐ < \$15 million		
City State ZIP		□ > \$15 million		Age of Firm (Yrs.)
Name	Phone	☐ < \$1 million		YES
		☐ < \$5 million		□NO
Address		< \$10 million		If YES list DBE #:
	Fax	< \$15 million		
City State ZIP		□ > \$15 million		Age of Firm (Yrs.)

Distribution: 1) Original – Local Agency File

LOCAL AGENCY BIDDER UDBE COMMITMENT(CONSTRUCTION CONTRACTS)

	NOTE: PLEASE REFE	R TO INSTRUCT	TIONS ON THE NEXT PAG	E		
LOCAL AGENO	CY:	LOCATIO	N:			
PROJECT DESCRIPTION:						
TOTAL CONTR	ACT AMOUNT: \$					
	1E:					
	DBE GOAL:					
CONTRACT ITEM NO.	ITEM OF WORK AND DESCRIPTION OR SERVICES TO BE SUBCONTRACTED OR MATERIALS TO BE PROVIDED (or contracted if the bidder is a UDBE)	UDBE CERT NO. AND EXPIRATION DATE	NAME OF EACH UDBE (Must be certified on the date bids are opened - include UDBE address and phone number)	DOLLAR AMOUNT UDBE		
For Local Agency to Complete: Local Agency Contract Number: Federal-aid Project Number:		Total Claimed UDBE Participation	\$%			
	Date:					
Local Agency certifies that all UDBE certifications have been verified and information is complete and accurate.		Signature of Bidder				
			Date (A	rea Code) Tel. No.		
Print Name Local Agency Re	Signature	Date	Person to Contact (P	lease Type or Print)		
(Area Code) Telephone Number: Local Agency Bidder UDBE Commitment (Construction Construction Constructi						

Distribution: (1) Original – Local agency files

INSTRUCTIONS- LOCAL AGENCY BIDDER UDBE COMMITMENT (CONSTRUCTION CONTRACTS)

ALL BIDDERS

PLEASE NOTE: It is the bidder's responsibility to verify that the UDBE(s) falls into one of the following groups in order to count towards the UDBE contract goal: 1) African Americans; 2) Asian-Pacific Americans; 3) Native Americans; 4) Women. This information may be submitted with your bid. If it is not, and you are the apparent low bidder or the second or third low bidder, it must submitted and received as specified in the Special Provisions. Failure to submit the required UDBE commitment will be grounds for finding the bid nonresponsive

A UDBE is a firm meeting the definition of a DBE as specified in 49 CFR and is one of the following groups: African Americans, Asian-Pacific Americans, Native Americans, or Women.

The form requires specific information regarding the construction contract: Local Agency, Location, Project Description, Total Contract Amount, Bid Date, Bidder's Name, and Contract UDBE Goal.

The form has a column for the Contract Item Number and Item of Work and Description or Services to be Subcontracted or Materials to be provided by UDBEs. Prime contractors shall indicate all work to be performed by UDBEs including, if the prime is a UDBE, work performed by its own forces, if a UDBE. The UDBE shall provide a certification number to the Contractor and expiration date. Enter the UDBE prime's and subcontractors' certification numbers. The form has a column for the Names of UDBE contractors to perform the work (who must be certified on the date bids are opened and include the UDBE address and phone number).

IMPORTANT: Identify **all** UDBE firms participating in the project regardless of tier. Names of the First-Tier UDBE Subcontractors and their respective item(s) of work listed should be consistent, where applicable, with the names and items of work in the "List of Subcontractors" submitted with your bid.

There is a column for the UDBE participation dollar amount. Enter the Total Claimed UDBE Participation dollars and percentage amount of items of work submitted with your bid pursuant to the Special Provisions. (If 100% of item is not to be performed or furnished by the UDBE, describe exact portion of time to be performed or furnished by the UDBE.) See Section "Disadvantaged Business Enterprise (DBE)," of the Special Provisions (construction contracts), to determine how to count the participation of UDBE firms.

Exhibit 15-G1 must be signed and dated by the person bidding. Also list a phone number in the space provided and print the name of the person to contact.

Local agencies should complete the Local Agency Contract Award, Federal-aid Project Number, Federal Share, Contract Award Date fields and verify that all information is complete and accurate before signing and filing.

LOCAL AGENCY BIDDER DBE INFORMATION (CONSTRUCTION CONTRACTS)

(Inclusive of all DBEs including the UDBE listed at bid proposal)

NC	TE: PLEASE REFER TO INST	TRUCTIONS ON T	THE REVERSE SIDE OF TH	IIS FORM
LOCAL AGEN	CY:	LOCATIO	ON:	
PROJECT DES	CRIPTION:			
TOTAL CONTR	ACT AMOUNT: \$			
BID DATE:				
BIDDER'S NAM	ME:			
CONTRACT U	DBE GOAL:			
CONTRACT ITEM NO.	ITEM OF WORK AND DESCRIPTION OR SERVICES TO BE SUBCONTRACTED OR MATERIALS TO BE PROVIDED (or contracted if the bidder is a DBE)	DBE CERT NO. AND EXPIRATION DATE	NAME OF EACH DBE (Must be certified on the date bids are opened - include DBE address and phone number)	DOLLAR AMOUNT DBE
	Agency to Complete:		Total Claimed DBE Participation	\$
				%
	ject Number:			
	Date:			
	ertifies that all DBE certification have been complete and accurate.	verified and		
			Signature of Bidder	
Print Name Local Agency F		Date	Date (Are	ea Code) Tel. No.
(Area Code) Te	lephone Number:		Person to Contact (Plea	ase Type or Print)
For Caltra	ans Review:			
Print Name Caltrans District	Signature t Local Assistance Engineer	Date	Local Agency Bidder DBE Informati (Rev 6/26/0	

Distribution: (1) Copy – Fax or scan a copy to the Caltrans District Local Assistance Engineer (DLAE) within 15 days of contract execution. Failure to send a copy to the DLAE within 15 days of contract execution may result in de-obligation of funds for this project.

- (2) Copy Include in award package to Caltrans District Local Assistance
- (3) Original Local agency files

INSTRUCTIONS-LOCAL AGENCY BIDDER DBE INFORMATION

(CONSTRUCTION CONTRACTS) The form requires specific information regarding the construction contract: Local Agency, Location, Project Description, Total Contract Amount, Bid Date, Bidder's Name, and Contract UDBE Goal.

The form has a column for the Contract Item Number and Item of Work and Description or Services to be Subcontracted or Materials to be provided by DBEs. Prime contractors shall indicate all work to be performed by DBEs including work performed by its own forces, if a DBE. The DBE shall provide a certification number to the Contractor and expiration date. Enter DBE prime and subcontractors certification number. The DBE contractors should notify the Contractor in writing with the date of the decertification if their status should change during the course of the contract. The form has a column for the Names of DBE certified contractors to perform the work (must be certified on the date bids are opened and include DBE address and phone number.

IMPORTANT: Identify **all** DBE firms participating in the project--including all UDBEs listed on the UDBE Commitment form (Exhibit 15-G1), regardless of tier. Names of the First-Tier DBE subcontractors and their respective item(s) of work listed should be consistent, where applicable, with the names and items of work in the "List of Subcontractors" submitted with your bid.

There is a column for the DBE participation dollar amount. Enter the Total Claimed DBE Participation dollars and percentage amount of items of work submitted with your bid pursuant to the Special Provisions. (If 100% of item is not to be performed or furnished by the DBE, describe exact portion of time to be performed or furnished by the DBE.) See Section "Disadvantaged Business Enterprise (DBE)," of the Special Provisions (construction contracts) to determine how to count the participation of DBE firms.

Exhibit 15-G2 must be signed and dated by the successful bidder. Also list a phone number in the space provided and print the name of the person to contact.

Local agencies should complete the Local Agency Contract Number, Federal-aid Project Number, Federal Share, Contract Award Date fields and verify that all information is complete and accurate before signing and sending a copy of the form to the District Local Assistance Engineer within 15 days of contract execution. Failure to submit a completed and accurate form within the 15-day time period may result in the de-obligation of funds on this project.

District DBE Coordinator should verify that all informations is complete and accurate. Once the information has been verified, the **District Local Assistance Engineer** signs and dates the form.

EXHIBIT 15-H UDBE INFORMATION—GOOD FAITH EFFORTS

UDBE INFORMATION - GOOD FAITH EFFORTS

The City of Sausalito established an Underutilized Disadvantaged Business Enterprise (UDBE) goal of 32.4% for this project. The information provided herein shows that a good faith effort was made. Lowest, second lowest and third lowest bidders shall submit the following information to document adequate good faith efforts. Bidders should submit the following information even if the "Local Agency Bidder UDBE Commitment" form indicates that the bidder has met the UDBE goal. This will protect the bidder's eligibility for award of the contract if the administering agency determines that the bidder failed to meet the goal for various reasons, e.g., a UDBE firm was not certified at bid opening, or the bidder made a mathematical error. Submittal of only the "Local Agency Bidder UDBE Commitment" form may not provide sufficient documentation to demonstrate that adequate good faith efforts were made. The following items are listed in the Section entitled "Submission of UDBE Commitment" of the Special Provisions: A. The names and dates of each publication in which a request for UDBE participation for this project was placed by the bidder (please attach copies of advertisements or proofs of publication): **Publications** Dates of Advertisement B. The names and dates of written notices sent to certified UDBEs soliciting bids for this project and the dates and methods used for following up initial solicitations to determine with certainty whether the UDBEs were interested (please attach copies of solicitations, telephone records, fax confirmations, etc.): Names of UDBEs Solicited Date of Initial Follow Up Methods and Dates Solicitation

	Items of Work	Bidder Normally Performs Item (Y/N)	Breakdown of Items	Amount (\$)	Percentage Of Contract
D	The names, addresses and phone numbers of rejected UDBE firms, the reasons for the bidder's rejection of the UDBEs, the firms selected for that work (please attach copies of quotes from the firms involved), and the price difference for each UDBE if the selected firm is not a UDBE: Names, addresses and phone numbers of rejected UDBEs and the reasons for the bidder's rejection of the UDBEs:				
	Names, addresses and phone numbers of firms selected for the work above:				
E	Efforts made to assist interany technical assistance or the work which was provid	information related to the			

F.	Efforts made to assist interested UDBEs in obtaining necessary equipment, supplies, materials or related assistance or services, excluding supplies and equipment the UDBE subcontractor purchases or leases from the prime contractor or its affiliate:
G.	The names of agencies, organizations or groups contacted to provide assistance in contacting, recruiting and using UDBE firms (please attach copies of requests to agencies and any responses received, i.e., lists, Internet page download, etc.):
_	Name of Agency/Organization Method/Date of Contact Results
Н.	Any additional data to support a demonstration of good faith efforts (use additional sheets if necessary):

NOTE: USE ADDITIONAL SHEETS OF PAPER IF NECESSARY.

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION

DISADVANTAGED BUSINESS ENTERPRISES (DBE) CERTIFICATION STATUS CHANGE

CP-CEM-2403(F) (New. 10/99)

CONTACT NUMBER		COUNTY	ROUTE	POST MILES		ADMINISTERING AGENCY			CONTRACT COMPETION DATE		
PRIME CONTRACTOR				BUSINESS ADI	BUSINESS ADDRESS				ESTIMATED CONTRACT AMOUNT		
Prime Contractor Attach DBE certi	: List all DBEs wi fication/Decertifi	th changes in certification letter in acco	cation status (certific ordance with the Spe	ed/decertified) while ecial Provisions	in your employ, wh	ether or no	t firms were origina	lly listed for good o	credit.		
CONTRACT ITEM NO.			CT NAME AND S ADDRESS		BUSINES: PHONE		CERTIFICATION	NUMBER A	MOUNT PAID WHILE CERTIFIED	CERTIFICATION/ DECERTIFICATION DATE Letter attached	
								\$			
								\$			
								\$			
								\$			
								\$			
								\$			
								\$			
								\$			
								\$			
Comments:				,							
			I CERTIFY T	THAT THE ABOVE	E INFORMATION	IS COMP	LETE AND CORR	ECT			
CONTRACTOR REPRESENTATIVE SIGNATURE				TITLE				BUSINESS PHONE NUMBER		DATE	
		то	THE BEST OF MY	KNOWLEDGE, TI	HE ABOVE INFO	RMATION	IS COMPLETE A	ND CORRECT			
RESIDENT ENGINEER				,				BUSINESS PHON	E NUMBER	DATE	
Distribution Ori	ginal copy -DLAI py -1) Business Er	Enterprise Program 2) Prime Contactor 3)) Local Agency 4) F	Resident Engineer						

Form CP-CEM 2403(F) (New 10/99)

DISADVANTAGED BUSINESS ENTERPRISES (DBE) CHANGE IN CERTIFICATION STATUS REPORT

The top of the form requires specific information regarding the construction project: Contract Number, County, Route, Post Miles, the Administering Agency, the Contract Completion Date, and the Estimated Contract Amount. It requires the Prime Contractor's name and Business Address. The focus of the form is to substantiate and verify the actual DBE dollar amount paid to contractors on federally funded projects that had a changed in Certification status during the course of the completion of the contract. The two situations that are being addressed by CP-CEM 2403(F) are, if a firm certified as a DBE and doing work on the contract during the course of the project becomes Decertified, and if a non-DBE firm doing work on the contract during the course of the project becomes Certified as a DBE.

The form has a column to enter the Contract Item No (or Item Nos.) as well as a column for the Subcontractor's Name, Business Address, Business Phone, and contractor's Certification Number.

The column entitled Amount Paid While Certified will be used to enter the actual dollar value of the work performed by those contractors who meet the conditions as outlined above during the time period they are Certified as a DBE. This column on the CP-CEM-2403(F) should only reflect the dollar value of work performed while the firm was Certified as a DBE.

The column called Certification/Decertification Date (Letter attached) will reflect either the date of the Decertification Letter sent out by the Civil Rights Program or the date of the Certification Certificate mailed out by the Civil Rights Program. There is a box to check that support documentation is attached to the CP-CEM-2403 (F) form.

There is a Comments section for any additional information that may need to be provided regarding any of the above transactions.

The CEM-2403(F) has an area at the bottom where the Contractor and the Resident Engineer sign and date that the information provided is complete and correct.

There is a Comments section for any additional information that may need to be provided regarding any of the above transactions.

The CEM-2403(F) has an area at the bottom where the Contractor and the Resident Engineer sign and date that the information provided is complete and correct.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

FINAL REPORT-UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE), FIRST-TIER SUBCONTRACTORS

ADA Notice

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Management, 1120 N Street, MS-89, Sacramento, CA 95814

CEM-2402F (REV 02/2008)

CONTRACT NUMBER		COUNTY	ROUTE	POST MILES		FEDERAL AID PROJECT NO.		ADMINISTERING AGENCY		CONTRACT COMPLETION DATE		
PRIME CONTRACTOR				BUSINESS	BUSINESS ADDRESS					ESTIMATED CONTRACT AMOUNT \$		
DESCRIPTION OF				225	CONTRACT PAYMENTS							DATE 05
ITEM NO.	WORK PERFORMED AND MATERIAL PROVIDED	COMPANY NA BUSINESS AD		DBE CERT. NUMBER	NON-DBE	DBE	BA UDBE	APA UDBE	NA UDBE	W UDBE	DATE WORK COMPLETE	DATE OF FINAL PAYMENT
					\$	\$	\$	\$	\$	\$		
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00101					\$	\$	\$	\$	\$	\$		
ORIGINAL COMMITMENT											BA- Black Americ	can
\$			TOTAL	\$	\$	\$	\$	\$		APA- Asian-Paci	fic Islander	
	UDBE								NA-Native Ameri	can		
List all Fir	st-Tier Subcontractors, Disadvantac	ned Business Enterprises (DF	BEs) and underutili	ized DBEs (UDREs	s) regardless of tier v	whether or not the fir	ms were originally list	ed for goal credit			W-Woman	
	DBE utilization (or item of work) was		•	-	. •			godi oroditi				
			IC	ERTIFY THA	T THE ABOVE	INFORMATION	IS COMPLETE	AND CORREC	Г			
CONTRACTOR REPRESENTATIVE'S SIGNATURE							BUSINESS PHONE NUMBER				DATE	

I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT

CONTRACTOR REPRESENTATIVE'S SIGNATURE

BUSINESS PHONE NUMBER

TO THE BEST OF MY INFORMATION AND BELIEF, THE ABOVE INFORMATION IS COMPLETE AND CORRECT

RESIDENT ENGINEER'S SIGNATURE

BUSINESS PHONE NUMBER

DATE

Copy Distribution-Caltrans contracts:

Original - District Construction

neer Copy- District Local Assistance Engineer

Copy- Contractor

Copy Resident Engineer

Copy Distribution-Local Agency contracts:

Original - District Local Assistance Engineer (submitted with the Report of Expenditure)

eer Copy- Local Agency file

Copy- Business Enterprise Program

FINAL REPORT – UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE), FIRST-TIER SUBCONTRACTORS CEM 2402(F) (Rev. 02/2008)

The form requires specific information regarding the construction project: Contract Number, County, Route, Post Miles, Federal-aid Project No., the Administering Agency, the Contract Completion Date and the Estimated Contract Amount. It requires the prime contractor name and business address. The focus of the form is to describe who did what by contract item number and descriptions, asking for specific dollar values of item work completed broken down by subcontractors who performed the work both DBE and non-DBE work forces. DBE prime contractors are required to show the date of work performed by their own forces along with the corresponding dollar value of work.

The form has a column to enter the Contract Item No. (or Item No's) and description of work performed or materials provided, as well as a column for the subcontractor name and business address. For those firms who are DBE, there is a column to enter their DBE Certification Number. The DBE should provide their certification number to the contractor and notify the contractor in writing with the date of the decertification if their status should change during the course of the project.

The form has six columns for the dollar value to be entered for the item work performed by the subcontractor.

The Non-DBE column is used to enter the dollar value of work performed for firms who are not certified DBE.

The decision of which column to be used for entering the DBE dollar value is based on what program(s) status the firm is certified. This program status is determined by the California Unified Certification Program by ethnicity, gender, ownership, and control issues at time of certification. To confirm the certification status and program status, access the Department of Transportation Civil Rights web site at: http://www.dot.ca.gov/hq/bep or by calling (916) 324-1700 or the toll free number at (888) 810-6346.

Based on this DBE Program status, the following table depicts which column to be used:

DBE Program Status	Column to be used
If program status shows DBE only with no other programs listed	DBE
If program status shows DBE, Black American	BA UDBE
If program status shows DBE, Asian-Pacific Islander	APA UDBE
If program status shows DBE, Native American	NA UDBE
If program status shows DBE, Woman	W UDBE

If a contractor performing work as a DBE on the project becomes decertified and still performs work after their decertification date, enter the total dollar value performed by this contractor under the appropriate DBE identification column.

If a contractor performing work as a non-DBE on the project becomes certified as a DBE, enter the dollar value of all work performed after certification as a DBE under the appropriate identification column.

Enter the total of each of the six columns in Form CEM-2402(F).

Any changes to DBE certification must also be submitted on Form-CEM 2403(F).

Enter the Date Work Completed as well as the Date of Final Payment (the date when the prime contractor made the "final payment" to the subcontractor for the portion of work listed as being completed).

The contractor and the resident engineer sign and date the form indicating that the information provided is complete and correct.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CITY OF SAUSALITO COMMUNITY DEVELOPMENT DEPARTMENT

SPECIAL PROVISIONS

SECTION 1. SPECIFICATIONS AND PLANS

The work embraced herein shall be done in accordance with the Standard Specifications dated May 2006, and the Standard Plans dated May 2006, of the State of California Department of Transportation insofar as the same may apply and in accordance with the following Special Provisions.

In case of conflict between the Standard Specifications and these Special Provisions, the Special Provisions shall take precedence over and be used in lieu of such conflicting portions.

DEFINITIONS AND TERMS

As used herein, unless the context otherwise requires, the following terms have the following meaning:

DEPARTMENT OF TRANSPORTATION

City Council of the City of Sausalito, State of California.

DIRECTOR OF TRANSPORTATION

City Council of the City of Sausalito, State of California.

ENGINEER

The Director of Public Works of the City of Sausalito acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

LABORATORY

The established laboratory of the Materials and Research Department of the Department of Transportation of the State of California or laboratories authorized by the Engineer to test materials and work involved in the contract.

CITY

The City of Sausalito.

STANDARD SPECIFICATIONS

The 2006 edition of the Standard Specifications of the State of California, Department of Transportation. Any reference therein to the State of California or a State agency, office, or officer shall be interpreted to refer to the City or its corresponding agency, office, or officer acting under this contract.

STANDARD PLANS

Standard Plans shall mean the standard plans of the State of California, Business and Transportation Agency, Department of Transportation dated May 2006.

UNIFORM CONSTRUCTION STANDARDS

Uniform Construction Standards shall mean the Uniform Construction Standards approved and adopted by the Cities of Marin and County of Marin, in 2008.

CONTRACT DOCUMENTS

The work shall conform to the requirements of all the following contract documents:

Project Plans.

The Standard Specifications, insofar as they may apply.

The Standard Plans, insofar as they may apply.

The Uniform Construction Standards, insofar as they may apply.

These specifications, including the Notice to Contractors.

The Proposal and the Contract (or Agreement).

The contract bond required herein.

Any supplemental agreements amending or extending the work.

Any working drawings, sketches, or instructions clarifying or enlarging upon the work specified herein.

Pertinent portions of any other documents included by reference thereto in these specifications, the Standard Specifications, or the Plans.

IN CASE OF CONFLICT BETWEEN THE STANDARD SPECIFICATIONS AND THESE FOLLOWING PROVISIONS, THESE PROVISIONS SHALL TAKE PRECEDENCE OVER AND BE USED IN LIEU OF SUCH CONFLICTING PORTIONS. IT IS THE INTENT OF THIS CONTRACT TO OBTAIN A FINISHED, WORKMANLIKE JOB, COMPLETE IN PLACE.

SECTION 2. PROPOSAL REQUIREMENTS AND CONDITIONS

2-1.01 GENERAL

The bidder's attention is directed to the provisions in Section 2, "Proposal Requirements and Conditions," of the Standard Specifications and these special provisions for the requirements and conditions which the bidder must observe in the preparation of and the submission of the bid.

The bidder's bond shall conform to the bond form in the Bid book for the project and shall be properly filled out and executed. The bidder's bond form included in that book may be used.

In conformance with Public Contract Code Section 7106, a Noncollusion Affidavit is included in the Bid book. Signing the Bid book shall also constitute signature of the Noncollusion Affidavit.

The Contractor, sub-recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of Title 49 CFR (Code of Federal Regulations), Part 26 in the award and administration of US DOT-assisted contracts.

Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate. Each subcontract signed by the bidder must include this assurance.

Failure of the bidder to fulfill the requirements of the Special Provisions for submittals required to be furnished after bid opening, including but not limited to escrowed bid documents, where applicable, may subject the bidder to a determination of the bidder's responsibility in the event it is the apparent low bidder on a future public works contracts.

The last sentence in Section 21.01, "Contents of Proposal Forms," of the Standard Specifications are deleted.

After the fifth paragraph of Section 21.03, "Examination of Plans, Specifications, Contract, and Site of Work," the following is added:

When cross sections are included with the contract plans, it is expressly understood and agreed that said cross sections do not constitute part of the contract, do not necessarily represent actual site conditions or show location, character, dimensions and details of work to be performed, and are included in the plans only for the convenience of bidders and their use is subject to all the conditions and limitations set forth in Section 21.03.

When cross sections were not included in the plans, but are available, Bidders or Contractors may inspect such cross sections and obtain copies for their use, at their expense.

The first sentence of the second paragraph in Section 2I.05, "Proposal Forms," of the Standard Specifications is amended to read:

The proposal form is bound together with the contract.

The last paragraph in Section 2I.07, "Proposal Guaranty," of the Standard Specifications is amended to read:

The bidder's bond shall be issued to the "City of Sausalito," and in the usual form of the surety.

2-1.015-FEDERAL LOBBYING RESTRICTIONS.

Section 1352, Title 31, United States Code prohibits Federal funds from being expended by the recipient

or any lower-tier sub-recipient of a Federal-aid contract to pay for any person for influencing or attempting to influence a Federal agency or Congress in connection with the awarding of any Federal-aid contract, the making of any Federal grant or loan, or the entering into of any cooperative agreement.

If any funds other than Federal funds have been paid for the same purposes in connection with this Federal-aid contract, the recipient shall submit an executed certification and, if required, submit a completed disclosure form as part of the bid documents.

A certification for Federal-aid contracts regarding payment of funds to lobby Congress or a Federal agency is included in the Bid book. Standard Form - LLL, "Disclosure of Lobbying Activities," with instructions for completion of the Standard Form is also included in the Bid book. Signing the Bid book shall constitute signature of the Certification.

The above referenced certification and disclosure of lobbying activities shall be included in each subcontract and any lower-tier contracts exceeding \$100,000. All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the Engineer.

The Contractor, subcontractors and any lower-tier contractors shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by the Contractor, subcontractors and any lower-tier contractors. An event that materially affects the accuracy of the information reported includes:

- (1) A cumulative increase if \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered federal action; or
- (2) A change in the person(s) or individual(s) influencing or attempting to influence a covered federal action; or
- (3) A change in the officer(s), employees(s), or member(s) contacted to influence or attempt to influence a covered Federal Action.

2-1.02 DISADVANTAGED BUSINESS ENTERPRISE (DBE).

This project is subject to Title 49 CFR 26.13(b). The UDBE Goal for this project is 14.3%.

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

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

To ensure there is equal participation of the DBE groups specified in 49 CFR 26.5, the Agency specifies a goal for Underutilized Disadvantaged Business Enterprises (UDBEs). UDBE is a firm that meets the definition of DBE and is a member of one of the following groups:

1. Black Americans 2. Native Americans 3. Asian-Pacific Americans 4. Women References to DBEs include UDBEs, but references to UDBEs do not include all DBEs.

Make work available to UDBEs and select work parts consistent with available UDBE subcontractors and suppliers.

Meet the UDBE goal shown in the Notice to Bidders or demonstrate that you made adequate good faith efforts to meet this goal.

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

Only UDBE participation will count towards the UDBE goal. DBE participation will count towards the Agency's Annual Anticipated DBE Participation Level and the California statewide goal. Credit for materials or supplies you purchase from UDBEs counts towards the goal in the following manner:

- 1. 100 percent counts if the materials or supplies are obtained from a UDBE manufacturer.
- 2. 60 percent counts if the materials or supplies are obtained from a UDBE regular dealer.
- 3. Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a UDBE that is neither a manufacturer, nor a regular dealer. 49 CFR 26.55 defines "manufacturer" and "regular dealer."

You receive credit towards the goal if you employ a UDBE trucking company that performs a commercially useful function as defined in 49 CFR 26.55.

UDBE Commitment Submittal

Submit UDBE information on the "Local Agency Bidder UDBE Commitment (Construction Contracts)," Exhibit 15-G1 form, included in the Bid book. If the form is not submitted with the bid, remove the form from the Bid book before submitting your bid.

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

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

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

If you do not submit the UDBE Commitment form within the specified time, the Agency finds your bid nonresponsive.

Good Faith Efforts Submittal

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

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

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

1. Items of work you have made available to UDBE firms. Identify those items of work you might

otherwise perform with its own forces and those items that have been broken down into economically feasible units to facilitate UDBE participation. For each item listed, show the dollar value and percentage of the total contract. It is your responsibility to demonstrate that sufficient work to meet the goal was made available to UDBE firms.

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

2-1.03 REQUIRED LISTING OF PROPOSED SUBCONTRACTORS

Each proposal shall have listed therein the name and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in the amount of 1/2 of one percent of his total bid or \$10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The bidder's attention is invited to other provisions of said Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

A SHEET FOR LISTING THE SUBCONTRACTORS, AS REQUIRED HEREIN, IS INCLUDED IN THE PROPOSAL.

SECTION 3. AWARD AND EXECUTION OF CONTRACT

3-1.01 GENERAL

The bidder's attention is directed to the provisions in Section 3, "Award and Execution of Contract," of the Standard Specifications and these Special Provisions for the requirements and conditions concerning award and execution of contract.

Bid protests are to be delivered to the following address.

City of Sausalito Public Works Department 420 Litho Street Sausalito, CA 94965

The award of contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed, and shall be based on budget requirements. If awarded the contract shall be made to the lowest bidder based on the Base Bid Total.

Before the contract is awarded, the Director of Public Works may, at his discretion, require from the proposed Contractor further evidence of qualification, ability to perform, and financial responsibility; and the City Council may consider such evidence in making its decision on the award of the proposed contract.

The contract shall be executed by the successful bidder and shall be returned together with the contract bonds, to the Agency so that it is received within 10 days, not including Saturdays, Sundays and legal holidays, after the bidder has received the contract for execution. Failure to do so shall be just cause for forfeiture of the proposal guaranty. The executed contract documents shall be delivered to the following address:

City of Sausalito Public Works Department 420 Litho Street Sausalito. CA 94965

A "Local Agency Bidder DBE Information (Construction Contracts)," Exhibit 15-G2 form is included in the Bid book to be executed by the successful bidder. The purpose of the form is to collect data required under 49 CFR 26. Even if no DBE participation will be reported, the successful bidder must execute and return the form.

The successful bidder's "Local Agency Bidder DBE Information (Construction Contracts)," Exhibit 15-G2 form should include the names, addresses and phone numbers of DBE firms that will participate, with a complete description of work or supplies to be provided by each and the dollar value of each DBE transaction. When 100 percent of a contract item of work is not to be performed or furnished by a DBE, a description of the exact portion of that work to be performed or furnished by that DBE should be included in the DBE information, including the planned location of that work. A successful bidder certified as a DBE should describe the work it has committed to performing with its own forces as well as any other work that it has committed to be performed by DBE subcontractors, suppliers and trucking companies.

The successful bidder is encouraged to provide written confirmation from each DBE that the DBE is participating in the contract. A copy of a DBE's quote will serve as written confirmation that the DBE is participating in the contract. If a DBE is participating as a joint venture partner, the successful bidder is encouraged to submit a copy of the joint venture agreement. The "Local Agency Bidder DBE Information (Construction Contracts)," Exhibit 15-G2 form shall be completed and returned to the Agency by the successful bidder with the executed contract and contract bonds.

3-1.02 BONDS

Contractor shall provide, at the time of the execution of the agreement or contract for the work, and at his/her own expense, a surety bond in an amount equal to at least one hundred percent (100%) of the contract price as security for the faithful performance of said agreement. Contractor shall also provide, at the time of the execution of the agreement or contract for the work, and at his/her own expense, a separate surety bond in an amount equal to at least one hundred percent (100%) of the contract price as security for the payment of all persons performing labor and furnishing materials in connection with said agreement. Sureties on each of said bonds shall be satisfactory to the City Attorney.

SECTION 3-5 SCOPE OF WORK

Attention is directed to the provisions in Section 4 SCOPE OF WORK of the State of California Standard Specifications and these special provisions.

The Contractor is hereby notified that the Engineer has been granted discretionary authority by the City to consider overages of up to 10% of the total project bid amount. Changes Orders which exceed 10% of estimate either individually or cumulatively will require approval of the City Council unless additional authority has been granted to the Engineer at time of award.

Accordingly, Section 4 of the Standard Specifications are amended as follows:

4-1.03B Increased or Decreased Quantities

Increases or decreases in the quantity of a contract item of work will be determined by comparing the total pay quantity of that item of work with the Engineer's Estimate therefor.

If the total pay quantity of any item of work required under the contract varies from the Engineer's Estimate therefor by 10 percent or less, payment will be made for the quantity of work of the item performed at the contract unit price therefor, unless eligible for adjustment pursuant to Section 4-1.03C, "Changes in Character of Work."

• If the total pay quantity of any item of work required under the contract varies from the Engineer's Estimate therefor by more than 10 percent, in the absence of an executed contract change order specifying the compensation to be paid, the compensation payable to the Contractor will be determined in accordance with Sections 4-1.03B(1), 4-1.03B(2), or 4-1.03B(3), as the case may be.

4-1.03B(1) Increases of More Than 10 Percent

- Should the total pay quantity of any item of work required under the contract exceed the Engineer's Estimate therefor by more than 10 percent, the work in excess of 110 percent of the estimate and not covered by an executed contract change order specifying the compensation to be paid therefor will be paid for by adjusting the contract unit price, as hereinafter provided, or at the option of the Engineer, payment for the work involved in the excess will be made on the basis of force account as provided in Section 9-1.03.
- The adjustment of the contract unit price will be the difference between the contract unit price and the actual unit cost, which will be determined as hereinafter provided, of the total pay quantity of the item. If the costs applicable to the item of work include fixed costs, the fixed costs will be deemed to have been recovered by the Contractor by the payments made for 110 percent of the Engineer's Estimate of the quantity for the item, and in computing the actual unit cost, the fixed costs will be excluded. Subject to the above provisions, the actual unit cost will be determined by the Engineer in the same manner as if the work were to be paid for on a force account basis as provided in Section 9-1.03; or the adjustment will be as agreed to by the Contractor and the Engineer.
- When the compensation payable for the number of units of an item of work performed in excess of 110 percent of the Engineer's Estimate is less than \$5,000 at the applicable contract unit price, the Engineer reserves the right to make no adjustment in the contract unit price if the Engineer so elects, except that an adjustment will be made if requested in writing by the Contractor.

SECTION 4. BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES

Attention is directed to the provisions in Section 8-1.03, "Beginning of Work," in Section 8-1.06, "Time of Completion," and in Section 8-1.07, "Liquidated Damages," of the State of California Standard Specifications and these special provisions.

The Contractor shall begin work within 15 calendar days after the contract has been approved by the attorney appointed and authorized to represent the City of Sausalito.

This work shall be diligently prosecuted to completion before the expiration of **45 WORKING DAYS** beginning on the fifteenth calendar day after approval of the contract.

The Contractor shall pay to the City of Sausalito the sum of \$350 per day, for each and every calendar day's delay in finishing the work in excess of the number of working days prescribed above.

SECTION 5. GENERAL

5-1.01 LABOR NONDISCRIMINATION

Attention is directed to the following Notice that is required by Chapter 5 of Division 4 of Title 2, California Administrative Code.

NOTICE OF REQUIREMENT FOR NONDISCRIMINATION PROGRAM (GOVERNMENT CODE, Section 12990)

Your attention is called to the "Nondiscrimination Clause," set forth in Section 7-1.01A(4), "Labor Nondiscrimination," of the Standard Specifications, which is applicable to all nonexempt state contracts and subcontracts, and the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein. The Specifications are applicable to all nonexempt state construction contracts and subcontracts of \$5,000 or more.

5-1.02 PUBLIC SAFETY

In addition to any other measures taken by the Contractor, pursuant to the provisions of Section 7-1.09, "Public Safety," of the Standard Specifications, the Contractor shall install temporary railing (Type K) between any lane carrying public traffic and any excavation, obstacle, or storage area when the following conditions exist:

- **1. Excavation.** Any excavation the near edge of which is 12 feet or less from the edge of the lane, except:
 - (a) Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
 - (b) Excavations less than one foot deep.
 - (c) Trenches less than one foot wide for irrigation pipe or electrical conduit or excavations less than one foot in diameter.
 - (d) Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
 - (e) Excavations in side slopes, where the slope is steeper than 4:1.
 - (f) Excavations protected by existing barrier or railing.
- 2. Temporarily Unprotected Permanent Obstacles. Whenever the work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with protective railing, and the Contractor elects to install the obstacle prior to installing the protective system; or whenever the Contractor, for his convenience and with permission of the Engineer, removes a portion of an existing protective railing at an obstacle and does not replace such railing complete in place during the same day.
- **3. Storage Areas.** Whenever material or equipment is stored within 12 feet of the lane and such storage is not otherwise prohibited by the specifications.

When traffic cones or delineators are used to delineate a temporary edge of traffic lane, the line of cones or delineators shall be considered to be the edge of traffic lane, however, the Contractor shall not reduce the width of an existing lane to less than 10 feet without written approval from the Engineer. The lane

closure provisions of this section shall not apply if the work area is protected by permanent or temporary railing or barrier.

When work is not in progress on a trench or other excavation that required a lane closure, the traffic cones or portable delineators used for the lane closure shall be placed off of and adjacent to the edge of the traveled way. The spacing of the cones or delineators shall be not more than the spacing used for the lane closure.

5-1.03 SUBCONTRACTOR AND DBE RECORDS

The Contractor shall maintain records showing the name and business address of each first-tier subcontractor. The records shall also show the name and business address of every DBE subcontractor, DBE vendor of materials and DBE trucking company, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all of these firms. DBE prime contractors shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.

Upon completion of the contract, a summary of these records shall be prepared on "Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors" Form CEM-2402(F) and certified correct by the Contractor or the Contractor's authorized representative, and shall be furnished to the Engineer. The form shall be furnished to the Engineer within ninety days from the date of contract acceptance. The amount of \$10,000 will be withheld from payment until a satisfactory form is submitted.

Prior to the fifteenth of each month, the Contractor shall submit documentation to the Engineer showing the amount paid to DBE trucking companies. The Contractor shall also obtain and submit documentation to the Engineer showing the amount paid by DBE trucking companies to all firms, including owner-operators, for the leasing of trucks. If the DBE leases trucks from a non-DBE, the Contactor may count only the fee or commission the DBE receives as a result of the lease arrangement.

The Contractor shall also obtain and submit documentation to the Engineer showing the truck number, owner's name, California Highway Patrol CA number, and if applicable, the DBE certification number of the owner of the truck for all trucks used during that month. This documentation shall be submitted on "Monthly DBE Trucking Verification" Form CEM-2404(F).

5-1.04 DBE CERTIFICATION STATUS

If a DBE subcontractor is decertified during the life of the project, the decertified subcontractor shall notify the contractor in writing with the date of decertification. If a subcontractor becomes a certified DBE during the life of the project, the subcontractor shall notify the Contractor in writing with the date of certification. The Contractor shall furnish the written documentation to the Engineer.

Upon completion of the contract, "Disadvantaged Business Enterprises (DBE) Certification Status Change" Form CEM-2403(F) indicating the DBE's existing certification status shall be signed and certified correct by the Contractor. The certified form shall be furnished to the Engineer within ninety days from the date of contract acceptance.

5-1.05 FORCE ACCOUNT PAYMENT

Attention is directed to Section 9-1.03A, "Work Performed by Contractors," of the Standard Specifications and these Special Provisions.

5-1.06 PAYMENT OF WITHHELD FUNDS

Attention is directed to Section 9-1.065, "Payment of Withheld Funds," of the Standard Specifications and these Special Provisions.

5-1.07 PAYMENTS

Attention is directed to Section 9-1.06, "Partial Payments," and 9-1.07, "Payment after Acceptance," of the Standard Specifications and these Special Provisions.

No partial payments will be made for any materials on hand, which are furnished but not incorporated in the work.

5-1.08 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. The 10 days is applicable unless a longer period is agreed to in writing. Any delay or postponement of payment over 30 days may take place only for good cause and with the agency's prior written approval. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanctions 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.

5-1.09 PROMPT PAYMENT OF FUNDS WITHHELD TO SUBCONTRACTORS

The agency shall hold retainage from the prime contractor and shall make prompt and regular incremental acceptances of portions, as determined by the agency, of the contract work and pay retainage to the prime contractor based on these acceptances. The prime contractor or subcontractor shall return all monies withheld in retention from a subcontractor within 30 days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the agency. Federal law (49 CFR 26.29) requires that any delay or postponement of payment over 30 days may take place only for good cause and with the agency's prior written approval. Any violation of this provision shall subject the violating prime contractor or subcontractor to the penalties, sanctions and other remedies specified in Section 7108.5 of the Business and Professions Code. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime contractor or subcontractor, in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance or noncompliance by a subcontractor.

5-1.10 HAZARDOUS WASTE IN EXCAVATION

If the Contractor encounters material in excavation which he has reason to believe may be hazardous waste, as defined by Section 25117 of the Health and Safety Code, he shall immediately so notify the Engineer in writing. Excavation in the immediate area of the suspected hazardous material shall be suspended until the Engineer authorizes it to be resumed.

If such suspension delays the current controlling operation more than two (2) working days, the delay will be considered a right of way delay and the Contractor will be compensated for such delay as provided in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

The Department reserves the right to use other forces for exploratory work to identify and determine the extent of such material and for removing hazardous material from such area.

5-1.11 SOUND CONTROL REQUIREMENTS

Sound Control shall conform to the provisions in Section 71.011, "Sound Control Requirements," of the Standard Specifications and these Special Provisions.

Said noise level requirement shall apply to all equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

5-1.12 WORKING HOURS

City inspection personnel will be available as required during normal working hours from 8:00 a.m. to 5:00 p.m. on Monday thru Friday. In the event that the Contractor wishes to schedule overtime work after 5:00 p.m. or before 8:00 a.m. on Monday thru Friday, or at any time on Saturdays, Sundays or holidays, he shall make arrangements with the City Engineer at least forty-eight (48) hours in advance of such overtime work. In the event that the City Engineer is unable to schedule the necessary personnel the Contractor's request may be denied and no work shall be performed outside of normal working hours unless the work is of an emergency nature. The Contractor shall compensate the City for work done by City personnel outside of normal working hours (8:00 a.m. to 5:00 p.m., Monday through Friday). Compensation shall be actual costs plus 15% and shall be deducted from the total amount for various pay items. No additional compensation will be allowed.

5-1.13 WATER CONSERVATION

Attention is directed to the various sections of the Standard Specifications and these Special Provisions which require the use of water for the construction of this project. Attention is also directed to the provisions of Section 7, "Legal Relations and Responsibility," of the Standard Specifications with regards to the Contractor's responsibilities for public convenience, public safety, preservation of property and responsibility of damage.

Nothing in this section, "Water Conservation," shall be construed as relieving the Contractor from furnishing an adequate supply of water required for the proper construction of this project in accordance with the Standard Specifications or these Special Provisions or relieving the Contractor from the legal responsibilities defined in said Section 7.

The Contractor shall, whenever possible and not in conflict with the above requirements, minimize the use of water during construction of the project. Watering equipment shall be kept in good working order; water leaks shall be repaired promptly; and washing of equipment, except when necessary for safety or for the protection of equipment, shall be discouraged.

Minor concrete structures and miscellaneous concrete construction shall not be cured by using water.

When ordered by the Engineer, a dust palliative conforming to the provisions of Section 18, "Dust Palliative," of the Standard Specifications shall be used to control dust on this project. Dust palliative ordered by the Engineer will be paid for as extra work in accordance with Section 4-1.03D of the Standard Specifications.

Attention is directed to Section 17-1.025, "Chemical Additives," of the Standard Specifications. When ordered by the Engineer, a chemical additive shall be added to water used for compaction. The additive shall be approved by the Engineer and shall be used in accordance with his instructions. Chemical additive ordered by the Engineer will be paid for as extra work in accordance with Section 4-1.03D of the Standard Specifications.

5-1.14 SUBCONTRACTING

Attention is directed to the provisions in Section 8-1.01, "Subcontracting," of the Standard Specifications, Section 2, "Proposal Requirements and Conditions," and Section 3, "Award and Execution of Contract," elsewhere in these Special Provisions.

A sheet for listing the subcontractors, as required by the Subletting and Subcontracting Fair Practices Act, is included in the proposal.

No subcontract releases the Contractor from the contract or relieves the Contractor of their responsibility for a subcontractor's work.

If the Contractor violates Pub Cont Code § 4100 et seq., the City of Sausalito may exercise the remedies provided under Pub Cont Code § 4110. The City Sausalito may refer the violation to the Contractors State License Board as provided under Pub Cont Code § 4111.

The Contractor shall perform work equaling at least 30 percent of the value of the original total bid with the Contractor's own employees and equipment, owned or rented, with or without operators.

Each subcontract must comply with the contract.

Each subcontractor must have an active and valid State contractor's license with a classification appropriate for the work to be performed (Bus & Prof Code, § 7000 et seq.).

Submit copies of subcontracts upon request by the Engineer.

Before subcontracted work starts, submit a Subcontracting Request form.

Do not use a debarred contractor; a current list of debarred contractors is available at the Department of Industrial Relations web site at: http://www.dir.ca.gov/dlse/debar.html

Upon request by the Engineer, immediately remove and not again use a subcontractor who fails to prosecute the work satisfactorily.

Each subcontract and any lower-tier subcontract that may in turn be made shall include the "Required Contract Provisions Federal-Aid Construction Contracts" in Section 14 of these special provisions. Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due or to become due, until correction is made. Failure to comply may result in termination of the contract.

5-1.15 PERFORMANCE OF SUBCONTRACTORS

The subcontractors listed by you in Bid book shall list therein the name and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in an amount in excess of one-half of one percent of the total bid or \$10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The bidder's attention is invited to other provisions of the Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

UDBEs must perform work or supply materials as listed in the "Local Agency Bidder UDBE Commitment" form specified under Section 2, "Bidding," of these special provisions. Do not terminate a UDBE listed subcontractor for convenience and perform the work with your own forces or obtain materials from other sources without prior written authorization from the Agency.

The Agency grants authorization to use other forces or sources of materials for requests that show any of the following justifications:

- 1. Listed UDBE fails or refuses to execute a written contract based on plans and specifications for the project.
- 2. You stipulate a bond is a condition of executing the subcontract and the listed UDBE fails to meet your bond requirements.
- 3. Work requires a contractor's license and listed UDBE does not have a valid license under

Contractors License Law.

- 4. Listed UDBE fails or refuses to perform the work or furnish the listed materials.
- Listed UDBE's work is unsatisfactory and not in compliance with the contract.
- 6. Listed UDBE delays or disrupts the progress of the work. 7. Listed UDBE becomes bankrupt or insolvent.

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

The Agency does not pay for work or material unless it is performed or supplied by the listed UDBE, unless the UDBE is terminated in accordance with this section.

5-1.16 HIGHWAY CONSTRUCTION EQUIPMENT

Attention is directed to Sections 7-1.01D, "Vehicle Code," and 7-1.02, "Weight Limitations," of the Standard Specifications and these Special Provisions.

Pursuant to the authority contained in Section 591 of the Vehicle Code, the Department has determined that, within such areas as are within the limits of the project and are open to public traffic, the Contractor shall comply with all the requirements set forth in Divisions 11, 12, 13, 14 and 15 of the Vehicle Code. Attention is directed to the statement in Section 591 that this section shall not relieve him or any person from the duty of exercising due care. The Contractor shall take all necessary precautions for safe operation of his equipment and the protection of the public from injury and damage from such equipment.

5-1.17 INDEMNITY AND INSURANCE REQUIREMENTS.

Indemnity and Insurance Requirements

For the purpose of this Section "Indemnity and Insurance Requirements" and "City" shall mean the City of Sausalito, which is the public entity, awarding this contract by action of the City Council sitting as the governing body of such public entity.

1. Indemnity. Contractor shall effectively protect and guard City, its officers, agents and employees, from any liability as a consequence of any willful act, negligent act or non-negligent act or omission by the Contractor, and of the Contractor's employees or agents, or any subcontractor, and shall be responsible for any and all damage, injury, or death to persons, or damage to property. Contractor shall indemnify, defend and hold City from any and all claims, suits, actions, costs, and liability ensuing in connection with the performance of the contract, or failure to protect the safety of workers or the general public, regardless of the existence of or degree of fault or negligence on the part of the City or the Contractor, subcontractor, or any employee of any of these, other than the active negligence of the City, its officers, or employees.

In those instances where the City has obtained "Right of Entry" from private property owners upon whose property it will be necessary for the Contractor to enter to perform the work to be done under the contract, Contractor shall indemnify such property owners in the same manner as the City is indemnified.

2. Insurance Requirements. Contractor shall procure and maintain, for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Contractor's bid.

Said policies shall be in effect until final acceptance by City and shall provide that they may not be canceled without first providing City with thirty (30) days written notice of such intended cancellation. If Contractor fails to maintain the insurance provided herein, City may secure such insurance and deduct that cost thereof from any funds owing to Contractor.

- (a) Minimum Scope of Insurance. Coverage shall be at least as broad as:
 - Insurance Services Office Commercial General Liability coverage ("occurrence" form CG 00 01 or equivalent or "claims made" form CG 00 02 or equivalent) NOTE: "claims made" coverage requires special approval and "modified occurrence" coverage is unacceptable.
 - ii. Insurance Service Office form number CA 00 01 (Ed. 01/87 or equivalent) covering Automobile Liability, Code 1 "any auto" with endorsement CA 00 29 (auto contractual).
 - iii. Worker's Compensation insurance as required by the State of California and Employers Liability Insurance.
- (b) Minimum Limits of Insurance. Contractor shall maintain limits of no less than:
 - i. General Liability: \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit.
 - ii. Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
 - iii. Employers' Liability: \$1,000,000 per accident for bodily injury or disease.
- (c) <u>Deductibles and Self-Insured Retentions</u>. Any deductibles or self-insured retentions must be declared to and approved by the City of Sausalito. At the option of the City, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officials, employees and volunteers, or the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- (d) <u>Other Insurance Provisions</u>. The general liability policy is to contain, or be endorsed to contain, the following provisions:
 - i. The City of Sausalito, its officials, employees and volunteers are to be covered as insured 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 (using either the County of Marin's prepared form or using ISO form CG 20 10 11 85 or equivalent).

Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officials, employees and volunteers or other insured under this contract.

- ii. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the City, it officials, employees or volunteers. Any insurance or self-insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.
- iii. The workers' compensation policy shall contain a waiver of subrogation in favor of the City.
- iv. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty days prior written notice (10 days for non-payment of premium) by certified mail, return receipt requested has been given to the City of Sausalito, (Attention) Department of Public Works, 420 Litho Street, CA 94965.
- (e) Rights of Entry. If applicable, all private property owners granting "Rights of Entry" for construction of the work shall be covered as insureds under the same coverage as provided the City as respects their ownership of the property and the work to be done thereon.
- (f) Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII. Carriers not licensed in the State of California should have a current A.M. Best's rating of no less than A:VII.
- (g) Verification of Coverage. Contractor shall furnish the City with original certificates and amendatory endorsements effecting coverage required by this clause. The endorsements should be on forms provided by the County of Marin or on other than the County of Marin's forms, provided those endorsements or policies conform to the requirements. All certificates and endorsements are to be received and approved by the City before work commences. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.
- (h) <u>Subcontractors</u>. Contractor shall require all its subcontractors to name contractor and City of Sausalito as additional insureds under its policies and contractor shall require all its subcontractors to furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

5-1.18 ARCHAEOLOGICAL DISCOVERIES

All articles of archaeological interest which may be uncovered by the Contractor during the progress of the work shall be reported immediately to the Engineer. The further operations of the Contractor with respect to the find will be decided under the direction of the Engineer.

5-1.19 BUY AMERICA REQUIREMENTS

Attention is directed to the "Buy America" requirements of the Title 23 United States Code, Section 313 and the regulations adopted pursuant thereto. In accordance with said law and regulations, all manufacturing processes for steel and iron materials furnished for incorporation into the work on this project shall occur in the United States; with the exception that pig iron and processed, pelletized and reduced iron ore manufactured outside of the United States may be used in the domestic manufacturing process for such steel and iron materials. The application of coatings, such as epoxy coating, galvanizing, painting, and any other coating that protects or enhances the value of such steel or iron materials shall be considered a manufacturing process subject to the "Buy America" requirements.

A Certificate of Compliance, conforming to the provisions in Section 6-1.07, Certificates of Compliance, of the Standard Specifications, shall be furnished for steel and iron materials. The certificates, in addition to certifying that the materials comply with the specifications, shall also specifically certify that all manufacturing processes for the materials occurred in the United States, except for the exceptions allowed herein. The requirements imposed by said law and regulations do not prevent a minimal use of foreign steel and iron materials if the total combined cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract cost or \$2,500, whichever is greater. The Contractor shall furnish the Engineer acceptable documentation of the quantity and value of any foreign steel and iron prior to incorporating such materials into the work.

SECTION 6. (BLANK)

SECTION 7. CITY OF SAUSALITO SPECIAL PROVISIONS

7-1.01 ENGINEER'S ESTIMATE OF CONSTRUCTION COSTS

The Engineer's estimate of construction costs for this project is \$181,500(total).

7-2.01 TERMINATION OF CONTRACT

The City reserves the right to terminate the contract at any time upon a determination by the City Engineer that termination of the contract is in the best interests of the City.

If the City Engineer elects to terminate the contract, the termination of the contract and the compensation payable to the Contractor shall be governed by Section 8-1.11, paragraphs A through D, of the State of California Standard Specifications.

7-3.01 **GENERAL**

LOCATION OF PROJECT. The Project is located in the City of Sausalito, and includes various City Streets shown on the plans for pavement overlay, pavement slurry seal and pavement crack seal.

SCOPE OF WORK. The Project includes but is not limited to pavement crack sealing, pavement slurry seal coat, asphalt pavement grinding, wedge cutting, base failure repair, asphalt concrete overlay, and pavement striping.

LIMITS OF WORK. The approved working limits are shown on the project drawings.

SUBMITTALS. The Contractor shall submit a minimum of six (6) copies of all submittals including, but not limited to, shop drawings, schedules and reports, product data, manufacturer's instructions, design calculations, design drawings and other material required in the Contract Documents. Two (2) copies of each submittal will be returned to the Contractor within seven (7) calendar days from receipt by the Engineer. In addition to the submittals required in the Specifications or in specific work sections of the City special provisions, the Contractor shall submit the following:

- Construction Schedule. A proposed construction schedule shall be submitted at the
 preconstruction meeting. The schedule shall be updated, and submitted at the weekly
 construction meetings. Schedule may be CPM, or a Bar Chart Schedule, but must
 include all major work items and show all interrelationships.
- 2. Schedule of Submittals. A schedule of all submittals shall be submitted at the pre construction meeting.
- A traffic control plan will be submitted to the Engineer at the pre construction conference. This
 plan will explain how the Contractor will control the traffic during the life of the project.
 In this plan Contractor will identify how the conduct of the will take place with minimum
 impact to the tenants at the Project Site.

RESPONSIBILITIES TO THE PUBLIC

No street may be completely closed to through traffic at any time unless permitted in writing by the Engineer. The Contractor shall post warning signs near each end of work limits as detailed in traffic control plan approved by the Engineer and as otherwise directed by the Engineer.

Traffic control and construction warning devices shall be provided in conformance with the latest edition of the CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PART 6, TEMPORARY TRAFFIC CONTROL, a copy of which shall be on the site at all times during work periods.

PROTECTION OF EXISTING FACILITIES. The Contractor shall protect in place all existing facilities within the limits of work that are not a part of the project. All damaged facilities shall be repaired or replaced as directed by the Engineer. All costs associated with protecting, repairing and/or replacing these facilities shall be the sole responsibility of the Contractor.

PRIORITY OF PROJECT DOCUMENTS. The contract documents for this project are listed below and if there is a conflict between contract documents, the document first in order shall control. The precedence shall be as follows:

- 1. Construction Contract
- 2. Bid Proposal
- 3. Permits from Other Agencies
- 4. Instruction to Bidders
- 5. Project Plans
- 6. City of Sausalito Special Provisions
- 7. Special Provisions
- 8. Shop Drawings
- 9. State of California Standard Specifications
- 10. State Standard Plans

PROJECT MEETINGS. In order to effectively manage the construction process, the City requires that certain meetings be held during the course of the Work at which time all members of the building team are expected to attend.

As soon as the City has obtained the Contractor's executed bonds and certificate of insurance, a preconstruction meeting will be held. At that time, representatives of the City, the Contractor, and the Design Professional will discuss in detail certain procedural aspects of the Work, including:

- 1. Administrative procedures for transmittals, approvals, change orders and similar items;
- 2. Review of the method of application for payment, progress payments, retention, and final payment;
- Review of the Contractor's construction schedule, list of proposed subcontractors, and the schedule of values.

Not less than once every two (2) weeks during the course of work on the Project, the Contractor's superintendent, the Design Professional's project manager, and representatives from the City shall meet to discuss the progress of the Work in general. At that time, any adjustment to the progress schedule will be transmitted to the City, together with an explanation of the time saved or lost.

In addition to the meetings described above, the City reserves the right to call meetings spontaneously when it believes necessary in order to effectively manage work on the Project, to prevent misunderstandings, or to disseminate information.

PROJECT RECORD DOCUMENTS. Project record documents are the City's construction documents for the Project which have been modified by the City to show the actual conditions of in-place construction installed by the Contractor as accurately as possible. They include:

- 1. Drawings marked where required to show changes in dimension or configuration between the original design and final construction;
- 2. Specifications, marked to indicate changes of materials, products, or methods of installation;
- 3. Modifications to Drawings or Specifications issued during the course of construction (including addenda, change orders, or clarifications issued by the Design Professional or his consultants);
- 4. Approved shop drawings and product data;
- 5. Field test records and reports.

Contractor shall note clarifications/deviations/changes in the Project Plans as the work progresses. City shall cause to have prepared record documents as the work progresses. Contractor shall not conceal in-place construction until field verifications are made for record purposes.

Locate internal utilities and concealed in the construction, referenced to visible and accessible features of the structure. Note field changes of dimension and detail, and changes made by change order. Sketch details not on the original Drawings.

Contractor shall inform City of details. For Specifications and Addenda, Contractor shall legibly mark each Section to record the manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed. Note changes made by Change Order.

Contractor shall submit not less than two sets of project plan mark-ups to the City at the end of the Work, before final payment is made, to allow City to prepare record documents.

CONTRACTOR'S LICENSE REQUIREMENTS. <u>Contractor's License Classification</u> – 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.

NOTIFICATION OF UTILITIES. Before commencing any work under this contract, the Contractor shall notify Underground Service Alert (USA) at (800) 227-2600 a minimum of 72-hours before excavation activities.

LICENSE, FEES AND PERMITS. City Plan check fees and building permit fees required for operations under this contract will be paid by the City. The City has made an effort to secure other Permits and believes it has necessary permits to perform the work. Costs for unanticipated costs shall be paid for by city and documented in a Change Order.

Contractor shall request from utilities companies and Owner will pay for all required licenses, charges, fees, inspection fees and permits necessary to obtain permanent utility connection and services. Such include but are not limited to:

Pacific Gas and Electric Company AT&T (Telephone) Marin Municipal Water District Comcast (Cable TV) City of Sausalito Sanitary Sewer

CONSTRUCTION STAKING. Construction staking and marking will be provided by the City. Contractor shall inform the Engineer in case he/she finds discrepancy between the condition shown on the plans and the existing condition of the project. Engineer will investigate make necessary change(s) within 48 hours and inform the Contractor to make the corrections.

MEASUREMENT AND PAYMENT. All work performed under this contract shall be paid for at the unit prices detailed the bid proposal unless specifically noted otherwise or modified in the various sections of work under the City special provisions. Payment shall include all costs associated with labor, equipment, materials and expenses required to complete the work, and no additional payment will be made therefor.

7-4.01 STORM WATER POLLUTION PREVENTION PLAN

The contractor shall follow the Stormwater Control Plan and Caltrans Construction Site BMP Manual which designates the following:

- (a) Measures to control or prevent pollution of surface runoff from erosion, mud and sediment, material stockpiles (which shall be at or nearby the worksite) and on-site vehicle/equipment storage and maintenance. These shall include preventing any contaminated water, such as saw-cut wash water, from entering storm drain system.
- (b) Provisions for maintenance and repair of control measures, personnel training, waste disposal and, if necessary, on-site sanitary facilities.

These documents together, represent the Stormwater Pollution Prevention Plan.

The City does not have a yard available for contractor use in executing work of this provision. Contractor may propose modifications in writing subject to approval by the Engineer.

Work includes installation of necessary materials and maintenance(including the need to remove and replace materials that have deteriorated and no function as installed)

Upon learning of approaching inclement weather, the contractor shall initiate the appropriate pollution prevention measures pursuant to the SWPPP and during the course of such inclement weather, shall assign personnel to regularly visit, inspect, document, report and as necessary, maintain, the enacted pollution control measures. Contractor shall submit site inspection reports to the Engineer after each storm event resulting in measurable precipitation.

Contractor shall have sole liability for failing to comply with these provisions.

MEASUREMENT AND PAYMENT. Compensation for implementing SWPPP shall be paid at the lump sum price detailed in the bid proposal, and no additional compensation will be allowed.

7-5.01 MOBILIZATION

GENERAL. This work shall conform to the requirements of Section 11, "Mobilization" of the State of California Standard Specifications and shall consist of preparatory work and operation, including, but not limited to, those necessary for the movement of personnel, equipment supplies, and incidentals to the project site for the establishment of facilities necessary for work on the project and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.

SCOPE OF WORK. Mobilization shall consist of all work in mobilizing the Contractor's equipment, furnishing required submittals and installing temporary fencing.

STAGING AREA. The Contractor shall obtain permission from the Engineer to use any portion of the City controlled public right-of-way for a staging area. Note that City cannot grant permission to use of Hwy 101 right-of-way.

- The staging area must be located on an existing concrete or asphalt paved surface.
- The staging area will be subject to provisions contained within the Stormwater Pollution Prevention Plan to prevent non-stormwater discharges to the maximum extent practicable.

- -The staging area will not be located in an environmentally sensitive or culturally sensitive areas and will not impact water resources(e.g. streams, bays, inlets, drainage sloughs).
- -The staging area will not be located in an regulatory coastal flood zone or a determined flood plain.
- The staging area shall not affect access to property or roadways.

MEASUREMENT AND PAYMENT. The lump sum price paid for "Mobilization" shall include full compensation for furnishing all personnel, equipment, and supplies and no additional payment will be made therefor.

7-6.01 CLEARING AND GRUBBING

GENERAL. Clearing and grubbing shall conform to the applicable provisions of Section 16 of the Standard Specifications and these Special Provisions.

Clearing and grubbing shall include, but not be limited to, the removal from the area of work all trees, brush, roots, curbs, gutters, AC Pavement, and all other items conflicting with the work as shown on the plans, including the pruning of trees as necessary to accommodate construction operations, or as directed by the Engineer. It is expected that weed growth not treated and removed under Section 10-1.06 WEED KILLING AND DEBRIS REMOVAL will be removed by work performed under this Section. Clearing and grubbing shall also include the removal of raised pavement markers on any roads. Such removal of raised pavement markers shall be done by mechanical or hand device in advance of paving operations.

Where grinding is not anticipated, clearing and grubbing shall also include the removal of residue asphalt concrete from the gutter area of existing concrete curb and gutter prior to overlay paving.

The removal of roots less than two inches in diameter and interfering with the work by being within the work zone shall be removed by the Contractor. Roots which in the opinion of the Engineer are greater than two inches in diameter and interfering with the work and which will require special equipment shall be removed as extra work if so directed by the Engineer.

All removed material, unless otherwise indicated on the plans specified herein, shall become the property of the Contractor who shall dispose of same outside the road right-of-way at a legal dump site.

MEASUREMENT AND PAYMENT.

The various unit prices paid for clearing and grubbing for the respective work components shall include furnishing all labor, materials and equipment necessary to perform the removal and disposal of materials and other miscellaneous items including concrete curbs, gutters and drainage structures to complete the work as shown on the plans and specified herein.

7-7.01 TRAFFIC CONTROL

GENERAL. Contractor shall provide traffic control within the construction area in accordance with these city special provisions.

The Contractor shall refer to the current "CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PART 6 TEMPORARY TRAFFIC CONTROL and other relevant traffic control guidance documents, issued by the California Department of Transportation, and shall furnish, maintain and remove temporary traffic stripes and legend, traffic control signs, lights, flares, barricades and other warning devices, and furnish competent flag persons and guards at his expense when necessary for public safety.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way at any time including any section closed to public traffic. When entering or leaving roadways carrying public traffic, the Contractor's equipment whether empty or loaded, shall in all cases yield to public traffic.

The use of fluorescent traffic cones to direct traffic away from excavations shall be considered as lane closure. No excavation shall remain open longer than is necessary to perform the work as determined by the Engineer. Construction of street improvements and structures, and conduit installation shall follow immediately after excavation and shall be performed in a continuous operation during each working day. All excess and unsuitable material resulting from the Contractor's operations shall be removed as it develops and before the end of each day.

No material or equipment shall be stored where it will interfere with the free and safe passage of the public. At the end of each day's work and at other times when construction operations are suspended for any reason, the Contractor shall remove all equipment and other obstructions from that portion of the roadway open for public use. During the pre construction conference Contractor shall present the traffic control plan. In this plan Contractor shows the gates and entrances that will be used to receive the construction material or dispose of debris and hazardous material.

Construction is within the City-owned right of way and provisions shall be made for the safe passage of vehicular and pedestrians traffic around the area of the work at all the times. Every effort shall be made by the Contractor to permit access into private driveways immediately after paving operation. Local and emergency traffic shall be given full access to their destination through the project area.

The Contractor shall be responsible for keeping the local Police and local Fire Department informed of any obstructions to either public or private roads caused by his \her operation. The Contractor shall Post "No Parking, Tow – Away "Signs on the Barricades along the streets to be resurfaced at least 72 hours prior to resurfacing. Should the resurfacing work not occur on the specified date, a new notice shall be distributed by the Contractor.

Traffic lane closures shall be as directed by the Engineer, and under no circumstances shall the Contractor close off a street for any period of time without prior approval from the Engineer. The maximum traffic delay duration is 10 minutes for daytime work.

When construction operations are not actively in progress, not less than two such lanes shall be opened to public traffic. The full width on the traveled way shall be opened for use by public traffic on Saturdays, Sundays, designated City holidays, after 3:00 p.m. on Fridays, the day preceding designated legal holidays, and when construction operations are not actively in progress.

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

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

Before Obstructing any private driveway entrance or City street with equipment or other barriers, for any prolonged period of time, the Contractor shall notify the known users of the respective thoroughfare(s) involved and shall provide access for pedestrian to and from the street.

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

Should the Contractor fail, in the opinion of the Engineer, to provide all materials, work force and equipment necessary to maintain traffic around the work area as set forth herein, the City may take necessary steps to suspend the contract. The City may then, upon such suspension, cause such work to be done as may be necessary to maintain traffic, and charge same against the Contractor Sureties.

The provisions in this section may be modified or altered if, in the opinion of the Engineer, public traffic will be better served and work expedited. Said modifications or alteration shall not be adopted until approved in writing by the Engineer.

MEASUREMENT AND PAYMENT. The contract lump sum price paid for traffic control shall include full compensation for furnishing all labor (including flagman cost), Materials, (including Construction area and No Parking signs), tools equipment, barricades and incidentals, and for doing all the work involved in installing, maintaining, relocating, and removing the components of Traffic control system throughout the life of the project (including Saturdays, Sundays, and holidays), as specified in the State Standard Specifications, and these city special provisions and as directed by the Engineer, and no additional compensation will be allowed.

7-11.01 CONCRETE FINISH WORK

GENERAL. This work shall consist of constructing PCC curb and gutter (Bid item 3b, 3c), and PCC sidewalk (Bid Item 3d, 3e) and Access Ramps (Bid Item 3m) including removal of existing pavement, excavation, backfill and aggregate bases; and shall conform to the provisions in Section 73, "Concrete Curbs and Sidewalks" of the State of California Standard Specifications and the special provisions.

MATERIALS.

- Concrete shall be Portland Cement Concrete conforming to Section 90 of the Caltrans Standard Specifications. Unless specified other wise in the drawings, all concrete structures retaining walls etc., and flatwork shall be Class A (7 sack) 3/8" aggregate, 4000 psi concrete. Slump shall be 4". Water/cement ratio shall be 0.48 with 0% entrained air.
- Grout and mortar shall conform to Section 51 of the Caltrans Standard Specifications. Mortar for patching shall contain three (3) parts sand to one (1) part Portland Cement by volume with color to match the work to be patched.
- Pigment colors shall be metallic oxide unless otherwise specified. Integral color shall be 3 lbs lampblack per cubic yard of concrete.
- Where washed exposed aggregate (not top seeded) finish is required to equivalently replace existing finishes, aggregate in concrete shall consist of 3/8" to 3/4" rounded river run pebbles to match the finish on the existing concrete.

Any damage caused by the Contractor to existing improvements shall be repaired or replaced by the Contractor at his expense.

Where driveway approaches are reconstructed to accommodate work they shall be a minimum of 6 inches thick, except for 8" in commercial usage.

MEASURMENT AND PAYMENT. The contract unit prices paid for various Concrete Finish Work items, shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and for doing all the work involved to perform Concrete Finish Work as shown on the plans, as marked in the field by the engineer, as specified in the state standard specifications, these city special provisions, and as directed by the Engineer, and no additional payment will be allowed.

7-12.01 ADJUST MANHOLE RIM TO GRADE

Manholes (Bid Item 3j and 3k), rodholes (Bid Item 3l), monument castings (Bid Item 3l) and other similar facilities (including small utility boxes) (Bid Item 3l) to be adjusted to grade shall be adjusted to grade after pavement overlay in accordance with the applicable provisions of Section 15-2.05A of the Standard Specifications and these Special Provisions.

Use of metal riser rings for Manholes is not acceptable. If metal riser rings are currently used they must be removed and the additional height adjusted with grade rings as shown on the plans.

Grade rings, if used, shall be placed before resurfacing. The height of the grade ring shall be equal to the thickness of the overlay pavement to be placed, or shall be of such height so as to adjust the manhole, rodhole or monument to grade.

If the height of all grade rings exceeds 18 inches, the cone shall be removed and a new barrel set (Bid Item "Remodel Manhole (Utility) to Grade") upon the direction of the Engineer.

The quantity shown in the bid proposal for "Remodel" manhole is for the purpose of comparison of bids only. The need to remodel as opposed to simple raising will be determined in the field in conformance with the conditions shown on the Plans and these Special Provisions.

All survey monuments shall conform to the provisions in Section 81 of the Standard Specifications and shall be street monument type as shown on U.C.S. Standard Drawing No. 930, "Monuments," and these Special Provisions.

Some existing monuments may need to be recovered (tied out) and the County of Marin may furnish a new marker disc. Also recovered or new casting shall be installed after the overlay is complete and for these the Engineer shall designate the exact location by having straddle nails placed by the surveyor.

MEASUREMENT AND PAYMENT. The respective prices paid per each for adjusting, or remodeling manholes, rodholes, monument castings, plus similar facilities, and for removing and replacing survey monuments shall include furnishing all labor, materials and equipment necessary to complete the work as shown on the plans and specified herein.

7-12.02 ADJUST UTILITY BOX TO GRADE

Contractor shall work with involved utility to adjust or assure that affected Utility Box lids are adjusted to grade after pavement overlay or site work in accordance with the applicable provisions of Section 15-2.05A of the Standard Specifications and these Special Provisions.

MEASUREMENT AND PAYMENT. The unit price paid per each for adjusting Utility Boxes to grade shall include furnishing all labor, materials and equipment necessary to complete the work as shown on the plans and specified herein. Contractor shall not be compensated for work performed by utility.

7-12.03 RELOCATE UTILITY BOX

This item (Bid Item 3i)is included to address work and costs associated with relocating larger utility boxes in the event project improvements interfere with them and it is not feasible to adjust the improvement locations. Interference can be the result of parking lot driveway entrance changes, conflicts with motor vehicle wheel paths, for safety reasons. If relocation is necessary Contractor shall work with involved utility to relocate utility box or assure that affected Utility Box is relocated in accordance with PUC requirements in accordance with the applicable provisions of Section 15-2.05A of the Standard Specifications and these Special Provisions.

MEASUREMENT AND PAYMENT. The unit price paid per each for relocating Utility Boxes shall include furnishing all labor, materials and equipment necessary to complete the work as shown on the plans and specified herein. Contractor shall not be compensated for work performed by utility. Costs associated with relocation work coordination with actual relocation work performed by the utility shall be paid on a force account basis subject to concurrence with the Engineer.

7-14.01 ASPHALT CONCRETE

Asphalt concrete shall conform to the provisions of Section 39 of the Standard Specifications and these Special Provisions.

Asphalt concrete shall be Type "A", 1/2 inch Maximum, Medium Gradation, conforming to the requirements of Section 39-2 of the Standard Specifications.

Asphalt shall be AR-4000 viscosity graded asphalt.

The percentage of crushed particles will be determined by Test Method No. Calif. 205, except that no particle shall be considered a crushed particle unless it has <u>three</u> or more fractured faces, regardless of size.

In lieu of the requirements for the combined aggregates, Los Angeles Rattler Test, contained in Section 39-2.02 of the Standard Specifications, the following shall apply:

	Test	Aspl	halt Conc	rete
	Method		Type	
	No. Calif.	<u>A</u>	В	<u>C</u>
Los Angeles Rattler	211			
Loss at 100 rev. (max.)		6%	10%	
Loss at 500 rev. (max.)		22%	25%	

Asphalt concrete shall be hot plant mixed, and shall be furnished from the plant at a temperature not to exceed 325 degrees F.

Asphalt concrete shall not be supplied from more than one mixing plant unless otherwise approved by the Engineer.

The Contractor shall furnish to the Engineer, at least ten (10) working days prior to start of work, a list of his sources of materials together with a Certificate of Compliance, indicating that materials to be incorporated in the work fulfill the requirements of these specifications, <u>and</u> a job-mix-design for the asphalt concrete. The Certification of Compliance shall be signed by the material supplier or suppliers representative. It is the intent of these specifications that materials to be incorporated in the work must meet the requirements of these specifications after incorporation in the paved areas shown on the plans. The Contractor shall be responsible for all costs associated with the required job-mix-design.

The job-mix-design shall have been done within the last twelve months if not done for this specific project.

The job-mix-design shall indicate the percentage passing each sieve size, percent asphalt recommended, percent voids, optimum bitumen content (OBC), stability and maximum theoretical unit weight at each asphalt content used to arrive at the recommended OBC.

NOTE: At the OBC, the compacted mixture shall have the following properties:

Hveem Stability 35 min. Type B 37 min. Type A % Air Voids 3% to 5%

The Contractor shall submit to the Engineer samples of all materials to be used in the work for the purpose of determining specifications compliance. The Engineer reserves the right to obtain said samples at the point of delivery and/or at the point of manufacture. The Owner shall also have the right to inspect sources of materials to be used in the work.

During paving operations, the County will take various fields and plant tests for asphalt content and gradation to check for compliance with the approved mix. If it is found that the asphalt concrete mix being used does not comply with the approved mix, the paving operations shall cease until the plant supplying the asphalt concrete makes necessary corrections to bring the mix back into compliance. Any materials

rejected by the County shall be removed from the job site, at the Contractor's expense, and no additional payment will be allowed.

The contractor shall notify the Engineer at least seventy-two (72) hours in advance of commencement of paving operations on any road.

The surface to receive asphalt concrete shall be clean and dry. The existing pavement shall be power broomed, prior to applying paint binder. Oil free pressurized air shall be used to clear cracks.

Paint binder shall be RS-1 and shall be applied on existing pavement and between layers of asphalt concrete. Paint binder shall be uniformly spread from a distributor truck by means of a horizontal spray bar. Hand-held spraying will not be allowed except in small irregular areas as permitted by the Engineer. The rate of coverage shall be as approved by the Engineer. Paint binder shall not be applied to a width greater than can be covered by the paving operation, nor greater than 500 feet in advance of the paving operation, unless authorized by the Engineer. Following the application of the paint binder, the surface of the roadway shall be closed to the use of public traffic. Care shall be taken to avoid tracking paint binder material on existing pavement surfaces beyond the limits of construction. Material so tracked shall be removed by the Contractor at Contractor's expense.

The Contractor shall pave in such a way as to minimize longitudinal cold joints. In no event shall longitudinal joints be allowed to remain at the end of the working day.

The asphalt concrete shall be delivered to the site in a thoroughly blended condition and shall be spread by a self-propelled asphalt paving machine in such a manner as to avoid segregation during the placing operations. Areas inaccessible to spreading and compaction equipment may be paved by such methods as may be approved by the Engineer.

All mixtures shall be spread at a temperature of not less than 260 degrees F., and not greater than 300 degrees F.

Initial rolling shall be performed immediately after placement.

No asphalt concrete is to be placed when the atmospheric temperature is below 50 degrees F.

The Contractor shall furnish and use tarpaulins to cover the first loads in the morning and subsequent loads until the ambient air temperature is above 55 degrees F.

Asphalt pavers shall be self-propelled mechanical spreading and finishing equipment, provided with a screed or strike-off assembly capable of distributing the material to not less than ten (10) feet. Screed action shall include any cutting, crowding or other practical action which is effective on the mixture without tearing, shoving or gouging, and which produces a surface texture of uniform appearance. The screed shall be adjustable to the required section and thickness. The paver shall be provided with a full width roller or tamper or other suitable compacting devices. Pavers that leave ridges, indentations or other marks in the surface shall not be used unless the ridges, indentations or other marks are eliminated by rolling or prevented by adjustment in operation.

The asphalt paver shall operate independently of the vehicle being unloaded or shall be capable of propelling the vehicle being unloaded in satisfactory manner and if necessary, the load of the haul vehicle shall be limited to that which will insure satisfactory spreading. While being unloaded, the haul vehicle shall be in contact with the machine at all times, and the brakes on the haul vehicles shall not be depended upon to maintain contact between the vehicle and the machine.

Should the automatic screed controls fail to operate properly during the day's work, the Contractor may use manual control of the spreading equipment for the remainder of that day, however, the equipment shall be corrected or replaced with an alternative automatically controlled equipment conforming to the requirements in this section before starting another day's work.

Intersections, conforms, tapers, and feather paving shall be paved as directed by the Engineer.

Spreading, shoveling or raking asphalt concrete shall not leave irregular or segregated areas. The Contractor shall supply an appropriate number of qualified, experienced rakers and shovelers.

Asphalt spilled on to any new or old paving shall be removed along with loose asphalt concrete.

The Contractor shall furnish equipment capable of producing the required compaction. Vibratory rollers shall be double steel drum, having adjustable frequency and amplitude settings directly available to the operator during the operation. The roller shall be equipped with self-reversing eccentrics. The vibratory mode shall automatically shut off when machine direction is changed.

The Contractor shall furnish a sufficient number of rollers to obtain the compaction required by these specifications and the surface finish required in provisions of Section 39-6.03.

Asphalt concrete surfacing shall be placed in lifts no greater than 3 inches in thickness (compacted). Total thickness of surfacing shall be as indicated on the plans.

Asphalt concrete shall be compacted to a minimum 93 percent of Maximum Theoretical Density as determined by American Society of Testing Materials (ASTM) D-2041.

Finished asphalt concrete pavements which do not conform to the specified relative compaction requirements will be paid for using the following pay factors.

In-Place Relative Compaction	Pay Factor
93% or greater	100% Pay factor.
90 - 92.9%	90% Pay factor.
89.9% or less	Remove and replace as directed by Engineer.

The surface, when completed, shall be smooth, dense, well-bonded, and of uniform texture and appearance. The compacted surface course of asphalt concrete shall be free from ruts, humps, depressions or irregularities. When a straight-edge 12 feet long is laid on the finished surface and parallel with the center line of the road or driveway, the surface shall not vary more than 0.02 foot from the lower edge of the straight-edge. 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 straight-edge 12 feet long laid in a direction transverse to the center line and extending from edge to edge of a 10 foot pass.

Any ridges, indentations or other objectionable marks left in the surface of the asphalt concrete shall be eliminated by rolling or other means. The use of any equipment that leaves ridges, indentations or other objectionable marks in the asphalt concrete shall be discontinued.

MEASUREMENT AND PAYMENT. The quantity of asphalt concrete shall be determined from certified weighmaster tickets delivered to and signed by the Engineer at the work site on the day of placement. The Engineer shall be supplied with a copy of each certified weigh ticket for the Engineer's records. The price paid per ton of Asphalt Concrete Pavement shall be considered full compensation for furnishing all labor, materials (including paint binder) and equipment necessary to complete the work as shown on the plans and specified herein.

No adjustment in the contract unit price for asphalt concrete shall be made for increases or decreases of more than 25 percent of the quantities set forth in the Schedule of Bid Prices, and portions of Section 4-1.03B of the Standard Specifications shall not apply.

7-15.01 THERMOPLASTIC PAVEMENT MARKING AND STRIPING

Thermoplastic traffic stripes (traffic lines) and pavement markings shall conform to the provisions in Sections 84-1, "General," and 84-2, "Thermoplastic Traffic Stripes and Pavement Markings," of the Standard Specifications and these special provisions.

Thermoplastic material for traffic stripes shall be applied at a minimum thickness of 0.070-inch for application on fine graded surface and 0.080-inch for application on open graded surface.

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

Thermoplastic traffic stripes will be measured by the linear foot along the line of the traffic stripes, without deductions for gaps in broken traffic stripes. A double traffic stripe, consisting of two 4-inch wide yellow stripes, will be measured as 2 traffic stripes.

Thermoplastic pavement markings will be measured by the square foot for the actual area covered.

MEASUREMENT AND PAYMENT. The contract prices paid on a lump sum basis for thermoplastic traffic stripes and pavement markings shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in applying thermoplastic traffic stripes and pavement markings, complete in place, including establishing alignment for stripes, and layout work, as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Engineer.

7-16.01 PAVEMENT MARKERS AND DETAILS

The Contractor shall install pavement markers (buttons), both reflective and nonreflective, as shown on the plans, as specified in the State Standard Plans, and as directed by the Engineer. The pavement markers shall conform to the shape, dimensions and tolerances specified in the Standard Specifications.

The pavement markers shall be stored indoors and shall be protected from any source of moisture both during shipment to the job site and at the job site. All layout, spotting, or cat tracking shall be performed by the Contractor and approved by the Engineer prior to placement of any permanent pavement markers. No pavement markers shall be placed any sooner than 14 days after the paving operation.

Before obliterating any pavement delineation that is to be replaced on the same alignment, the Contractor shall reference the existing pavement delineation with sufficient control points to reestablish the alignment with the new pavement delineation.

The Contractor shall remove and dispose of all existing pavement markers as required by the plans and as directed by the Engineer. The method of pavement marker removal shall be approved by the Engineer and performed in such a manner as to leave the existing pavement undamaged. Should the removal process leave a divot of more than 1/4 inch deep, each divot shall be repaired with an approved bituminous adhesive.

Reflectorized temporary raised pavement markers (yellow to delineate opposing traffic and white for lane separation), shall be placed on the roadway surface where pavement markers currently exist. Spacing of the temporary raised pavement markers shall be at approximately 25 foot intervals or as directed by the Engineer. The pavement markers shall be cemented to the pavement with Rapid Set Type adhesive conforming to the provisions of the Standard Specifications. The portion of the street surface which will receive the pavement markers shall be free of dirt, oil, moisture, or any other material which would adversely affect the bonding of the adhesive.

The adhesive shall be placed uniformly on the cleaned pavement surface or on the bottom of the marker in a quantity sufficient to result in complete coverage of the area of contract of the marker with no voids present and with a slight excess after the marker has been pressed in place. Excess adhesive around the edge of the marker, excess adhesive on the pavement, and adhesive on the exposed surfaces of the

markers shall be immediately removed. The marker shall be protected against impact until the adhesive has hardened.

Pavement Marker Application

<u>Standard Details</u> - Markers shall be placed according to the State Traffic Manual details, except as modified by the project plans or the Engineer. Additional work under this bid item may include replacement of broken or missing reflectors on other streets.

<u>Fire Hydrants</u> - Blue reflector shall be installed in the center of the traffic lane adjacent to each fire hydrant on all streets listed in this project. It is Contractor's responsibility to locate each fire hydrant.

Timing - Pavement markers shall be applied within 4 days of resurfacing.

Control of the Work

<u>Preparation</u> - Surfaces which are to receive markers shall be thoroughly clean, free from loose materials and dry, and such areas shall be thus prepared by the Contractor to the satisfaction of and with methods approved by the Engineer. Pavement markers shall not be placed when the pavement or air temperature is 50 F or less.

<u>Corrective Work</u> - Any damage to the newly placed stripe, marking or marker due to the failure of the Contractor to protect his work and correction of errors shall be repaired by him at no additional cost.

MEASUREMENT AND PAYMENT. The Contract unit price paid for the installation of both the Reflective and Non-Reflective pavement markers (buttons), regardless of color or type, shall include full compensation for furnishing all the labor, materials, tools, equipment, incidentals, for doing all the work required to install the pavement markers, including the placement of temporary raised pavement markers, removal, repair and resurfacing existing pavement markers, and disposing of original and temporary pavement markers, complete in place, as shown on the plans, as specified in the Standard Specifications, these city special provisions, and directed by the Engineer, and no additional compensation will be allowed. The final quantity of pavement markers will be determined from an actual count in place.

7-17.01 UTILITY STRUCTURES

GENERAL. Specifications for the furnishing and installing of cast-in-place concrete and precast concrete structures for utilities as indicated. The work includes: Pipe (Bid Item 3n), Catch basins (Bid Item 3o), curb and gutter inlets(Bid item 3o), manholes, remodel manhole (Bid Item 3t), valve boxes, handholes, pull boxes, vaults, concrete collars(Bid item 3p) and the related cast iron and steel products required for gratings, covers, and manhole steps and ladders, channel inserts, pulling eyes, and electrical grounding.

Utility Structures shall conform to the applicable provisions of Section 51 of the Standard Specifications and these Special Provisions.

SUBMITTALS. When not indicated on the Contract Drawings in sufficient detail or definition, submit detailed drawings of cast-in-place and precast concrete utility structures and related metal work. Submit manufacturer's product data for standard manufactured precast concrete utility boxes and structures and for metal gratings and covers and other related miscellaneous metal items. Submit certification or other acceptable evidence that covers and grates to be provided for roadways and parking areas meet proof testing requirements for H20 loadings in accordance with Caltrans Bridge Design Specifications Manual, Section 3.

MATERIALS. Portland Cement shall be ASTM C150, Type II, low alkali.

Admixtures shall be (if used) Air Entrainment: ASTM C260. Provide six percent air entrainment, plus or minus one percent. Pozzolan: ASTM C618, Class N. Provide pozzolan of 10 percent by weight of the cement content.

Aggregates shall be ASTM C33, fine aggregate and Size No. 67 (3/4 inch maximum size) coarse aggregate.

Mix Design shall be Class 3000 minimum. Maximum water-cement plus pozzolan ratio: 0.45. Maximum slump: Four inches.

Storm Drain replacement pipe shall conform to Section 65 of the Standard Specifications and shall be RCP Class III.

MATERIALS (PRECAST). The Contractor may provide precast concrete structures which conform to the general configuration, capacities, and inverts indicated. Provide fine and coarse aggregates conforming to ASTM C33, in size commensurate with structure and reinforcement clearances. Class 3000 minimum Concrete may be polymer or latex modified to achieve higher strengths and denser concrete. Concrete shall not deteriorate from chemical attack of sanitary waste. Precast covers shall have the utility identification, such as "PG&E Gas Valve," stamped into the cover. The Engineer shall perform such inspections and tests as required to verify compliance with these Specifications. Furnish samples of materials and their handling as needed by the Engineer for analyses of materials.

MATERIALS (METAL COVERS, GRATES, AND INLETS). Metal used in manufacture of castings shall conform to ASTM A48, Class 35B for Gray Iron, or ASTM A536, Grade 65-45-12 for Ductile Iron. Castings shall be of uniform quality, free from blowholes, shrinkage, distortion or other defects. Castings shall be smooth and cleaned by shot blasting. Minimum tensile strength shall be 35,000 psi. Castings shall be manufactured true to pattern; component parts shall fit together in a satisfactory manner. Round frames and covers shall have continuously machined bearing surfaces to prevent rocking and rattling. Covers shall be of a type that overlaps box edges. Where castings will be subjected to loads of H20 or greater, as indicated, provide ductile iron castings.

<u>Manhole Covers</u>. Provide cast, manufactured manhole covers and frames with heavy duty solid cover (lid) or vented cover (lid) as indicated. Covers shall be embossed or engraved with nonslip diamond or square cross-hatched pattern. Provide covers with embossed or engraved word identification, as indicated or appropriate, for the enclosed or underground utility.

<u>Grates</u>. Cast Ferrous Grates: Grates for area drains and catch basins shall be heavy duty, bicycle safe inlet grates and frames of size and configuration indicated. Grates in roadways and parking areas shall withstand H20 loadings when proof-tested in accordance with Caltrans Bridge Design Specifications Manual, Section 3.

<u>Curb and Gutter Inlets</u>. Provide cast, manufactured curb inlet frame, grate, and curb box of size and configuration indicated. Curb and gutter inlets shall conform to the contour and profile of the concrete curb and gutter. Grates shall be heavy duty and bicycle safe and shall withstand H20 loading.

MORTAR. Cement mortar for the sealing of openings for pipe penetrations, for cementing of joints of component parts of precast structures, for providing of flow characteristics for the bottoms of drainage structures, and other features as indicated shall conform with the California Building Code, Chapter 21, Type S (without Lime), with a minimum compressive strength at 28 days of 1,800 psi. Mortar shall comply with applicable requirements of ASTM C270, including measurement, mixing, proportioning and water retention. Ten percent by volume of the cement content of the mortar shall be fly ash or pozzolanic material confirming with ASTM C618. Use mortar within 90 minutes after mixing. Discard mortar which has been mixed longer or which has begun to set. Retempering of mortar will not be permitted.

INSTALLATION. Construct manholes, junction chambers, catch basins, curb and gutter inlets, trench drains, culverts, headwalls, wingwalls, pull boxes, utility boxes and vaults, and related utility structures in connection with the installation of pipe, conduits, ductbanks, and utility trenches, as indicated. Provide formwork, steel reinforcement, and concrete in accordance with applicable requirements.

Precast Concrete Structures: Install as indicated. Comply with applicable requirements of ASTM C891. Provide such appurtenances and installation accessories, including cement mortar and sealants, as required for a complete installation.

Metal Components: Install manhole covers, grates and frames, curb and gutter inlets, metal steps, ladders, channel inserts, pulling eyes, and electrical grounding rods as indicated and in accordance with the respective manufacturer's instructions. Covers and grates in roadways, parking areas, and concrete walks shall be installed flush with adjacent, abutting pavement.

MEASUREMENT AND PAYMENT. The Contract unit price paid for various utility structure items shall include full compensation for furnishing all the labor, materials, tools, equipment, incidentals, for doing all the work required of the various bid items to install utility structures complete in place, as shown on the plans, as specified in the Standard Specifications, these city special provisions, and directed by the Engineer, and no additional compensation will be allowed.

7-18.01 EARTHWORK

GENERAL. Specifications for the excavation, filling, recompacting, grading and disposal of excess material covering bid Items 3f amd 3g. Earthwork shall conform to the applicable provisions of Section 19 of the Standard Specifications and these special provisions.

COMPACTION. The degree of compaction is specified as percent compaction. Maximum densities refer to the maximum laboratory dry soil densities obtainable at optimum moisture content as determined by ASTM D1557. Percent compaction (relative compaction) is the ratio of the measured field dry density to the laboratory maximum dry density.

SUBMITTALS. Submit certification regarding the following: Fill materials and source of concrete and aggregate for approval; Test Reports: Gradation (ASTM C136), Density-In-Place (ASTM D2922)

MATERIALS. Class 2 aggregate base for subsequent backfill and/or pavement base to be ¾ inches maximum Class 2 aggregate base conforming to Caltrans, Section 26

EXECUTION. Unless otherwise specified, surplus excavated material shall be disposed of offsite in accordance with applicable ordinances and environment requirements at the expense of the Contractor. When hauling is down over highways or city streets, loads shall be trimmed and the vehicle shelf areas shall be cleaned after each loading.Loads shall be watered after trimming to eliminate dust.

Subgrade shall be compacted to 90% RC, 12" in depth prior to placing base material.

Finish surfaces shall be smooth, compacted and free from irregularities. The degree of finish shall be that normally obtainable with a blade-grader. Finish grades shall be as specified on the plans, except where a local change in elevation is required to match existing conditions, or to ensure proper drainage. When the work is at an intermediate stage of completion, lines and grades shall be as specified within 0.5 foot to provide adequate drainage.

Fill material shall be placed in horizontal layers and compacted with power operated tampers, rollers, idlers, or vibratory equipment. Material type, maximum layer depth, relative compaction, and general application are specified in Table A, below. Unless otherwise specified, fill classes shall be used where specified in Table A under General Application.

TABLE A: FILL CLASSIFICATION			
Material Type	Maximum Uncompressed Layer Depth (Inches)	Minimum Relative Compaction (Precent)	General Application
Aggregate Base	8"	95%	Roadway Grades

MEASUREMENT AND PAYMENT. The Contract price paid for earthwork shall be included in the various items of earthwork. Full compensation for furnishing all the labor, materials, tools, equipment, incidentals, for doing all the work required of the various bid items for earthwork complete in place, as shown on the

plans, as specified in the Standard Specifications, these city special provisions, and directed by the Engineer, and no additional compensation will be allowed.

7-19.01 CLASS 2 AGGREGATE BASE, DRAINAGE

Aggregate base shall be Class 2 and shall conform to the provisions in Section 26, "Aggregate Bases," and compaction shall conform to Section 26-1.05 of the Standard Specifications and these Special Provisions.

Aggregate base shall be used for trench backfill as shown on the plans.

The grading of the material shall conform to the 3/4-inch, maximum, specified in Section 26-1.02A, "Class 2 Aggregate Base," of the Standard Specifications.

PAYMENT

Compensation for providing and placing Class 2 Aggregate Base shall be considered as included in the contract prices paid for the various drainage facilities and no additional payment will be made.

SECTION 7-20.01 LANDSCAPE SITE CONCRETE

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Provide Portland cement concrete site work complete, including the following principal items:
 - 1. Walks and pavements, including aggregate bases.
 - 2. Footings for posts and structures.
- B. Related requirements specified elsewhere include:
 - 1. Section 7-17.02, Earthwork
 - 2. Section 7-17.01, Utility Structures.
 - 3. Section 7-11.02. Concrete Finish Work

1.2 QUALITY ASSURANCE

- A. Reference and Standards
 - 1. Perform work in accordance with all applicable laws, codes and regulations required by the City of Sausalito.
 - Reference to "Standard Specifications" shall mean the current Standard Specifications of the State of California, Business and Transportation Agency, Department of Transportation, CALTRANS.
 - 3. The American Concrete Institute (ACI): "Manual of Concrete Practice," Parts 1, 2 and 3.
 - 4. The American Concrete Institute (ACI): "Recommended Practice for Concrete Formwork" (ACI 347R)
 - 5. The American Concrete Institute (ACI): "Hot Weather Concreting", 305R-99
 - 6. The American Concrete Institute (ACI): Guide for Concrete Slab construction, 302.1R-07
 - 7. The American Concrete Institute (ACI): "Standard Specification for Cold Weather Concreting, 306.1-90 (R2002)
 - 8. United States Voluntary Product Standard for Construction & Industrial Plywood (PS 1-95).
 - 9. American Plywood Association's "Guide to Plywood Grades" (APA).
 - 10. West Coast Lumber Inspection Bureau's "Standard Grading Rules No. 17" (WCLIB)
 - 11. Concrete Reinforcing Steel Institute (CRSI): "Manual of Standard Practice" and "Recommended Practice for Placing Reinforcing Bars".
 - 12. American Welding Society: AWS A5.1 and AWS D1.1 and D1.2.
 - 13. Americans with Disabilities Act (ADA), Federal ADA/State of California Title 24 Standards.
 - 14. California Code of Regulations, Title 24, 2007 Edition, also known as California Building Code (CBC).

B. Stipulations

- 1. Finish Surface Tolerance: 1/4-inch maximum variation in 10 feet.
- 3. At no point shall paving surface fail to drain.
- 4. Finish Concrete Surface Slip Resistance: Shall have a minimum slip resistance coefficient of 0.65 on concrete pavement with less than 5% slope and 0.8 on concrete pavement with more than 5% slope.
- 5. Walls retaining soil that retain 30 inches or more of soil shall include a subsurface drain behind wall per Section 68 of the Standard Specifications and as accepted by the Owner's Representative.
- 6. Concrete slabs shall be poured in a checkerboard fashion between expansion joints, allowing seven days curing time between pours on the other side of the expansion joints.
- C. Conform to ACI 318, Section 5.13 during hot weather and to ACI 318, Section 5.12 during cold weather.
- D. Requirements of ACI 318 shall govern work, materials and equipment related to this Section; specifications herein set minimum results required, and references to procedures are intended to establish minimal guides.
- E. The Contractor shall be responsible for quality of concrete in place and shall bear burden of proof that concrete meets minimum requirements. Contractor shall confirm that site soils do not contain elevated levels of sulfate that would require sulfate resistant concrete as outlined in Table 4.3.1 of the ACI 318 Building Code or Table 19B-A-3 of the Uniform Building Code. If the site soils contain elevated levels of sulfate, it is the Contractor's responsibility to request mixes that meet the aforementioned requirements.
- F. Placing of concrete by means of pumping will be an acceptable method of placement providing that the Contractor can demonstrate that:
 - 1. Specified concrete strengths will be met.
 - 2. Equipment has a record of satisfactory performance under similar conditions and using a similar mix.
 - 3. Trial batches have been successfully made.
- G. Installer Qualifications: Concrete work shall be by firm with 5 years experience with work of similar scope and quality.
- I. Formwork Design Criteria: Formwork shall conform to ACI 318, Section 6.1 and CBC Section 1906A.
 - 1. Formwork:
 - a. Shall prevent leakage or washing out of cement mortar.
 - b. Shall resist spread, shifting, and settling.
 - Shall reproduce accurately required lines, grades and surfaces within tolerances specified.
 - 2. Safety: The Contractor shall be responsible for adequate strength and safety of all formwork including falsework and shoring.
 - 3. Formwork allowable tolerances: Formwork shall produce concrete within tolerance limits recommended in ACI 318, Section 6.1, unless otherwise noted.

1.3 TESTS

- A. Per Caltrans Standard Specifications, Section 6-3.02 Testing By Contractor.
- B. Should tests show that concrete is below specified strength, Contractor shall remove all such concrete, as directed by the Owner. Full cost of removal of low strength concrete, its replacement with concrete of proper specified strength and testing, shall be borne by Contractor.

1.4 COORDINATION: Coordinate items of other trades. Contractor shall be responsible for the proper installation of all accessories embedded in the concrete and for the provision of holes, openings, etc., necessary to the execution of the work of the trades.

1.5 SUBMITTALS

- Samples of all materials under this Division shall be supplied for testing as requested by the Owner.
- B. Submit color additive manufacturer's color chart and sample chip(s), indicate color additive number and required dosage rate.
- C. Submit two full-scale mock-up (minimum 3' by 3') sample panels of all concrete finishes and color. The samples shall include curing compound if any is to be used, and include an expansion joint and a score joint, as indicated on the Drawings. Approved samples shall be kept at the job site to serve as a prerequisite for all finishes until acceptance of the Work.
- D. Submit one pint samples of aggregate for exposed aggregate finished concrete paving in color range as specified.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Supply ready mixed concrete throughout. Batch, mix and transport in accordance with ASTM C-94, "Specifications for Ready Mixed Concrete."
 - B. Mix and deliver concrete in quantities that will permit immediate use only.
 - C. Indiscriminate addition of water for any reason will be cause for rejection of the load.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS

- A. Cement and aggregates shall have proven history of successful use with one another. Sources of cement and aggregate shall remain unchanged throughout work.
 - B. Mixes:
 - 1. Ready-mixed concrete shall meet requirements of ASTM C94.
 - The Contractor shall perform tests or assemble the necessary data indicating conformance with specifications.
 - 3. For each mix, submit data showing that proposed mix will attain the required strength in accordance with requirements of CBC Section 1905A.3.
 - 4. Instruct Laboratory to base mix design on use of materials specified and approved by the Owner's Representative.
 - 5. Mix design shall include compression strength test reports per CBC Section 1905A.6.3.
 - 6. Insure mix designs will produce concrete to strengths specified and of uniform density without segregation.
 - 7. If mix yield exceeds 1-cubic yard, modify mix design to no more than one cubic yard, without changing cement content.
 - 8. Introduction of calcium chloride will not be permitted.
 - 9. Mix design shall be in accordance with CBC Section 1905A.3.

2.2 FORMWORK MATERIALS

A. Panel or board forms for Exposed Finish Concrete: Minimum 5/8-inch thick exterior grade plywood with sealed edges, PS 1 grade Plyform Class I and II B-B Exterior.

- B. For Exposed Smooth Form-finished Concrete: Use Medium Density (or better) Overlaid Concrete Form Exterior (MDO), to provide continuous straight, smooth, exposed surfaces without grain patterns. Furnish in largest practicable sizes to minimize number of joints and to conform to a joint system as approved by Owner's Representative.
 - C. Curbs may be formed with approved metal form systems.
- D. Chamfer Strips: Burke Concrete Accessories, PVC type CSF ½-inch or as otherwise shown, all exposed corners.
- E. Form Release Agent: Must not stain or otherwise adversely affect architectural concrete surfaces. "Nox-Crete Form Coating"; Industrial Synthetics Corp.'s "Synthex"; or equal.
 - F. Form Ties: Burke "Penta-Tie," or equal, cone and rod type with 1-inch break-back.

2.3 REINFORCING MATERIALS

- A. Bar Reinforcement: ASTM A615.
 - 1. #3 and smaller: Grade 40.
 - 2. #4 and larger: Grade 60.
- B. Wire Fabric Reinforcement: ASTM A185. Size (6" by 6" / W1.4 By W1.4 (#10 ga. by #10 ga.)
- C. Recycled content shall be a minimum of 75% recycled post consumer steel.

2.4 CONCRETE MATERIALS

- Portland Cement: ASTM C150, Type II. Use one brand of cement throughout project.
- B. Fly Ash: ASTM C618,08A.
- C. Aggregates: ASTM C33, materials from established sources with proven history of successful use in producing concrete with minimum shrinkage.
- D. Per City of Sausalito standards, aggregate for seeded aggregate finish paving shall consist of 3/8" smooth, hard, fine-grained clean, river run pea gravel mix aggregate. Submit samples for approval as specified herein.
- E. Water: Clear and potable, free from deleterious impurities.

F. Admixtures:

- 1. Admixtures are optional; however, a water reducer or plasticizing admixture shall be included in the concrete mix and it must be compatible with color pigments where color pigments are required. Any proposed admixture shall comply with ASTM C494.
- 2. Where more than one admixture is proposed, include statement from admixture manufacturer indicating that admixtures proposed for use are compatible, such that desirable effects of each admixture will be realized.
- Accelerating admixtures and admixtures containing more than 0.05 percent chloride ions are not permitted. If an accelerator is used, it shall be an non-chloride accelerator.
- 4. Liquid admixtures shall be considered part of the total water.

2.4 CONCRETE MIXES

A. Concrete mixes shall be approved and shall be in accordance with Caltrans Standard Specifications Section 90. Unless otherwise noted, mix shall contain not less than 550 pounds of cementitious

- material per cubic yard (Class "2", 3,000 psi,) Type II Portland cement and 3/4-inch maximum aggregate.
- B. Cementitious Material: An intimate blend of type II Portland cement and fly ash. Cementitious material shall include 15% maximum fly ash by weight unless the strength is specified to be achieved on 7 or 14 days.
- C. Lampblack: As supplied by batch plant for plain non-colored concrete work. Concrete for non-colored pavements shall be darkened by the addition of lampblack at the mixer. The proportion of lampblack or other approved colorant shall be that required to properly darken the concrete to reduce glare, and shall be subject to the approval of the Owner's Representative. Provide ¾ pound of lampblack per cubic yard of concrete unless required otherwise.

2.5 SPECIAL AGGREGATE FOR EXPOSED AGGREGATE FINISHES

A. Aggregate for exposed aggregate finished concrete paving shall be smooth, river-washed hard durable aggregate in a color range as accepted by the Owner's Representative and per City standards.

2.6 ANCILLARY MATERIALS

- A. Aggregate Base: Class II aggregate base conforming to Section 26 of the Standard Specifications and Subgrade Specifications herein.
- B. Expansion Joint Material
 - 1. Fiber Expansion Joint: A non-extruding resilient filler, saturated with high quality bituminous materials having preserving characteristics. Conform to ASTM-D1751-04.
 - 2.Caulked Expansion Joint: "Sonolastic Sealant Two-Part" as manufactured by Sonneborn-Contech, Building Products Division, Contech, Inc.; or approved equal. Joint caps or bond breaker tape to be as recommended by sealant manufacturer. Color shall match adjacent paving.
- C. Dampproofing: Per CALTRANS Standard Specifications, Section 54.
- D. Curing Materials for non-colored Concrete:
 - 1. Waterproof Paper: ASTM C171, Type 1.1.1.1, regular. Same as Sisalkraft Division of St. Regis Paper Co.'s "Orange Label", or equivalent.
 - 2. Impervious sheeting: 4 mil white polyethylene laminated to 10 oz. Burlap, ASTM C171, Type 1.1.3. fungus-resistant.
 - 3. Curing Compound: ASTM C309. Product: Sealtight 1100 Clear-Series by WR Meadows, Burke Azua Resin Cure by Edocol, or equal that will not discolor concrete or affect bonding of other finishes applied thereafter, and which restricts loss of water to not more than 0.500 grams per sq. centimeter of surface when tested per ASTM C156, "Test Method for Water Retention by Concrete Curing Materials."
- E. Grout: Premixed high strength non-shrink grout requiring only addition of water at the site. Burke's "Non-Ferrous, Non-Shrink Grout"; Master Builders "Masterflow 928 Grout", or equal.
- F. Patching Mortar: Mix in proportions by volume of one part cement to two parts fine sand. Provide integrally colored patching mortar as required to match color and finish of colored concrete surfaces.
- G. Abrasive Grains: Fused aluminum oxide granules or crushed emery containing not less than 50% aluminum oxide. Factory graded, rustproof, nonglazing and unaffected by cleaning materials. Subject to compliance with requirements provide one of the following: Sonneborn-Contech's "Frictex NS"; General Abrasive Co., Inc.'s "Fut-Sure"; The Exolon Co.'s "Exolon Anti-Slip"; or equal.
- 2.7 DETECTABLE WARNING TRUNCATED DOME SURFACE

A. Concrete ADA Compliant Paver shall be 4" x 8" x 2-3/8" integrally colored pavers from 8000 psi concrete, standard color in "River Rock" by Pavestone, Sacramento, CA 530/795-4400; or approved equal.

PART 3 - EXECUTION

3.1 GENERAL REQUIREMENTS

- B. Install all concrete work true to line and grade as indicated on the drawings.
- C. Correct irregularities to the satisfaction of the Owner's Representative.
- D. Plain non-colored, exposed concrete shall contain lampblack, approximately 3/4 pound of lampblack per cubic yard, as accepted by Owner's Representative.
- E. The intent of the Grading Drawings is to provide positive drainage and to maintain slopes on walkways as required by the Americans with Disabilities act and California Title 24 throughout the project site. Notify the Owner's Representative immediately of any discrepancies between the Drawings and actual field conditions and/or conflicts between the desing and Code requirements.

3.2 PREPARATION

- A. Provide subgrade preparation and the base material installation complete, including clearing, grading, excavation, and filling and dewatering. Take every precaution to obtain a subgrade of uniform bearing power compacted to a minimum of 95% relative compaction as determined by the ASTM D1557 laboratory test procedure and in Sections 19 and 20 of the Caltrans Standard Specifications.
- B. Subgrade shall be kept moist and shall not be allowed to dry out before placement of concrete. Place no material on muddy subgrade.
- C. Aggregate base, where indicated, shall be placed and compacted in conformance with Caltrans Standard Specifications 26-1.04 and 26-1.05.
- D. Obtain approval of subgrade from Owner's Representative prior to placing steel and concrete.

3.3 FORMS

- A. Forms shall be constructed in accordance with ACI 318, Section 6.1 and shall be of sufficient strength and sufficiently tight to prevent visible distortion or leakage of mortar and fines.
- B. Forms for exposed surfaces shall be constructed to protect intended finish. Deflection of facing material between studs shall not exceed 0.0025 of the span. Facing material and pattern of joints shall be as approved by the Owner's Representative.
- C. For vertical surface of wall footings below grade, clean cut trench may be used in lieu of form if character of soil will permit installation without sluffing and width of concrete is increased at least 1 inch beyond indicated dimension of each face poured against earth.
- D. Curb and pavement edge forms shall extend full depth of concrete and shall be coordinated with installation of planting root barriers where required. Curves shall be formed with flexible metal or wood made up of thin laminations. Curve forms shall extend one stake space straight beyond tangent point. Where curbs and pavement are adjacent to areas to receive root barriers, provide smooth uniform edges. Remove any excess concrete as required to allow installation of root barriers without gaps between curbs and/or pavement and barriers.
- E. Maintain forms within the following tolerances.

- 1. Top of Form: Plus or minus 1/8 inch in 10 feet and no abrupt variations; at required elevation to plus 3/8 inch.
- 2. Face of Form: Plus or minus 1/4 inch in 10 feet longitudinal and no abrupt variations; perpendicular to surface plus or minus 1/8 inch.
- F. Form Ties: Align form ties as accepted by Owner's Representative. Obtain approval of form work from Owner's Representative prior to placing concrete.
- G. Forms may be reused upon cleaning and coating with parting compound to ensure separation from concrete without damage.

3.4 REINFORCEMENT

- A. All concrete shall be unreinforced unless specifically noted to be "reinforced."
- B. Fabricate and place reinforcement as indicated on the Drawings and in accordance with ACI "Detailing Manual" SP-66. No reinforcement shall be placed prior to distribution of the approved shop drawings.
- C. Secure reinforcement in position by suitable supports and by wiring at intersections with tie wire. Supports shall be of sufficient number and strength to resist crushing or displacement under full load. Metal shall not extend to surface of concrete.
- D. At time of placing concrete, reinforcing shall be free of excessive rust, mill scale, or other bond reducing matter. Immediately before placing concrete, check and adjust position, support and anchorage.

3.5 CLEANING, PATCHING AND DEFECTIVE WORK

- A. Where concrete is under strength, out of line, level or plumb, or shows objectionable cracks, honeycombing, rock pockets, voids, spalling, exposed reinforcement, signs of freezing or is otherwise defective, and , in the Owner's Representative's judgment, these defects impair proper strength or appearance of the work, the Owner's Representative will require its removal and replacement at the Contractor's expense.
- B. Immediately after stripping and before concrete is thoroughly dry, patch minor defects, form-tie holes, honeycombed areas, etc., with patching mortar colored and textured to match concrete. Remove ledges and bulges.
- C. Compact mortar into place and neatly file defective surfaces to produce level, true planes. After initial set, dress surfaces of patches mechanically or manually to obtain same texture as surrounding surfaces.

D. Rock Pockets:

- 1. Cut out to full solid surface and form key.
- 2. Thoroughly wet before casting mortar.
- 3. Where the Owner's Representative deems rock pocket too large for satisfactory mortar patching as described, cut out defective section to solid surface, and replace.

E. Cleaning

 Insure removal of bituminous materials, form release agents, bond breakers, curing compounds, if permitted and other materials employed in work of concreting that would otherwise prevent proper application of sealants, liquid waterproofing, and other delayed finishes and treatments. 2. Where cleaning is required, take care not to damage surrounding surfaces or leave residue from cleaning agents.

3.6 MIXING AND PLACING CONCRETE

- Conform to applicable requirements set forth in Caltrans Standard Specifications Section 51-1.09 and Section 90.
- B. Mixes for integrally colored concrete shall have pigment added early enough to ensure complete dispersal and uniform color, but not less than 15 minutes before placing.

3.7 JOINTS AND GROOVES

A. Plane of joints shall be perpendicular to surface. Where new pavements join existing, joints shall align.

B. Sawn Contraction Joints:

- 1. General: Provide where shown. Saw cut straight, true, and uniform, 1/8 –inch wide and not less than 1/4 of slab thickness in depth, unless otherwise noted. Cut with a power saw fitted with an abrasive or diamond blade.
- 2. Commence saw cutting operations after concrete has cured long enough to resist damage by the saw cutting operations and early enough to avoid random contraction cracks.
- 3. Contractor shall coordinate form removal and sequencing of adjacent concrete placement to minimize unnecessary saw cutting of adjacent surfaces.
- 4. Contractor shall plan for the use of varying types of saw cutting apparatus to provide acceptable finishes in areas limited in accessibility.
- 5. Fill saw cut over-runs and inadvertent saw cutting of adjacent surfaces with cement mortar to match color and finish of sawn pavement.
- 6. I joint pattern not shown, provide joints not exceeding 15 feet in either direction and located to conform to column centerlines, wall corners, etc. as accepted by Owner's Representative.

C. Tooled Joints / Score Joints

- 1. Form joints in fresh concrete using a jointer to cut the groove so that a smooth, uniform impression is obtained to 1/4 depth of pavement unless shown otherwise.
- 2. All joints shall be struck before and after brooming. Tool concrete both sides of joint.
- D. Expansion Joints and Edging: Provided at the location and intervals as shown on the drawings, and at all locations where concrete paving abuts buildings, curbs or other structures, and not more than 18 feet on center. Specified and shown joint material shall be placed with top edge 1/8" below the paved surface, and shall be securely held in place to prevent movement. Joint and other edges shall be formed in the fresh concrete using an edging tool to provide a smooth uniform impression. All edges shall be struck before and after brooming.
- E. Sealed Joints: After the curing period, expansion joints shall be carefully cleaned and filled with approved joint sealant to just below adjacent paved surface in such a manner as to avoid spilling on paved surfaces or overflowing from joint.

3.8 FINISHING

A. Flatwork and Curbs

a. Float Finish (typical preliminary finishing for slabs to receive other finishes): The surface of the slab shall be screeded and all surface water and laitance removed. Floating shall be started as soon as the screeded surface has stiffened sufficiently. Floating shall be performed by hand using a wood float and shall be the minimum necessary to produce a relatively smooth, level, even-textured surface.

- b. Heavy Broom Finish (typical for paving bands): After the slab has been float finished as described above, the surface shall be uniformly directional textured by coarse stable broom to match approved sample.
- c. Medium Broom Finish: Obtain by drawing a stiff bristled broom across a floated finish for a nonslip surface. Perform brooming while concrete is still wet enough to receive broom marks to match approved sample. Direction of brooming to be perpendicular to direction of work or as otherwise shown on the drawings.
- d. Brush Finish (typical for curbs): After the front form is removed, exposed surface shall be troweled smooth and then given a uniform light texture with fine brush parallel to line of curb, to match approved sample.
- e. Sand Finish: Washed and finish shall be achieved by rubbing with bristle brush and flooding surface so that concrete fines are exposed slightly and resultant surface is similar to medium grit sandpaper.
- f. Seeded Aggregate Finish: Evenly distribute specified aggregate over the surface with minimum surface voids. After the aggregate is thoroughly embedded, the surface shall be hand floated so that all aggregate is entirely embedded just beneath the surface. As soon as the concrete has achieved a firm set, begin simultaneously brushing and hosing with water so as to obtain a clean, uniform surface with no stone exposed more than 1/16". Care shall be taken so as to not dislodge or unevenly expose the seeded aggregate. Do no use a pressurized nozzle in washing the surface and avoid direct hosing of the surface.
- g. Washed Exposed Aggregate Finish:
 - Place concrete using specified aggregate/concrete mix, screed tamp and bull float to desired elevation. A compatible water-reducing retarding admixture may be added in warm weather if desired. Apply surface retardant as soon as screeding and floating is complete.
 - 2) If concrete is pumped into forms, lightly top seed surface of concrete with additional 3/8" size aggregate as required to match approved sample.
 - 3) Cover slab with acceptable curing cover to prevent drying out. If fog cure is employed, start no sooner than recommended by retardant manufacturer.
 - 4) Check retarded surface at regular intervals to determine optimum time for removing retarded surface mortar.
 - 5) Broom and wash aggregate surface to remove mortar to its optimum (approximately 1/8" to 1/16" at surface stone depth) to match sample.
 - 6) After aggregate is exposed, proceed with proper curing.
- h. Steel Trowel Finish: After surface water disappears and floated surfaces sufficiently hardened, steel trowel and retrowel to smooth surface. After concrete has set enough to ring trowel, retrowel to a smooth uniform finish free of trowel marks or other blemishes. Avoid excessive troweling that produces burnished areas.
- i. Sandblast Finish: Perform in as continuous an operation as possible, utilizing the same work crew to maintain continuity of finish.
 - i. Use an abrasive grit of the proper type and gradation to expose the aggregate and surrounding matrix surfaces to match sample panel, as follows:

1. Light Cut: approximately 1/16" depth

Medium Cut: approximately 1/8" to 3/16" depth
 Heavy cut: approximately 1/4" to 5/16" depth

- ii. Blast corners and edge of patterns carefully, using backup boards in order to maintain a uniform corner of edge line.
- iii. Use same nozzle, nozzle pressure and blasting technique as used for sample panel.
- iv. Maintain control of abrasive grit and concrete dust in each area of blasting. Clean up and remove all expended abrasive grit, concrete dust and debris at the end of each day of blasting operations.
- j. Salt Finish: Screed, tamp and float concrete under normal installation procedures. While concrete is still in a plastic state, evenly dispense coarse grain rock salt over surface at the rate of 10 lbs. per 150 square feet to match approved sample. Carefully tamp and float in rock salt to depress it into concrete, but do not cover the salt grains. Allow concrete to set and cure thoroughly.
- k. Abrasive Finish: tamp and float concrete under normal installation procedures. While concrete is still in a plastic state, evenly dispense specified Abrasive Grains over surface at the rate of 1/4 lb. per square foot. Care-fully tamp and float in Abrasive Grains to depress grains into concrete, but do not cover grains. Allow concrete to set and cure thoroughly under normal procedure.

3.10 DETECTABLE WARNING TRUNCATED DOME SURFACE

A. Concrete Truncated Dome Paver: Install pavers as shown and as recommended by manufacturer.

3.11 DAMPPROOFING

Mop apply one heavy coat of asphalt to a minus 2 inches below finished soil grade on soil side of retaining walls and planters.

3.12 CURING

- A. Cure non-colored exposed concrete in accordance with Caltrans Standard Specifications Section 90-7.
- B. When applying Curing Compound, apply after initial set of fresh concrete when bleed water has evaporated from surface using a "Hudson-type" airless sprayer in accordance with manufacturer's specifications.
- C. Only water or curing compounds which impart no permanent color or gloss shall be used for curing concrete.

MEASUREMENT AND PAYMENT

Compensation for conforming to this provisions shall be considered as included in the square foot unit price for truncated dome pavers, within the square foot or linear foot unit price for Sidewalk, curb and gutter, or within the various items for post foundation cement. Full compensation for furnishing all the labor, materials, tools, equipment, incidentals, for doing all the work required of the various bid items for site concrete, complete in place, as shown on the plans, as specified in the Standard Specifications, these city special provisions, and directed by the Engineer, and no additional compensation will be allowed

^{***} END OF SECTION ***

7-21.01 IRRIGATION

PART 1- GENERAL

1.1 DESCRIPTION

- A. The work in this section consists of furnishing, layout and installing an irrigation system.
- B. Related work specified elsewhere includes:
 - 1. Section 7-17.02 EARTHWORK
 - 2. Section 7-20.01 PLANTING

1.2 QUALITY ASSURANCE

- A. Manufacturer's Specifications: Follow manufacturer's current printed specifications and drawings in all cases where the manufacturers of articles used in the Contract furnish directions covering points not specified or shown in the drawings.
- B. Ordinances and Regulations: All local, municipal and state laws, codes and regulations governing or relating to all portions of this work are hereby incorporated into and made a part of these Specifications. Anything contained in these Specifications shall not be construed to conflict with any of the above codes, regulations or requirements of the same. However, when these Specifications and Drawings call for or describe materials, workmanship or construction of a better quality, higher standard, or larger size than is required by the above codes and regulations, the provisions of these Specifications and Drawings shall take precedence. Furnish without extra charge additional materials and labor required to comply with above rules and regulations.
- C. References, Codes and Standards:
 - 1. AB 325 State of California Model Water Efficient Landscape Ordinance.
 - 2. Water Use Classification of Landscape Species (WUCOLS).
 - 3. American Society of Irrigation Consultants (ASIC) Design Guidelines.
 - California Landscape Standards, California Landscape Contractors Association, (CLCA) Sacramento, California.
 - 5. CAL-OSHA, title 8, Subchapter 4-Construction Safety Orders and Subchapter 7-General Industry Safety Orders.
 - 6. California Electric Code.
 - 7. California Plumbing Code (UPC) published by the Association of Western Plumbing Officials.
 - 8. NFPA 24, Section 10.4, Depth of Cover.
 - 9. Underwriters Laboratories (UL): Electrical wiring, controls, motors and devices, UL listed and so labeled.
 - 10. American Society of Testing Materials (ASTM).
- D. Furnish without extra charge any additional material and labor when required by the compliance with all above mentioned codes and regulations, though the work be not mentioned in these specifications or shown on the drawings.
- E. Reclaimed Water: Contact water company supplying reclaimed water prior to the commencement of installing the irrigation system to coordinate inspection of the work and to verify all codes and regulations regarding use of reclaimed water. Provide all required signage and other warnings.
- F. Experience: Assign a full-time employee to the job as supervisor for the duration of the Contract with a certified landscape technician, irrigation certification through CLCA or minimum of four (4) years experience in landscape irrigation installation.
- G. Labor Force: Provide a landscape installation and maintenance force thoroughly familiar with, and trained in, the work to be accomplished to perform the task in a competent, efficient manner acceptable to the Owner's Representative.
- H. Explanation of Drawings:

- 1. Due to the scale of the Drawings, it is not possible to indicate all offsets, fittings, sleeves, etc., which may be required. Carefully investigate the conditions affected all of the work and plan accordingly, and furnish all required fittings. Install system in such a manner to avoid conflicts with planting, utilities and architectural features.
- 2. Do not install the irrigation system as shown on the Drawings when it is obvious in the field that obstructions, grade differences or discrepancies in arc dimensions exist that might not have been considered in engineering. Bring such obstruction or differences to the attention of the Owner's Representative. In the event this notification is not given, the Contractor shall assume full responsibility for any revision necessary.
- I. Trench Interference with Tree Root Systems:
 - 1. Review with Owner's Representative where trenching may interfere with existing root systems and propose alternate trench locations to avoid or reduce damage to root systems.

1.3 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

- A. The Drawings show, if applicable, existing above and below grade structures and utilities that are known to the Owner. Locate known existing installations before proceeding with construction operations that may cause damage to such installations. Existing installations shall be kept in service where possible and damage to them shall be repaired with no adjustment of Contract Sum. Verify with Owner if As Built drawings are available.
- B. If other structures or utilities are encountered, request Owner's Representative to provide direction on how to proceed with the Work. If a structure or utility is damaged, take appropriate action to ensure the safety of persons and property.
- C. Verify location of existing irrigation systems to be removed and replaced. Maintain any existing systems as required by the Drawings and Specifications, including temporary retention of systems necessary to maintain existing on site and adjacent planting.

1.4 SUBMITTALS

A. Materials List:

- Submit required copies of the cut sheets and a complete list of materials proposed for installation, along with any proposed substitutions clearly identified and obtain the Owner Representative's written approval thereof before proceeding. Use only accepted materials and items of equipment.
- 2. List all materials by manufacturer's name and model number.

B. Substitutions:

- 1. If the Contractor desires to substitute a product, he shall list each item and note it as a "substitution" and provide the following information:
 - a. Descriptive information describing its similarities to the specified product.
- 2. If the product is approved and, in the opinion of the Owner's Representative, the substituted product does not perform as well as the specified product, the Contractor shall replace it with the specified product at no additional cost to the Owner.

C. Manuals:

- 1. Prior to the final acceptance of the irrigation system, furnish three (3) individually bound Operation and Maintenance Manuals to the Owner's Representative for use by the Owner. The manuals shall contain complete enlarged drawings, diagrams and spare parts lists of all equipment installed showing manufacturer's name and address. In addition, each Service Manual shall contain the following:
 - a. Index sheet indicating the Contractor's name, address and phone number.
 - b. Copies of equipment warranties and certificates.
 - c. List of equipment with names, addresses and telephone numbers of all local manufacturer representatives.

- d. Complete operating and maintenance instructions in sufficient detail to permit operating personnel to understand, operate and maintain all equipment.
- e. Parts list of all equipment such as controllers, valves, solenoids and heads.

D. Record Drawings:

- 1. Dimension the location of the following items from two (2) permanent points of reference such as building corners, sidewalks, road intersections, etc.:
 - a. Connection to existing water lines/meter.
 - b. Connection to electrical power.
 - c. Gate valves.
 - d. Routing of sprinkler pressure lines (a dimension at least every 100 feet and as required to identify all changes in direction and location).
 - e. Remote control valves.
 - f. Routing of control valves.
 - g. Quick coupling valves.
 - h. All sleeve locations.
 - i. Routing of all control wiring.
 - Include all invert elevations below 12".
- 2. Deliver a reproducible record drawing to the Architect within seven (7) working days before the date of final review. Delivery of the record drawings shall not relieve the Contractor of the responsibility of furnishing required information in the future.

E. Controller Plan:

- 1. Provide one Irrigation Diagram plan in each controller housing. The plan shall show the area controlled by each valve in different colors and for orientation, any major permanent structure such as buildings and roads.
- Charts to be waterproof and hermetically sealed between two pieces of transparent 10 mil thick plastic and installed in each controller on the door as accepted by the Owner's Representative no later than the time of the coverage test of the irrigation system.
- F. Maintenance Material supply the following tools to the Owner:
 - 1. Three (3) sets of specialized tools required for removing, disassembling and adjusting each type of sprinkler, valve or other equipment supplied on this project.
 - 2. Two (2) keys for each type of equipment enclosure.
 - 3. Two (2) keys for each type of automatic controller.
 - Two (2) quick-coupler keys and matching hose swivels for each type of quick-coupling valve installed.
 - 5. All lock keys shall be keyed alike.
- G. Landscape Irrigation Audit: Upon completing the installation of the irrigation system, conduct an irrigation audit prior to beginning the maintenance period. Submit written report, recommended 12-month schedule and estimate of annual water consumption. Include a copy of this report in the Operation and Maintenance Manual.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Furnish and deliver materials in manufacturer's packaging, bearing original legible labeling.
- B. The Contractor is cautioned to exercise care in handling, loading, unloading, and storing PVC pipe and fittings. All PVC pipe shall be transported in a vehicle which allows the length of the pipe to lie flat so as not to subject it to undue bending or concentrated external load at any point. Any section of pipe that has been dented, cracked, or otherwise damaged shall be discarded and, if installed, shall be replaced with new piping.

1.6 SEQUENCING AND SCHEDULING

- A. Acceptance: Do not install main line trenching prior to acceptance by Owner's Representative of rough grades completed under another Section.
- B. Coordination: Coordinate with the work of other sections to insure the following sequence of events:
 - 1. Sleeves and Conduits: Installation of all sleeves and conduits to be located under paving and through walls prior to placement of those materials.
 - 2. Bubbler Heads: Install after placement of tree, but prior to backfill with planter soil mix.
 - 3. On-Structure Equipment: Install piping and risers after waterproofing is accepted.
 - 4. Sprinkler Head in Pots: Install riser and seal the penetration of the pot prior to backfill of pot with drainage materials and planter soil mix.
 - 5. Coordinate work schedule with Owner to avoid disruption of landscape maintenance of existing landscaping.
 - 6. Install piping prior to soil preparation (planting soil amendment installation).

1.7 WARRANTY

- A. In addition to manufacturer's guarantees and warranties, work shall be warranted for one (1) year from date of final acceptance against defects in material, equipment and workmanship. Warranty shall also cover repair of damage to any part of the premises resulting from leaks or other defects in materials, equipment and workmanship to the satisfaction of the Owner.
- B. Include a copy of the warranty form in the Operation and Maintenance Manual.

1.8 OPERATION

- A. Routine: Inspect and adjust all spray heads and control valves including raising or lowering of spray head heights to accommodate plant growth and weather conditions.
- B. Controller: Inspect regularly for power interruption and reset clock as required. Adjust station timing to accommodate changes in plant growth and weather conditions.
- C. System Failure: Perform all repairs within one (1) operating period. Replacements to match removed products and materials in all respects. Report promptly all damage not resulting from Contractor's operations. Repair all damage caused by Contractor at no expense to Owner.
- D. Climate Change: Set and program automatic controllers in response to seasonal requirements and requirements of newly planted materials.

PART 2- PRODUCTS

2.1 PIPE

- A. Pressure Main Line Pipe and Fittings: All PVC fittings shall bear the manufacturer's trademark name, material designation, size, applicable I.P.S. schedule and NSF seal of approval.
- B. All main line pipe shall be solvent welded and shall be schedule 40 unless shown otherwise on the Drawings.
 - 1. PVC Pressure Rated Pipe: ASTM D2241 NSF approved Type I, Grade I, solvent welded PVC with an appropriate standard dimension ratio (S.D.R.).
 - PVC Scheduled Pipe: ASTM D1785 NSF approved, Type I,
 - 3. Grade I, solvent welded PVC.
 - 4. PVC Solvent-weld Fittings: ASTM D2466 Schedule 40, 1-2, II-I NSF approved.
 - 5. Solvent Cement and Primer for PVC solvent-weld pipe and fittings: Type and installation methods prescribed by the manufacturer.

- 6. Connections between Main Lines and RCVs: Schedule 80 PVC (threaded both ends) nipples and fittings unless required otherwise by local jurisdiction.
- 7. Valves 2-inch and larger shall be flanged only.
- Copper pipe shall be Type K or Red Brass where threaded joints are required and Type L otherwise.
- C. All lateral line pipe shall be solvent welded and shall be schedule 40 unless shown otherwise on the Drawings.

2.2 CONTROLLER ENCLOSURES

- A. Type: Use one of the following (unless noted otherwise on the Drawings):
 - 1. Stainless steel, NEMA Type 3 rated, with back panel, padlocking hasp and padlock. See Detail for pedestal construction.
 - 2. Le Meur, (714) 822-5100.
 - 3. "Strong Box" available from John Deere, (800) 347-4272.

2.3 REMOTE CONTROL VALVE: As shown on Drawings and with the following minimum requirements:

- A. Remote control valves shall be those normally manufactured for irrigation systems and shall have a slow, consistent speed of closure through entire closing operation, including last portion. To ensure this, the effective diaphragm working area/valve seating opening ratio must be a minimum 3 to 1.
- B. Shall be mechanically self-cleaning to help prevent diaphragm or solenoid port plugging. To ensure this, the flush rod should be tapered to vary the size of the port opening as the diaphragm raises and lowers, thus allowing trapped material to escape. Rod is to be finished with a serrated surface to help scrub trapped material out. Screens not acceptable.
- C. Shall have removable valve seat so valve can be repaired without removal from irrigation line.
- D. Shall have ability to operate manually without the use of wrenches or special keys.
- E. Shall have one-piece solenoid that attaches directly to valve without shunts or clips that can be lost.
- F. Shall have cross top handle to adjust maximum travel of diaphragm to allow "tuning" of valve and closure.

2.4 BOX FOR REMOTE CONTROL VALVE:

Rectangular plastic valve box with lid - Ametek, Carson, Christy or accepted equal in green color (unless noted otherwise), with non-hinged bolt down lid marked "irrigation". Box body shall have knock outs. Do not saw cut body. Minimum size box as shown on Drawings. Increase box size as required to fit. Valve box lids are to indicate the controller letter and station number of valve as accepted by Owner's Representative. Also refer herein to required polyurethane tag at valve solenoid control wire under Control Wires. Locate the identification in center of the lid. Provide separate box for each valve. Provide H/20 Loading concrete boxes with bolt-down concrete lids for all valves that occur in paved areas.

2.5 CONTROLLER GROUND

- A. Provide each pedestal controller with its own ground rod. Separate the ground rods by a minimum of eight feet. The ground rod shall be an eight foot long by 5/8" diameter U.L. approved copper clad rod or as recommended by controller manufacturer. Install no more than 6" of the ground rod above finish grade. Connect #8 gauge wire with a U.L. approved ground rod clamp to rod and back to ground screw at base of controller with appropriate connector. Make this wire as short as possible, avoiding any kinks or bending. Install within pedestal housing base unless otherwise noted.
- B. Provide each irrigation controller with its own independent low voltage common ground wire.

2.6 BATTERY OPERATED CONTROLLER(S): As shown on Drawings. TBOS by Rainbird or approved equal with IP-68 rated waterproof case.

2.7 CONTROL WIRES

- A. Connections between automatic controllers and the solenoid-operated electric control valves shall be made with direct burial copper wire 14- AWG-UF 600 volt (minimum size). Pilot wires shall be a color other than white, and shall be a different color for each automatic controller with wires sharing a common trench. Common wires shall be white in color, with a different color stripe for each controller with wiring sharing the same common trench. No stripe is required if multiple controller wiring is not present.
- B. Size of wire shall conform to the remote control valve manufacturer's specification for control wire sizes, but in no case shall the control wire be smaller than #14. Runs over 2,000 lineal feet shall be #12- AWG-UF 600 volt copper wire.
- C. All wire splices are to be made within a valve box, with a copper crimp-type connector, and a "3-M" #DBY splice kit.
- D. Use continuous control wiring between controllers and remote control valves (no splices).
- E. Provide polyurethane tag at valve solenoid control wire that shows the controller number and station number. Also refer to valve box lid identification.
- F. Provide a spare control wire in each RCV box for future.

2.8 BUBBLER HEADS

A. As shown on drawings

2.9 QUICK COUPLER VALVES:

A. Quick coupler valves shall be as listed on the Drawings with 10" diameter box and lid similar to isolation valve box described below.

2.10 ISOLATION VALVE:

A. Valves 3 inches and smaller: 125 lb. WSP bronze gate valve with screw-in bonnet, non-rising stem and solid wedge disc, NIBCO T-113 K, or approved equal. Valves shall be line size.

2.12 DRIP IRRIGATION

A. Drip Manifold:

- 1. Pressure Regulator: Preset at 30 psi outlet pressure, ³/₄" female threaded inlet and outlet, by RainBird, Torro or equal.
- 2. Emitters: Xeri-Bug (XB Series) by RainBird, Toro EZ Drip Series, or equal.
- 3. Flexible PVC: ASTM D2287 algae-resistant flexible PVC as recommended by manufacturer of Drip Emitters.
- 4. Drip tubing: Conform to A. S. A. E. standards for minimum inside diameter and wall thickness, Minimum 2% carbon black, Salco 3/4" AR Drip PVC flexible drip hose, or equal.
- 5. 3/4" Y-filter, 200 mesh.
- 6. Toro DL 2000 Air/Vacuum Relief Valves and In-line Spring Check Valves.
- 7. 3/4" manual PVC ball valve with extra 3' of hose coiled in valve box.
- 8. Drip system in accordance with "RainBird Xerigation Low-Volume Landscape Irrigation Design Manual" and as shown on the drawings as required for a complete working system.

2.13 SUBSURFACE DRIP IRRIGATION:

- A. As specified herein and as shown on the drawings and in accordance with manufacturer's recommendations. Provide all miscellaneous valves, filters fittings etc. required for a complete, operable system including the following:
 - 1. Emitters shall be Toro DL 2000 Techline, in-line Treflon impregnated emitter with Netafim Automatic Flush Valves, Toro DL 2000 Air/Vacuum Relief Valves in accordance with "Toro DL-2000 Low-Volume Irrigation Bidding Specifications and Design Details" and as shown on the drawings as required for a complete working system.
- B. Drip Valve Assembly: Size valve box large enough and deep enough to contain assembly and allow convenient access and easy removal of filter screen. Position filter pointed down, approximately 45 degrees.
- C. Pressure regulator: Size regulator in accordance with flow rate. Do not over size. Use factory pre-set regulator at 30 PSI.
- 2.14 BOX FOR ISOLATION VALVE: 10" diameter plastic, Ametek, Brooks, Christy with bolt down lid marked "irrigation," or accepted equal. Avoid locating valve in paved areas. Provide H/20 Loading concrete box with bolt-down concrete lid if valve is located in paved area. Obtain location approval by Owner's Representative.

2.15 SWING JOINTS

- A. Sprinklers and Bubblers: Use Dura, Lasco or equal pre-assembled swing joints with O-rings.
- B. Quick Coupling Valve: Dura 1-inch 1-A2-1-11-18 pre-assembled swing joint with O-rings and Dura quick lock to receive stabilizing rod.

2.16 BACKFLOW PREVENTION DEVICE

- A. As required by Code and as shown on Drawings. Verify with Owner if Anti-freeze Jacket is required and provide as required.
- B. Riser assemblies from main line burial depth to backflow preventers shall be Schedule 40 brass pipe.
- C. All metallic pipe and fittings installed below grade shall be painted with two coats of Koppers #50 Bitumastic, or approved equal. Pipes may be wrapped with an approved asphaltic tape in lieu of the liquid-applied coating.

2.17 BACKFLOW PREVENTION DEVICE ENCLOSURE

A. "Smooth Touch" enclosure without sharp edges, by Strong Box, available from V.I.T., Escondido, CA (800) 729-1314 or equal. Coordinate size of enclosure with plumbing for minimum clearance and size. Enclosure to include hasp and staple to receive padlock. Padlock N.I.C.

2.18 CONDUIT/SLEEVES

A. Sleeving shall be Schedule 40 PVC pipe sleeves and a minimum of two times the aggregate diameter of all pipes contained within the sleeve. Provide vertical sweep for all electrical conduit on each side of hardscape and terminate ends at 12" minimum depth and 12" from hardscape surface.

2.19 Y-STRAINER

- A. "Y"-Strainer upstream of remote control valves, Brass, 100 mesh.
- 2.20 RCV IDENTIFICATION TAGS: Plastic or brass tags with valve number, approximately 2" by 2" with number imprinted, as accepted by Owner.

2.21 MISCELLANEOUS INSTALLATION MATERIALS

- A. Solvent Cement and Primers for Solvent-weld Joints: Make and type approved by manufacturer(s) of pipe and fittings. Maintain cement proper consistency throughout use.
- B. Pipe and Joint Compound: Permatex: Do not use on sprinkler inlet port.

2.22 MISCELLANEOUS EQUIPMENT/ACCESSORIES

- A. Concrete For Thrust Blocks and Pads: Poured-in-place Class A concrete per Section 90 of the Caltrans Standard Specificaitons.
- B. Sleeves and Conduits: See Drawings.
- C. Key(s) for Quick-Coupling Valves:
 - 1. Type: Same manufacturer as Quick-Coupling Valve.

2.22 OTHER EQUIPMENT: As shown on Drawings and required for a fully functional irrigation system.

PART 3- EXECUTION

3.1 EXAMINATION

- A. Sleeves and Conduits: Verify that all installed sleeving and conduits are undisturbed and are free of defects or errors introduced by the work of other sections.
- B. Water Meter/Water Pressure: Test and verify that existing water pressure is the minimum pressure at maximum system g.p.m. to operate the irrigation system as indicated on the drawings.
- C. Stub-outs: Verify that all stub-outs to be provided under another contract are correctly sized, located and installed as noted on Drawings.
- D. Notification: Submit written notification to Owner's Representative within ten (10) working days of above inspections describing all acceptable and non-acceptable site conditions.

3.2 CONNECTIONS TO SERVICES

- A. Provide and coordinate connection to water meter.
- B. Provide and coordinate connection of irrigation controller to electrical power source.

3.3 INSTALLATION

- A. Install irrigation system components in accordance with this Section, with the Drawings, with the manufacturer's recommendations, and with established industry standards. The Contractor shall do nothing that may jeopardize any manufacturer warranty.
- B. Conduits and Sleeves:
 - Coordination: Provide conduits and sleeves and coordinate installation with other trades.
 - 2. Extent: Install conduits and sleeves where control wires and pipes pass under paving or through walls as shown on Drawings. Extend twelve inches (12") beyond edges of paving and walls and cap ends until ready for use.
- C. Excavating and Trenching:
 - 2. Dig trenches wide enough to allow a minimum of three inches (3") between parallel pipe lines. Provide a minimum cover from finish grade as follows:
- D. Pipeline Assembly:
 - 1. Install pipe and fittings in accordance with manufacturer's current printed Specifications.
 - 2. Clean all pipes and fittings of dirt, scale and moisture before assembly.
 - 3. Solvent-welded Joints for PVC Pipes:
 - a. Solvents: Use solvents and methods specified by pipe manufacturer.

- b. Curing Period: Minimum of one (1) hour before applying any external stress on the piping and at least 24 hours before placing the joint under water pressure.
- 4. Threaded Joints for Plastic Pipes:
 - Use Permatex on all threaded PVC fittings except sprinkler heads and quick coupler valve ACME threads.
 - b. Joining: Use strap-type friction wrench only. Do not use metal-jawed wrench. Assemble finger tight plus one or two turns.

5. Laying of Pipe:

- a. Bedding On-grade: Remove from trench all rocks or clods. Bed pipe in at least 2 inches of soil excavated from trench. Backfill on all sides of piping to provide a uniform bearing.
- b. Snaking: Snake pipe from side to side of trench bottom to allow for expansion and contraction. Minimum allowance for snaking is one (1) additional foot per 100 ft. of pipe.
- c. Moisture Restrictions: Do not lay PVC pipe when there is water in the trench. Do not assemble PVC pipe unless the pipe is dry.

E. Control Valves:

- 1. Install in valve boxes where shown on Drawings and group together where practical. Install box flush with finish grade, not necessarily level. If valve occurs in drainage swale, relocate out of drainage swale as approved by Owner's Representative.
- 2. Where two or more valves are installed adjacent to each other, provide at least six inches (6") separation. Align boxes in a row, perpendicular with pavement edge.
- 3. Permanently mark valve box lid with 2" black valve number and controller letter or with numbered metal tag inside box as approved by Owner's Representative.
- 4. Refer to control wiring for required spare wire in each valve box.
- F. Install "Y"-Strainer upstream of remote control valves at backflow preventer.
- G. Sprinkler Head Installation:
 - 1. Bubblers:
 - a. Coordinate installation with planting contractor to insure timely and proper placement of heads at new planting.

H. Subsurface Irrigation

- Install emitters at uniform 18 inches on center and 6 inches deep except where shown otherwise. Adjust spacing on slopes to prevent over watering at base of slopes. Install system in accordance with "Toro DL-2000 Low-Volume Irrigation Bidding Specifications and Design Details" and as shown on the Drawings as required for a complete working system.
- 2. Provide air/vacuum relief valves at all high points on systems.
- 3. Provide filter as shown and as recommended by emitters manufacturer.
- 4. Tape pipe ends during installation and do not allow dirt or debris to enter pipe.
- 5. Use emitter line with the specified emitter flow rate and emitter spacing. Assemble dripper line to allow water to flow continuously and directly, with no dead ends or dead end loops between control valve and flush valve.
- 6. Use fittings at sharp bends and do not allow dripper line to kink.
- 7. Install emitter line around perimeter of planter not more than 3 inches off edge for ground cover and turf, 18 inches maximum for shrub planting.
- 8. Adjust alternate rows so emitters are spaced in a triangular pattern.
- 9. Collect water from multiple dripper lines and convey the water to automatic line flush valve.
- 10. Install flush valve at end(s) of collector laterals so that entire system will flush and be free of dirt and debris.
- 11. Flush valves shall be open when water is turned on for the first time and after a break in the main or lateral lines. Extend collector lateral as required and locate flush valve at convenient accessible location.
- 12. Flush the systems weekly through the first month of the maintenance period.

13. Thoroughly saturate soil prior to planting. Provide additional surface watering as required to keep plant root systems moist during planting establishment period.

Drip Irrigation:

- Install system in accordance with "RainBird Landscape Irrigation Design and Specifications Xerigation Products and Details" or equal and as shown on the Drawings as required for a complete working system.
- 2. Install Toro DL 2000 Air/Vacuum Relief Valves at high points in system.
- 3. Install manual PVC ball valve with extra 3' of hose coiled in valve box at end(s) of collector laterals so that entire system will flush and be free of dirt and debris.

J. Battery-Operated Controller:

- 1. General: Install per drawings and manufacturer's instructions.
- 2. Use a legible reduced copy of the Record Drawing for the irrigation diagram clearly showing all valves operated by the controller, station, number, valve size, and type of planting irrigated. Color code area operated by each valve.

K. Control Wiring:

- General: Install control wires in common trenches with sprinkler mains and laterals wherever possible. Lay to the bottom side of pipe line. Provide looped slack at valves. Snake wires in trench to allow for contraction of wires. Tie wires in bundles at 10 ft. intervals.
- 2. Extra Length: Provide 30 inches (30") extra control wire at each remote control valve splice to facilitate the removal of the remote control bonnet to finish grade without cutting wires.
- 3. Spare: Install one unconnected spare control wire running from the controller through each intermediate control valve box.
- 4. Size: Minimum size of wire is to be determined strictly by the manufacturer's current printed specifications for remote control valves, but not smaller than #14.
- 5. Detection Wire: Install a bare #12 copper wire or greater on top of the PVC supply line for the purpose of possible future mine detection search. Install the control wires on the bottom of the PVC supply line with electrical tape every ten feet (10').
- 6. Splicing: Crimp control wire splices at remote control valves. Seal with specified splicing materials. In-line splices will be allowed only on runs exceeding 2500 feet and only in junction boxes.

L. Closing of Pipe and Flushing of Lines:

Capping: Cap or plug all openings as soon as lines have been installed to prevent entrance
of materials that would obstruct the pipe. Leave in place until removal is necessary for
completion of installation.

M. Rain Shutoff Switch:

1. Install switch in area not affected by irrigation or rain shadow. Provide wires in rigid conduit as accepted by Owner's Representative.

N. Detection Wire and Warning Tape:

- 1. Install a bare # 12 copper wire or greater on top of the PVC supply line for the purpose of possible future mine detection search.
- 2. Install a continuous PVC irrigation mainline warning tape 12" above the supply line.
- O. RCV IDENTIFICATION TAGS: Install in remote control valve box as recommended by manufacturer and as accepted by Owner's Representative.

3.4 MISCELLANEOUS EQUIPMENT

A. Install miscellaneous equipment with concrete footings, brackets, etc., as required and as recommended by manufacturer.

3.5 FIELD QUALITY CONTROL

A. Testing of Irrigation System:

- 1. Make hydrostatic tests with risers capped when welded PVC joints have cured at least 24 hours. Center load piping with backfill to prevent pipe from moving under pressure. Keep all couplings and fittings exposed.
- 2. Install two (2) pressure gauges at opposite ends of main line system. Pump system up to a minimum of 125 psi the day preceding the scheduled test and verify that pressure is holding. Inspect system early following day and immediately notify Owner's Representative if the test confirmation must be postponed.
- 3. Apply continuous static water pressure of 125 psi in accordance with Caltrans Standard Specifications Section 20-5.03H, except after a drop in pressure (5 psi maximum), then the pressure must stabilize and remain stable for a one (1) hour minimum period before acceptance of the test.
- 4. Leaks detected during tests shall be repaired and test repeated until system passes tests at no additional cost to Owner.

B. Adjustment of the System:

- 1. Flush and adjust all sprinkler heads for optimum performance and to prevent overspray onto walks, roadways and buildings. Adjust the arc and radius as applicable.
- 2. Include as a part of the work any nozzle changes or arc adjustments necessary due to daytime windy conditions during grass establishment period. After grass has been established and watering can be performed during calm early morning or evening hours, make any required adjustments to nozzles and arcs.
- 3. Set all sprinkler heads perpendicular to finished grades unless otherwise noted on the drawings.
- 4. When the landscape sprinkler system is completed and before planting, perform a coverage test in the presence of the Owner's Representative to determine if the water coverage for planting areas is adequate.
- 5. Test controllers individually in the presence of the Owner's Representative and the Landscape Architect. Demonstrate that all control valves operate electronically. Provide vehicles and radio equipment as necessary to expedite this process.
- 6. Demonstrate to Owner's Representative that irrigation scheduling programmed into controller is adequate for plant requirements without causing runoff, and that scheduling capacities of controller are utilized.

3.6 BACKFILL AND COMPACTING

- A. General: After system is operating and required tests and reviews have been made, backfill excavations and trenches with clean soil, free of debris.
- B. Backfill for All Trenches: Regardless of the type of pipe covered, compact to minimum 95% density under pavements and 85% under planted areas.
- C. Finishing: Dress off areas to finish grades. Re-dress any areas which subsequently settle.
- D. Owner's testing agency will test backfill compaction in areas under paving.

3.7 MAINTENANCE

- A. The entire sprinkler irrigation system shall be under full automatic operation for a period of 2 days prior to any planting.
- B. The Owner's Representative reserves the right to waive or shorten the operation period.
- C. Maintain/repair system for full duration of plant maintenance period.

3.8 REVIEWS PRIOR TO ACCEPTANCE

- A. Notify the Owner's Representative in advance for the following reviews, according to the time indicated:
 - 1. Supply line pressure test and control wire installation 72 hours.
 - 2. Coverage and controller test 72 hours.

- 3. Final review 7 days.
- B. No reviews will commence without record drawings, without completing previously noted corrections, or without preparing the system for review.

3.9 FINAL REVIEW AND CLEANUP

- A. Operate each system in its entirety for the Owner's Representative at time of final review. Any items deemed not acceptable by the Owner's Representative shall be reworked to the complete satisfaction of the Owner's Representative.
- B. Provide evidence to the Owner's Representative that the Owner has received all accessories and equipment as required before final review can occur.
- C. Final acceptance and start of warranty period will occur no earlier than the end of the plant maintenance period.
- D. For time of final review, Contractor shall arrange a meeting with the Owner's maintenance personnel to demonstrate the operation of the irrigation systems automatically in order to verify acceptance and to familiarize the maintenance personnel with the system and recommended programming.
- 4.0 MEASUREMENT AND PAYMENT. The contract prices paid on a square foot basis for irrigation shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved installing, setting up and testing the irrigation system, as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Engineer.

*** END OF SECTION ***

Section 7-22.01 PLANTING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Provide planting work and planting maintenance complete as shown on the drawings and as specified including staking and layout of the landscaping.
- B. Related work specified elsewhere includes:
 - 1. Section 7-17.02, EARTHWORK
 - 2. Section 7-19.01, IRRIGATION

1.2 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. Ordinances and Regulations: All local, municipal and state laws, codes and regulations governing or relating to all portions of this work are hereby incorporated into and made a part of these Specifications. Anything contained in these Specifications shall not be construed to conflict with any of the above codes, regulations or requirements of the same. However, when these Specifications and Drawings call for or describe materials, workmanship or construction of a better quality, higher standard than is required by the above mentioned codes and regulations, the provisions of these Specifications and Drawings shall take precedence. Furnish without extra charge additional materials and labor required to comply with above rules and regulations.
 - 2. "Sunset Western Garden Book," Lane Publishing Co., Menlo Park, California; current edition.
 - 3. "American Standards for Nursery Stock," American Association of Nurseryman, 230 Southern Building, Washington, D.C. 20005.
 - 4. Alameda Countywide Clean Water Program (ACCWP) or member agency having jurisdiction over the project work.
 - 5. US Composting Council Compost analysis Program (CAP)
 - 6. Test Methods for the Evaluation of Composting and Compost (TMECC)
 - 7. Manufacturer's recommendations.

B. Qualifications:

- Experience: Assign a full-time employee to the job as foreman for the duration of the Contract who is certified landscape technician, certification through CLCA or minimum of four (4) years experience in landscape installation and maintenance supervision, with experience or training in turf management, entomology, pest control, soils, fertilizers and plant identification.
- 2. Labor Force: Provide a landscape installation and maintenance force thoroughly familiar with, and trained in, the work to be accomplished to perform the task in a competent, efficient manner acceptable to the Owner.

C. Requirements:

- 1. Supervision: The foreman shall directly supervise the work force at all times and be present during the entire installation. Notify Owner's Representative of all changes in supervision.
- 2. Identification: Provide proper identification at all times for landscape maintenance firm's vehicles and a labor force uniformly dressed in a manner satisfactory to Owner's Representative.
- 3. Planting soils and organic amendments shall meet the AACWP requirement for the stormwater treatment measures used with this project work.

D. Plant Material Standards

- 1. Quality and Size of Plants: Conform to the State of California Grading Code of Nursery Stock, No. 1 grade. Use only nursery-grown stock which is free from insect pests and diseases.
- Comply with federal and state laws requiring inspection for plant diseases and infestations. Submit inspection certificates required by law with each shipment of plants, and deliver certificates to the Owner. Obtain clearance from the County Agricultural Commissioner as required by law, before planting plants delivered from outside the County in which planted.
- E. Testing Agency: Soil and Plant Laboratory, Inc. 352 Matthew Street (P.O. Box 153), Santa Clara, CA 95052; Tel. (408) 727-0330; or Root Zone Associates, P.O. Box 18911, San Jose, CA 95118; Tel. (408) 264-7024. Components of the test shall include all major nutrients, pH, salinity, boron, sodium, micronutrients, copper, zinc, manganese and iron, adsorption rate, organic content and texture.
- F. Weed Germination: Following soil preparation and fine grading of planting areas, irrigate the planting areas to germinate any weed seeds for a minimum period of 21 days. Maintain the soil in a damp condition for a minimum depth of 4 inches. Following approval of the weed germination by the Owner's Representative, spray kill the weeds using a short lived systemic weed killer that will not affect subsequent planting. Confirm the weed kill and allow the soil to dry out to optimum degree for planting prior to planting.

1.2 SUBMITTALS,

- A. Product Data: Manufacturer's current catalog cuts and specifications of the following:
 - 1. Fertilizers
 - 2. Herbicide
 - 3. Tree Tie and Stake
 - 4. Iron Sulfate
 - 5. Tree Guy Material
 - 6. Filter Fabric
 - 7. Perforated Drain Pipe
 - 8. Erosion Control Netting
 - 9. Steel Edging
 - 10. Header Board
 - 11. Root Barrier

- B. Samples: Submit following samples along with certificates of compliance/analytical data from approved laboratory for degree of compliance:
 - 1. Plants: Submit typical sample of each variety or entire quantity to site for approval by Landscape Architect.
 - 2. Organic Mulch: Submit 1-pint sample.
 - 3. Rock Mulch: Submit 1-pint sample(s).
 - 4. Organic (Soil) Amendment: Submit 1/2-pint sample.
 - 5. Permeable Backfill (Filter Rock): Submit 1-pint sample.
 - 6. Imported Planting Soil: Submit 1-pint sample
- C. Delivery Receipts: Provide delivery receipts for quantities of organic soil amendments delivered to the site.
- D. Topsoil Analysis: After approval of rough grading and topsoil placement, obtain three representative samples of in situ topsoil taken from accepted site locations at depth of 4" to 6" below finish grade and submit to an accredited Soils Laboratory for "agricultural suitability" analysis report, including particle size, and evaluation of physical and chemical properties of soil and recommendations for adding amendments and fertilizers to the soil.
- E. Subsoil Analysis: Besides the above required soil samples, take one representative sample of any subgrade soil that is to receive a layer of imported planting soil over it. The laboratory report shall include the subgrade soil's total combined silt and clay content for determining the total allowable combined silt and clay content of the imported planting soil specified herein.
- F. Imported Planting Soil Analysis: See Imported Planting Soil Analysis requirements elsewhere in this specification for comparison to existing soil analysis.
- G. Approval of Laboratory Report: Upon approval of the Laboratory's report by the Landscape Architect, the recommendations in the report shall become a part of the Specifications and the quantities of soil amendment, fertilizer and other additives shall be adjusted to conform with the report at no additional cost to the owner. Request Testing Laboratory to send one copy of test results directly to Landscape Architect and one copy to the Owner. Note that there is a minimum quantity of organic amendment specified elsewhere in this specification section.

1.3 PROJECT/SITE CONDITIONS

1. Site Visit: At beginning of work, visit and walk the site with the Owner's Representative to clarify scope of work and understand existing project/site conditions.

1.4 WARRANTY AND REPLACEMENT

- A. Pre-Emergence Weed Killer: Warrant the work against weed growth for a period of four (4) months after application.
- B. Warrant all plants and planting to be in a healthy, thriving condition until the end of the maintenance period, and deciduous trees beyond that time until active growth is evident.
- C. Replace all dead plants and plants not in a vigorous condition immediately as directed by the Owner's Representative at Contractor's expense. Install replacement plants before the final acceptance at the size specified.
- D. Warrant all plant material for a period of one year after final acceptance of the maintenance period against plant materials with defects at the time of installation.
- E. Warrant plant installation and maintenance by Contractor against defects for a period of one year.

PART 2 - PRODUCTS

2.1 PLANTS

- A. Plant the variety, quantity and size indicated. The total quantity tabulated on the drawings are considered approximate and furnished for convenience only. Contractor shall perform his/her own plant quantity calculations and shall provide all plants shown on the Drawings.
- B. Tag plants of the type or name indicated and in accordance with the standard practice recommended by the American Association of Nurserymen.
- Install healthy, shapely and well rooted plants with no evidence of having been root-bound, restricted or deformed.
- D. Take precautions to ensure that the plants will arrive at the site in proper condition for successful growth. Protect plants in transit from windburn and sunburn. Protect and maintain plants on site by proper storage and watering.
- E. Substitutions will not be permitted, except as follows:
 - 1. If proof is submitted to the Landscape Architect that any plant specified is not obtainable, a proposal will be considered for use of nearest equivalent size or variety with an equitable adjustment of contract price.
 - 2. Substantiate and submit proof of plant availability in writing to the Landscape Architect within 10 days after the effective date of Notice to Proceed.
- F. Tree Form: Trees shall have a symmetrical form as typical for the species/cultivar and growth form.
 - 1. Central Leader for Single Trunk Trees: Trees shall have a single, relatively straight central leader and tapered trunk, free of co dominant stems and vigorous, upright branches that compete with the central leader. Preferably, the central leader should not have been headed; however, in cases where the original leader has been remove, an upright branch at leas ½ the diameter of the original leader just below the pruning point shall be present.
 - 2. Potential Main Branches: Braches shall be evenly distributed radially around and appropriately spaced vertically along the trunk, forming a generally symmetrical crown typical for the species.
 - 3. Headed temporary branches should be distributed around and along the trunk as noted above and shall be no greater than 3/8" diameter, and no greater than ½ diameter of the trunk at point of attachment.

G. Tree Trunk

- 1. Trunk diameter and taper shall be sufficient so that the tree will remain vertical without the support of a nursery stake.
- 2. Trunk shall be free of wounds (except properly-made pruning cuts), sunburned areas, conks (fungal fruiting-bodies), wood cracks, bleeding areas, signs of boring insects, galls, cankers and/or lesions.
- 3. Tree trunk diameter at 6" above the soil surface shall be within the diameter range shown for each container size below, except where shown otherwise:

Container	Trunk Diameter in inches	Soil level from Container Top
5 gallon	0.5" to 0.75"	1.25 to 2"
15 gallon	0.75" to 1.0"	1.75 to 2.75"
24" Box	1.5" to 2. 5"	2.25 to 3"

4. Tree trunks shall be undamaged and uncut with all old abrasions and cuts completely callused over. Do not prune plants prior to delivery.

H. Tree Roots

- 1. Trunk root collar (root crown) and large roots shall be free of circling and/or kinked roots. Contractor may be required to remove soil near the root collar in order to verify that circling and/or kinked roots are not present.
- 2. The tree shall be well rooted in the container. When the trunk is lifted the trunk and root system shall move as one and the rootball shall remain intact.
- 3. The top-most roots or root collar shall be within 1" above or below the soil surface. The soil level in the container shall be within the limits shown in above table.
- 4. The rootball periphery shall be free of large circling and bottom-matted roots.
- 5. On grafted or budded trees, there shall be no suckers from the root stock.

I. Shrubs

- 1. Each shrub must stand upright without support.
- 2. All container shrubs shall be free of girdling roots, defined as those roots greater than 1/8" diameter circling the periphery of the rootball. The top of the rootball shall be free of "Knees" (roots) protruding above the soil, and the bottom shall be free of matted roots.
- J. Measure trees and shrubs with branches in normal position. Height and spread dimensions indicated refer to the main body of the plant, and not from branch tip to tip.

2.3 FERTILIZERS

A. Commercial fertilizer, pelleted or granular form, conform to the requirements of Chapter 7, Article 2, of the Agricultural Code of the State of California for fertilizing materials as follows:

Type A: 6% Nitrogen, 20% Phosphorus Acid and 20% Potash, (6-20-20).

Type B:21 gram planting tablets 20% Nitrogen, 10% Phosphoric Acid and 5% Potash (20-10-5) available from Agriform or 10gm BestPacks packets 20% Nitrogen, 10% Phosphoric Acid and 5% Potash (20-10-5) available from Best Fertilizer Co.

Type C: Complete fertilizer 21% Nitrogen, 7% Phosphoric Acid and 14% Potash (21-7-14).

If commercial fertilizer having this analysis is not obtainable, other similar commercial fertilizer may be used providing it meets the approval of the Landscape Architect.

- B. Maintenance Fertilizer: Type C
- C. Sod Fertilizer: Provided by grower.

2.4 ORGANIC AMENDMENT FOR IN SITU SOILS (ON-GRADE):

A. Ground Redwood or Ground Fir Bark with the following properties:

Percent Passing	Sieve Designation		
100	9.51 mm	3/8"	
50-60	6.35 mm	1/4"	
20-40	4.76 mm	No. 4	
0-20	2.38 mm	No. 8	8 mesh

Redwood Sawdust

- 1. Dry bulk density, lbs. per cu. yd., 260-280
- 2. Nitrogen stabilized dry weight basis, min. 0.4%
- 3. Salinity (ECe): 4.0 maximum
- 4. Organic Content: 90% minimum
- 5. Reaction (pH): 4.0 minimum

Ground Fir and/or Pine Bark

- 1. Dry bulk density, lbs. per cu. yd., Min. 350
- 2. Nitrogen stabilized dry weight basis, min. 0.5%
- Salinity (ECe): 4.0 maximum
 Organic Content: 90% minimum
- 5. Reaction (pH): 4.0 minimum
- B. Submit sample along with analytical data from an approved laboratory for degree of compliance to the Landscape Architect within two weeks after award of Contract.

2.5 COMPOSTED YARD WASTE AMENDMENT:

A. The above Ground Redwood or Ground Fir Bark or Ground Pine Bark (ORGANIC AMENDMENT FOR IN SITU SOILS) is the specified organic amendment material required. Acceptance of Composted Yard Waste Amendment in lieu of the above specified ORGANIC AMENDMENT FOR IN SITU SOILS (ON-GRADE) material will be considered if the in situ planting soil salinity and soil structure is favorable for the inclusion of recycled yard waste organic matter, as approved by the Landscape Architect. It is the Contractor's responsibility to secure test samples of both the planting soil and the proposed composted yard waste amendment (2 quart samples)

and submit to Soils and Plant Laboratory for evaluation and recommendations per code A05-1 for the soil sample and A91-0 for the amendment sample. The composted yard waste amendment sample shall be a grab sample from the currently available material.

B. Based on the Soils and Plant Laboratory evaluation, the addition of composted yard waste amendment shall not be acceptable if it creates a leaching requirement. The addition of the compost shall result in a final ECe of the amended soil of less than 4.0 dS/m @ 25 degrees C. as determined in a saturation extract. Use the following table to determine the maximum allowable Ece (dS/m of saturation extract) of compost at desired use rate and allowable Ece increase.

DESIRED USE RATE		MAXIMUM ALLOWABLE Ece INCREASE FROM AMENDMENT		
Cu. Yds. Amendment Per 1000 Sq. Ft. for Incorporation to 6" depth	Volume percentage of amendment	1 dS/m	2 dS/m	3 dS/m
		Maximum ECe of Compost		
1	5	14	28	42
2	11	7	14	21
3	16	5	9.5	14
4	22	3.5	7	10.5
5	27	3	5.5	8.5
6	32	2.5	4.5	7

Example: Specification calls for 6 cu. Yrds. Compost per 1000 sq. ft. for incorporation to 6" depth, and site soil has an ECe of 2.0. In order to avoid exceeding ECe of 4 in final blend, compost ECe shall be less than 4.5 dS/m.

- C. Composted Yard Waste Soil Amendment properties as follows:
 - 1. Gradation:

Percent Passing by weight		Sieve Designation		
90		1/2"	 _	
85-100		9.51 mm	3/8"	
50-80	2.38 mm	No. 8	8 mesh	
0-40	500 micron	No. 35	32 mesh	

- 2. Organic Content: Minimum 50% based on dry weight and determined by ash method. Minimum 250 lbs. organic matter per cubic yard of compost.
- 3. Carbon to nitrogen ratio: Maximum 35:1 if material is claimed to be nitrogen stabilized.
- 4. pH: 5.5 8.0 as determined in saturated paste.
- 5. Soluble Salts: See B. above.
- 6. Moisture Content: 35-60%.
- 7. Contaminants: The compost shall be free of contaminants such as glass, metal and visible plastic.
- 8. Maturity: Physical characteristics suggestive of maturity include:
 - a. Color: Dark brown to black.
 - b. Acceptable Odor: None, soil-like, musty or moldy.
 - c. Unacceptable Odor: Sour, ammonia or putrid.
 - d. Particle Characterization: Identifiable wood pieces are acceptable but the balance of the material shall be soil-like without recognizable grass or leaves.
- D. Submit planting soil and composted yard waste amendment samples along with laboratory report from Soils and Plant Laboratory for degree of compliance as specified above to the Landscape Architect a minimum of 3 weeks prior to beginning soil prep. The laboratory report shall include recommendations for adjusting fertilizer and amendment quantities. Upon approval of the Laboratory's report by the Landscape Architect, the recommendations in the report shall become

a part of the Specifications and the quantities of soil amendment and fertilizer shall be adjusted to conform with the report at no additional cost to the owner.

- 2.7 IRON SULFATE: Dry form.
- 2.8 PLANT BACKFILL: Except for acid loving plants (Azaleas, Rhododendrons, Ferns, Camellias, etc.), use a mixture of 2 parts soil from the hole, and 1 part amendment with iron added at the following rates:

1 gallon can plants - iron, 1/4 cup 5 gallon can plants - iron, 1/3 cup 15 gallon can plants - iron, 1/2 cup 24" box and larger - iron, 1 cup

Mix the iron, amendment and soil thoroughly for use in the top 8 inches of backfill around plants. For acid loving plants, mixture to be 1/2 soil from the hole and 1/2 amendment.

2.9 MULCH

- A. Organic Mulch: Fir tree or pine tree bark, dark in color; 3/4-inch to 1-inch size.
- B. Rock Mulch: Hard, durable, crushed stone, average 1/4-inch diameter, in gray color range from American Soil Products or approved equal.
- C. Submit samples of organic and rock mulches to the Landscape Architect for approval within two weeks of award of Contract. Resubmit until acceptable to Owner, at no extra cost.
- 2.10 TREE SUPPORT POLES (ON-GRADE): Peeled lodge pole pine logs, clean, smooth, new, and sized as follows:
 - A. Two-inch (2") diameter by eight feet (8') long for trees less than 8' high and 1" caliper.
 - B. Three-inch (3") diameter by eight to ten feet (8' 10') long for trees greater than 8' high and 1" caliper.
- 2.11 TIES: Rubber strap, 24-inch minimum length without sharp edges adjacent to trunk, V.I.T. cinch-tie, Dublin, CA, (818)882-9530, or approved equal.

2.12 TREE GUYING:

- A. For trees up to 3" caliper, 3/16" galvanized steel cable, with rubber tree collar, 12" minimum long, and secured with cable clamp, and attached to anchor for below-grade location, Duckbill Model 40 DTS, or approved equal.
- B. For trees 3" to 6" caliper, 1/8" galvanized steel cable with rubber tree collar, 21" minimum long, and secured with cable clamp, 3" take-up eye to eye turnbuckle, and attached to anchor for below-grade location, Duckbill Model 68 DTS, or approved equal.

2.13 PLANTING SOIL (TOPSOIL):

- A. Planting soil is defined as on-site surface soil. Satisfactory planting soil shall be free of subsoil, clay, lumps, stones, and other objects over 4" in diameter, and without weeds, roots, and other objectionable material.
- B. Strip planting soil to whatever depths encountered, a maximum of 12" inches in a manner to prevent intermingling with the underlying subsoil or other objectionable material. Topsoil stripping

- is limited to area outside "Drip Line" of existing trees to remain and areas indicated on drawings and as approved by the Owner's Representative.
- C. Remove heavy growths of grass from areas before stripping.
- D. Stockpile topsoil in storage piles in areas shown, or where designated by Owner. Construct storage piles to freely drain surface water. Cover storage piles if required to prevent windblown dust.
- E. If herbicide contamination is suspected then a radish/ryegrass growth trial must be performed. Consult with Landscape Architect prior to decision to test or not.
- F. If sufficient on-site surface soil is not available, provide imported planting soil as specified below. Placement of dissimilar soils shall be coordinated with irrigation system valving to maintain separate valves for dissimilar soils.

2.14 IMPORTED PLANTING SOIL (TOPSOIL):

- A. Imported planting soil shall be fertile, friable, natural, productive soil containing a normal amount of humus, and shall be capable of sustaining healthy plant life. Planting soil shall be free of subsoil, heavy or stiff clay, rocks, gravel, brush, roots, weeds, noxious seeds, sticks, trash, and other deleterious substances. Soil shall not be infested with nematodes or with other noxious animal life or toxic substances. Soil shall be obtained from well-drained, arable land, and shall be of an even texture. Soil shall not be taken from areas on which are growing any noxious weeds such as Morning Glory, Sorrel, or Bermuda Grass.
- B. Imported planting soil shall have a pH value of between 6.0 and 7.5, a boron concentration of the saturation extract of less than 1 ppm, salinity of the saturation extract at 25 degrees C. of less than 4.0 millimoles, and a sodium absorption rate (SAR) of less than 8.
- C. The silt and clay content of imported planting soil shall not exceed that of the existing soil it is to be placed over. It shall be a "Sandy Loam" as classified in accordance with USDA Standards with a combined total of between 25%to 40% Clay and Silt.
- D. Make the site of the source of supply of planting soil available to the Landscape Architect for observation and approval prior to any hauling or placing of soil. In addition, submit for approval a 1-quart sample of soil, together with a standard soil analysis report by an accredited soils analyst showing chemical analysis stating source, fertility, agricultural suitability and particle size distribution of the soil. Deliver the sample to the Landscape Architect two weeks before starting the contemplated hauling of the soil. Following approval of the sample, provide a one-half cubic yard sample, which shall be stored at the site of work for comparison with subsequent loads of soil. The comparison sample shall be protected by a cover until the furnishing of all soil has been completed and accepted. Should the soil submittal lack certain requirements which can be added to the soil, the Landscape Architect will consider a request by the Contractor to amend the soil as recommended by the Soils Analyst at the Contractor's expense.
- 2.15 PRE-EMERGENCE WEED KILLER: Clean non-staining as recommended by a licensed pest control specialist.
- 2.16 FILTER FABRIC: Polyester or polypropylene non-woven filter fabric with uniform fiber distribution by "Terra Bond" #1115, "Mirafi, Inc." #140N, or approved equal.
- 2.17 PERFORATED DRAIN PIPE: Polyvinyl Chloride (PVC) pipe and pipe fittings shall meet extra strength minimum of SDR-35 of the requirements of ASTM Specification D3034. Perforated and non-perforated corrugated polyethylene pipe, 3- to 10-inch diameter, shall meet the requirements of ASTM D883 and ASTM F412, and shall conform to Section 68 of the Standard Specifications.

- Corrugated polyethylene pipe fittings shall comply with all requirements of AASHTO M-252-85I for 3- to 10-inch diameter pipe. Couplings shall be split or snap-on type for perforated pipe and split couplings with gaskets for non-perforated pipe. Cutting pipe with integral couplings will not be allowed.
- 2. Corrugated polyethylene pipe and fittings manufactured by Advanced Drainage Systems, Inc., shall be considered the standard to determine compliance to this specification.
- Inspection Tube Cap: Paint cap one coat chocolate-brown color using Flat, exterior grade latex paint as accepted by Owner's Representative.
- 2.18 PERMEABLE BACKFILL (FILTER ROCK): Permeable backfill used in subsurface drain installations to be Class 2 permeable material in conformance with Section 68 "Subsurface Drains" of the Standard Specifications; gradation to 3/4" maximum size. Submit Sample for approval.
- 2.19 EROSION CONTROL NETTING: New, with a uniform, open plain-weave, flame-retardant mesh. The mesh shall be natural brown-tan and made from unbleached single jute yarn. The yarn shall be of loosely twisted construction and shall not vary in thickness by more than one-half its normal diameter. Furnish jute mesh in rolled strips to meet the following requirements:
 - 1. Width: 48 inches, with a tolerance of one-inch wider or narrower.
 - 2. Not less than 78 warp ends per width.
 - 3. Not less that 41 weft ends per yard.
 - 4. Weight shall average 1.22 pounds per linear yard, with a tolerance of 5 percent heavier or lighter.
- 2.20 VINE TIES: For vines that require supports in order to climb, install anchor bolts with clear vinyl coated 3/16" galvanized steel cable, secured and taut with cable clamps, on structure in configuration approved by Landscape Architect. Train vine branches to supports with green nursery tape.
- 2.21 ARBOR-GUARD: AG 8-4 as manufactured by Dimex (800/334-3776), or approved equal.
- 2.22 STEEL EDGING: 3/16" X 4" by 8' black finish with 12" min long stakes set ½" below grade at each joint and maximum 4' spacing, in-line joints without offset or double thickness, by Sure-Loc, (800) 787-3562 or approved equal.
- 2.23 HEADER BOARD: 2 by 6 inch "Rough" Construction Heart Redwood with 2 by 4 by15" Construction Heart Redwood stakes.
- 2.24 ROOT BARRIER: UB 18-2 as manufactured by Deep Root Corporation (800)458-7668, Root Solutions, Inc. (800) 554-0914, or equal.

PART 3 - EXECUTION

3.1 FINE GRADING AND SOIL PREPARATION

- A. General: Soil in all planting areas shall be moist, but not so moist that it sticks to a hand shovel, and loose and friable to a minimum depth of 12 inches with a relative maximum compaction of 85%. Rip and scarify and dry any areas that do not meet this requirement.
- B. Lime Treated Soil Removal: All Lime treated soils shall be removed full depth from planting areas and replaced with approved planting soil as accepted by Owner's Representative and as shown.
- B. Planting Soil Placement: EARTHWORK Section
- C. Planting Soil Placement:
 - 1. Inspect planting areas and remove all base rock and other foreign material Rip all planting areas in two directions full depth of compacted fill (to a minimum of 6 inches) into undisturbed native soil prior to backfilling. Scarification of any planting area which cannot be

- accomplished with a tractor shall be accomplished by an alternative method approved by the Owner's Representative to the specified depth to ensure proper drainage.
- 2. Prior to placing planting soil secure the Owner's Representatives acceptance of the planting areas subgrade condition. After acceptance of the planting areas subgrade condition, uniformly distribute and spread planting soil backfill over scarified subgrade as specified in planting areas and compact to a maximum of 85% relative compaction.
- 3. Do not work planting soil in a wet or muddy condition or dump or spread in areas where subgrade is not in proper condition.
- 4. Water settling, puddling, and jetting of fill and backfill materials as a compaction method is not acceptable.
- 5. Provide a minimum of 12" depth in planting areas, or more where shown or specified otherwise.
- D. Planting Soil Placement in Planting Islands and Adjacent to Pavement Areas: Provide planting soil as a final lift in all planting areas within and adjacent to paved areas and other construction where native site soil has been covered by engineered fill and/or base rock. Remove all engineered fill, base rock and compacted subgrade full depth of compaction and replace with approved planting soil, a minimum lift of 12". Unless shown otherwise, finish grade in planting islands shall be crowned with a minimum 2 % pitch to the edges.
- E. All planting areas soil shall be loose and friable prior to planting. Rip any overly compacted and re-compacted planting areas in two directions full depth of compacted soil prior to planting.
- F. Before proceeding with the work: Carefully inspect all areas and verify all dimensions and quantities. Immediately inform the Landscape Architect of any discrepancy between the drawings and specifications and actual conditions and secure approval to proceed.
- G. Planting operations shall be performed only during periods when beneficial results can be obtained. When excessive moisture or other unsatisfactory conditions prevail, the work shall be stopped until conditions are satisfactory.
- H. Thoroughly wet down the planting areas to settle the soil and confirm irrigation coverage and operation. Allow soil to dry so as to be workable as described herein.
- I. Drag to a smooth, even surface. Grade to form all swales, pitch to catch basins, streets, curb, etc., to ensure uniform surface drainage. Areas requiring grading include adjacent transition areas that shall be uniformly level or sloped between finish elevations. Refer to Erosion Control Netting below for treatment of slopes 3:1 and steeper.
- J. Finish Grade: Hold finish grade and/or mulch surface in planting areas1/2-inch below adjacent pavement surfaces, tops of curbs, manholes, etc. The subgrade of the mulch in mulched planting areas shall be a minus 2 inches for a distance of 12 to 18 inch from the edge of pavement. The remainder of the planting area shall be graded to receive the required 3 inch layer of mulch.
- K. In Situ Soil Preparation:
 - 1. Spread organic amendment, iron and Type A fertilizer evenly over installed and rough graded on-site topsoil in all planting areas including turf, ground cover and shrub areas at the following rates:
 - a. Organic Amendment: 6 cubic yards per 1,000 square feet
 - b. Fertilizer: Type A (6-20-20) at 20 lbs. per 1,000 square feet.
 - c. Iron Sulfate: 10 lbs. per 1,000 square feet
 - 2. In the case of a contradiction between the quantity of organic amendment required by the Contractor-obtained soils laboratory analysis and the specified quantity shown above, the greater of the two quantities shall take precedence.
 - 3. Rototill above additives into soil 6 to 8 inches deep. Keep iron sulfate off pavement and other surfaces to prevent rust staining. Correct all rust damage to work.

- L. After the rototill work, float areas to a smooth, uniform grade as indicated on the drawings. Slope all planting areas to drain. Roll, scarify, rake and level as necessary to obtain true, even planting surfaces. Remove rocks, sticks and debris 2 inches or larger in size in turf areas and 3 inches or larger in shrub and ground cover areas. Secure approval of the grade by the Landscape Architect before any planting.
- 3.2 ROOT BARRIER: Install in continuous sheet parallel and adjacent to curb or pavement edge as required on drawings and in accordance with manufacturer's recommendations.
- 3.3 EROSION CONTROL NETTING: Verify finished grades and provide Jute Mesh and single grind Redwood bark mulch on all slopes 3:1 and steeper as accepted by the Owner's Representative. Install jute mesh loosely up and down the slope in accordance with manufacturer's specifications and as follows. Fit the soil surface contour and hold in place with 12-inch long, 11-gauge (minimum) steel wire staples driven vertically into the soil at 18- to 24-inch spacing. Jute mesh strips shall overlap along all edges at least 6 inches. Ends of side strips shall be buried into the soil at least 6 inches. Drive staples along edges to securely anchor mesh to ground.
- 3.4 ARBOR-GUARD: Install arbor guard on all trees in turf areas. Install according to manufacturer's specifications.
- 3.5 METAL EDGING: Install in continuous strips as indicated and in accordance with manufacturer's recommendations.
- 3.6 HEADER BOARD: Install in continuous, smooth alignment as indicated with stakes spaced 48 inches on center maximum and at all joints.

3.7 TREE AND SHRUB PLANTING

- A. Mark tree and shrub locations on site using stakes, gypsum or similar approved means and secure location approval by the Landscape Architect before plant holes are dug. Review location of plants in relationship to irrigation heads and adjust location(s) that interfere with the function of the spray heads as accepted by the Landscape Architect prior to planting.
- B. Test drainage of plant beds and pits by filling with water (minimum 6"). The retention of water in planting beds and plant pits for more than two (2) hours shall be brought to the attention of the Landscape Architect. If rock, underground construction work, tree roots, poor drainage, or other obstructions are encountered in the excavation of plant pits, alternate locations may be selected by Landscape Architect.
- C. Excavate tree, shrub and vine pits as follows (Note square Tree Pit pattern required below):

Excavation for	<u>Width</u>	<u>Depth</u>
Boxed Trees	Box + 24"	Box depth
Canned Trees (15 gc)	Can + 18"	Can depth
Canned Shrubs/Vines (1 or 5 gc)	Can + 12"	Can depth

- D. Square Tree Pits: Tree pits shall be dug in a square pattern with pit walls scarified to promote root penetration into surrounding soil. Drilled tree pits shall be modified to a square shape.
- E. Break and loosen the sides and bottom of the pit to ensure root penetration and water test hole for drainage as required above.
- F. Backfill plant holes with mix as specified, free from rocks, clods or lumpy material. Backfill native soil free of soil amendments under rootball and foot tamp to prevent settlement. Backfill

remainder of the hole with soil mix and place plant tablets or packets (Type B fertilizer) 3 inches below finish grade and 1/2-inch from roots at the following rates:

1 gallon can plant - 1 tablet or packet 5 gallon can plant - 3 tablets or packet 15 gallon can plant - 6 tablets or packet 24-inch box plant - 6 tablets or packet 36-inch box plant - 8 tablets or packet

- G. Carefully remove and set plants without damaging the rootball. Superficially cut edge roots vertically on three sides. Remove bottom of plant boxes before planting. Remove sides of boxes after positioning the plant and partially backfilling.
- H. Set plants in backfill with top of the rootball 2 inches above finished grade. Backfill remainder of hole and soak thoroughly by jetting with a hose and pipe section. Water backfill until saturated the full depth of the hole.
- I. Build 6" high watering basin berms around trees and shrubs to drain through rootball. Basins are not required around trees in turf areas.
- J. Stake and/or guy trees as detailed. Drive stake until solid and remove excess stake protruding above top tree tie to prevent rubbing against branches.
- K. Remove any soil from top of plant rootballs and secure Landscape Architect's approval of rootball height prior to mulching.
- L. After approval of rootball height, install mulch as required below.

3.8 MULCH:

- A. Except where rock mulch is required, mulch all tree, shrub and ground cover areas with organic mulch to a 3-inch depth, except adjacent to walkways where soil grade is 2 inches below top of pavement, mulch shall be 2 inches deep, and 2-inches deep where planting ground cover plants from flats. Hold bark mulch away from base (trunk) of plant 4" or as directed by the Landscape Architect. Individual trees and/or shrubs planted in non-irrigated areas shall, at minimum, receive bark mulch over their watering basin and berm. No mulch is required around trees in turf areas.
- B. Install rock mulch to a [4-inch] depth where shown.
- 3.9 ROOT BARRIER: Install in linear fashion along and adjacent to the edges of the planting area as detailed or, if not shown, in accordance with manufacturer's recommendations. Set top of barrier approximately ½-inch above finished soil surface to allow concealment with mulch, as accepted by Owner's Representative.
- 3.10 GROUND COVER PLANTING: Plant in neat, straight, parallel and staggered rows as indicated on plan. Plant first row one-half required ground cover spacing behind adjacent curbs, structures, or other plant bed limits. Plant ground cover to edge of water basins of adjacent trees and shrubs.
- 3.11 PRE-EMERGENCE WEED KILLER: Apply pre-emergence weed killer in all areas to receive ground cover planting. Work shall be done under the supervision of a person licensed by the State of California as a pest control applicator and holding a qualified applicator license or a Qualified Applicator Certificate. Obtain approval of the finish grades prior to applying weed killer and coordinate planting and watering with the pest control specialist prior to planting. Take care to keep weed killer off areas to be seeded.
- 3.12 WATERING: Water all trees, shrubs and ground cover immediately after planting. Apply water to all plants as often and in sufficient amount as conditions may require to keep the plants in a healthy

vigorous growing condition until completion of the Contract. Do supplemental hand watering of trees and shrubs during the first 3 weeks of plant establishment.

3.13 MAINTENANCE OF PLANTING: Maintain plants from time of delivery to site until final acceptance of landscape installation.

3.14 PRE-MAINTENANCE PERIOD REVIEW AND APPROVAL OF PLANTING

- A. Receive approval of the installed planting prior to commencement of planting establishment maintenance period. Notify the Landscape Architect a minimum of seven (7) days prior to requested review. Before the review, complete the following:
 - 1. Complete all construction work.
 - 2. Present all planted areas neat and clean with all weeds removed and all plants installed and appearing healthy.
 - 3. Plumb all tree stakes.
 - 4. Seed [sod] all turf areas.
 - 5. No partial approvals will be given.

3.22 PLANTING ESTABLISHMENT MAINTENANCE

- A. General Requirements:
 - 1. Maintenance Period: The planting establishment maintenance period required shall be 120 calendar days after all planting is complete, turf is seeded, and installation approved. A longer period may be required if the turf is not thick, vigorous and even and has been mowed a minimum of 4 times, or if the plant material is not acceptably maintained during the maintenance period. The maintenance period may be suspended at any time upon written notice to the Contractor that the landscaping is not being acceptably maintained, and the day count suspended until the landscape is brought up to acceptable standards as determined by the Landscape Architect.
 - 2. Planting establishment maintenance immediately follows, coincides with, and is continuous with the planting operations, and continues through turf installation, and after all planting is complete and accepted; or longer where necessary to establish acceptable stands of thriving plants.
 - Protect all areas against damage, including erosion, trespass, insects, rodents, disease, etc. and provide proper safeguards. Maintain and keep all temporary barriers erected to prevent trespass.
 - 4. Keep all walks and paved areas clean. Keep the site clear of debris resulting from landscape work or maintenance.
 - 5. Repair all damaged planted areas, and replace plants and reseed or resod turf immediately upon discovery of damage or loss.
 - 6. Check sprinkler systems at each watering; adjust coverage and clean heads immediately. Adjust timing of sprinkler controller to prevent flooding.
 - 7. Maintain adequate moisture depth in soil to ensure vigorous growth. Check rootball of trees and shrubs independent of surrounding soils and hand water as required.
 - 8. Keep Contract areas free from weeds by cultivating, hoeing or hand pulling. Use of chemical weed killers will not relieve the Contractor of the responsibility of keeping areas free of weeds over 1-inch high at all times.
- B. Tree, Shrub and Ground Cover Maintenance:

- 1. Maintain during the entire establishment period by regular watering, cultivating, weeding, repair of stakes and ties, and spraying for insect pests. Prune when requested by the Landscape Architect.
- 2. Keep watering basins in good condition and weed-free at all times.
- 3. Replace all damaged, unhealthy or dead trees, shrubs, vines and ground covers with new stock immediately; size as indicated on the drawings.
- C. Non-irrigated Erosion Control Areas: To be watered by winter rains.

D. Fertilizing:

- Upon approval and after submitting fertilizer delivery tags, maintenance fertilization shall begin 30 days after planting is complete. Fertilize all turf and ground cover areas by broadcasting Type C (21-7-14) fertilizer at the rate of 5 lbs. per 1,000 square feet evenly throughout. Reapply every forty-five (45) days until acceptable.
- 2. During the winter, for quick turf greening effect, calcium nitrate (15.5-0-0) may be applied at the rate of 6 lbs. per 1,000 square feet.
- 3. Early spring and fall substitute a complete fertilizer such as 15-15-15 applied at the rate of 6 lbs. per 1,000 square feet, to help insure continuing adequate phosphorus and potassium.
- 4. Apply ammonium sulfate fertilizer as necessary to maintain vigorous, green grass between fertilizings mentioned above.
- 5. Observe plant's color, and if a soil pH imbalance is suspected, take soil samples and obtain laboratory analysis for confirmation. Take necessary action recommended in laboratory analysis such as top dressing with soil sulfur, leaching soil, etc.

3.23 FINAL PLANTING REVIEW AND ACCEPTANCE

- A. At the conclusion of the Maintenance Period, schedule a final review with the Owner, the Owner's maintenance person, and the Landscape Architect. On such date, all project improvements and all corrective work shall have been completed. If all project improvements and corrective work are not completed, continue the planting establishment, at no additional cost to the Owner, until all work has been completed. This condition will be waived by the Owner under such circumstances wherein the Owner has granted an extension of time to permit the completion of a particular portion of the work beyond the time of completion set forth in the Agreement.
- B. Submit written notice requesting review at least 10 days before the anticipated review.
- C. Prior to review, weed and rake all planted areas, repair plant basins, mow and edge turf, plumb tree stakes, clear the site of all debris and present in a neat, orderly manner.
- 4.0 * MEASURMENT AND PAYMENT. The contract unit prices paid for various Planting Work items, shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and for doing all the work involved in the Planting category of work as shown on the plans, as specified in the state standard specifications, these special provisions, and as directed by the Engineer, and no additional payment will be allowed.

** END OF SECTION ***

SECTION 7-23.01 SITE FURNISHINGS

PART 1 GENERAL

1.1 DESCRIPTION

A. Furnish and install all site furnishings shown on drawings and specified in accordance with the manufacturer's instructions and as shown on the drawings and as specified

1.2 REFERENCES

- A. Perform work in accordance with all applicable laws, codes and regulations required by the City and the State of California.
- B. Manufacturer's Instructions: Where required in the Specifications that materials, products, processes, equipment or the like to be installed or applied in accordance with manufacturer's instructions, directions or specifications, or words to this effect, it shall be constructed to mean that said application or installation shall be in strict accordance with printed instructions furnished by the manufacturer of the material for use under conditions similar to those at the job site.

C. Reference Standards:

State of California, Business and Transportation Agency, Department of Transportation: "Standard Specifications."

Manufacturers' specifications and recommendations.

1.3 COORDINATION

A. Coordinate items of other trades. Contractor shall be responsible for the proper installation of all accessories embedded in concrete and for the provision of connections, holes, openings, etc., necessary to the execution of the work of the trades.

1.4 SUBMITTALS:

A. Trash & Recycling Receptacles

PART 2 - MATERIALS

2.1 TRASH & RECYCLING RECEPTACLES

- A. Trash Receptacle Model: Chase Park, 24" x 40", side-opening, black powder-coated finish. Manufactured by Landscape Forms, Kalamazoo, MI, (800) 521-2546.
- B. Recycling Receptacle: Chase Park, 24" x 40", side-opening, black powder-coated finish, standard glass and aluminum recycling signage attached. Manufactured by Landscape Forms, Kalamazoo, MI, (800) 521-2546.

PART 3 - EXECUTION

3.1 GENERAL INSTALLATION

- A. Install manufactured items in accordance with the manufacturer's instruction and as shown in the drawings and as specified herein.
- B. Perform all work in accordance with all applicable laws, codes and regulations required by State of California and the City of Sausalito.
- C. Set all work true and square, plumb and level. Remove and replace any wood that splits during or after erection until acceptance. Keep nailing neatly lined up.
- D. Place washer under the head and nut of bolts where same bear on wood, except head of carriage bolt. Drill bolt holes same diameter as bolt.

- E. Size bolts to fit flush with nuts. Countersink nuts and bolts as detailed.
- F. Hammers with scored faces shall not be used in nailing.
- G. Supply all miscellaneous metal units and install as specified herein under the Sections entitled "Miscellaneous Metalwork" and "Galvanizing." Hot-dip galvanize all metal fastenings, angles, etc., after complete fabrication.
- H. Set site furniture, level. Provide spacers under furniture to level as acceptable to Owner's Representative
- Transport, store and handle precast units and manufactured items in a manner to avoid hairline cracks, staining or other damage. Store units free of the ground and protected from mud or rain splashes. Cover units, secure covers firmly, and protect the units from dust, dirt or other staining material.

3.2 TRASH RECEPTACLES

A. Install level and in accordance with the manufacturer's instruction and as shown. Provide spacers under receptacles to level as acceptable to Owner's Representative.

3.7 CLEANUP

*** END OF SECTION ***

SECTION 7-24.01 SITE CARPENTRY

PART 1 - GENERAL

1.1 DESCRIPTION: Provide all labor, equipment and materials for the installation of site carpentry for header boards as shown on the drawings and specified.

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - ASTM A123 Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - 2. ASTM A307 Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength.
 - 3. ASTM D1761 Standard Test Methods for Mechanical Fasteners in Wood.
- B. Federal Specifications (FS):
 - 1. FS FF-S-111D Screws, Wood.
 - 2. FF-S-325 Expansion Shields.
- C. American National Standards Institute (ANSI):
 - 1. ANSI B18.2.1 Square and Hex Bolts and Screws, Inch Series.
- D. International Code Council (ICC):
 - 1. California Building Code (CBC)

1.3 QUALITY ASSURANCE

- A. Lumber: Grade stamp to contain symbol of grading agency, mill number of name, grade of lumber, species of species grouping or combination designation, rules under which grades, where applicable, and condition of seasoning at time of manufacture.
- B. Pressure Treatment of Wood: In accordance with the American Wood Preservers Institute (AWPI) Standards.
- C. Poles and Posts: Shall conform to American National Standards Institute specifications and dimensions for wood poles 05.1-1972, and poles shall be selected for uniformity and appearance with maximum taper of 1-inch per 10 linear feet.

- D. Preservative-treated Lumber: Lumber shall be pressure-treated for "Below Grade Use" in conformance with AWPA Standard C-2.
- E. Abbreviations: AD air dried. KD kiln dried. VG vertical grain. FG flat grain. RWD redwood. DF Douglas Fir. PT pressure-treated. All wood surfaced, four sides, unless otherwise designated "rough".

1.4 PROTECTION

- A. Lumber shall be stored in neat stacks at the site unless it is to be used immediately. All lumber shall be piled so that it may be readily inspected and shall be handled in a manner that will avoid injury or breakage.
- B. Immediately upon delivery to jobsite, place materials in area protected from weather.
- C. Take special care when handling.
- D. Store lumber on a flat surface with skids above ground as necessary to prevent warping.
- E. When stacking palleted units, start supports at each end and spaced 24" o. c.
- F. Line up supports vertically.

1.5 SUBMITTALS

- A. Submit listed submittals
- B. Certifications:
 - 1. Pressure-treated wood: Submit certification by treating plant stating chemicals and process used, net amounts of slats retained, and conformance with applicable standards.

PART 2 - MATERIALS

2.1 LUMBER

- A. Except where otherwise noted, all lumber shall conform to the allowable characteristics permitted within the applicable grading rule. No splits, checks, holes, decay or other irregularities will be permitted except characteristic of that grade.
- B. Lumber shall be as follows:
 - 1. Unless otherwise indicated on drawings or specified, lumber shall be Douglas Fir No. 1.
 - 2. Pressure Treated Lumber for Deck support structure: Douglas fir-Larch, No. 1, pressure-treated as noted below.
 - 3. Bench and deck tops and fascias shall be Redwood. Clear Heart. S4S.
 - 4. Posts shall be pressure-treated, Douglas fir-Larch, and sized as indicated on the Drawings. Pressure treat Douglas fir with "ACQ". Treat all posts for "below ground use" (.60 lbs. per cubic foot) in conformance with AWPA requirements.

2.2 ACCESSORIES

- A. Hardware: Provide all necessary nails, screws, clips and bolts required for proper installation of wood and wood composite lumber decking. Sizes and quantities as required by code authority having jurisdiction, unless more stringent requirements specified elsewhere.
 - 1. Bolts. Exterior Use:
 - a. Material Standard: Comply with ASTM A307, with standard washers.
 - b. Finish: Galvanized, ASTM A123.
 - c. Size: As shown.
 - 2. Lag Screws:
 - a. Material Standard: Comply with ANSI B18.2.1.
 - b. Finish: Hot dipped galvanized for exterior use.
 - 3. Expansion Shields:
 - a. Material Standard: Comply with Fed Spec. FF-S-325, Type 1, Group III, Self-drilling.
 - 4. Nails. General:
 - a. Material Standard: Comply with ASTM F1667.
 - b. Type: Common unless otherwise indicated.
 - c. Finish: Hot dipped galvanized for exterior use.

5. Square-Head-Drive Self-Taping Screws for attaching wood composite decking. a. Stainless steel Trimscrews or equal.

2.3 PRESERVATIVE

A. Preservative-treated Lumber shall be pressure-treated for "Below Grade Use" with ACQ, 0.60 retention, in conformance with AWPA Standard.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Site Verification of Conditions:
 - 1. Verify that site conditions are acceptable for installation of materials.
 - Do not proceed with installation of wood and wood composite lumber until unacceptable conditions are corrected.

3.2 INSTALLATION

- A. Workmanship shall be first class throughout. All lumber (except Wood Composite Lumber) shall be accurately cut and framed to a close fit and shall have even bearing over the entire contact surface. All joints shall be square and tight unless otherwise shown. No shimming will be permitted in making joints. Work shall be free of hammer marks, dents or other disfiguration. Nails and other hardware to be sized per U.C.B. Nailing Schedule and to be seated flush unless otherwise shown. Counter-sink finishing nails 1/16 inch. Holes for bolts shall be bored with a bit 1/16 inch larger than the bolt. Holes for lag screws shall be bored with a bit not larger than the base of the thread (75% of the diameter).
- B. Lumber Selection: Select individual pieces so that knots and obvious minor defects will not interfere with connections.
- C. Install members with crown and tight knots up.
- D. Cut joists, rafters and beams as required to provide a full even and horizontal seating on the support, unless otherwise shown;, do not overcut.
- E. Do not use lumber with end splits greater than the following:
 - 1. Joists 2x: Split length greater than 1/2 the wide face of the member.
 - 2. Beams and headers: Split length greater than thickness of member.
 - 3. Structural blocking: Split length greater than thickness of member.
- F. Limit notches and bored holes in joist and beams as follows:
 - 1. Not permitted unless detailed on the Drawings or approved by the Structural Engineer.
 - 2. Notches in bottom o in top at cantilever or continuous span not permitted.
 - 3. Notches in top shall not exceed 1/6th the depth and shall not be located in the middle 1/3 of span.
 - 4. Bored holes shall not exceed 1-1/2" nor 1/5 of the depth in diameter, and shall not be within 2" of top or bottom.

G. Fastening:

- Use such fastenings and connections as required to connect members securely together or to structure.
- 2. Minimum nailing, not otherwise shown or noted, shall convorm to CBC Table 2304.9.1.
- 3. Penetration of nails or spikes into piece receiving point shall be not less than ½ length of nail or spike, except, that 16 penny nails may be used to connect pieces of 2" thickness.
- 4. Drive nails and spikes no closer together than 2/3 their depth nor closer to edge of member than ½ their depth.
- 5. Place nails, bolts and other connector without splitting wood.
- 6. Predrill holes whenever nailing tends to split wood. Replace all split members.

- 7. All nuts and screws shall be tightened when placed and retightened at completion of the job or immediately prior to closing in.
- 8. Nuts shall be secured against loosening.

3.3 PRESERVATIVES:

- A. Apply specified preservative to all wood in contact with ground (including framing for deck). Moisture content of wood at time of application shall not exceed 25%. When any framing, cutting or boring of treated wood is performed after treatment, swab all cuts, dips and holes thoroughly with heavy application of the same preservative specified for the treatment of the lumber. Install cut end above grade only.
- B. Bolts 5/8" and less in diameter shall be fitted with cut washers, and all bolts and lag screws over 5/8" in diameter shall be fitted with cast or malleable iron washers unless otherwise shown on the Drawings. Select bolt length to fit situation. Where bolts project beyond nut, cut off to a point 1/8" from nut and paint same day with heavy coat of Zinc Chromate primer paint and one coat of Aluminum finish paint (to match the galvanized bolt finish, unless otherwise noted). Bolts to be hot dip galvanized.
- C. Stainless steel hardware may be used in lieu of hot dip galvanized.
- D. Exposed nails in exterior work shall be hot-dipped galvanized except where specified otherwise.

3.4 PROTECTION

- A. Protect installed work from damage due to subsequent construction or other activity on the site.
- 4.0 MEASURMENT AND PAYMENT. The contract unit prices paid for various site Furnishing Work items, shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and for doing all the work involved to perform Site Furnishings, as shown on the plans, as marked in the field by the engineer, as specified in the state standard specifications, these special provisions, and as directed by the Engineer, and no additional payment will be allowed.

*** END OF SECTION ***

SECTION 8. (BLANK)

SECTION 9. (BLANK)

SECTION 10. (BLANK)

SECTION 11. (BLANK)

SECTION 12. (BLANK)

SECTION 13. (BLANK)

APPLICABLE STANDARD PLANS AND DETAILS

CALTRANS Standard Drawings May, 2006

PLACEHOLDER

FOR

CALTRANS

STANDARD

DRAWINGS

(9 PAGES – PDF FORMAT)

SAMPLE AGREEMENT - INCLUDED FOR INFORMATION PURPOSES ONLY

CITY OF SAUSALITO PUBLIC WORKS CONTRACT

CAPITAL IMPROVEMENT PROJECT BRIDGEWAY TO FERRY LANDING IMPROVEMENTS

		entered into the	is	_ day of	, 2010, by	and between	
City of	Sausalito,			California einafter "Contr	(hereinafter actor").	"City")	and
	ation of the mu the parties ag Contract D	utual promises ree as follows	s contain		d based upon th	e provisions	s set
Instruction to City of Sau "Standard Saccepted properformanc affidavit requestion Contract be if attached to City of Sau City	o Bidders, the salito General Specifications for oposal of Confee Bond, Paymuired by 7106 tween City and o this Agreements	Special Provisions, the Provisions, the Public Hof the Public Contractor, all additional to the Public Contractor, agent or repeate	isions, the he Technorks Considenda reference Contracted herein.	ne Plans preparation Provision Struction, All (ferred to in Extending Extend	ment, the Notice ared by the City is (section 20 the Cities and Count thibit of this y required and these documents to as fully a part of the remainder of ent referred to in	of Sausalito, rough 80) of ty of Marin," s Agreement, he non collupgether form of the Contract this Agreem	the f the
Section 2.	The Work						
performed, BRIDGEWA under the	in the Cont	ract Docume LANDING II this Section	ents for MPROVE 2 of the	"CAPITAL EMENTS". T	and in the manne IMPROVEMENT he duties of Col are referred to	r PROJECT	T – uired
Section 3.	Work Sche	dule.					
City Engine receipt of su	er, and Contra	ctor shall ther e Work shall t	eafter co	mmence the	Notice to Procee Work within <u>15</u> of working days af	calendar day	ys of
Section 4.	Contract P	rice.					
amount of _ is as provid	ed in the Appr provided for ir	oved Bid. Pa	ayment o	of such amour	the total contract that is subject to any be provided for	_, which ameny deduction	ount ns of

Section 5. Amendments.

Amendments to the Contract including any Change Order shall be only by written agreement, signed by both parties. No Amendment to this Contract shall be effective until approved by the City Engineer.

Section 6. Independent Contractor - Subcontractors.

It is specifically understood and agreed that in the making and performance of this Contract, Contractor is an independent contractor and is not and shall not be construed to be an employee, agent or servant of City. Contractor shall be entitled to employ as its subcontractors only those individuals or firms described in its Bid Proposal, which subcontractors shall be required by Contractor to be subject to any terms and conditions of this Contract which pertains to them.

Section 7. Contractor's Responsibility.

It is understood and agreed that Contractor and any subcontractor has the professional skills and licenses necessary to perform the Work, and that City relies upon the professional skills of the Contractor and any subcontractor to do and perform the Work in a skillful and professional manner in accordance with the standards of the profession. Contractor thus agrees to so perform the Work, and to require the same of any subcontractor.

Acceptance by City of the Work, or any of it, does not operate as a release of the Contractor from such professional responsibility. It is further understood and agreed that Contractor has reviewed in detail the scope of the work to be performed under this Contract and agrees that in his professional judgment, the Work can and shall be completed for a fee within the amounts set forth in Section 4 of this Contract.

Contractor agrees to do the Work in accordance with the terms of this Contract and to be bound by the conditions of this Agreement, including all Contract Conditions set out in the documents enumerated in section 1, above.

Section 8. Hold Harmless, Indemnification and Insurance Requirements.

A. Indemnification and Hold Harmless.

Contractor shall indemnify, defend and save City, its officers, officials, employees and agents harmless from and against any and all liability, claims, suits, actions, damages and/or causes of action of any kind arising out of any bodily injury, personal injury, property damage or in violation of any federal, state or municipal law or ordinance or other cause in connection with the activities of Contractor, its employees, agents, subcontractors or on account of the performance or character of the Work or otherwise related to its performance of this Contract. Approval of any insurance coverage's does not, in any way, relieve Contractor of liability under this Indemnification and hold harmless clause.

B. Insurance Requirements, General

Contractor shall promptly obtain, at his own expense, all the insurance required by the Special Provisions and shall submit coverage verification review and approval by City. The notice to proceed with the Work will not be issued, and Contractor shall not commence work, until such insurance has been approved by City. Contractor shall not allow any Subcontractors to commence work on his subcontract until all similar insurance required of the Subcontractor has been obtained and verified. All required insurance shall remain in full force and effect at all times during the prosecution of the Work and until the final completion and acceptance thereof and in compliance with the further terms of the Contract. Notice to proceed does not relieve Contractor of the duty to obtain such insurance as required by the Contract. Each insurance policy shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt request, has been given to the City. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officers, officials, employees or volunteers.

Section 9. Nondiscrimination.

There shall be no discrimination against any employee who is employed in the Work, or against any applicant for such employment because of race, religion, color, sex or national origin. This provision shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

Section 10. City Personnel Conflict of Interest.

No officers, member, or employee of City and no member of the governing body of City who exercises any functions or responsibilities in the review, approval of the undertaking or carrying out of the Work, shall participate in any decision relating to this Contract which affects his personal interest or the interest of any corporation, partnership, or association in which he is, directly or indirectly interested; nor shall any such officer, member or employee of City have any interest, direct or indirect, in this Contract or the proceeds thereof.

Section 11. Contractor Conflict of Interest.

Contractor covenants that he presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of the Work. Contractor further covenants that in the performance of this Contract, no persons having any such interest shall be employed.

Section 12. Assignment.

Contractor shall not assign any interest in this Contract, and shall not transfer any interest in the same (whether by assignment or notation) without the prior written consent of City.

Section 13. Ownership of Documents.

Contractor agrees that all designs, drawings, specifications, and other technical data produced in the performance of this Contract including any and all shop drawings shall at the request of City and upon completion or termination of the Contract become the sole property of the City including all rights therein of whatever kind and whether arising from common or civil law or equity, and without requirement of additional compensation. Contractor agrees that City shall have access at all reasonable times to inspect and make copies of all notes, designs, drawings,

specifications and other technical date pertaining to the Work.

All drawings and engineering documents shall be subject to the approval of and if requested by the City Engineer shall be prepared for the signature of the City Engineer.

Section 14. Enforcement of Contract - Attorney Fees.

In the event it shall be necessary for either party to institute court action to enforce any of the terms of this Contract, the prevailing party in such litigation shall be entitled to recover reasonable attorneys fees.

Section 15. Miscellaneous Provisions.

- A. Time is of the essence in the performance of this Contract.
- B. This Contract shall extend to, be binding upon and inure to the benefit of any executor, administrator, successor, heir and assign of the parties hereto.

In Witness Whereof, City and Contractor have executed this Contract as of the date first written above.

City of Sausalito:	Contractor:		
City Manager			
Recommended for approval by:	Corporate authority of:		
City Engineer	to enter into this Contract confirmed by:		
Approved as to form by:			
City Attorney	Corporate Secretary		

WORKMEN'S COMPENSATION INSURANCE CERTIFICATE

The Contractor shall execute the following form as required by the California Labor Code, Sections 1860 and 1861:

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workmen's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract.

Date: _	
Contrac	or
By:	
_,. <u>.</u>	Signature
-	Title
Attest: _	
	Signature
-	Title

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: That
WHEREAS, the City Council of the City of Sausalito, County of Marin, State of California, has awarded to
(hereinafter designated as "Principal")
a contract for <u>CAPITAL IMPROVEMENT PROJECT – BRIDGEWAY TO FERRY LANDING IMPROVEMENTS</u> , and,
WHEREAS, said Principal is required under the terms of said contract to furnish a bond for the faithful performance of said contract,
NOW, THEREFORE, we, the Principal and
The condition of this obligation is such that if the above bounded Principal, his or its heirs, executors, administrators, successors or assigns shall in all things stand to and shide by and

The condition of this obligation is such that if the above bounded Principal, his or its heirs, executors, administrators, successors or assigns shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in the said contract and any alteration thereof made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save according to their true intent and meaning, and shall indemnify and save harmless City, its officers, representatives, agents, and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

And the said Surety for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alternation, or additions to the terms of the contract or to the work or to the specifications.

In the event suit is brought upon this bond by City and judgment is recovered, Surety shall pay all costs incurred by City in such suit, including a reasonable attorney's fee to be fixed by the court.

	erparts of this instrument, each of which shall fo ave been duly executed by Principal and Surety
above named on the day	of
	(Seal)
	(Seal)
	(Seal)
Principal	
	(O. 1)
	(Seal)
	(Seal)
	(Seal)
Surety	

Address

NOTE: Signature of those executing for Surety must be properly acknowledged.

PAYMENT BOND FOR PUBLIC WORKS

KNOW ALL MEN BY THESE PRESENTS: That WHEREAS, the City Council of the City of Sausalito, County of Marin, State of California, and (hereinafter designated as "Principal") have entered into an agreement for the furnishing of all materials, labor, services, and transportation necessary, convenient, and proper to implement: **CAPITAL IMPROVEMENT PROJECT BRIDGEWAY TO FERRY LANDING IMPROVEMENTS** which said Agreement dated , 20 , and all of the Contract Documents attached to or forming a part of said Agreement, are hereby referred to and made a part thereof; and WHEREAS, said Principal is required by Chapter 5 (commencing at Section 3225) and Chapter 7 (commencing at Section 3247), Title 15, Part 4, Division 3 of the California Civil Code to furnish a bond in connection with said contract; NOW, THEREFORE, we, the Principal and Surety, are held and firmly bound unto the City of Sausalito (hereinafter called "City"), in the penal sum of Dollars(\$__) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors jointly and severally, firmly by these presents. THE CONDITION OF THIS OBLIGATION IS SUCH that if the said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns fail to pay any of the persons named in Section 3181 of the California Civil Code, or amounts due under the Unemployment Insurance code with respect to work or labor performed by any such claimant, the Surety will pay for the same, in an amount not exceeding the sum hereinabove specified, and also, in case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the court. This bond shall insure to the benefit of any of the persons named in Section 3181 of the California Civil Code, so as to give a right of action to such persons or their assigns in any suit

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration, or modification in, to, or any contract, plans, specification, or agreement pertaining or relating to any scheme or work of improvement hereinabove described or pertaining to or relating to the furnishing of labor, materials, or equipment therefor, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement hereinabove described nor by any rescission or attempted rescission of the contract, agreement, or bond; nor by any conditions precedent or subsequent in the bond attempting to limit the right or recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by

brought upon this bond.

any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances bond has been given, by reason of any breach of contract between the owner or Public Entity and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 3110 or 3112 of the California Civil Code, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration, or modification herein mentioned.

all purp	NESS WHEREOF, two identical oses be deemed an original then named on the	reof, have been duly e	executed by Principal and Surety
above i		day of	20
		(Seal)	
		(Seal)	
		(Seal)	
	Principal		
		(Seal)	
•			
,		(Seal)	
	Surety	(Seal)	
	Juicty		

Address

NOTE: Signature of those executing for Surety must be properly acknowledged.

WARRANTY BOND

KNOW ALL MEN BY THESE PRESENTS: That
WHEREAS, the City Council of the City of Sausalito, County of Marin, State of California, has awarded to
(hereinafter designated as "Principal")
a contract for <u>CAPITAL IMPROVEMENT PROJECT-BRIDGEWAY TO FERRY LANDING IMPROVEMENTS</u> , and,
WHEREAS, said Principal is required under the terms of said contract to furnish a bond for the guarantee of materials used and workmanship performed for a period of one (1) year after the recordation of the "Notice of Completion":
NOW, THEREFORE, we, the Principal and as Surety, are held and firmly bound unto the City of Sausalito (hereinafter called "City"), in the penal sum of Dollars(\$) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.
THE CONDITION OF THIS OBLIGATION IS SUCH that if the said Principal, his or its heirs, executors, administrators, successors or assigns shall for a period of one year from the date of recordation of the "Notice of Completion" repair or replace, at the discretion of the City, any and all defective or deficient materials or workmanship used, supplied, or provided by Principal in performance of said contract, and otherwise well and truly keep and perform all the undertakings, terms, covenants, conditions, and agreements as to any all guarantees and warranties required by said contract and any alteration thereof, made as therein provided, all within the time and in the manner therein designated and in all respects according to their true intent and meaning, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.
FURTHER, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Contract Documents or of the Work to be performed thereunder, shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time alteration or modification of the Contract Documents or of work to be performed thereunder. IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety herein named on the day of, 20
(Seal)
(Seal)
(Seal)
Principal

	(Seal)
	(Seal)
	(Seal)
Surety	

Address

NOTE: Signature of those executing for Surety must be properly acknowledged.

Contract No.	
Escrow Agreem	ent No.

ESCROW AGREEMENT: SUBSTITUTION OF SECURITIES PROGRESS PAYMENTS UNDER PUBLIC WORKS CONTRACTS (Gov. Code Sec. 4590)

The pa	arties t	to this Agreement are: The City of Sausalito, County of Marin ("CITY" herein); and:
		("CONTRACTOR" herein), and the
	(nam	e of contractor)
		("ESCROW AGENT" herein).
	name	e of bank)
		RECITALS
CITY	and Co	ONTRACTOR have entered into a contract for the construction
of	· · · · · ·	Contract No
purpo: require	se is to	nent is made pursuant to the authority of Government Code Section 4590; its provide for the release to CONTRACTOR of sums which CITY otherwise would be withhold from progress payment to CONTRACTOR. This agreement shall be the date of execution by the parties shown on Page 5.
In con	sidera	tion of their mutual promises the parties hereto agree as follows:
CONT	RACT	OR agrees:
1.	provi secu than secu	TRACTOR shall deliver initially to ESCROW AGENT, in accordance with the sions of Government Code Section 4590, either or both of the following forms of rity in the combined amount of not less than: \$
	(a)	securities listed under Government Code Section 16430;
	(b)	certificates of deposit issued by banks authorized to transact business in California which are members of the Federal Deposit Insurance Corporation, or by savings and loan associations authorized to transact business in California which are members of the Federal Savings and Loan Insurance Corporation. Non-negotiable certificates of deposit shall be payable to the order of
		as Trustee under their Escrow Agreement number
2.	Any	certificates of deposit delivered by CONTRACTOR to ESCROW AGENT,

parties being permitted to intervene.

hereunder, shall be accompanied by evidence satisfactory to ESCROW AGENT that the issuing bank or savings and loan company will honor any request for redemption prior to maturity and that payment will be made to ESCROW AGENT without any rights of third

- 3. CONTRACTOR shall maintain on deposit at all times prior to termination of escrow created by this agreement securities as specified in Section I Paragraph (b), above; or a combination of such securities and certificates of deposit having a market value of not less than the amount to be paid to CONTRACTOR under the terms of this agreement.
- 4. Upon demand of ESCROW AGENT, CONTRACTOR shall deposit with ESCROW AGENT additional securities as defined in Section I, Paragraphs 1 (a) and 1 (b), above, necessary to maintain said deposit as specified above.
- CONTRACTOR shall pay all charges made by ESCROW AGENT for services rendered by it as such ESCROW AGENT, including but not limited to service fees and out-ofpocket expenses.
- 6. CONTRACTOR shall pay any escrow charges made by CITY for escrow services performed by CITY.
- CONTRACTOR shall deposit with ESCROW AGENT such properly executed documents as, in the opinion of ESCROW AGENT, are necessary to enable ESCROW AGENT to sell deposited securities or to redeem certificates of deposit.
- 8. CONTRACTOR shall pay any and all costs incurred by CITY or ESCROW AGENT, including but not limited to reasonable attorney's fees, in any legal proceedings in any way arising out of or related to this escrow, including but not limited to legal proceedings challenging the right of CITY or ESCROW AGENT to possess or dispose of said securities.
- CONTRACTOR agrees that CITY may direct ESCROW AGENT to sell securities or redeem certificates of deposit deposited with ESCROW AGENT under the terms of this CONTRACTOR'S default or failure to perform pursuant to the terms of the construction contract.

CITY agrees:

- CITY shall pay to ESCROW AGENT, in accordance with established CITY procedures, funds which otherwise would be withheld from progress payments pursuant to the requirements of law and in accordance with the contract documents upon receipt of notice from ESCROW AGENT that the following are on deposit with ESCROW AGENT:
 - (a) securities in the form and amount specified in Section I, Paragraph 1, hereof;
 - (b) documents necessary to enable ESCROW AGENT to sell or redeem the deposited securities.
- CITY shall be obligated to make such payments only if ESCROW AGENT holds securities deposited under the provisions of Section I, Paragraph 1, having a market value of not less than the total amount otherwise normally withheld from the progress payments to be paid to CONTRACTOR under this agreement.

ESCROW AGENT agrees:

- 1. ESCROW AGENT shall hold the securities or certificates of deposit in trust for the benefit of CITY until such time as the escrow created hereunder is terminated.
- ESCROW AGENT shall obtain from CONTRACTOR such documents as in the opinion of ESCROW AGENT are necessary to enable ESCROW AGENT to sell the securities or to redeem the certificates of deposit deposited hereunder.
- 3. ESCROW AGENT shall review the market value of securities held in said escrow account monthly at the close of business on the first business day of each month.
- 4. ESCROW AGENT shall pay to CONTRACTOR moneys paid to ESCROW AGENT by CITY, except that in no event will ESCROW AGENT make any payment to CONTRACTOR if such payment will cause the total amount of payments so made to exceed the value of the securities on deposit with ESCROW AGENT as of the date of such payment.
- 5. ESCROW AGENT shall promptly, upon receipt of written notice from CITY to do so, sell securities or redeem certificates of deposit and hold proceeds of such sale or redemption for disbursement at the written direction of CITY.
- 6. ESCROW AGENT shall make no charge to CITY for any services or out-of-pocket expenses incurred in carrying out its duties and obligations under this agreement.
- 7. ESCROW AGENT shall hold securities as Trustee for CITY as security for payment of money which would otherwise be held by CITY pursuant to the requirements of law, and agrees that the rights of CITY to said securities are superior to any lien (or claim of lien) including but not limited to the right to sell or redeem securities as provided in Section I, Paragraph 8, hereof, which ESCROW AGENT claims or may in the future claim against said deposit.

ALL PARTIES hereto further agree that:

- 1. CONTRACTOR shall have the right to withdraw or exchange securities from the custody of ESCROW AGENT. Such withdrawal or exchange may be made only if the market value or, in the case of certificates of deposits, face value of securities deposited under the provisions of Section I, Paragraph 1, in the custody of ESCROW AGENT after such withdrawal or exchange equals not less than 100% of total amount paid to CONTRACTOR by ESCROW AGENT under this agreement. ESCROW AGENT shall notify CITY in writing of any such withdrawal or exchange within two business days of such withdrawal or exchange.
- 2. The total amount of funds to be released to CONTRACTOR pursuant to this escrow agreement, in lieu of being withheld by CITY from progress payments to CONTRACTOR, may be increased during the term of this agreement to 5% of the total contract amount if CONTRACTOR so elects. CONTRACTOR shall deliver to ESCROW AGENT securities as specified in Paragraph 1 having a market value not less than 5% of the total contract amount.

- 3. This escrow shall terminate and ESCROW AGENT shall return to CONTRACTOR all securities held in its custody promptly upon receipt of written notice from CITY that said securities may be released.
- 4. CONTRACTOR is the beneficial owner of said securities held by ESCROW AGENT and CONTRACTOR is entitled to receive any and all interest which may be paid thereon.

IN —			WHEREOF, day of			have	executed	this	agreement	as	of	the
	С	ITY O	F SAUSALITO)								
Ву												
	С	ity En	gineer									
	"(CONTI	RACTOR"									
	1)	Name	of Firm)		 							
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Ву	-				 							
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APPENDIX A

ARTICLE 1.5

Resolution of Construction Claims

[Added Stats 1994 ch 726 § 22 (AB 3069), effective September 21, 1994. Former Article 1.5, also entitled "Resolution of Construction Claims", consisting of §§ 20104-20104.8, was added Stats 1990 ch 1414 § 2 and repealed, operative January 1, 1994, by the terms of § 20104.8.]

Section	
20104.	Application of article; "Public work"; "Claim"
20104.2.	Requirements to submit claim; Agency's response; Dispute by claimant
	over response; Failure of agency to respond; Inapplicability of
	article to tort claims
20104.4	Procedures to resolve claims
20104.6	Payment of portion of claim which is undisputed; Payment of interest on
	arbitration award or judgment

§ 20104. Application of Article; "Public work"; "Claim"

- (a)(1) This article applies to all public works claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between a contractor and a local agency.
- (2) This article shall not apply to any claims resulting from a contract between a contractor and a public agency when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2.
- (b)(1) "Public work" has the same meaning as in Sections 3100 and 3106 of the Civil Code, except that "public work" does not include any work or improvement contracted for by the state or the regents of the University of California.
- (2) "Claim" means a separate demand by the contractor for (A) a time extension, (B), payment of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitle to, or © an amount the payment of which is disputed by the local agency.
- (c) The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work which may give rise to a claim under this article.
- (d) This article applies only to contracts entered into on or after January 1, 1991.

Added Stats 1994 ch 726 § 22 (AB 3069), effective September 21, 1994.

Former Sections:

Former § 20104, similar to the present section, was added Stats 1990 ch 1414 § 2 and repealed, operative January 1, 1994 by the terms of § 20104.8.

Former § 20104 was added Stats 1990 ch 321 § 2, effective July 16, 1990, and renumbered to be § 20103.5 by Stat 1990 ch 1414 § 1.

§ 20104.2. Requirements to submit claim; Agency's response; Dispute by claimant over response; failure of agency to respond; Inapplicability of article to tort claims For any claim subject to this article, the following requirements apply:

(a) The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is

intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.

- (b)(1) For claims less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.
- (2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.
- (3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the claimant in producing the additional information, whichever is greater.
- (c)(1) For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written claims within 60 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.
- (2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.
- (3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the claimant in producing the additional information or requested documentation, whichever is greater.
- (d) If the claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the claimant may so notify the local agency, in writing, either within 15 days of receipt of the local agency's response or within 15 days of the local agency's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the local agency shall schedule a meet and confer conference within 30 days for settlement of the dispute.
- (e) Following the meet and confer conference, if the claim or any portion remains in dispute, the claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the claimant submits his or her written claim pursuant to subdivision (a) until the time that the claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.
- (f) This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code

Added Stats 1994 ch 726 § 22 (AB 3069), effective September 21, 1994.

Former Sections:

Former § 20104.2, similar to the present section, was added Stats 1990 ch 1414 § 2, amended Stats 1991 ch 1029 § 1, and repealed, operative January 1, 1994, by the terms of § 20104.8.

§ 20104.4. Procedures to resolve claims

The following procedures are established for all civil actions filed to resolve claims subject to this article:

- (a) Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The
- (b) mediation process shall provide for the selection within 15 days of both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15 day period, any party may petition the court to appoint the mediator.
- (b)(1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.
- (2)Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.
- (3) In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.
- (c) The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

Added Stats 1994 ch § 22 (AB 3069), effective September 21, 1994.

Former Sections:

Former § 20104.4 similar to present selection, was added Stats 1990 ch 1414 § 2, amended Stats 1991 ch 1029 § 2, and repealed, operative January 1, 1994, by the terms of § 20104.8.

§ 20104.8. [Section repealed 1993.]

Added Stats 1990 ch 1414 § 2 (AB 4165). Repealed, operative January 1, 1994, its own terms.