

**CONTRACT DOCUMENTS
AND
SPECIFICATIONS
FOR**

**HIGUERA STREET BRIDGE REPLACEMENT
PROJECT**

**EASTHAM DRIVE TO JEFFERSON BOULEVARD
PROJECT NO. PZ553, BHLS 5240(026)**



CITY OF CULVER CITY

Bid No. #1617

Public Works Department
City of Culver City

9770 Culver Boulevard

Culver City, CA 90232-0507

(310) 253-5600

TABLE OF CONTENTS

	<u>PAGE</u>
SECTION A - NOTICE INVITING BIDS.....	A-1 through A-3
SECTION B - INSTRUCTIONS TO BIDDERS.....	B-1 through B-7
SECTION C - BID FORMS	C-1 through C-18
SECTION D - AWARD AND EXECUTION OF CONTRACT	D-1 through D-10
SECTION E - GENERAL PROVISIONS.....	E-1 through E-28
SECTION F - TECHNICAL SPECIFICATIONS	
GENERAL	F-1 - F-7
PART 2 – CONSTRUCTION MATERIALS.....	F-8 – F-19
PART 3 – CONSTRUCTION METHODS	F-20 - F-48
SIGNALS, LIGHTING, AND ELECTRICAL SYSTEMS	F49 – F-54
SIGNING, STRIPING AND PAVEMENT MARKERS	F-55 – F-57
APPENDIX I	Project Plans
APPENDIX II	Initial Study/Mitigated Negative Declaration

NOTICE INVITING BIDS

**CITY OF CULVER CITY
NOTICE INVITING SEALED BIDS
FOR**

**HIGUERA STREET BRIDGE REPLACEMENT PROJECT, PZ553, BHLS 5240(026)
(EASTHAM DRIVE TO JEFFERSON BOULEVARD)**

Bid No. #1617

1. ANNOUNCEMENT

Notice is hereby given that sealed bids will be accepted by the City of Culver City, California, for furnishing all labor, services, materials, and equipment, and performing all work to provide for a complete and acceptable project, including site work for: **Higuera Street Bridge Replacement Project (Eastham Drive to Jefferson Boulevard); Project No. P-553, BHLS 5240(026)**, in the City of Culver City and in strict accordance with the plans and specifications in the Office of the Public Works Director and City Engineer of the City of Culver City, 9770 Culver Boulevard, Culver City, CA. 90232.

2. DESCRIPTION OF WORK:

The work to be done consists of furnishing all materials, equipment, tools, labor and incidentals as required in the specifications and contract documents. The general items of work include removal of existing AC and PCC pavement, construction of AC and PCC pavement, bike path, cold milling and overlay, removal and construction of curb and gutter, sidewalk, driveways, cross gutter, curb ramps, construction of landscaped slope, storm drain, inlets, catch basin, irrigation, traffic signal modifications, signing and striping, street lighting, structural bridge replacement and all other items not mentioned but indicated in the Plans and Specifications.

3. COMPLETION OF WORK:

All work to be done under this contract shall be completed within 18 Months, beginning on the date stipulated in the written "Notice to Proceed" issued by the City Engineer. **The Contractor's working hours shall be limited to the hours of 8:00 am to 8:00 pm Monday through Friday, 9:00 am to 7:00 pm on Saturday, and 10:00 am to 7:00 pm on Sunday.**

4. BIDDING PROCEDURES

All bids and bidding procedures must comply with the "Instruction to Bidders", Section B of the Bid Documents.

5. SUBMISSION OF BIDS

Bids must be filed with the Office of the City Clerk, at 9770 Culver Boulevard, Culver City, CA. 90232, not later than **3:00 PM** on **02/02/2017** at which time they will be publicly opened in the City Council Chambers. Bids will later be referred to the City Council of the City of Culver City for the appropriate action.

6. BID SECURITY

Each Bidder shall submit a form of Bid Guaranty such as a money order, a cashier's check, certified check, cash, or surety bond for the sum of ten percent (10%) of the total amount of the bid and made payable to the City of Culver City as a guaranty that the Bidder, if its bid is accepted, will enter into a satisfactory contract and furnish a bond for the faithful performance thereof, and for the payment of labor and materials costs, and insurance in accordance with the requirements of the contract documents.

7. BID DOCUMENTS

A copy of the plans and specifications may be obtained from the Engineering Division counter, 9770 Culver Blvd., Culver City, CA 90232, 2nd floor in City Hall only, (310) 253-5600, for a **\$15.00** fee. There is a **\$50.00** mailing (FedEx) fee in addition to the non-refundable fee, or your Federal Express number.

8. PRE-BID CONFERENCE

A mandatory pre-bid conference will be held at **2pm on Thursday, January 19, 2017** in Patacchia Conference Room, First Floor, City Hall, Culver City, California 90232. This meeting will give bidders the opportunity to present, discuss, and receive answers on technical questions regarding the project. Attendance of all bidders at the pre-bid conference is mandatory.

9. FORM AND STYLE OF BIDS

Bids must be prepared on the forms provided with the BID DOCUMENTS and must be in compliance with the INSTRUCTIONS TO BIDDERS. Bidders shall not change the wording of the forms provided, except as required by Addendum.

10. QUESTIONS/REQUESTS FOR INTERPRETATION

Pursuant to Section B-6, all questions shall be directed to **Sammy Romo**, P.E., Project Manager, at (310) 253-5619 or sammy.romo@culvercity.org.

11. RIGHT TO REJECT BIDS

The Owner reserves the right to reject any or all bids as the best interests of the Owner may dictate. Bidders are referred to Section B-18 of the "INSTRUCTIONS TO BIDDERS," for additional qualification requirements.

12. SHORING

Pursuant to the provisions of the California Labor Code Section 6707, each bid submitted in response to this Invitation to Bid shall contain, as a bid item, adequate sheeting, shoring, and bracing, or equivalent method, for protection of life and limb in trenches and open excavation, which shall conform to applicable safety orders. By listing this sum, the bidder warrants that its action does not convey tort liability to the Owner, the Engineer, the Construction Manager, and their employees, agents and subconsultants.

13. WAGE RATES

In accordance with the Labor Code, no worker employed in work under contract to the Owner shall be paid less than the prevailing wage rate referenced hereinafter. Copies of the current prevailing rate of per diem wages are on file in the Culver City, City Engineer's and City Clerk's Offices in the City Hall and is available for review to any interested person upon request. Any classification not listed therein shall be paid not less than the prevailing wage scale as established for similar work in the Culver City area. Said prevailing wage rates are hereby incorporated in and made part of the specifications by this reference.

14. CONTRACTOR'S LICENSE

All bidders shall be licensed under provisions of Chapter 9, Division 3 of the Business and Professions Code of the State of California to do the type of work contemplated in the project. In accordance with provisions of California Public Contract Code Section 3300, the Owner has determined that the Contractor shall possess a valid Class "A" License at the time that the bid is submitted. Failure to possess the specified license shall render the bid as non-responsive

BY ORDER OF THE COUNCIL OF THE CITY OF CULVER CITY, CALIFORNIA

By: _____
Jeremy Green, City Clerk

PUBLISHED: Culver City News Thursday, January 19 and January 26, 2017

--End of Section--

SECTION B

INSTRUCTIONS TO BIDDERS

SECTION B - INSTRUCTIONS TO BIDDERS

1. DEFINITIONS

Alternate Bid

"Alternate Bid" shall mean an amount stated in the Bid as set forth in the supplementary bid forms, to be added to or deducted from the Total Base Bid, if the corresponding substitution or change in the Work, materials or other items as described in the Bid Documents, is accepted by Owner.

Total Base Bid

"Total Base Bid" shall mean the sum stated in the Total Base Bid Form for which the Bidder offers to perform the Work described in the Bidding Documents. The Total Base Bid is the base to which work, materials, or other items may be added to or from which work, materials, or other items may be deleted, for sums stated in the Alternate Bid form.

Bid Date

"Bid Date" shall mean the deadline (including date and time) set forth in the Notice Inviting Bids accompany these Instructions.

Bid Form

"Bid Forms" shall mean the Total Base Bid Form, the Supplementary Bid Forms, and other additions attached hereto, all of which constitute part of the Bid Documents.

Bid Documents

"Bid Documents" shall mean all documents provided by Owner to Bidder for Bidder's use and consideration in preparation of its Bid. Bidding documents include the Notice Inviting Bids, these Instructions to Bidders and any supplements or additions hereto, the Bid Proposal Form, the Supplementary Bid Forms, the Statement of Contractor's Qualifications, other sample bid and contract forms, the Contract Documents, Drawings, Plans, and Specifications, all documents referenced in the Contract Documents, and all Addenda issued prior to execution of the Contract.

Bidder

"Bidder" shall mean any individual, firm, partnership, corporation, or combination thereof, submitting a Bid for the work, acting directly or through a duly authorized representative.

Sub-bidder

"Sub-bidder" shall mean a person or entity who submits a Bid to a Bidder for materials, equipment or labor (including quantity surveyors) for a portion of the Work and who is identified on the appropriate Supplementary Bid Form.

Contract Documents

"Contract Documents" shall mean all documents executed by Owner and Bidder to evidence their agreements relating to the Work. The Contract Documents include, but are not limited to, the Owner-Contractor Agreement; any supplementary and other conditions or provisions; the Drawings, the Plans, the Specifications and all Addenda issued prior to execution of the Owner-Contractor Agreement; and all modifications thereof.

Unit Price

"Unit Price" shall mean an amount stated in the Supplementary Bid Form as a price unit of measurement for materials, equipment and/or services or a portion of the Work as described in the Bid Documents, and shall include all elements of the described portion of the Work, including materials, labor, overhead and profit.

Work

"Work" shall mean the construction required by the Contract Documents, Specifications and Standard Drawings and includes all tools, materials, and labor necessary to produce such construction and all materials and equipment incorporated or to be incorporated in such construction.

2. BID AND BID FORMS

Owner Supplied Forms

Bid forms (Section C, "Bid Forms") have been provided with this document (inserted under the front cover) by the Office of the Public Works Director/City Engineer of the City of Culver City. All bids for this project must be submitted on said original supplied by the Office of the City Engineer of the City of Culver City. Copies of the bid forms made from Section C of this bound Specification by the Contractor shall not be allowed. Bid forms shall be completely filled out and signed by the Bidder or, if a partnership, by all partners or, if a corporation, by its President, Secretary and Treasurer, in the designated spaces.

Filling-in Forms

All blank spaces for unit prices, extensions and totals must be filled in. Signatures shall be completely and personally executed. If erasures are made, they must be initialed by the Bidder over his signature.

Modifications Prohibited

Bids shall not contain any recapitulation, inserted by the Bidder, of work to be done. Alternative proposals will not be considered unless specifically requested. No oral or telephone modifications will be considered.

Submitting Bids

All bids must be submitted in sealed envelopes bearing on the outside the name of the Bidder, the Bidder's business address and the name of the project for which the bid is submitted. Any bid received after the scheduled closing time for receipt of bids will be returned to the Bidder unopened. It is the sole responsibility of the Bidder to see that his bid is timely received.

ALTERNATE BIDS

The Contractor shall complete bid schedules for all Alternate Bids. Failure to complete all bid schedules will be considered a non-responsive bid.

Bids May Be Rejected

Bids may be rejected if there is any alteration of the bid form, additions not called for, conditional bids, qualifying provisions, incomplete entries, or irregularities of any kind. The Owner reserves the right to reject any or all bids.

3. ADDENDA

3.1 Mailed Addenda

Addenda will be mailed and/or faxed to all bidders who have received complete sets of Bid documents. Copies of Addenda will be made available for inspection in the Office of the Public Works Director/City Engineer at 9770 Culver Boulevard, Culver City, California, 90232.

3.2 Acknowledgment of Addenda

Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge its receipt in the Bid Form.

4. INTERPRETATION OF PLANS AND SPECIFICATIONS

If any person contemplating submitting a bid for the project is in doubt as to the meaning of any requirement of plans or specifications or finds any discrepancies in or omissions from the plans or specifications, he may submit to the Public Works Director/City Engineer a written request for an interpretation or correction thereof. The person making the request will be responsible for its prompt delivery. Interpretations or corrections will be made by addenda to specifications or by dated revisions of plans with a copy of each addition or change being furnished, through the Public Works Director/City Engineer or Construction Manager, to each known prospective Bidder. Questions concerning the contract form, bonding requirements or similar documents shall be directed to the City Attorney through the Office of the City Engineer.

5. EXAMINATION OF SITE, PLANS, SPECIFICATIONS AND OTHER DOCUMENTS

Each Bidder shall carefully examine the plans, these specifications and the forms for all other contract documents, and shall visit the site of the proposed work to fully inform him/herself of all existing conditions and limitations that may affect the execution and cost of work under the contract. He/She shall include in the individual bid prices the cost of all labor, materials, supplies, overhead and profit for each such bid item. The failure or omission of any Bidder to obtain and examine the plans or specifications, any form, instrument, addendum, or any other document, or to visit and acquaint him/herself with conditions at the construction site, shall in no respect relieve him/her from any obligation imposed by his/her bid or by award or execution of the contract. The submission of a bid shall be taken as prima facie evidence that the Bidder has read, understands and agrees to comply with all instructions contained herein.

6. COMPLETE BIDDING AND CONTRACT DOCUMENTS

A complete set of Bid documents contains the following documents:

1. Notice Inviting Bids, Section A;
2. Instruction to Bidders, Section B;
3. Bid Forms, Section C;
4. Award and Execution of Contract, Section D;
5. Special Provisions, Section E;
6. Technical Specifications, Section F, appendices and appended drawings.

7. BID GUARANTY

Bid Guaranty Enclosed With Bid

Each bid shall be presented under sealed cover and be accompanied by an approved form of Bid Guaranty such as a cashier's check, money order, certified check or cash, or surety bond in favor of the Owner for an amount of at least ten percent (10%) of the amount of the bid as a guaranty that the Bidder will provide bonds and insurance, and enter into a contract with the Owner for construction of the project. No bid shall be considered, unless such Bid Guaranty is enclosed.

In lieu of the foregoing, any bid may be accompanied by a surety bond in said amount, furnished by a surety authorized to do surety business in the State of California, guaranteeing that said bidder will enter into the contract and file the required bonds within the designated period.

Owner to Enforce Bid Guaranty

If within the time frame specified in Section B-18 of these Specifications, the successful bidder fails or neglects to enter into the contract and file the required bonds, the Owner may deposit in its treasury said bid security and not return it to the defaulting bidder.

Bid Guaranty Return

Upon execution of the contract with the successful Bidder, the Bid Guaranties of all Bidders will be returned by the City Clerk of the City of Culver City.

8. REJECTION OF BIDS

The Owner reserves the right to reject any or all bids and to waive any apparent clerical errors or discrepancies, or minor informalities if to do so seems to best serve the interests of the Owner.

9. WITHDRAWAL OF BIDS

Any Bidder may withdraw his bid, without obligation, either personally or by written request, at any time prior to the scheduled closing time for receipt of bids, provided that such personal or written request is delivered to the place specified in Section 5 of the "NOTICE INVITING BIDS" for receipt of Bids, prior to the Bid Date.

10. FACSIMILE MODIFICATION OF BIDS

No facsimile modification of bids will be allowed.

11. OPENING OF BIDS

Bid will be opened and publicly read aloud at the time and place designated in the Notice Inviting Bids.

12. BIDDERS INTERESTED IN MORE THAN ONE BID

No person, firm or corporation shall be allowed to make, or file, or be interested in, more than one bid for the same work, unless alternative bids are specifically requested. A person, firm or corporation that has submitted a sub proposal to a Bidder or that has quoted prices of materials to a Bidder is not hereby disqualified from submitting a sub proposal or quoting prices to other Bidders.

13. NON-COLLUSION AFFIDAVITS

The Owner requires any Bidder to whom it may make an award of the principal contract to execute a Non-Collusion Affidavit in the form included in the Bid Documents. The Owner also reserves the right to require that the Bidder shall, before awarding any subcontract, obtain from any or all proposed Subcontractors a Non-Collusion Affidavit in the form included in the Bid Documents.

14. LIST OF SUBCONTRACTORS FILED WITH BID

In accordance with the provisions of the Public Contracts Code of the State of California relating to listing of subcontractors, each Bidder must submit with his bid the name and location of place of business of each proposed Subcontractor who will perform work or labor or render service to the Bidder for the construction of the project covered by the bid, in an amount in excess of one-half of one percent (0.5%) of the Bidder's bid and shall state the portion of the work which will be done by each Subcontractor.

15. LICENSING OF CONTRACTORS

All Bidders and Subcontractors submitting bids shall be licensed in accordance with the provisions of the Business and Professions Code of the State of California pertaining to the licensing of contractors. The license shall be valid and active at the time of submitting a bid, and remain so throughout the duration of the Contract for the successful bidder and sub-bidders.

16. APPROXIMATE ESTIMATES

The quantities set forth on the bid form, if any, are approximate only, being given as a basis for the comparison of bids; and the Owner does not, expressly or by implication, agree that these will be the final quantities. The Bidder agrees that the Owner will not be responsible if any of said quantities are found to be incorrect; and the Bidder agrees not to make any claim for damages or for loss of profits because of a difference between the quantities of the various classes of work as estimated and the work actually done. If any error, omission or misstatement shall be discovered in the estimated quantities, the same shall not invalidate the contract executed pursuant to this bid or release the Bidder from the execution and completion of the whole or part of the work herein specified, in accordance with these specifications and the plans herein mentioned and the prices herein agreed upon and fixed therefore, or excuse him from any of the obligations or liabilities hereunder, or entitle him to any damages or compensation otherwise than as provided for in the contract executed pursuant to this bid.

17. GENERAL REQUIREMENTS

It is the purpose of the Owner, pursuant to these specifications, to realize work on a project, which is complete in every detail and respect. The Bidder shall furnish all equipment, materials and labor and perform all work required to accomplish this purpose. The Bidder shall not omit any item of work or fail to furnish any element, component or part thereof, whether or not such is specifically called for in the Contract Documents, which is necessary for a satisfactory completion of the project.

18. AWARD OF CONTRACT

The contract will be awarded to the lowest responsible and responsive Bidder. If award is made, it will be based on the lowest responsive and responsible total base bid Contract price. Selection of any or all alternates shall be at the sole discretion of the Owner. The Owner, however, reserves the right to reject any or all bids, and, so far as permitted by law, to waive any informality in the bids received in order to serve the best interests of the Owner. If an award is made, the contract shall be awarded within forty-five (45) days after the opening of the bids. Within ten (10) days of the mailing by the Owner of notification of award of contract and the contract form, Bidder shall provide and return to the Owner all required bonds and insurance documents and the executed formal contract. In determining if a Bidder is a responsive bidder, the Owner shall consider the following in addition to other requirements in these bid documents:

- a. Quality of services offered.
- b. Proven capacity of the Bidder to perform the contract or provide the supplies or services required in a timely and competent manner. The evaluation of the Contractor's capacity to perform the contract or provide the supplies or services required in a timely and competent manner shall be based on the information provided by the Contractor in Section C-5 "Declaration of Bidder's Qualifications," as well as other pertinent data available to the Owner.
- c. Character, integrity, reputation, judgment, experience and efficiency of the Bidder.

19. BONDS

The successful bidder will be required to file and pay for costs of bonds in the proper sums from a bonding company acceptable to the Owner. Forms for these bonds are included in Section D. The "Labor and Materials Payment Bond" and "Faithful Performance Bond" shall be for one hundred percent (100%) of the contract price (including base bid, adjustments and addenda).

20. INSURANCE CERTIFICATES AND POLICIES

Proof of insurance in an amount required by the Bid Specifications Section D-6 must be provided and endorsed to name: the City of Culver City, members of its City Council, its boards and commissions, officers, agents, and employees as additional insured for the particular operations of the insured which affect the Owner.

21. HOLD HARMLESS.

To the fullest extent permitted by law, Contractor shall indemnify, defend (at Contractor's sole expense, with legal counsel approved by CITY) and hold harmless the City of Culver City, members of its City Council, its boards and commissions, officers, agents, and employees (hereinafter, "Indemnitees"), from and against all loss, damage, cost, expense, liability, claims, demands, suits, attorneys' fees and judgments arising from or in any manner connected to Consultant 's or its employees or agent's wrongful or negligent acts, errors or omissions related to this Agreement. This indemnification includes, but is not limited to, tort liability to a third person for bodily injury and property damage.

Contractor agrees that this obligation to indemnify, defend and hold harmless extends to liability and/or claims arising from INDEMNITEES' active or passive negligence.

Notwithstanding the foregoing, nothing herein shall be construed to require Consultant to indemnify an INDEMNITEE from any claim arising from the sole negligence or willful misconduct of that INDEMNITEE.

The duty to defend referenced herein is wholly independent from the duty to indemnify, arises upon written notice by City to Contractor of a claim within the potential scope of this indemnification provision, and exists regardless of any determination of the ultimate liability of Contractor, City or any Indemnitee.

22. ASSIGNMENT OF CONTRACT RESTRICTED

No assignment by the Bidder of any contract to be entered into in accordance with Notice Inviting Bids and these instructions or any part thereof, or of funds to be received there under, will be recognized by the Owner unless such assignment had prior written approval of the Owner and the surety on all bonds had notice of such assignment in writing and has consented thereto in writing.

In entering into the Contract or any Subcontract for the Project, the Contractor and Subcontractor offer and agree to assign to the Owner all right, title and interest in and to all causes of action they may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the Contract or any Subcontract. This assignment shall be deemed made and effective at the time the Owner tenders final payment to the Contractor, without further acknowledgment by the parties.

23. SHORING

Pursuant to the provisions of the California Labor Code Section 6707, each bid submitted in response to this Invitation to Bid shall contain, as a bid item, adequate sheeting, shoring, and bracing, or equivalent method, for protection of life and limb in trenches and open excavation, which shall conform to applicable safety orders. By listing this sum, the bidder warrants that its action does not convey tort liability to the Owner, the Engineer, the Construction Manager, and their employees, agents and subconsultants.

24. OTHER PERMITS, FEES AND LICENSES

Any work performed within the City of Culver City and County of Los Angeles Public Works Department shall not begin until required permits have been issued. The City of Culver City has applied permits from the flowing agencies and is in the final stage of permit approval. The Contractor shall, prior to the start of construction, obtain and pay for "contractor riders", and comply with all necessary permits and special provisions requirements as necessary as the result of its work related to the permits listed below:

1. **County of Los Angeles Department of Public Works Access Permit (bike path, landscape, wall and drainage outlet)**
2. **City of Los Angeles "B" Permit for work within City of Los Angeles limits as shown on plans**

Some samples of similar permits are in the appendix and are to be considered representative of requirements that will apply. There being no substantive deference between the plans and specification and the permits requirements, there shall be no additional payment allowed.

In addition Contractor shall, prior to the start of construction, obtain, pay, and comply with other all necessary permits as required as the result of its work

In addition to the requirements above noted, the Contractor **shall possess a valid City of Culver City business tax certificate** at the time of contract agreement execution and for the duration of the contract. The fee for said business license shall be based upon the total amount bid for the contract. Amount of fee may be obtained from the City of Culver City.

All bidders are encouraged to utilize Culver City subcontractors and suppliers to the extent they are available, competitive and qualified. However, no bid will be affected either positively or negatively by the inclusion or exclusion of such Culver City businesses.

-- End of Section B --

SECTION C

BID FORMS

BID FORM**FIRM
NAME** _____**ADDRESS** _____
_____**TELEPHONE** _____**FAX NUMBER** _____**Email** _____

**FOR
HIGUERA STREET BRIDGE REPLACEMENT PROJECT
(EASTHAM DRIVE TO JEFFERSON BOULEVARD)
PZ553, BHLS 5240(026)**

**FOR
CITY OF CULVER CITY
CULVER CITY, CALIFORNIA**

Bid No. # 1617

1 TOTAL BID BASE FORM

TO THE HONORABLE CITY COUNCIL
CITY OF CULVER CITY, CALIFORNIA

This Bid is submitted in accordance with the advertised "Notice Inviting Bids" requesting sealed bids for furnishing all labor, services, materials and equipment and performing all work necessary for **Higuera Street Bridge Replacement Project (Eastham Drive to Jefferson Boulevard), PZ553, BHLS5240(026)**.

Having carefully examined the location of the proposed work and the Bid Documents for same and read the accompanying proposed requirements, and attended the pre-bid conference, the undersigned Bidder hereby proposes and agrees to enter into a contract to furnish all equipment, materials and labor necessary to complete all work described in the Bid Documents for the project under the supervision of the City Engineer of the City of Culver City for the sum set forth in the following schedule **Higuera Street Bridge Replacement Project (Eastham Drive to Jefferson Boulevard), PZ553, BHLS5240(026)**.

The undersigned further agrees, in case of award, to execute the contract for the within described work and improvements, within ten (10) days following written notice of award of contract. All work to be done under this contract shall be completed within **330 working days**, beginning on the date stipulated in the written Notice to Proceed issued by the City Engineer. **The Contractor's working hours shall be limited to the hours of 8:00 am to 8:00 pm on Monday through Friday, 9:00 am to 7:00 pm on Saturday, and 10:00 am to 7:00 pm on Sunday.**

Liquidated damages of **\$1,000** per calendar day shall be assessed based upon the applicable number of days noted above. The Contract Time shall commence on the date the Contractor

actually commences the Work or on the tenth (10th) day after the issuance of the Notice to Proceed, whichever comes first. The Contractor shall retain the right to fully complete (including Final Completion, Punch List Correction and project Close-Out) the Work in less days than established by above, however, neither shall a reduction or increase to the Contract Sum be made, if the Work is so fully completed in less days than established by this Section C-1, nor shall a Claim be made or granted for Compensable Delay, or any other increase in Contract Sum, if, for any reason, including but not limited to delay caused by the Owner, the Contractor does not so fully complete the Work in less days than established herein.

(NOTE: All amounts and totals given in the Bid Schedule are subject to verification by the Owner.)

BID SCHEDULE

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT COST	ESTIMATED QUANTITY	TOTAL
1.	Mobilization (5% maximum bid amount)	LS	\$	1	\$
2.	Traffic control	LS	\$	1	\$
3.	Changeable Message Signs	EA	\$	5	\$
4.	Remove and Construct Type C Integral Curb and Gutter (a=2', b=6" or as shown on plan and profile)	LF	\$	550	\$
5.	Remove and Construct Concrete (t=8", type=520-A-2500)	CY	\$	3	\$
6.	Remove and Construct Concrete Driveway (Case 2, W Per Plan)	SF	\$	1,560	\$
7.	Remove and Construct PCC Sidewalk (t=4")	SF	\$	3,260	\$
8.	Remove and Construct Curb Ramp (Case Per Plan)	EA	\$	5	\$
9.	Remove and Construct Asphalt Concrete Pavement (t=5")	TON	\$	145	\$
10.	Remove and Construct Crush Miscellaneous Base (t=8")	TON	\$	215	\$
11.	Remove and Construct Metal Beam Guardrail	LF	\$	25	\$
12.	Furnish and delivery of tree wells replacement	EA	\$	4	\$
13.	Remove Tree Well	EA	\$	4	\$
14.	Coldplane (Mill) AC Pavement (t=2" Min)	SF	\$	20,000	\$
15.	Remove and Construct Curb Drain per SPPWC Std Plan 150-3 (d=4" CIP)	LF	\$	10	\$
16.	Remove Existing Gate Inlet	EA		1	
17.	Variable Depth Asphalt Concrete Pavement (t=2" Min)	TON	\$	250	\$
18.	Unclassified Excavation	CY	\$	110	\$
19.	Miscellaneous Grading	LS	\$	1	\$
20.	Remove and Construct Chain Link Fence	LF	\$	210	\$
21.	Remove and Construct Retaining Curb	LF	\$	390	\$

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT COST	ESTIMATED QUANTITY	TOTAL
22.	Remove and Construct 18-inch RCP, 2000D, Case 1 Bedding	LF	\$	180	\$
23.	Remove and Construct 24-inch RCP, 2000D, Case 1 Bedding	LF	\$	50	\$
24.	Remove and Construct Side Opening Catch Basin (W=3.5')	EA	\$	4	\$
25.	Modify existing Junction Structure and install new 18" RCP per plan.	EA	\$	1	\$
26.	Construct Concrete Collar	EA	\$	1	\$
27.	Construct Warped Gutter/Local Depression at Catch Basin	CY	\$	3	\$
28.	Construct Brick and Mortar Plug	EA	\$	1	\$
29.	Furnish and construct miscellaneous landscaping	LS	\$	1	\$
30.	Perform 90-calendar day landscape maintenance including manual tree well watering	LS	\$	1	\$
31.	Class I Bike Path (2" AC/ 2" CMB)	SF	\$	650	\$
32.	Remove, salvage existing Traffic Signal system at Higuera/Eastham as shown	LS	\$	1	\$
33.	Furnish and install Traffic Signal system and appurtenant equipment (pullboxes, conduits, conductors, etc.) at Higuera/Eastham	LS	\$	1	\$
34.	Adjust Manholes to Grade	EA	\$	4	\$
35.	Adjust Valves to Grade	EA	\$	2	\$
36.	Traffic signal modification at Jefferson/Rodeo	LS	\$	1	\$
37.	Traffic signal modification at Higuera/Eastham	LS	\$	1	\$
38.	Remove, install and relocate Street lighting per plan	LS	\$	1	\$
39.	Modify Signing , striping and legend and pavement markings	LS	\$	1	\$
40.	Bridge removal	LS			
41.	Structure excavation (Bridge)	CY			
42.	Structure backfill (Bridge)	CY			
43.	Prestressing cast-in-place concrete	LS			
44.	Structural concrete, Bridge footing	CY			
45.	Structural concrete, Bridge	CY			
46.	Structural concrete, approach slab (Type N)	CY			
47.	Bar reinforcing steel (Bridge)	LB			
48.	Concrete barrier (Type 26)	LF			
49.	Miscellaneous metal (bridge)	LB			
50.	24" cast-in-drilled-hole concrete piling	LF			
51.	Joint seal (MR = 1.5")	LF			
52.	Slope paving (Concrete)	CY			
53.	Bridge deck drain system	LB			

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT COST	ESTIMATED QUANTITY	TOTAL
TOTAL BASE BID IN FIGURES (Bid items 1~53):					\$
TOTAL BASE BID IN WORDS (Bid items 1~53):					

Note to Bidders:

1.	The contract will be awarded to the responsible contractor who submits the lowest Total Base Bid Amount (including the deletable items), with responsive bid proposal. The contract award amount by the City may or may not include the deletable items, based on available budget and priorities.
2.	The Prime Contractor shall perform, with its own organization, contract work amounting to at least 50% of the contract price. Any items designated as specialty items by the City and performed by Subcontractors shall be deducted from the contract price before computing the amount of the work required to be performed by the Prime Contractor with its own forces. This percentage shall be of the original contract price, exclusive of specialty items performed by Subcontractors, but include the cost of materials and manufactured products purchased or produced by the Prime Contractor.

The undersigned has carefully checked the above figures and understands that the City, or any officer thereof, will not be responsible for any errors or omissions on the part of the undersigned in submitting this bid. In case of a discrepancy between words and figures, the figures shall prevail, and in case of a discrepancy between unit prices and totals, the unit prices shall prevail. The unit price amounts for each item shall include all indirect costs (i.e., permit fee, business license fee, mobilization, coordination, supervision, overhead and profit, etc.), incidental work (i.e. traffic control, safety devices, protection of utilities, utility investigation and "pot holes," work necessary for the protection of life and limb, etc.) and other work required by the contract but not listed above.

Payment for all work on the above items shall be made subject to verification in the field of the actual quantity of work performed.

Exclusions: Includes everything necessary to complete the project with the following exceptions only:

2 RECEIPT AND ACKNOWLEDGMENT OF ADDENDUM

We acknowledge that the following addenda numbers have been received and have been examined as part of the Contract Documents.

Addenda Number	Date Received	Initials

3 CERTIFICATION

The undersigned Bidder certifies that:

1. Bidder has, by investigation of the site of the work and otherwise, understands the nature and location of the work and has fully informed the Owner as to all conditions and matters, which can in any way affect the work or cost thereof.
2. Bidder will cooperate fully with the Owner to ensure the Owner's best interests are protected and the work expedited to completion. In the event of any disagreement, the City Engineer shall fully review the matter and provide a determination. His judgment shall be final and binding upon all parties concerned.
3. Where demolition is necessary for the project described herein, the successfully awarded Contractor shall conform with the South Coast Air Quality Management District (S.C.A.Q.M.D.) Rule 1403, as amended. The Contractor shall mail the Rule 1403 Notification within five (5) calendar days after the Notice to Commence Work is mailed by the Owner. Once the S.C.A.Q.M.D Rule 1403 Notification has been post marked and mailed, the Contractor shall begin work no later than fifteen (15) calendar days after the mailing date. The duration set for the completion of this project will begin on the date work actually commences by the Contractor. In any case, the work shall not begin later than twenty (20) days after the date in which the Owner mailed the Notification to Commence Work.
4. All bonds, certificates, endorsement forms shall be submitted at the time of the execution of the contract.

THE UNDERSIGNED BIDDER IS AWARE OF THE FACT THAT THE OWNER RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS BUT THAT IF A BID IS ACCEPTED, THE CONTRACT WILL BE AWARDED TO THE LOWEST RESPONSIBLE AND RESPONSIVE BIDDER.

4 BIDDER INFORMATION

Name of Individual Bidder: _____

Bid Prepared By: _____

Business Address: _____

Business Telephone Number: _____

Fax Number: _____

Contractor License No: _____ Class: _____

OR:

Name of Partnership Bidder: _____

Bid Prepared By: _____

Business Address: _____

Fax Number: _____

Business Telephone Number: _____

List Names and Business addresses of All Partners Below:

If the Bidder is a Corporation, list corporate information below:

Name of Corporate Bidder: _____

By: _____
(Signature of President of Corporation)

By: _____
(Signature of Secretary of Corporation)

By: _____
(Signature of Treasurer of Corporation)

Business Address: _____

Business Telephone Number: _____

Fax Number: _____

Corporation organized under laws of State of: _____

Contractor License No: _____ Class: _____

5 DECLARATION OF BIDDER'S QUALIFICATIONS

Each Bidder must be properly licensed and must submit the following information on this form. If necessary, include supplemental information as a separate package. All information submitted

for qualification evaluation will be considered official information acquired in confidence and the Owner will maintain its confidentiality to the extent permitted by law.

5.1 Authorization and Declaration

The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by Owner or their designated representative in verification of the recitals comprising this Declaration of Bidder's Qualifications. The undersigned declares under penalty of perjury that all of the qualification information submitted with this form is true and correct and that this Declaration was executed in

(City, County) of California, on _____ (Date).

Signature: _____

Title (Printed): _____

5.2 Business Name, Address, Telephone Numbers (if different than Section C-4)

Business Name: _____

Business Address: _____

Business Telephone & Fax Numbers: _____

5.3 License

Bidders must be licenses in the State of California as **"A" Contractor**.

Complete the information requested below.

_____ License Number	_____ Class	_____ Date Issued	_____ Expiration Date
_____ License Number	_____ Class	_____ Date Issued	_____ Expiration Date
_____ License Number	_____ Class	_____ Date Issued	_____ Expiration Date

5.4 Surety

A. Indicate the names of all surety companies utilized by Bidder in last five (5) years and state if the Surety(ies) bonding the Bidder's jobs have had to complete any part of Bidder's Contract (attach separate sheet if necessary).

Surety Name & Address

Period Covered

 Jobs Completed by Surety

 Surety Name & Address

 Period Covered

 Jobs Completed by Surety

- B. If a Bid Guaranty (Section C-7) is provided in lieu of a Bid Bond (Section C-6), the Bidder shall attach a notarized statement from Surety(ies) proposed to be utilized on the project, indicating Bidder's total bonding capacity and certifying that: (1) currently available bonding capacity exceeds \$5,000,000 and (2) Surety(ies) will provide bonding in the event that Bidder is awarded the project.
- C. Indicate below that the surety is licensed and admitted as a surety insurer in the State of California.

 Surety Name and Address

 Licensed & Admitted in CA (Y/N)

 Surety Name and Address

 Licensed & Admitted in CA (Y/N)

 Surety Name and Address

 Licensed & Admitted in CA (Y/N)

- D. Indicate below those projects with disputed amounts in excess of \$1,000,000 or portions of any such project, which have been terminated by an Owner, Owner's representative, or other contracting party and which required completion by another party in the last five (5) years. State the project Name, Location, Owner, with address and phone number, contract amount, and reason for disputed amount or termination (attach separate sheet if necessary.)

 Project Name and Location

 Owner

 Contract Value

 Reasons for Disputed Amount or Termination

 Disputed Amount

5.5 Insurance

- A. Provide a notarized statement from the Worker's Compensation carrier specifying Contractor's current Experience Modification Rate for Worker's Compensation for the State of California. In addition, provide a list of the above referenced ratings and corresponding company for the last three (3) years.

- B. Provide statement from insurance carrier indicating that the minimum scope and limits of insurance will be provided as required in Section D-6, of this document.
- C. Indicate below that the surety is licensed and admitted as a surety insurer in the State of California.

Ins. Co. Name and Address

Licensed & Admitted in CA/Y/N

Ins. Co. Name and Address

Licensed & Admitted in CA/Y/N

5.6 Construction Experience

Furnish a list of at least three (3) **similar scope and size projects completed (Roadway and Bridge Work)** in the past five (5) years, for which construction costs exceeded \$4,000,000 for each project, two (2) of which must have been built in the State of California. Failure to meet the required experience may result in the rejection of the bid. Provide the following information for each project on the attached form. Copy additional forms as required.

- i* Project name and location
- ii* Contact name, address and telephone number for Owner & Architect/Engineer
- iii* Base and final contract amounts
- iv* Type of project and major project components. Provide approximate percent of construction cost associated with each construction component.
- v* Date project was completed (i.e., date of filing of Notice of Completion, etc.).
- vi* Indicate completion rate of projects by showing initial contract time, time extensions, and number of days that project was completed early or late, all expressed in calendar days.

SIMILAR PROJECTS FOR LAST FIVE (5) YEARS

1. _____
Project Name and Location

Owner

Engineer

Address and telephone

Project Components

Contract Amounts (\$)

Date Completed

2.

Project Name and Location

Owner

/Engineer

Address and telephone

Project Components

Contract Amounts (\$)

Date Completed

3.

Project Name and Location

Owner

Engineer

Address and telephone

Project Components

Contract Amounts (\$)

Date Completed

4.

Project Name and Location

Owner

Engineer

Address and telephone

Project Components

Contract Amounts (\$)

Date Completed

5.

Project Name and Location

Owner

Engineer

 Address and telephone

 Project Components

 Contract Amounts (\$)

 Date Completed

5.7 Staff Roster/Functions

List all members of your staff that will be assigned to or responsible for work on this project (except clerical) and show their job titles/functions. Include Company Officers.

Name	Function	Years w/Firm	Years Total
Name	Function	Years w/Firm	Years Total
Name	Function	Years w/Firm	Years Total
Name	Function	Years w/Firm	Years Total
Name	Function	Years w/Firm	Years Total

5.8 Arbitration and Litigation History

Indicate below all arbitration and/or litigation against bidder in the last five (5) years, including all claims by owners. Indicate yes or no (Y/N) which claims were resolved against bidder in litigation or arbitration or which resulted against in any payment by the Bidder or its insurers/sureties or reduction in compensation on any Bidder. Failure to provide this information on any contract undertaken in the past five (5) years may result in disqualification. Indicate final status (Resolved or Unresolved) of each claim. Attach separate sheet if necessary.

Project Name	Amount of Claim	
Nature of Claim	Resolution (Y/N) Against Bidder	Final Status

Project Name	Amount of Claim	
Nature of Claim	Resolution (Y/N) Against Bidder	Final Status

Project Name	Amount of Claim	
Nature of Claim	Resolution (Y/N) Against Bidder	Final Status

- 5.9 PCC pavement construction qualification and experience. Failure to submit satisfactory supporting documents may result in the bidder deemed as non-responsive.

Working Knowledge of the Scope of the Project, Submittal: Name of person that inspected the job site.

Contractors Experience, Submittal: The Contractor shall have a minimum of ten (10) years experience in PCC pavement/bridge projects for similar project size as contained in this contract. The lead personnel including the project manager, superintendent, the foreman and the lead crew personnel for the PCC work, must have a minimum of ten (10) years of similar PCC pavement experience as proposed for this Contract and must have demonstrated competency and experience to perform the scope of Work contained in this Contract. The name and experience of each lead individual performing Work on this Contract shall be submitted.

6 BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and
 _____, as Surety (Local Agent
 Contact Telephone Number , _____), are held and firmly bound unto the Owner in
 the sum of _____ Dollars
 (\$ _____) to be paid to said Owner its successors and assigns, for which
 payment well and truly will be made, we bind ourselves, our heirs, executors, administrators,
 successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH:

That if the certain Bid of the above-bounden Principal submitted for the following improvement
 project:

**Higuera Street Bridge Replacement Project (Eastham Drive to Jefferson Boulevard),
 PZ553, BHLS5240(026).**

is accepted by the Owner through action of its legally constituted contracting authorities and if the
 above-bounden Principal, its heirs, executors, administrators, successors and assigns shall duly
 enter into and execute a contract for such construction in strict accordance with the specifications
 and drawings on file at the office of the City Engineer, in the City Hall, Culver City, and shall
 execute and deliver the required Faithful Performance Bond and Payment Bond, and Insurance
 Certificates within ten (10) days after the date of notification by and from said Owner that said
 contract is ready for execution, then this obligation shall become null and void; otherwise, it shall
 be and remain in full force and virtue.

IN WITNESS WHEREOF, we hereunto set our hands and seals this _____
 day of _____, 20__.

 Signature

 Surety

 Title

By: _____

 Company

7 BID GUARANTY**BID GUARANTY**

Note: The following statement shall be used if other than a bid surety bond accompanies bid.

"Accompanying this proposal is a money order*, certified check*, cashier's check*, cash*, payable to the order of the Owner in the amount of Dollars (\$ _____) which is ten percent (10%) of the total amount of this bid. The proceeds of this bid guaranty shall become the property of said Owner provided this bid is accepted by said Owner, through action of its legally constituted contracting authorities, and the undersigned fails to execute a contract and furnish the required bonds within the stipulated time. Otherwise, the proceeds of this bid guaranty shall be returned to the undersigned."

Signature

Title

Company

(*Delete the inapplicable words)

SUPPLEMENTARY BID FORM NO. 1

Pursuant to **INSTRUCTIONS TO BIDDERS** for the Work titled:

For portions of the Work equaling or exceeding 1/2 of one percent (0.5%) of the Base Bid, the undersigned Bidder proposes to use the subcontractors listed below. Except as otherwise approved by the Owner, the undersigned Bidder shall perform all other portions of the Work with his own forces.

Subcontractor Name, Address, & License Number:

[illegible][illegible]

Bidder: _____

By: _____

Its: _____

SUPPLEMENTARY BID FORM NO. 2

LISTING OF PROPOSED SUPPLIERS

Pursuant to **INSTRUCTIONS TO BIDDERS** for the work titled:

Pursuant to **INSTRUCTIONS TO BIDDERS** for the Work titled:

**Higuera Street Bridge Replacement Project (Eastham Drive to Jefferson Boulevard),
PZ553, BHLS5240(026).**

[illegible]

-- End of Section --

SECTION D

PART D

AGREEMENT, BONDS AND INSURANCES

SECTION D - AWARD AND EXECUTION OF CONTRACT

1 SAMPLE AGREEMENT

CULVER CITY PUBLIC WORKS DEPARTMENT AGREEMENT WITH

Contractor

This Agreement is made and entered into by and between the City of Culver City (City) and Name of Contractor (Contractor)

WHEREAS, Contractor submitted its total base bid the total lump sum for: Amount of Bid Dollars (\$ xx,00) for the completion of the Higuera Street Replacement Project (Eastham Drive to Jefferson Boulevard), PZ553, BHLS 5240(026) as further described in the Scope of Services; and

WHEREAS, Contractor represents it has that degree of specialized expertise and holds all licenses necessary to practice and perform the service contemplated; and

WHEREAS, after reviewing all bids submitted and declaring that the Contractor submitted the lowest responsible and responsive bid, City's City Council, at its meeting of meeting date, awarded the contract for the work to Contractor.

NOW, THEREFORE, THE PARTIES HERETO AGREE as follows:

SCOPE OF SERVICES

Contractor shall provide all services described in accordance with the Contract Documents, as defined below, relating to the Higuera Street Replacement Project (Eastham Drive to Jefferson Boulevard), PZ553, BHLS 5240(026) and follow the work schedules defined therein.

CONTRACT DOCUMENTS

The documents comprising the entire agreement between City and Contractor shall be collectively referred to as the "CONTRACT DOCUMENTS," and shall consist of and include the following:

This Agreement – including:

- Schedule of Values;
- List of Subcontractors;
- Labor and Materials Payment Bond;
- Faithful Performance Bond (including agent's Power of Attorney for each Bond);
- Non-Collusion affidavit (General and Subcontractor) ;
- Certificates of Insurance;
- Plans and Specifications for "Higuera Street Replacement Project (Eastham Drive to Jefferson Boulevard), PZ553, BHLS 5240(026)", Bid #1617
- All addenda setting forth any modifications or interpretations of those documents, (Addenda by number and date: Addendum No. x dated xxx);
- All documents incorporated into the foregoing;
- Change Orders;
- Notice to Proceed; and
- Notice of Completion

All the Contract Documents are intended to complement one another, so that any work called for in one and not mentioned in another is to be performed as if mentioned in all documents.

The terms of this Agreement shall prevail over any inconsistent provision of the other Contract Documents.

The Contract Documents constitute the entire agreement between the parties and supersede any and all other writings and oral negotiations.

NOTICE

All notices shall be in writing and delivered in person or sent by certified mail, postage prepaid. Notices required to be given to City shall be addressed as follows:

Charles D. Herbertson
Public Works Director/City Engineer
Public Works Department
City of Culver City
9770 Culver Blvd.
Culver City, CA 90232

Notices required to be given to the Contractor shall be addressed as follows:

Contractor
Address

It shall be the duty of Contractor to notify all subcontractors of the above Notice provisions.

CONTRACT PRICE

For Contractor's satisfactory completion of the scope of services, City shall pay Contractor a total sum of Amount of Compensation Dollars (\$00.00) lawful money of the United States of America provided, that City's Public Works Director, in the exercise of his sole discretion, is authorized to increase that total fee by up to xxx,xxx Dollars (\$xx,xxx.00) for additional services due to unexpected causes.

EFFECTIVE DATE

The effective date of this agreement is the date it is signed on behalf of City.

IN WITNESS WHEREOF, the parties hereto have caused their names to be hereunto subscribed.

CONTRACTOR

Dated: _____

By: _____

Its _____

By: _____

Its _____

CITY OF CULVER CITY, CALIFORNIA

Dated: _____

By: _____

City Manager

APPROVED AS TO CONTENT:

APPROVED AS TO FORM:

Charles D. Herbertson
Public Works Director/City Engineer

Carol A. Schwab
City Attorney

APPROVED AS TO FINANCING:

APPROVED AS TO BUSINESS
TAX CERTIFICATE:

Jeff Muir
Chief Financial Officer

Treasury Division

2 LABOR AND MATERIALS PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

WHEREAS, THE City of Culver City, County of Los Angeles, State of California, has awarded to:

hereinafter designated as the Principal, a contract for:

Higuera Street Replacement Project (Eastham Drive to Jefferson Boulevard), PZ553, BHLS 5240(026)

in the City of Culver City, California, which contract is incorporated wherein by this reference; and

WHEREAS, said Principal is required to furnish a bond in connection with said contract, providing that if said Principal or any of his or its Subcontractors shall fail to pay for any materials, provisions, equipment or supplies used in, upon or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, the Surety on this bond will pay the same to extent hereinafter set forth;

NOW, THEREFORE, WE, _____

as Principal and _____

as Surety, are held and firmly bound unto the City of Culver City, hereinafter called the Owner in the sum of: _____ Dollars (\$ _____) lawful money of the United States of America 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 said Principal, his or its heirs, executors, administrators, successors or assigns shall fail to pay for any materials, provisions or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, as required by the provisions of an act of the Legislature of the State of California entitled, "An Act to secure the payment of claims or persons employed by Contractors upon public works, and the claim of persons who furnish materials, supplies, teams, implements or machinery used or consumed by such Contractors in the performance of such work, and prescribing the duties of certain public officers with respect thereto," approved May 10, 1919, as amended, and provided that the persons, companies or corporations so furnishing said materials, provisions or other supplies, appliances or power used in, upon, for or about the performance of the work contracted to be executed or performed, or any person, company or corporation renting or hiring implements, machinery or power for or contributing to said work to be done, or any person who performs work or labor upon the same, or any person who supplies both work or labor upon the same, or any person who supplies both work and material therefor, shall have complied with the provision of said Act, then said Surety will pay the same in or to an amount not exceeding the amount herein above set forth, and also will pay in case suit is brought upon this bond, such reasonable attorneys' fees, as shall be fixed by the court, awarded and taxed as in aforementioned Statute provided. This bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under said Act, so as to give a right of action to them or their assigns in any suit brought upon this bond.

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 modifications of the contract documents or of work to be performed thereunder.

IN WITNESS WHEREOF, three (3) 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____. The name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

Principal

By:_____

Surety

By:_____

3 FAITHFUL PERFORMANCE BOND**FAITHFUL PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS: that

WHEREAS, the City of Culver City, in the County of Los Angeles, State of California, has awarded to:

_____ herein designated as the Principal, a contract for the construction of

Higuera Street Replacement Project (Eastham Drive to Jefferson Boulevard), PZ553, BHLS 5240(026) in the City of Culver City, California, which contract is incorporated herein by this reference; 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 _____

as Principal and _____ as Surety, are held and firmly bound unto the City of Culver City, hereinafter called the Owner in the sum of:

_____ Dollars (\$_____) lawful money of the United States of America for 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 hereby bound 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 all the undertakings, terms, covenants, conditions and agreements in the 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. This bond shall remain in effect until the end of all warranty periods set forth in the contract documents.

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, three (3) identical counterparts of this instrument, each of which shall for purposes be deemed an original thereof, have been duly executed by the Principal and Surety herein named on the _____ day of _____, 200__. The name and corporate seal of each corporate party being hereto affixed, and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

Principal

By: _____

Surety

By: _____

4 NON-COLLUSION AFFIDAVIT (CONTRACTOR)**NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY
EACH AWARDEE OF A PRINCIPAL CONTRACT**

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss

_____, being first duly sworn, deposes and

says that he is _____
sole owner, partner, president, secretary, etc.

of _____

the party making the foregoing bid; that such bid is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation; that such bid is genuine and not collusive or sham; that such bidder 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 said bidder has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix the bid price of said bidder or of any other bidder, or to fix any overhead, profit or cost element of such bid price, or of that of any other bidder, or to secure an advantage against the public body awarding the contract or anyone interested in the proposed contract; that all statements contained in such bid price or of that of any other bidder, or to secure an advantage against the public body awarding the contract or anyone interested in the proposed contract; that all statements contained in such bid are true; and, further, that said bidder has not, directly or indirectly, submitted his 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 in connection therewith to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, or to any other individual except to such person or persons as have a partnership or other financial interest with said bidder in his general business.

Signed: _____

Title: _____

Subscribed and sworn to (or affirmed) before me on this _____ day of _____, 20____,
by _____, proved to me on the basis of satisfactory evidence to
be the person(s) who appeared before me.

(Notary Public)

5 NON-COLLUSION AFFIDAVIT (SUBCONTRACTOR)

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss

_____ being first duly sworn, deposes

and says that he is _____
(sole owner, partner, president, secretary, etc.)
of _____

the party submitting a bid for a contract covering _____

(describe nature of subcontract)

That such bid is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation; that such bid is genuine and not collusive or sham; that said 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 said bidder has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix the bid price of said bidder or of any other bidder or to fix any overhead, profit or cost element of such bid price, or of that of any other bidder, or to secure any advantage against the principal contractor or anyone interested in the proposed subcontract; that all statements contained in such bid are true; and, further, that said bidder has not directly or indirectly submitted his 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 in connection therewith to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, or to any other individual except to such person or persons as have a partnership or other financial interest with said bidder in his general business. The provisions of this affidavit shall not be held as disqualifying a person, firm or corporation who has submitted a subproposal to one bidder from submitting separate subproposals or quoting prices for materials or work to other bidders.

Signed: _____

Title: _____

Subscribed and sworn to (or affirmed) before me on this _____ day of _____, 20____,
by _____, proved to me on the basis of satisfactory evidence to
be the person(s) who appeared before me.

(Notary Public)

6 INSURANCE REQUIREMENTS

A. Policy Requirements.

Contractor/ Consultant shall submit duly executed certificates of insurance for the following:

1. An occurrence based Comprehensive General Liability ("CGL") policy, at least as broad as ISO Form CG 0001, in the minimum amount of One Million Dollars (\$1,000,000) each occurrence, with not less than Two Million Dollars (\$2,000,000) in annual aggregate coverage.

The CGL Policy shall have the following requirements:

- a. The policy shall provide coverage for personal injury, bodily injury, death, accident and property damage and advertising injury, as those terms are understood in the context of a CGL policy. The coverage shall not be excess or contributing with respect to City's self-insurance or any pooled risk arrangements;
- b. The policy shall provide \$1,000,000 combined single limit coverage for owned, hired and non-owned automobile liability;
- c. The policy shall include coverage for liability undertaken by contract covering, to the maximum extent permitted by law. Consultant's obligation to indemnify the Indemnitees as required under Paragraph 6 of this agreement;
- d. The Policy shall not exclude coverage for Completed Operations Hazards or Athletic or Sports Participants; and
- e. **The City of Culver City, members of its City Council, its boards and commissions, officers, agents, and employees will be named as an additional insured** in an endorsement to the policy, which shall be provided to the City and approved by the City Attorney.
- f. **County of Los Angeles and City of Culver City will be named as an additional insured in an endorsement to the policy, as part of the permit requirements.**

2. Business Automobile Liability Insurance coverage in the amount of One Million Dollars (\$1,000,000), providing coverage for use of mobile equipment (i.e. heavy mobile equipment or vehicles primarily for use in an off-road environment), to the extent that (1) such mobile equipment will be used within the City limits or on City business, and (2) coverage for mobile equipment is not otherwise covered by the CGL policy listed in subparagraph (a), above.

3. For Professional Services: Professional/Negligent Acts, Errors and Omissions Insurance in the minimum amount of One Million Dollars (\$1,000,000) per claim, and shall include coverage for separate "personal injury" alleged to have been committed in the course of rendering professional services, unless such coverage is provided by the CGL policy listed in subparagraph (a), above.

4. Workers' Compensation limits as required by the Labor Code of the State of California with Employers' Liability limits of One Million Dollars (\$1,000,000.00) per accident, if the Agreement will have Consultant employees working within the City limits.

B. Waiver by City.

City may waive one or more of the coverages listed in Section A, above. This waiver must be express and in writing, and will only be made upon a showing by the Consultant that its operations in and with respect to City are not such as to impose liability within the scope of that particular coverage.

C. Additional Insurance Requirements.

1. All insurance listed in Paragraph A shall be issued by companies licensed to do business in the State of California, with a claims paying ability rating of "BBB" or better by S&P (and the equivalent by any other Rating Agency) and a rating of A:VII or better in the current Best's Insurance Reports;
2. Consultant shall provide City with at least thirty (30) days prior written notice of any modification, reduction or cancellation of any of the Policies required in Paragraph A, or a minimum of ten (10) days notice for cancellation due to non-payment.
3. City may increase the scope or dollar amount of coverage required under any of the policies described above, or may require different or additional coverages, upon prior written notice Consultant.

SECTION E

GENERAL PROVISIONS

(SUPPLEMENTS AND MODIFICATIONS TO
THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

SECTION 1 -- TERMS, DEFINITIONS, ABBREVIATIONS & SYMBOLS

Except as modified by the Special Provisions, Technical Provisions, Standard Drawings and the Project Plans, all work shall be in accordance with the Provisions of the latest edition of the STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION (SSPWC), including all Supplemental Amendments, as published by Building News, Inc., Los Angeles, California, which Specifications are hereinafter referred to as the Standard Specifications.

For work within the City of Culver City jurisdiction, all work as shown on the Contract Drawings and indicated on the Contract Documents, including General Conditions and General Requirements, shall conform to the latest edition of the Standard Specifications for Public Works Construction (SSPWC), the "Green Book" as modified by the current edition of the City of Culver City, Department of Public Works Additions and Addendums to the Standard Specifications for Public Works Construction (Brown Book), latest edition. All traffic signal and/or related electrical work within shall conform to the standards under Section 2000, Subsection 1.1, and the Special Provisions and Standard Drawings for the Installation and Modification of Traffic Signals, issued by the City of Culver City Department of Transportation (LADOT), Red Book, and by the City of Culver City Bureau of Street Lighting (BSL), Blue Book.

The herein stated Special Provisions supplement and revise the aforementioned standard Specifications. Any reference to "Section" or "Subsection" in these Special Provisions shall refer to the aforementioned Standard Specifications unless noted otherwise.

1-2 DEFINITIONS

In this subsection, substitute where applicable, or add the following:

Agency	The City of Culver City, for which the work is being performed.
Board	The City Council of the City of Culver City.
City	The City of Culver City.
Engineer (or) City Engineer	The City Engineer of the City of Culver City or other person designated by the City Engineer acting either directly or through authorized agents.
Working Day	All days beginning with the Notice to Proceed and ending with the "completion Date", except the following: - Saturday (The contractor has an option to work on Saturday provided approved by the City.) - Sunday (The contractor has an option to work on Sunday provided approved by the City.) - Any day designated as a holiday by the City. - Any day designated as a holiday in a Master Labor Agreement binding the Contractor - Any day the Contractor is prevented from working for cause as established in 6-6 of these specifications. Any day the Contractor is prevented from working during the first (5) hours of the workday with at least sixty percent (60%) of normal work force for cause as established in 6-6 of these specifications

SECTION 2 -- SCOPE AND CONTROL OF THE WORK**2-1 AWARD AND EXECUTION OF CONTRACT** Add the following:

The Bidder is required to examine carefully the site of work, Bid Proposal forms and all other Contract documents for the work contemplated. The Submission of a Bidder's Proposal shall be considered conclusive evidence that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality and quantities of work to be performed and materials to be furnished, and as to the requirements of all the above documents.

2-5 PLANS AND SPECIFICATIONS**2-5.1. General** Add the following:

Except as modified by the Special Provisions, Technical Provisions, Standard Drawings and the Project Plans, all work shall be in accordance with the Provisions of the latest edition of the STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION (SSPWC), including all Supplemental Amendments, as published by Building News, Inc., Los Angeles, California, which Specifications are hereinafter referred to as the Standard Specifications, and when applicable, the California Department of Transportation (Caltrans) Standard Specifications, latest edition, except the following:

Traffic Signal, Lighting, Pavement Striping and Markers, Roadside Sign Work

For roadside sign, traffic striping and pavement marking, pavement markers, and traffic signal and lighting work, the technical provisions provided within Section 56-2, "Roadside Signs," Section 84, "Traffic Stripes and Pavement Markings", Section 85, "Pavement Markers", and Section 86, "Signals, Lighting and Electrical Systems," of the State of California Department of Transportation (Caltrans) Standard Specifications, latest edition, hereafter "State Specification" or "State Standard Specification," shall supersede related provisions of the SSPWC. Except as otherwise specified on the Plans or in these General or Technical Provisions, all work relating to traffic signals and street lighting, including all equipment, materials, components, and the installation thereof, shall be in accordance with the latest edition of the State Standard Plans and Section 86, of the latest edition of the State Standard Specifications. The order of precedence for said State Standard Plans shall be lower than that of the Special Provisions and Plans but higher than that of the Standard Plans and Specifications.

Storm Drain Work

In addition to the SSPWC, Los Angeles County Flood Control District's "Part C, General Provisions; Part D, Additions and Amendments to the Standard Specifications; and Parts E through M, Additional Provisions," (The "Gray Book") shall be considered a part of the Specification for storm drain construction.

Work within City of Culver City Right of Way

Shall conform to the approved plans and permit requirements.

If the contractor, in the course of the work, becomes aware of any claimed errors or omissions in the contract documents or in the City's field work, it shall immediately inform the City Engineer. The City Engineer shall promptly review the matter, and if he/she finds an error or omission has been made, he/she shall determine the corrective actions and advise the Contractor accordingly. If the corrective work associated with an error or omission increase or decrease the amount of work called for in the Contract, the City shall issue an appropriate Change Order. After discovery

of an error or omission by the Contractor, any related work performed by the Contractor shall be done at its risk unless authorized by the City Engineer.

Where applicable, the latest edition of the Uniform Building Code (UBC), and Amendments and the Culver City Municipal Code shall be adhered to.

Comply with the provisions for safety practices set forth in the "Manual of Accident Prevention on Construction", published by the Associated General Contractors of America (AGC) 213/263-1500, and to comply with the State of California Occupational Safety and Health Act (Cal-OSHA).

2-5.3.3 Shop Drawings Add the following:

Within fourteen (14) calendar days after the Award of Contract, the Contractor shall, at his or her expense, transmit by letter to the Engineer for review and acceptance, shop drawings and/or other available instructive and descriptive information from the manufacturer, when and as required by the Plans or Special Provisions, or requested by the Engineer. Shop drawings will normally not be required for standard items in common use for which adequate manufacturers' literature is available.

The Contractor shall consecutively number, thoroughly check, approve and sign each Shop Drawing and transmit the Shop Drawings by letter to the Engineer for review. In the event that certain Shop Drawings are unacceptable to the City, they will be rejected by the Engineer. The Contractor shall thereafter, correct said drawings and resubmit same in quadruplicate within seven (7) calendar days.

In the event that in the process of development of the Shop Drawings, it is discovered that there are defects and/or errors on the Plans, resulting in conflict between said Plans and the Shop Drawings, or if the Shop Drawings show variation from the Plans and/or Contract requirements because of standard shop practice or other reasons, the Contractor shall thoroughly describe and explain said defects and/or conflicts in his transmittal letter to the Engineer.

The Engineer's review of the Shop Drawings will be for general design and arrangement only, and shall not relieve the Contractor from responsibility for errors of any sort in the Shop Drawings or of the responsibility for executing the work in accordance with the Contract. The Contractor shall be solely responsible for the correctness of the drawings, for shop fits and field connections, and for the results obtained by use of such drawings. The Contractor shall verify and be fully responsible for all dimensions and job-site conditions affecting the work and shall be responsible for furnishing and installing the proper materials required by the Contract, whether or not indicated on the Shop Drawings when reviewed.

2-9 SUBSURFACE DATA

The Contractor's attention is directed to the provisions of Section 2-7, "Subsurface Data" of the SSPWC. Section 2-7 of the SSPWC is hereby amended in that a copy of the pavement coring logs is include **Appendix II** for the Contractor's review and information. This report is for general use.

2-9 SURVEYING

2-9.1 Permanent Survey Markers Add the following:

The contractor shall construct three street centerline intersection monuments per Caltrans Standard Plan RSP A74, type D. The exact location to be provided by the Engineer.

2-9.2 Survey Service Delete the entire subsection and substitute the following:

The **Contractor** shall pay and provide usual and customary construction staking. The Contractor shall submit to the City for approval, the qualifications of the Licensed Land Surveyor prior to commencing the construction staking.

2-11 INSPECTION Add the following:

The City Engineer, or his authorized agent, shall at all times have access to work during construction, and shall be furnished with every reasonable facility for ascertaining full knowledge regarding the process, workmanship, and character or materials used and employed in the work. Whenever required, the Contractor shall furnish to the City for test, and free of charge, samples of any one of the materials proposed to be used in the work. Said samples shall be delivered by the Contractor at the place within the City of Culver City designated by the City Engineer. Rejected material must be immediately removed from the work by the Contractor and shall not again be brought back to the site of the improvement.

The Contractor shall be responsible to reimburse the City for its actual inspection services cost for any work that is outside the normal working days or working hours (as defined by Section 6-7 of this Special Provisions) , if approved the by Engineer.

See permits and plans for work within City of Culver City and catch basin modification (County of Los Angeles) for additional inspection requirements.

Twenty-Four Hour Notice

The Contractor shall give at least twenty-four (24) hours advance notice of the time when Contractor or Contractor's subcontractor will start or resume the various units of operations of the work as per the contract, or resume said units of operations when they have been suspended per the contract.

The above notice is to be directed to the City Engineer through the Construction Manager, and is to be given during working hours (8 a.m. to 5 p.m.; closed alternate Fridays), exclusive of Saturday, Sunday or holidays for the purpose of permitting the Engineer to make necessary assignments of the Engineer's representative or inspector on the work.

Uncovering of Uninspected Work

Any work performed in conflict with said notice, without the presence or approval of the inspector, or work covered up without notice, approval or consent may be rejected or ordered to be uncovered for examination at Contractor's expense and shall be removed at Contractor's expense, if so ordered by the City Engineer or his/her representative or inspector on the work. Any unauthorized or defective work, defective material or workmanship or any deficient work that may be discovered shall be corrected immediately without extra charge even though it may have been overlooked in previous inspections and estimates.

Changes Authorized in Writing

All authorized alterations affecting the requirements and information given on the approved plans shall be in writing. No changes shall be made on any original plan or drawing after the same has been approved by the Engineer. Deviations from the approved plans, as may be required by the exigencies of construction, will be determined in all cases by the Engineer and authorized in writing.

Protests

If the Contractor considers any work demanded of Contractor to be outside the requirements of the Contract, or if Contractor considers any instruction, ruling or decision of the Inspector or Engineer to be unfair, Contractor shall within three (3) calendar days after any such demand is made, or instruction, ruling or decision is given, state clearly and in detail the Contractor's objections and reasons therefore. Except for such protest and objections as are made of record, in the manner and within the time above stated, the Contractor shall be deemed to have waived and does thereby waive all claims for extra work, damages and extensions of time on account of demands, instructions, rulings and decisions of the Public Works Director/City Engineer.

Upon receipt of any such protest from the Contractor, the Engineer shall review the demand, instruction, ruling or decision objected to and shall promptly advise the Contractor, in writing, of Public Works Director/City Engineer's final decision, which shall be binding on all parties, unless within the ten (10) calendar days thereafter the Contractor shall file with the Owner, a formal protest against said decision of the Public Works Director/City Engineer. The Owner shall consider and render a final decision on any such protest within thirty (30) calendar days of receipt of same.

SECTION 3 - CHANGES IN WORK

3-3 EXTRA WORK

3-3.1 General Add the following:

The Contractor shall not perform any extra work prior to written authorization from the Engineer.

3-3.2.3 Markup Delete the entire paragraph and substitute the following:

Work by Contractor When extra work is to be paid for on a force account basis, the labor, materials, equipment rental and other items of expenditures, the percentage of markup applied to the Contractor's direct cost for all overhead and profit shall be as follows:

(1)	Labor.....	12
(2)	Materials.....	12
(3)	Equipment Rental.....	12
(4)	Other Items and Expenditure.....	12

Work by Subcontractor. When all or any part of the extra work is performed by a Subcontractor, the markup established above in this section shall be applied to the Subcontractor's actual cost of such work. A markup of 10 percent on the first \$5,000 of the subcontracted portion of the extra work and a markup of 5 percent on work added in excess of \$5,000 of the subcontracted portion of the extra work may be added by the Contractor.

To the sum of the coats and markups provided for in this section, 1% shall be added as compensation for bonding.

3-3.3 Daily Reports By Contractor Add the following:

Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily extra work reports, or if not available, they shall be submitted with subsequent daily extra work reports. When these daily extra work reports are agreed upon and signed by both parties, said reports shall become the basis of payment for the work performed.

3-4 CHANGED CONDITIONS Add the following after the last paragraph:

This subsection shall not apply to utilities.

3-5 DISPUTED WORK Add the following:

All claims which do not exceed the sum of three hundred seventy-five thousand dollars (\$375,000) shall be resolved pursuant to the provisions of Public Contract Code Section 20104 through 20104.6, "Resolution of Construction Claims".

Notice - The Contractor shall notify the Public Works Director/City Engineer, in writing, of its intention to make claim. Claims pertaining to decisions provided above for such other determinations by the Construction Manager shall be filed in writing to the Public Works

Director/City Engineer prior to the commencement of such work. Written notice shall use the words "Notice of Potential Claim". Such Notice of Potential Claim shall state the circumstances and the reasons for the claim, but need not state the amount.

Additionally, no claim for additional compensation or extension of time for a delay will be considered unless the above provisions are complied with. No claim filed after the date of final payment will be considered.

It is agreed that unless notice is properly given, the Contractor shall not recover costs incurred by it as a result of the alleged extra work, changed work or other situation which had proper notice been given would have given rise to right for additional compensation. The Contractor should understand that timely notice of potential claim is of great importance to the Public Works Director/City Engineer and Owner, and is not merely a formality. Such notice allows the Owner to consider preventative action, to monitor the Contractor's increases costs resulting from the situation, to marshal facts, and to plan its affairs. Such notice by the Contractor, and the fact that the Public Works Director/City Engineer has kept account of the cost as aforesaid, shall not in any way be construed as proving the validity of the claim.

Records of Disputed Work - In proceeding with a disputed portion of the Work, the Contractor shall keep accurate records of its costs and shall make available, to the Public Works Director/City Engineer, a daily summary of the hours and classification of equipment and labor utilized on the disputed work, as well as a summary of any materials or any specialized services which are used. Such information shall be submitted to the Public Works Director/City Engineer on a monthly basis, receipt of which shall not be construed as an authorization for or acceptance of the disputed work.

Submission of Claim Costs - Within 30 days after the last cost of work for which the Contractor contends it is due additional compensation is incurred, but if costs are incurred over a span of more than 30 days, then within 15 days after the thirtieth day and every month thereafter, the Contractor shall submit to the Public Works Director/City Engineer as best the Contractor is able its costs incurred for the claimed matter. Claims shall be made in itemized detail and should the Public Works Director/City Engineer be dissatisfied with format or detail of presentation, upon request for more or different information, the Contractor will promptly comply, to the satisfaction of the Public Works Director/City Engineer. If the additional costs are in any respect not quantifiable with certainty, they shall be estimated as best can be done. In case the claim is found to be just, it shall be allowed and paid for as provided in the Standard Specification.

SECTION 4 - CONTROL OF MATERIALS

4-1 MATERIALS AND WORKMANSHIP Add the following:

No materials, supplies or equipment for the work under this Contract shall be purchased subject to any security agreement or other agreement by which an interest therein or any part thereof is retained by the seller or supplier. The Contractor warrants clear and good title to all materials, supplies and equipment installed and incorporated in the work, and agrees upon completion of all work to deliver the premises, together with all improvements and appurtenances constructed or placed thereon by Contractor, to the Owner free from any claims, liens, encumbrances or charges, and further agrees that neither Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by the Contract shall have any right to a lien upon the premises or any improvement or appurtenance thereon, provided that this shall not preclude the Contractor from installing metering devices or other equipment of utility companies the title of which is commonly retained by the utility company. Nothing contained in this article, however, shall defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection of any right under any law permitting such persons to look to funds due the Contractor in the hands of the Owner.

The provisions of this Section shall be inserted in all subcontracts and material contracts, and notices of its provisions shall be given to all persons furnishing materials for the work when no formal contracts are entered into for such materials.

4-1.2 Protection of Work And Materials Add the following:

Until acceptance of the Work, the Contractor shall have the charge and care of the Work and Materials to be used therein and shall bear the risk of injury, loss, or damage, to any part thereof (regardless of whether partial payments have been made on such damaged portions of the Work) by the action of the elements or from any other cause, whether or not arising from the non-execution of the Work. The Contractor shall rebuild, repair and restore and make good all injuries, losses, or damages to any portions of the Work or materials occasioned by any cause before its completion and acceptance and shall bear the expense thereof, except for such injuries, losses or damages as are directly and proximately caused by the acts of the Owner.

4-1.3 Inspection Requirements

4-1.4 Tests of Materials The third sentence of the first paragraph shall be deemed revised to read as follows:

Unless otherwise called for hereinafter in these Special Provisions, all testing during construction will be performed by the City in such number and at such locations as deemed necessary by the Engineer to insure compliance with the Plans and Specifications; the cost of all initial testing will be borne by the City; the cost of all retesting will be borne by the Contractor, and the amount due the City for said retesting will be deducted from the Contractor's progress payments.

4-1.6 Trade Names or Equals Delete the last sentence of the second paragraph and substitute the following:

Wherever catalog numbers and specific brands or trade names not preceded by designation "similar and equal" nor followed by the designation "or equal" are used in conjunction with a designated material, product thing, installation, or service mentioned in these Specifications, to ensure compatibility with existing facilities, no substitutions will be favorably reviewed.

Within ten (10) working days from the date of bid opening, the Contractor shall, at his expense, submit a written request to the Engineer for each desired substitution, accompanied by complete descriptive information from the manufacturer, samples as requested by the Engineer, complete detailed test results from a licensed independent testing laboratory of the City's choice if requested by the Engineer, and if requested by the Engineer, an evaluation report from a qualified licensed professional engineer, all for final evaluation by the Engineer. If in the Engineer's opinion, the requested substitution is of lesser quality or in variance with that specified, or if the information submitted is insufficient or incomplete, the requested substitution will be disallowed and the specified materials or equipment shall be furnished. Except as hereafter provided, no request for substitutions submitted, after the 10-working -day deadline specified will be considered.

If alternative named or substitutions are proposed by the Contractor and favorably reviewed by the City, the Contractor is responsible for providing at no additional cost to the Owner, any engineering designs, any electrical, mechanical, structural, or other related changes or testing that may be required to accommodate or provide the particular material or equipment the Contractor desires to use. Any deviation from the Specifications or the Drawings resulting from the type of material or equipment to be used shall not be the basis for any "extra charges" above and in excess of the original bid price of the work.

In addition the Contractor is responsible for all additional costs to the Owner, and its agents and representatives, for evaluation of data submitted by the Contractor for alternative named or substitutions and any redesign necessary. The Owner shall deduct said costs from the Contract monies due the Contractor.

In the event that a substitute is favorably reviewed, fifty percent (50%) of all savings shall be credited to the Owner.

SECTION 5 - UTILITIES

5-1 LOCATION Add the following:

Prior to performing any excavation, the Contractor shall determine, by potholing, the location and depth of all utilities, including service connections, which have been marked by the respective owners and which may affect or be affected by its operations. Contractor shall locate all existing utilities, including storm and sewer main and laterals, within the project vicinity and shall exercise due care to ensure that existing utility facilities are not damaged during his operations. The existence of sewer mains or storm drains is evidenced by the manhole structures and catch basins. When in doubt, the Contractor shall contact the utility operator concerned before proceeding further.

Pipelines, conduits and other facilities may be buried within the limits of the work or adjacent thereto and may or may not be shown or indicated on the Plans. The Public Works Director/City Engineer possesses records of certain utility facilities located within the public right-of-way. These records are available for inspection by the Contractor at the Engineer's Office. In making these records available, the Owner does not warrant or guarantee the accuracy or completeness of the information contained therein and does not represent that the facilities shown on said records actually exist at the locations shown or elsewhere or that the Contractor may not encounter facilities not identified in said records. The sewer service laterals are owned by the property owners and will not be marked by the City. Sewer system atlas sheet is available upon request for contractor's reference. However, the City shall not guarantee the accuracy of the information. It shall be the Contractor's responsibility to locate and pothole all laterals. The Contractor at its expense shall repair sewer laterals that are damaged as the result of contractor's activities.

The Contractor shall immediately notify the Engineer of any potential conflict with the proposed improvements. The cost of repair to any utility damaged by the contractor due to failure to determine location and depth as required herein shall be borne by the Contractor. Full compensation for determining location and depth of utilities shall be considered as included in the prices bid for other items of work, and no additional compensation will be allowed.

5-2 PROTECTION Add the following:

The contractor shall adjust all existing sewer, storm drain, and other utility manhole lids and covers, water meter boxes and covers, gas meter boxes and covers, valve covers, etc. to grade unless specifically designated for adjustment by others on the Plans. Payment for adjustment of said items to grade shall be as shown in the Bid Schedule or considered as part of related bid items for which payment is made and no separate payment will be made therefore.

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK Add the following:

The Contractor must provide to the Engineer's Representative within five (5) days after receiving the "Notice to Proceed", a Critical Path Method (CPM) construction schedule in the format of a Gantt Chart and revised schedules thereafter as required by the Engineer when the Contractor's activities differ or are expected to differ from the latest existing schedule.

In addition, if requested by the Engineer, the Contractor shall submit a detailed "two-week look-ahead" schedule bi-weekly, including a narrative report, showing the activities or portions of activities completed and look ahead during the reporting period.

The report shall state the percentage of the work completed and scheduled, the remaining duration, and the progress along the critical path in terms of days ahead or behind the allowable dates as of the report date. Any changes made by the Contractor to the schedule shall be listed.

If, in the opinion of the Construction Manager, the project is behind schedule, the Contractor shall also submit a narrative report with each updated analysis which shall include but not be limited to a description of current and anticipated problem areas, delaying factors and their impact, and an explanation of corrective actions taken or proposed.

Notice To Procure Equipment and Material will be issued prior to the Notice to Proceed with construction.

6-3 SUSPENSION OF WORK Add the following:

If the Contractor fails to correct defective or unauthorized work as required by the Contract Documents or fails to carry out the Work in accordance with the Contract Documents or any other applicable rules and regulations, the Owner, by a written order of the Owner's representative or signed personally by an agent specifically so empowered by the Owner, in writing, may order the Contractor to stop the work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Owner to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity. All delays in the Work occasioned by such stoppage shall not relieve the Contractor of any duty to perform the Work or serve to extend the time for its completion. Any and all necessary corrective work done in order to comply with the Contract Documents shall be performed at no cost to the Owner.

In the event that a suspension of Work is ordered, as provided in this paragraph, the Contractor, at its expense, shall perform all work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by public, pedestrian, and vehicular traffic, during the period of such use by suspension. Should the Contractor fail to perform the Work as specified, the Owner may perform such work and the cost thereof may be deducted from monies due the Contractor under the Contract.

The Owner shall also have authority to suspend the Work wholly or in part, for such period as the Owner may deem necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the Work. Such temporary suspension of the Work will be considered justification for time extensions to the Contract in an amount equal to the period of such suspension if such suspended work includes the current critical activity on the latest favorably reviewed progress schedule.

6-4 DEFAULT BY CONTRACTOR Add the following:

The Contract may be canceled by the Owner without liability for damage when, in the Owner's opinion, the Contractor is not complying in good faith, has become insolvent, or has assigned or subcontracted any part of the work without the Owner's consent. In the event of such cancellation, the Contractor will be paid the actual amount due based on the quantity of work satisfactorily completed at the time of cancellation, less damages caused to the Owner by acts of the Contractor causing the cancellation. The Contractor, in having tendered a bid, shall be deemed to have waived any and all claims for damages because of cancellation of the Contract for any such reason. If the Owner declares the Contract canceled, for any of the above reasons, written notice to that effect shall be served upon the Surety. The Surety shall, within five (5) working days, assume control and perform the work as successor to the Contractor.

If the Contractor fails to begin delivery of material and equipment, to commence work within the time specified, to maintain the rate of delivery of material, to execute the work in the manner and at such locations as specified, or fails to maintain a work program which will ensure the Owner's interest or, if the Contractor is not carrying out the intent of the Contract, the Public Works

Director/City Engineer's written notice may be served upon Contractor, and the Surety on Contractor's faithful performance bond, demanding satisfactory compliance with the Contract.

If the Contractor or Contractor's Surety does not comply with such notice within five (5) working days after receiving it, or after starting to comply fails to continue, the Owner may exclude the Contractor from the premises and take possession of all material and equipment, and complete the work by Owner forces or by letting the unfinished work to another contractor, or by a combination of such methods. In any event, the cost of completing the work will be charged against the Contractor and Contractor's Surety, and may be deducted from any money due or becoming due from the Owner. If the sums under the Contract are insufficient for completion, the Contractor or Surety shall pay to the Owner within five (5) working days after the completion, all costs in excess of the Contract price.

If the Surety assumes any part of the work, Surety shall take the Contractor's place in all respects for that part, and shall be paid by the Owner for all work performed by Surety in accordance with the Contract. If the Surety assumes the entire Contract, all money due the Contractor at the time of Contractor's default shall be payable to the Surety as the work progresses subject to the terms of the Contract.

The provisions of this Section shall be in addition to all other rights and remedies available to the Owner under law.

6-5 TERMINATION OF CONTRACT Add the following:

The Owner may terminate the Contract at its own discretion or when conditions encountered during the work make it impossible or impracticable to proceed, or when the Owner is prevented from proceeding with the Contract by law, or by official action of a public authority. The Contractor will be compensated for works satisfactorily completed up to the date of termination of the contract by the Owner.

If all or any part of the work shall be damaged or destroyed by war, or acts of foreign aggression, fire, storm, lighting, flood, earthquake, settlement of defective soil, expansion or contraction, cracking or deflection, tidal wave, water, oil (surface or subsurface), mob violence or other casualty before the final completion of the work, the Contractor, upon notice from the Owner, shall resume construction and proceed in accordance with the Plans and Specifications. Provided that such damage or destruction was not caused by any condition related to Contractor's non-conformance with the provisions of these contract documents, the Owner will bear the total cost of removing and/or replacing all damaged and/or destroyed work. However, if the Owner exercises its option to abandon the project because of damage or destruction to the work by any of the above-mentioned causes, Owner may terminate this Contract upon three days' notice to the Contractor. Within 30 days after the date of such termination, the Contractor shall be paid all actual costs of the work to the date of termination for which it had not been previously paid.

If the owner abandons the project, the owner shall have the right, at any time, to terminate this Contract by notice to the Contractor, in which event, the owner shall pay the contractor pro rata for all work actually provided up to the date of such notice, for which it had not been previously paid, and the Owner shall have no further liability or obligations under this contract.

6-6 DELAYS AND EXTENSION OF TIME Add the following:

The Contractor shall retain the right to fully complete (include final completion, punch list and project close out) the Work in less days than established by the contract agreement. However, neither shall a reduction or increase to the Contract Sum be made, if the Work is so fully completed in less days than established by the contract agreement nor shall a Claim be made or granted for Compensable Delay, or any other increase in Contract Sum, if, for any reason, including but not limited to delay caused by owner, the Contractor does not so fully complete the Work in less days than established herein.

When the Contractor foresees a delay in the prosecution of the Work and, in any event, immediately upon the occurrence of a delay, the Contractor shall notify the Public Works Director/City Engineer in writing of the probability of the occurrence and the estimated extent of the delay, and its cause. The Contractor shall take immediate steps to prevent, if possible, the occurrence or continuance of the delay. The Contractor agrees that no claim shall be made for delays which are not called to the attention of the Public Works Director/City Engineer at the time of their occurrence.

Non-excusable delays in the prosecution of the Work shall include delays which could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its subcontractors, at any tier level, or suppliers.

Only the physical shortage of material, caused by unusual circumstances, will be considered under these provisions as a cause for extension of time, and no consideration will be given to any claim that material could not be obtained at a reasonable, practical, or economical cost or price, unless it is shown to the satisfaction of the Public Works Director/City Engineer that such material could have been obtained only at exorbitant prices entirely out of line with current rates, taking into account the quantities involved and usual practices in obtaining such quantities. A time extension for shortage of material will not be considered for material ordered or delivered late or whose availability is affected by virtue of the mishandling of procurement. The above provisions apply equally to equipment to be installed in the work.

6-7 TIME OF COMPLETION

6-7.2 Working Day Revise to read as following:

Working Day All days beginning with the date in the Notice to Proceed and ending with the "completion Date", exclusive of maintenance and plant establishment periods, except the following:

1. Sunday. (The Contractor has an option to work on Sunday provided approved by the City. Contractor shall be responsible for city's actual CM and inspection incurred cost)
2. Any day designated as a holiday by the City.
3. Any day designated as a holiday in a Master Labor Agreement binding the Contractor.
4. Any day the Contractor is prevented from working for cause as established in 6-6 of these specifications.
5. Any day the Contractor is prevented from working during the first (5) hours of the workday with at least sixty percent (60%) of normal work force for cause as established in 6-6 of these specifications

The following days have been designated as holidays by the City of Culver City:

New Year's Day	January 1
Martin Luther King, Jr. Day	3rd Monday in January
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	1st Monday in September
Thanksgiving	4th Thursday in November
Day after Thanksgiving	
Christmas Day	December 25

In addition, Culver City observes a "Holiday Slowdown" during which no work may take place within the public right-of-way. On arterial streets and commercial streets, Holiday slowdown will be observed during the Thanksgiving week, the Christmas week, and the New Year's

week; On all other streets, Holiday slowdown will be observed during the Thanksgiving days(including the days before and after), the Christmas days(including the days before and after), and the New Year's Days(and the days before). During the slowdown, the Contractor shall maintain job site and public safety and schedule to perform work outside the public right-of-way. No time extension will be granted due to the failure of the Contractor to schedule the work appropriately.

Add the following subsection:

6-7.4 Work Hours

The Contractor's working hours shall be limited to the hours of 8:00 am to 8:00 pm Monday through Friday, 9:00 am to 7:00 pm on Saturday, and 10:00 am to 7:00 pm on Sunday, excluding recognized holidays. Multiple 8-hour work shifts within the work hours are allowed in order to meet the contract completion date.

Working days are defined in Section 6-7.2 of the Standard Specifications and as modified above. Work hours other than normal work hours will not be allowed without prior consent of the City Engineer.

For work performed at night, the Contractor shall provide adequate lighting for proper prosecution of the work for the safety of the workers and the public, and for proper inspection.

Work in Caltrans Right of Way may have more restricted working/lane closure hours. The contractor shall adhere to all Caltrans encroachment permit requirements.

6-8 COMPLETION, ACCEPTANCE, AND WARRANTY Add the following:

The Contractor shall warranty that all work performed by him under this Contract fully meets the requirements thereof as to quality of workmanship and materials furnished. If any defects in materials or workmanship become evident within a period of one year from the date of the acceptance of the work by the City Council, the Contractor shall, at his or her own expense, make any repair or replacement necessary, including repair of settled backfill and resurfacing, pay administrative costs relative to inspection, testing, Contract administration, and attorney fees to restore the work to full compliance with the Plans and Specifications.

The guarantees and agreements set forth hereof shall be secured by a surety bond. Said bond the Contractor may, at his option, provide for the faithful performance bond furnished under the contract to remain in force and effect for said amount until the expiration of said one year period.

Such repair and replacement shall be made promptly upon receipt of written notice from the Engineer. If the Contractor fails to make such repair and replacement promptly, the Engineer may cause the work to be done and the costs incurred thereby shall become the liability of the Contractor and his or her Surety.

If in the opinion of the Engineer, defective work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the City or to prevent interruption of operations of the City, the City will attempt to give the notice required by this article. If the Contractor cannot be contacted or does not comply with the Engineer's request for correction within a reasonable time as determined by the Engineer, the City may, notwithstanding the Provisions of this article, proceed to make such correction or provide such attention, and the costs of such correction or attention shall be charged against the Contractor.

This article does not in any way limit the warranty on any items for which a longer warranty is specified or on any items for which a manufacturer gives a guarantee for a longer period, nor does it limit other remedies of the City in respect to latent defect, fraud implied warranties, or assigned claims

6-9 LIQUIDATED DAMAGES. Delete the entire subsection and substitute the following:

Failure of the Contractor to complete the Work within the time allowed will result in damages being sustained by the Agency. Such damages are, and will continue to be, impracticable and extremely difficult to determine. For each consecutive calendar day in excess of the time specified for completion of the Work, as adjusted in accordance with 6-6, the Contractor shall pay to the Agency, or have withheld from moneys due it, the sum of \$1,000 per day. Execution of the contract under these Specifications shall constitute agreement by the Agency and Contractor that **\$1,000** per calendar day is the minimum value of the costs and actual damage caused by failure of the Contractor to complete the Work within the allotted time. Such sum is liquidated damages and shall not be construed as a penalty, and may be deducted from payments due the Contractor if such delay occurs.

In addition to the liquidated damages specified, if the Contractor fails to complete the work within the time specified for completion, plus any authorized time extensions, the Agency shall have the right to charge to the Contract all or any part, as it may deem proper, of the actual costs of inspection, supervision and other overhead expenses that are directly chargeable to the project and that accrue after the expiration of such specified time for completion plus authorized extensions. This charge will be addition to the payment of liquidated damages.

6-11 LEGAL ACTIONS AGAINST THE CITY Add the following subsection:

In the event litigation is brought against the City concerning compliance by the City with State or Federal laws, rules or regulations applicable to highway work, the provisions of this section shall apply.

a. If, pursuant to court order, the City prohibits the Contractor from performing all or any portion of the work, the delay will be considered a right of way delay within the meaning of Subsection 6-6 of the Standard Specification unless the contract is terminated as hereinafter provided, in which event compensation payable to the Contractor shall be determined in accordance with said termination provisions.

b. If, pursuant to court order (other than an order to show cause) the City is prohibited from requiring the Contractor to perform all or any portion of the work, the City may, if it so elects, eliminate the enjoined work pursuant to Section 3 of the Standard Specifications or terminate the contract in accordance with Subsections 6-3 and 6-5 of the Standard Specifications.

c. If the final judgment in the action prohibits the City from requiring the Contractor to perform all or any portion of the work, the City will either eliminate the enjoined work pursuant to Sections 3 of the Standard Specifications or terminate the Contract in accordance with Subsections 6-3 and 6-5 of the Standard Specifications.

d. Termination of the Contract and the total compensation payable to the Contractor in the event of termination shall be governed by the following:

(1) The Engineer will issue the Contractor a written notice specifying that the Contract is to be terminated. Upon receipt of said written notice and, except as otherwise directed in writing by the Engineer, the Contractor shall:

- a. Stop all work under the contract, except that specifically directed to be completed prior to acceptance.
- b. Perform work the Engineer deems necessary to secure the project for termination.
- c. Remove equipment and plan from the site of the work.
- d. Take such action as is necessary to protect materials from damage.
- e. Notify all Subcontractors and suppliers that the contract is being terminated and that their contracts or orders are not to be further performed unless otherwise authorized in writing by the Engineer.

- f. Provide the Engineer with an inventory list of all materials previously produced, purchased or ordered from suppliers for use in the work and not yet used in the work, including its storage location and such other information as the Engineer may request.
 - g. Dispose of materials not yet used in the work as directed by Engineer. It shall be the Contractor's responsibility to provide the City with good title to all materials purchased by the City hereunder, including materials for which partial payment has been made as provided in Subsection 9-3.2 of the Standard Specifications, and with bills of sale or other documents of title for such materials.
 - h. Subject to the prior written approval of the Engineer, settle all outstanding liabilities and all claims arising out of subcontracts or orders for materials terminated hereunder. To the extent directed by the Engineer, the Contractor shall assign to the City all the right title and interest of the Contractor under subcontracts or orders for materials terminated hereunder.
 - i. Furnish the Engineer with the documentation required to be furnished by the Contractor under the provisions of the contract including, on projects as to which Federal funds are involved, all documentation required under the Federal requirements included in the contract.
 - j. Take such other actions as the Engineer may direct.
- (2) Acceptance of the Contract as hereinafter specified shall not relieve the Contractor of responsibility for damage to materials except as follows:
- A. The Contractor's responsibility for damage to materials for which partial payment has been made as provided in Subsection 9-3.2 of the Standard Specifications, and for materials furnished by the City for use in the work and unused, shall terminate when the Engineer certifies that such materials have been stored in the manner and at the locations he has directed.
 - B. The Contractor's responsibility for damage to materials purchased by the City subsequent to the issuance of the notice that the contract is to be terminated shall terminate when title and delivery of the materials has been taken by the City.
 - C. When the Engineer determines that the Contractor has completed the work under the contract directed to be completed prior to termination and such other work as may have been ordered to secure the project for termination, he will recommend that the Engineer formally accept the Contract, and immediately upon and after such acceptance by the Engineer, the Contractor will not be required to perform any further work thereon and shall be relieved of his contractual responsibilities for injury to persons or property which occurs after the formal acceptance of the project by the Engineer.
- (3) The total compensation to be paid to the Contractor shall be determined by the Engineer on the basis of the following:
- a. The reasonable cost to the Contractor, without profit, for all work performed under the contract, including mobilization, demobilization and work done to secure the project for termination. Reasonable cost will include a reasonable allowance for project overhead and general administrative overhead not to exceed a total of seven percent (7%) of direct costs of such work.
- When in the opinion of the Engineer, the cost of a contract item of work is excessively high due to costs incurred to remedy or replace defective or rejected work, the reasonable cost to be allowed will be the estimated reasonable cost of performing such work in compliance with the requirements of the Plans and Specifications and the excessive actual cost shall be disallowed.
- b. A reasonable allowance for profit on the cost of the work performed as determined under Subsection (a), provided the Contractor establishes to the

satisfaction of the Engineer that it is reasonably probable that he would have made a profit had the contract been completed and provided further that the profit allowed shall in no event exceed four percent (4%) of said cost.

- c. The reasonable cost to the Contractor of handling material returned to the vendor, delivered to the City or otherwise disposed of as directed by the Engineer.
- d. A reasonable allowance for the Contractor's administrative costs in determining the amount payable due to termination of the contract.

All records of the Contractor and his Subcontractors, necessary to determine compensation in accordance with the provisions of this section, shall be open to inspection or audit by representatives of the City at all times after issuance of the notice that the contract is to be terminated and for a period of three years, and such records shall be retained for that period.

After acceptance of the work by the Engineer, the Engineer may make payments on the basis of interim estimates pending issuance of the Final Estimate when in his opinion the amount thus paid, together with all amounts previously paid allowed, will not result in total compensation in excess of that to which the Contractor will be entitled. All payments, including payment upon the Final Estimate shall be subject to deduction for prior payments and amounts, if any, to be kept or retained under the provisions of the contract.

The provisions of this section shall be included in all subcontracts.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-1 CONTRACTOR'S EQUIPMENT AND FACILITIES Add the following:

The routing of trucks with gross vehicle weight exceeding 6,000 pounds through Culver City shall be subject to the provision of City Code Section 7.02.210 and the Contract Documents. Contractor shall submit a proposed haul route plan to the Engineer for approval. Said plan shall be approved prior to mobilization. **The Contractor is advised that any violation of the California Vehicle Code and Culver City Code (such as truck routing, overweight, improper licensing, etc.) will result in citation and fines by the Police Department.** Contractor shall be responsible for the immediate cleanup of all spills of any nature resulting from his operation.

Parking of Contractor's employee's vehicles or any other vehicles not utilized in the construction activity will be restricted during construction and shall not take place in public parking areas outside of the construction zone, unless shown otherwise on the plan or unless by arrangement with the Engineer.

Any commercial vehicle, the laden or unladen weight of which exceeds six thousand (6,000) pounds, shall use the following streets designated as truck routes:

- A. Adams Boulevard.
- B. Centinela Avenue.
- C. Culver Boulevard, between west City boundary and Sepulveda Boulevard.
- D. Fairfax Avenue.
- E. Higuera Street, between Hayden Avenue/Place and Jefferson Boulevard.
- F. Jefferson Boulevard.
- G. La Cienega Boulevard.
- H. National Boulevard.
- I. Sawtelle Boulevard, between Culver/ Washington off-ramp of the San Diego Freeway and Braddock Drive.

- J. Sawtelle Boulevard, between Matteson Avenue and Venice Boulevard.
- K. Sepulveda Boulevard.
- L. Slauson Avenue, east of Jefferson Boulevard.
- M. Venice Boulevard.
- N. Washington Boulevard, east of La Cienega Boulevard.

Most direct route shall be used to and from the restricted street from the truck route.

7-1.2 Temporary Utility Services Add the following:

Contractor is responsible to obtain and pay for construction water. Any water drawn from fire hydrant shall be coordinated through Golden State Water Company (Contact telephone No. 310.838.1324) located at 5839 Green Valley Circle, Suite 106, Culver City, CA 90230

7-2 LABOR

7-2.2 LAWS

7-2.2 LAWS Add the following paragraphs:

Attention is directed to the provisions in Sections 1777.5 (Chapter 1411, Statutes of 1968) and 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or any Subcontractor under the Contractor. The Contractor and any Subcontractor under him shall comply with the requirements of said Sections in the employment of apprentices.

Pursuant to the provisions of Section 1770 of the Labor Code, the Owner has ascertained the general prevailing rate of wages (which rate includes employer payments for health and welfare, vacation, pension and similar purposes) applicable to the work to be done, for straight time, overtime, Saturday, Sunday and holiday work. The holiday wage rate listed shall be applicable to all holidays recognized in the collective bargaining agreement of the particular craft, classification, or type of workmen concerned. These rates are set and on file with the City Clerk of Culver City. The Contractor shall pay travel and subsistence payments to each worker as such payments are defined and required in applicable collective bargaining agreements filed in connection with Labor Code Section 1773.8.

Any Contractor who shall be found in violation of the nondiscrimination provisions of the State of California Fair Employment Practices Act or similar provisions of Federal law or executive order in the performance of any contract with the City, thereby shall be found in material breach of such contract and thereupon the City shall have power to cancel or suspend the contractor, in whole or in part, or to deduct from the amount payable to such Contractor the sum of twenty-five dollars (\$25.00) for each person for each calendar day during which such person was discriminated against, as damages for said breach of contract; or both. Only a finding of the State of California Fair Employment Practices Commission or the equivalent Federal agency or officer shall constitute evidence of a violation of contract under this section.

7-2.4 Payroll Records Add the following section:

7-2.4 Payroll Records

The Contractor's attention is directed to the following provisions of Labor Code Section 1776 (Stats. 1978, Ch. 1249). The Contractor shall be responsible for the compliance with these provisions by his Subcontractors.

- a. Each Contractor and Subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each

journeyman, apprentice, worker or other employee employed by him or her in connection with the public work.

- b. The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:
 - (1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
 - (2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations.
 - (3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request to the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Contractor.
- c. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division.
- d. Each Contractor shall file a **certified copy** of the records enumerated in subdivision (a) with the entity that requested such records within **10 days** after receipt of a written request.
- e. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the contract or performing the contract shall not be marked or obliterated.
- f. The Contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.
- g. The Contractor shall have **10 days** in which to comply subsequent to receipt of written notice specifying in what respects the contractor must comply with this section. In the event that the contractor fails to comply within the **10 day period**, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit **twenty-five dollars (\$25)** for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.
- h. The Contractor and Subcontractors shall submit to the City Engineer certified payrolls and copies of all payroll checks and paystubs showing all itemized deductions for each employee on a weekly basis during the term of this contract.

7-5 PERMITS Add the following:

The Contractor shall secure all necessary permits from all governing agencies having authority over any portion of the work. The Contractor shall obtain and pay for all other permits.

The Contractor shall obtain, pay, and comply with all permits, including but not limited to the permits requirements as shown in the "Instruction to Bidders" part of this contract document, and give all notices necessary and incident to the due and lawful prosecution of the work and to the preservation of the public health and safety.

7-6 THE CONTRACTOR'S REPRESENTATIVE Add the following:

When and as directed by the City Engineer, the Contractor shall attend all conferences and meetings which the City Engineer deems necessary for the proper progress of work under this contract.

7-8 PROJECT SITE MAINTENANCE**7-8.1 General** Add the following:

When and as often as required by the Engineer, the Contractor shall furnish and operate self-loading motor sweepers with spray nozzles, to keep paved areas affected by the work acceptably clean and dust free.

The Contractor shall remove graffiti from all work, materials, equipment, and signs within the project. Equipment, materials, or signs containing graffiti shall not be brought to the project. Any graffiti found on work, materials, equipment, or signs shall be cleaned or removed from the project within 24 hours from its discovery. The cost of graffiti removal shall be borne by the Contractor, and shall be considered as being included in the various Contract items.

Upon project completion, the contractor shall remove all dig-alert utility markings.

The Contractor shall have sole responsibility for providing security for his materials and equipment on and about the work site against theft and vandalism at all times for the duration of the contract. Contractor shall immediately replace all furniture, equipment, supplies, etc., which is being used or owned by the Owner or his/her designee at or on the project site or other areas under the security of the Contractor that is stolen, lost or damaged through theft, vandalism, graffiti, Contractor's negligence or any similar activity.

7-8.2 Air Pollution Control Add the following:

The Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes which apply to any work performed pursuant to the Contract, including any air pollution control rules, regulations, ordinances and statutes, specified in Section 11017 of the Government Code.

In the absence of any applicable air pollution control rules, regulations, ordinances or statutes governing solvents, all solvents, including but not limited to the solvent portions of paints, thinners, curing compounds, and liquid asphalt used on the Project shall comply with the applicable material requirements of the South Coast Air Quality Management District (SCAQMD). All containers of paint, thinner, curing compound or liquid asphalt shall be labeled to indicate that the contents fully comply with said requirements.

Material to be disposed of shall not be burned, either inside or outside of the premises. The provisions of Section 300-1.3, "Removal and Disposal of Materials", of the SSPWC permitting disposal of material by burning shall not apply.

7-8.3 Noise Control Add the following:

The Contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the contract.

The noise level requirements 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. Each internal combustion engine used for any purpose on the job shall be equipped with a muffler of a type recommended by the manufacturer. The noise level shall be in compliance with Chapter 9, Section 9.07 of the Culver City Municipal Code.

Residential Restrictions

For residential zones, hours of work shall be limited, in accordance with the Culver City Municipal Code pertaining to Mechanical Noise or Construction Noise near Residential Zones, which prohibits:

- (a) The use or operation of any automobile, motorcycle, engine, machine or mechanical device, or other contrivance or facility, or the carrying on of any trade or business, causing between the hours of 8:00 p.m. and 8:00 a.m., any loud or unusual noise or sound, disturbing the peace of residents of a residentially zoned neighborhood.
- (b) The use of any of the foregoing in construction or excavation work between the hours of 8:00 p.m. and 8:00 a.m., on weekday, or between the hours of 7:00 p.m. and 9:00 a.m. on a Saturday, or between the hours of 7:00 p.m. and 10:00 a.m. on a Sunday, which cause any loud or unusual noise or sound disturbing the peace of residents of a residentially zoned neighborhood.

Interference with Business Prohibited

Contractor must comply with Section 9.04.020(D) of the Culver City Municipal Code pertaining to Mechanical Devices, etc., Interfering with Business or Industrial Operations, which prohibits: The operation of any automobile, motorcycle, engine, machine or mechanical device or other contrivance or facility, or the carrying on of any trade or business, any loud or unusual noise or sound from which interferes with the transaction or conduct of any business or industrial operation in the surrounding area, unless the making of such noise is incident to the construction or repair of buildings or equipment or is otherwise necessary to the protection or preservation of the property from which such noise or sound emanates.

7-8.4 Storage of Equipment and Materials Add the following:

It shall be the Contractor's responsibility to locate any storage sites for materials and equipment needed and such sites must be approved in advance by the City Engineer, and must be free of objectionable material. The Contractor must submit to the City Engineer for approval any and all agreement(s) between the Contractor and the property owner(s) of said storage site(s) and/or construction site(s) for approval prior to the start of construction. Said agreement(s) must provide for the restoration of the site(s) by the Contractor prior to the filing of "Notice of Completion" by the City Engineer.

Stockpiling or storage of materials on any public right-of-way or parking areas will not be permitted without the approval of the Engineer. Materials spilled along or on said right-of-way or parking areas shall be removed completely and promptly. All stockpile and storage areas shall be

kept in a safe, neat, clean, and orderly fashion, and shall be restored to equal or better than original condition upon completion of the work

Contractor shall only use a haul route approved in writing by the Engineer. The Contractor shall keep the work site as well as the route to and from the disposal site clean at all times. The Contractor shall immediately remove and haul away all materials included in the various items of removals.

7-8.6 Water Pollution Control Add the following:

The Contractor shall comply with the requirements of Subsection 7-8.6 of the Standard Specifications and shall conduct his operations so as to prevent Portland cement, mud, silt or other materials from entering the surface drainage structures of the adjoining street and any underground storm drainage system. Contractor shall prepare and submit Storm Water Pollution Prevention Plan (SWPPP) prepared by qualified SWPPP developer for City's approval. Once approved, the Contractor shall comply with the requirements of project specific Storm Water Pollution Prevention Plan (SWPPP).

In addition to complying with all applicable federal, state and local laws and regulations, the Contractor shall take note of the NPDES (National Pollution Discharge Elimination System) Requirements. The Contractor shall take all precautionary actions and implement all necessary BMPs to prevent sewer discharges to any portion of the storm drain conveyance system including discharge of pollutants from activities such as paving operations, concrete waste washouts, cold-milling, vehicle and equipment fueling from entering storm drain systems. At the minimum, the following shall be implemented:

1. Handle, store, and dispose of materials properly.
2. Avoid excavation and grading activities during wet weather.
3. Construct diversion dikes and drainage swales around working sites.
4. Cover stockpiles and excavated soil with secured tarps or plastic sheeting.
5. Develop and implement erosion control plans (if applicable).
6. Check and repair leaking equipment away from construction sites.
7. Designate a location away from storm drains for refueling.
8. Cover and seal catch basins if work in their vicinity may allow debris or deleterious liquids to enter.
9. Use vacuum with all concrete sawing operations.
10. Never wash excess material from aggregate, concrete, or equipment onto a street.
11. Catch drips from paving equipment with drip pans or absorbent material.
12. Clean up all spills using dry methods.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS Add the following subsection:

The Contractor shall examine all adjoining premises (including for the purposes hereof, streets and sidewalks) and buildings, and ascertain, before beginning work, the depth of cellars, materials and construction of buildings and all existing conditions of such premises and the buildings thereon, and shall be governed thereby for the necessary, thorough, safe and satisfactory execution of all work called for herein, whether indicated on Plans and/or specified, or not, and all work and protective measures necessary to keep and leave the said premises and buildings in the same condition as they were before commencing work shall be done without any addition to the Contract Price. Wherever any parts of the existing adjoining buildings interfere with or are interfered with by the work to be performed hereunder, the Contractor shall make whatever changes necessary thereby, whether shown on the Plans, called for in the Specifications, or not shown or not called for. The Contractor, before commencing work on the premises, shall, if he sees fit, make a written report of the conditions as found at that time, noting particularly any defects in evidence, taking photographs of the exteriors, and, if necessary, photographs of interiors, and shall deliver to the Owner a copy of the written report of the examination and copies of photographs with the date of taking thereon. The Contractor shall

invite the Owner and the owners of the respective properties and buildings to join with them in the examination of the premises and buildings. The Owner may, at its option, be present during the examination. If the Contractor fails to make the examination and report as herein specified, it will be deemed that the adjoining buildings and premises are in good condition, and all claims for damages, repairs and replacements must be treated by the Contractor on the basis that the buildings and premises were in good condition before work began.

The Contractor shall shore up, brace, underpin, secure, and protect all foundations, improvements, and other parts of existing structures adjacent to the work site, which may in any way be affected by excavation or other operations in connection with the work to be performed under this contract. The Contractor shall be responsible for giving all required notices to any joining property owner or other party before commencement of work.

7-10 PUBLIC CONVENIENCE AND SAFETY

7-10.1 Traffic and Access Add the following:

Traffic and access, including but not limited to vehicular and pedestrian traffic controls, maintenance of vehicular and pedestrian access, detours, and street closures, shall be in accordance with Subsection 7-10, of the latest edition of the Standard Specifications for Public Works Construction, including all its subsequent amendments; the latest edition of the Work Area Traffic Control Handbook ("WATCH") as published by the Building News, Inc., 990 Park Center Drive, Suite E, Vista, California 92081, and the following Special Provisions. In the event of conflict, the Special Provisions shall take precedence over the Work Area Traffic Control Handbook ("WATCH") and the Standard Specifications, and the Work Area Traffic Control Handbook ("WATCH") shall take precedence over the Standard Specifications.

The Contractor is solely responsible for the traffic control safety of pedestrians and vehicles on the public right-of-way within the Contractor's work area. The Contractor shall hold harmless and indemnify the Owner, and each of its officers and employees, for any and all damages to persons and property due to the Contractor's failure to maintain adequate traffic control and safety. It is the affirmative duty of the Contractor to maintain all of his traffic control devices on the project at all times, including night and/or weekends.

The Contractor shall notify by printed notice, the occupants of all properties within the construction zone of any access, parking and circulation restrictions and limitations that will be created by the construction at least 7 calendar days in advance of the commencement of construction. This notice shall be prepared by the City of Culver City, but be distributed by the Contractor.

Traffic Control Plans (TCP)

Traffic Control Plans (TCP) on 24" x 36" sheet have been included in the bid plan package and clearly show and describe all proposed lights, warning signs, barricades, delineators, temporary lane markings, temporary traffic signals or signs, and any and all other facilities proposed to be installed. It shall be the Contractor's responsibility to immediately revise the TCP at the direction of the Engineer, and the Contractor hereby agrees that such Plan shall be strictly adhered to, and the Contractor hereby understands and agrees that its failure to provide any facility or device as shown on the TCP, or its deviation from said Plan, shall constitute a breach of contract. Traffic control set up in the field shall be inspected and approved by the City Engineer's Representative prior to commencement of any construction activity. Construction Sequence Plans for stages of construction are included in the project plans set and shall be adhered to. TCP plans in the project plan set have been prepared for the widening and replacement of the Higuera bridge of the project. All other work on this project will require contractor prepared TCP plans, including detour plans as directed by the City to provide alternate routes around the construction area.

Business Access

Pedestrian and vehicular access shall be maintained to businesses fronting the Work except when construction of areas immediately fronting a business entrance precludes such access. Contractor shall notify affected business three (3) business days in advance of construction.

Contractor shall make provisions for deliveries to business including temporary loading zones

Convenient and safe pedestrian access to occupied residential and business property shall be maintained at all times. Access to mailboxes must be maintained at all times such that the postal delivery service is not interrupted. Trash pick-up service shall not be interrupted. Access to vacant and unused property may be restricted when approved by the Engineer. Both vehicular and pedestrian access shall be maintained at all times to all other property except as otherwise specifically authorized in writing by the City's Engineer.

Temporary No Parking

The Contractor shall notify in writing residents of property adjoining the location of the work at least forty-eight (48) hours before the start of construction on that street. The Contractor is responsible for posting "temporary no-parking" signs at least forty-eight (48) hours before using the parking lane for construction purposes. The Contractor shall be responsible for furnishing, posting, and removing temporary "No Parking" and "No Driving" signs (as applicable) along project streets. Signs shall be posted on each side of the street with a maximum of 200 feet between signs. When necessary, the Contractor shall furnish posts. Pursuant to City requirements, "Temporary No Parking" signs must be posted and verified by the Culver City Police Department 48 hours prior to beginning of construction.

The Contractor shall coordinate with postal authorities for the temporary relocation of mailboxes. Contractor shall provide signage directing pedestrian and vehicular traffic to temporary mailbox locations.

In the case of work requiring excavation of the roadway which may interfere with the use by residents or businesses of their driveways, suitable provisions shall be made by the Contractor at such time as the exigencies of construction may demand a temporary blocking of said driveways. Efforts shall be made by the Contractor to minimize the duration of said blocking and to notify the residents of this need well in advance. Further, the Contractor shall provide access to each residential or commercial establishment each evening. Any trench or excavation in the street or alley which remains open after work hours shall be covered by steel plates.

The Contractor shall conduct his operations in such a manner as to provide reasonable access to the adjacent properties and shall have no greater length or quantity of work under construction than he can properly prosecute with a minimum of inconvenience to the public and other contractors engaged on adjacent or related work.

7-10.3 Street Closures, Detours, Barricades Add the following:

No closure of any street shall be allowed unless prior written permission is obtained from the City Engineer. If permission to close a street is granted, then the Contractor is required to notify in writing at least five (5) working days in advance of street closures, all emergency services, and school bus services shall be notified by the contractor in writing of the locations, time, and date of the closures. In case of schedule changes, the emergency services, etc., shall be notified by telephone at least two (2) days in advance of the street closure.

7-10.4.1 Safety Orders, Add the following:

Safety Orders and Safety Control

The Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to U.S. Department of Labor (OSHA), the California Occupational Safety and Health Act, and all other

applicable Federal, State, County, and local laws, ordinances, codes, the requirements set forth below, and any regulations that may be detailed in other parts of these Contract Documents. Where any of these are in conflict, the more stringent requirements shall be followed.

No provision of the Contract Documents shall act to make the Owner, the Engineer or any other party than the Contractor responsible for safety. The Engineer shall not have authority for safety on the project. The Contractor shall indemnify, defend and hold harmless the Owner, Engineer, or other authorized representatives of the Owner, from and against any and all actions, damages, fines, suits and losses arising from the Contractor's failure to meet all safety requirements and/or provide a safe work site.

If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the Engineer and the Owner. In addition, the Contractor must promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the Work whether on, or adjacent to, the Site, giving full details and statements of witnesses. The Contractor shall make all reports as are, or may be, required by authority having jurisdiction, and permit all safety inspections of the work being performed under this Contract.

If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

Safety Program

The Contractor shall establish, implement, and maintain a written injury prevention program as required by Labor Code Section 6401.7. Before beginning the Work the Contractor shall prepare and submit to the Engineer a Contractor Safety Program that provides for the implementation of all the Contractor's safety responsibilities in connection with the Work at the site and the coordination of that program and its associated procedures and precautions with the safety programs, precautions and procedures of each of its subcontractors and other prime Contractors performing work at the site. The Contractor shall be solely responsible for initiating, maintaining, monitoring, coordinating, and supervising all safety programs, precautions and procedures in connection with the Work and for coordinating its programs, precautions and procedures of the subcontractors and other prime contractors performing Work at the site. The Safety Program should contain all the necessary elements for the Contractor to administer its program on site.

The Contractor's compliance with requirements for safety and/or the Engineer's review of the Contractor's Safety Program shall not relieve or decrease the liability of the Contractor for safety. The Engineer's review of the Contractor's Safety Program is only to determine if the above listed elements are included in the program.

Safety Supervisor

The Contractor shall appoint an employee as safety supervisor who is qualified and authorized to supervise and enforce compliance with the Safety Program. The Contractor shall notify the Engineer in writing prior to the commencement of work of the name of the person who will act as the Contractor's safety supervisor and furnish the safety supervisor's resume to the Engineer.

The Contractor, will, through and with his Safety Supervisor, ensure that all of its employees and its subcontractors of any tier, fully comply with the Project Safety Policies. The Safety Supervisor shall be a full time employee of the Contractor whose responsibility shall be for supervising compliance with applicable safety requirements on the work site and for developing and implementing safety training classes for all job personnel. The Owner shall have the authority to request removal of the Contractor's Safety Supervisor if that representative is judged to be improperly or inadequately performing the duties; however, this authority shall not in any way affect the Contractor's sole responsibility for performing this work safely, nor shall it impose any obligation upon the Owner to ensure the Contractor perform its work safely.

Safety and Protection

The Contractor shall take all necessary protection to prevent damage, injury and loss to:

All employees on the Project, employees of all subcontractors, and other persons and organizations who may be affected thereby;

All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and

Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.

The Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor shall notify owners of adjacent property and of underground facilities and utility owners when prosecution of the Work may affect them and shall cooperate with them in the protection, removal, relocation and replacement of their property. All injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any subcontractor, supplier or any other person or organization part, by the Contractor, any subcontractor, supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by the Contractor. The Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and the Owner has issued a notice of final completion to the Contractor.

Safety Emergencies

In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Engineer, is obligated to act to prevent threatened damage, injury or loss. The Contractor shall give the Engineer prompt written notice if the Contractor believes that any significant changes in the Work or variations from the Contract have been caused thereby.

Safety Violations

Should the Contractor fail to correct an unsafe condition, the Engineer shall immediately notify the Owner of the Contractor's failure to correct the unsafe condition. The Owner shall then notify the Contractor through the Engineer that the unsafe condition must be corrected or the work in question will be stopped until the condition is corrected to the satisfaction of the Owner. No extension of time or additional compensation will be granted as a result of any stop order so issued.

The Owner shall have the authority to require the removal from the project of the foreman and/or superintendent in responsible charge of the work where safety violations occur.

Equipment Safety Provisions

The completed Work shall include all necessary permanent safety devices, such as machinery guards and similar ordinary safety items, required by the State and Federal (OSHA) industrial authorities and applicable local and national codes. Further, any features of the Work, including Owner-selected equipment subject to such safety regulations shall be fabricated, furnished, and installed in compliance with these requirements. All equipment furnished shall be grounded and provided guards and protection as required by safety codes, and where vapor-tight or explosion-proof electrical installation is required by safety codes, this shall be provided. Contractors and manufacturers of equipment shall be held responsible for compliance with the requirements included herein. The Contractor shall notify all equipment suppliers and subcontractors of the provisions of this paragraph.

On-Site Copies Required

The Contractor shall have at the work site copies or suitable extracts of: Construction Safety Orders, and General Industrial Safety Orders issued by the State Division of Industrial Safety.

Compliance Required

Contractor shall comply with provision of these and all other applicable laws, ordinances, and regulations, including but not limited to the Occupational Safety and Health Act of 1970 and current amendments, if any, to which particular attention is directed.

Clearance from Power Lines

To help prevent injuries and electrical service interruptions, Contractors are reminded CAL/OSHA requires tools, machinery equipment, apparatus, materials, or supplies must be kept at least 10 feet from voltage lines energized at 50,000 volts or less and even greater distances for lines in excess of 50,000 volts. In addition, the Penal Code of the State of California, Section 385, makes it a misdemeanor to violate certain clearances from high voltage lines.

Prior to starting work in which the aforementioned clearances will be impaired, it will be necessary to contact the Southern California Edison (SCE) Company Business Office nearest the proposed work location and request assistance. SCE will take appropriate action to assist in maintaining required clearances. Such action will be at Contractor's expense. Sufficient lead time to permit planning and scheduling of any necessary work will be required.

Special Hazardous Substance and Process

Contractor acknowledges that Contractor is aware of and in compliance with the provisions of the Hazard Communication Standards (California Administrative Code, Title 8, Section 4194). Contractor shall, at the request of the Owner, demonstrate that Contractor is in complete compliance with the Hazard Communication Standards.

In addition, Contractor shall, at the request of the Public Works Director/City Engineer, provide to the Owner a Material Safety Data Sheet for any product handled or used by the Contractor on Owner property or in an area where an Owner's employee is working.

7-13 LAWS TO BE OBSERVED

The Contractor shall keep fully informed of all existing and future State and Federal laws and county and municipal ordinances and regulations which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. Contractor shall at all times observe and comply with, and shall cause all his or her agents and employees to observe and comply with, all such existing and future laws, ordinances, regulations, orders, and decrees of bodies or tribunals having any jurisdiction or authority over the work; and shall protect and indemnify the Owner, and all its officers and employees connected with the work, and including but not limited to the Public Works Director/City Engineer, against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by Contractor or Contractor's employees.

If any discrepancy or inconsistency is discovered in the Plans, Drawings, Specifications, or Contract for the work in relation to any such law, ordinance, regulation, order or decree the Contractor shall forthwith report the same to the Engineer in writing.

7-15 RECORD DRAWINGS Add the following section:

At the beginning of the project, one print of each applicable drawing will be issued by the City for use in preparing record drawings.

Actual construction conditions shall be accurately and completely recorded on the prints as the project progresses. Contractor shall make complete, current, Record Drawings available for review by the City during the time the Contractor's Application for Payment is being reviewed. Incomplete Record Drawings may delay approval of said Application. Upon completion of the work, the Contractor shall sign the record drawings and shall submit same to the City's Inspector for checking and approval prior to the Notice of Completion is filed.

SECTION 8 -- FACILITIES FOR AGENCY PERSONNEL

Facilities for Agency Personnel shall be **Class "B" field office** on this project unless specified otherwise in technical Provisions.

SECTION 9 -- MEASUREMENT AND PAYMENT

9-3 PAYMENT

9-3.1 General. Add the following at the end of the second paragraph:

Payment for cost of work to comply with the General Provisions of the Standard Specification for Public Works Construction and as modified by this Contract shall be included in the various bid items, and no additional payment will be made.

Bid prices provided on the appropriate Bid Form will remain in force as Unit Prices under the Contract Documents until the Contract has been fully performed. No cost escalation is allowed due to material price increase for the term of the project.

When an item of work is not listed in the "bid schedule" in the bid proposal, the cost of such work shall be considered to be included in the cost of the other Work that is listed. The Contractor is to provide all labor, material, and equipment necessary to complete the Project in accordance with the plans and specifications including, but not limited to the following:

- a. All "Special Provisions" work required to complete the Project in a safe and orderly manner including, but without being limited to, safety measures, hoists, flagmen, clean-up, barricades, fences, temporary utilities, utility fees and charges, parking for the Contractor's and Subcontractor's personnel, and temporary facilities as may apply to this Work;
- b. All insurance in accordance with the insurance requirements of the Contract;
- c. Maintain and update current record drawings on-site. Upon project completion provide the Owner a legible set of record drawings, operation and maintenance manuals, warranties, and guarantees;
- d. All permits required;
- e. Construction schedule indicating material lead times, shop drawings, order dates, start and end dates, milestone dates. The schedule shall be updated monthly;
- f. Monthly project status report; Attend weekly project meetings;
- g. All engineering, testing and inspection costs for defective work, and work performed outside of the work hours set forth in Section 6-7 of the Special Provisions;
- h. Repair or replace all existing improvements (public or private) damaged by the Contractor. The Contractor is responsible to provide evidence of pre-existing conditions;

- i. All scheduling of utility connections turn on/off including but not limited to electrical services (for street lighting, traffic signals, and irrigation controllers) and water meters.
- j. All construction survey/staking necessary to set grade for all improvements. The survey provider shall be appropriately licensed by the State of California and is subject to approval by the Owner;
- k. Watchman or security service, as necessary;
- l. Perimeter fencing of work zones and staging area as necessary for public safety and protection of equipment and materials;
- m. Dust control, street cleaning, and protection and/or replacement of existing surfaces or properties; and
- n. Submittal Log of all submittals required to the Owner including but not limited to SWPPP, material, products, concrete testing data, batch plant testing data, shop drawings and traffic control and phasing plans. Said log shall be updated for each weekly project meeting.

All costs for the preceding shall be included in the other items for which bids are entered.

The City may keep any monies which would otherwise be payable at any time hereunder and apply the same, or so much as may be necessary therefore, to the payment of any expense, losses or damages, as determined by the Engineer, incurred by the City, for which the Contractor is liable under the Contract.

Other Withholds

In addition to the amount which the Owner may otherwise retain under the Contract, the Owner may withhold a sufficient amount or amounts of any payment or payments otherwise due the Contractor, as in its judgment may be necessary to cover:

- a. Payments which may be past due and payable for just claims against the Contractor or any subcontractor for labor or materials furnished for the performance of this Contract.
- b. Defective work not remedied.
- c. Failure of the Contractor to make proper payments to its subcontractors or suppliers.
- d. A reasonable doubt that the Contract can be completed for the balance remaining.
- e. Damage to another Contractor or third party, or to private or City property.
- f. Failure of the Contractor to keep its work progressing in accordance with its progress schedule or maintaining current Record Drawings.
- g. The Owner's costs for the Contractor's failure to complete work within the allowed time.
- h. Cost of insurance arranged by the Owner due to cancellation or reduction of the Contractor's insurance.
- i. Failure of the Contractor to make proper submissions, as herein specified.
- j. Failure to submit, revise, resubmit, or otherwise conform to the requirements herein for preparing and maintaining a construction schedule.

- k. Payments due the Owner from the Contractor.
- l. Provisions of law that enable or require the Owner to withhold such payments in whole or in part.

The Owner in its discretion may apply any withheld amount or amounts to the payment of valid claims. In so doing, the Owner shall be deemed the agent of the Contractor, and any payment so made by the Owner shall be considered as a payment made under the Contract by the Owner to the Contractor, and the Owner shall not be liable to the Contractor for such payment made in good faith. Such payments may be made without prior judicial determination of the claim or claims. The Owner will render to the Contractor a proper accounting of such funds disbursed in behalf of the Contractor.

Pursuant to Public Contract Code Section 22300, for monies earned by the Contractor and withheld by the Owner to ensure the performance of the Contract, the Contractor, may, at its option, choose to substitute securities meeting the requirements of said Public Contract Code Section 22300. There would be an associated administrative charge of \$75 per each Contractor's Progress Invoice.

9-3.3 Delivered Materials Add the following:

Unless included in the Bid Schedule, or unless otherwise called for in Technical Provisions, no payment will be made for materials or equipment delivered but not yet incorporated in the work.

Add the following:

9-3.5 Final Pay Quantities.

When the estimated quantities for a specific portion of the work are designated as a final payment quantities, said estimated quantities shall be the final quantities for which payment for such specific portion of the work will be made unless the dimensions of said portions of the work shown on the plans are revised by the Engineer. If such dimensions are revised and such revisions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the changes in the dimensions. The estimated quantities for such specified portion of the work shall be considered as approximate only, and no guarantee is made that the quantities which can be determined by computations made based on the details and dimensions shown on the plans will equal the estimated quantities. No allowance will be made in the event that the quantities based on computations do not equal the estimated quantities.

SECTION F

TECHNICAL PROVISIONS

(SUPPLEMENTS AND MODIFICATIONS TO
THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION)

SECTION F – TECHNICAL SPECIFICATIONS**GENERAL****1. GENERAL**

The work to be done consists of furnishing all materials, equipment, tools, labor and incidentals as required in the specifications and contract documents. The general items of work include removal of existing AC and PCC pavement, construction of AC and PCC pavement, bike path, cold milling and overlay, removal and construction of curb and gutter, sidewalk, driveways, cross gutter, curb ramps, construction of landscaped slope, storm drain, inlets, catch basin, irrigation, traffic signal modifications, signing and striping, street lighting, and all other items not mentioned but indicated in the Plans and Specifications.

All work as shown on the Contract Drawings and indicated on the Contract Documents, including General Conditions and General Requirements, shall conform to the latest edition of the Standard Specifications for Public Works Construction (SSPWC), the “Green Book” , and as supplemented and clarified herein.

All work within the **City of Culver City’s jurisdictional boundary** shall conform to the latest edition of the “Green Book” as modified by the current edition of the City of Culver City, Department of Public Works Additions and Addendums to the Standard Specifications for Public Works Construction (Brown Book), latest edition. All traffic signal and/or related electrical work shall conform to the standards under Section 2000, Subsection 1.1, and the Special Provisions and Standard Drawings for the Installation and Modification of Traffic Signals, issued by the City of Culver City Department of Transportation (LADOT), red book and City of Culver City Bureau of Street Lighting (LABSL), blue book.

2. MOBILIZATION**2.1 GENERAL**

Mobilization and traffic control shall conform to the provisions of Sections 9-3.4 of the Standard Specifications and Special Provisions of this specification, except modified herein.

The scope of the work shall include the obtaining of all bonds, insurance; moving onto the site of all project work areas and equipment; and the furnishing of other construction facilities; all as required for the proper performance and completion of the Work. Mobilization shall include but not be limited to the following principal items:

1. Notification to businesses.
Contractor will be required to print and distribute a 7-day advance notice to each business that may be impacted by the construction. Submit the notices to the City for approval.
2. The movement of personnel, equipment, supplies and incidentals to the project site.
3. Furnishing, installing, and maintaining all storage yards or sheds required for temporary storage of products, equipment, or materials that have not yet been installed in the Work. Construction yard: As required by Section 7-8.4 of the Special Provisions, the contractor is responsible for locating the construction yard for its construction operation. The contractor shall provide lease agreement and insurance prior to use any rented lot.
4. Confined space entry to excavations
5. Have the Contractor’s superintendent at the job site full time.
6. Submittal of required construction schedule as specified.
7. All submittals as required in the specifications.
8. Provide Class “B” field office.

9. Prepare SWPPP for approval prior to construction and Implement SWPPP and BMP throughout construction.
10. Comply with the requirements as stated in the environmental document (Initial Study/Mitigated Negative Declaration). Pay special attention to the mitigation measures.

All submittals (three copies) shall be submitted no later than two weeks after the contract award.

The maximum price for this bid item **shall not exceed 5 percent** of the total contract price of total base bid. **BID ITEM NO. 1 - Mobilization** includes all work necessary to mobilize and demobilize forces, equipment, transportation, and materials; obtain bonding, insurance, permits, licenses; SWPPP, and other work as necessary to prepare for constructing the work.

2.2 PAYMENT

Payment for **BID ITEM NO. 1 - MOBILIZATION** shall be at the contract lump sum (LS) bid price and shall be payable as follows for each payment upon approval of the Public Works Director/City Engineer.

- a. Payment of up to 50 percent of the contract lump sum (LS) bid price for mobilization at the first progress payment.
- b. Payment to 75 percent of the contract lump sum (LS) bid price for mobilization and restoration or resetting of survey monuments, when the monthly partial payment estimate of the total amount earned to date, not including the amount earned for mobilization, is 50 percent or more of the original contract amount.
- c. Payment to 100 percent of the contract lump sum (LS) bid price for mobilization and restoration or resetting of survey monuments, when the monthly partial payment estimate of the total amount earned to date, not including the amount earned for mobilization, is 75 percent or more of the original contract amount.

3. **TRAFFIC CONTROL**

Traffic Control shall conform to the provisions of Sections 7-8 and 7-10 of the Standard Specifications and Special Provisions of this specification, except as modified herein:

The Contractor shall provide adequate pedestrian and vehicular traffic controls for the duration of the work in accordance with the Contract Documents including Subsection 7-10 of the SSPWC, the Work Area Traffic Control Handbook (WATCH), Manual for Uniform Traffic Control Devices (MUTCD), latest edition, and the City of Culver City.

The Contractor shall provide all traffic controls necessary to provide for the safe and expeditious movement of traffic, motorized and non-motorized (including pedestrian traffic) through the construction zones, as well as those necessary to provide for the safety of the work force performing the construction, including two flagmen to direct traffic if deemed necessary by the Public Works Director/City Engineer.

Contractor shall provide and post "no parking" signs at least 48 hour prior to its work, if necessary.

Contractor shall utilize k-rail for all aspects of the construction for protection of the work area, except for areas such as a driveway and intersection work where k-rail and crash cushions may not be feasible. In this case, contractor may utilize barricades and delineators to channel traffic through the work zone, as approved by the Engineer. When barricades and delineators are used, contractor shall maintain a minimum of 5' clearance between excavation and the travel way. Barricades and delineators shall be maintained by the Contractor at all times. Temporary K-Rail

Barricades next to roadway excavation can be either concrete, or plastic (waterfilled) approved by Caltrans. The Contractor shall include any temporary pavement necessary for the safe and expeditious movement of traffic.

Business access shall be maintained at all times. At driveways or alley entryways, the Contractor may need construct improvements in phases in order to maintain the access. Short duration of closure during paving operation shall be coordinated with each business in advance.

The Contractor may, at his expense, submit and propose an alternative Construction Traffic and Phasing Plans to the Engineer for consideration.

Alternate Route and Signage

Should an alternate route or signage is required, the contractor shall prepare alternate route plans (due to the traffic lanes reduction during construction) for city's approval. The approved signage shall be installed and maintained by the Contractor throughout the duration of the construction project.

Information Signs

Information signs shall be provided as specified for each sign type described in this Subsection. For each sign style, Contractor shall submit a layout for approval prior to fabrication. Contractor shall fabricate and install 4 (four) such signs.

1. Business Open Signs. Size: 72 inch by 48 inch.

Title Lettering: Open for Business - 5 inch letters.

Other Lettering: Eight (8) business names, one per line conforming to names as shown on storefronts - 3.5-inch letters.

Lettering Style: To be selected by City from a wide range of templates supplied by Contractor.

Sign and Lettering Colors: To be selected based on samples submitted by Contractor of shades and colors approximating those requested by City.

Material: 2 -inch Marine plywood painted two coats overall with base color.

Mounting: Mount on 6 feet wide, Type 3 barricades, two bolts on top cross board and two bolts on center cross board, such that the sign is at maximum height and bolt pattern is stable.

Sign Placement: Signs shall be placed at convenient locations along the roadway in front of and before passing the businesses listed on the sign in the direction of travel on the side of the street under construction, and as approved by the Engineer. Signs will be installed only along frontages where construction that prohibits parking is being performed. Signs shall be left at the same general location if the area is open for parking between times of construction, but must be moved off of the roadway pavement.

- 2 Access Signs. Size: 36 inch by 24 inch

Title Lettering: Driveway Access - 7 inch letters, narrow style to fit on sign

Other: Provide 90 degree curved arrow around left and top perimeter edge of sign adjacent to lettering. The arrow shall be three inches wide and arrowhead shall be five inches wide by 8 inches long.

Colors and style of lettering shall conform to business open signs.

Material: 2 -inch Marine plywood painted two coats overall with base color.

Sign Placement. Signs shall be mounted to standard type barricades and placed directly ahead of an access point serving a driveway or multiple driveways. The sign shall be mounted with brackets or other devices that will maintain the sign in place with the bottom edge no lower than the bottom of the top panel on the barricade such that the sign will not be dislodge during normal construction activities and traffic conditions.

3 Project Signs. Two (2) each Size: 30 inch by 60 inch

Title Lettering:

Sponsored by

Three inch letters narrow style.

Other Lettering:

Colors and the letter styles shall conform to Business Open signs.

Other:

Sign placement: Signs shall be mounted at a height on street light poles as directed by the Engineer. Contractor shall provide mounting fastening devices that will not damage the pole but will securely clamp the sign at two points, one near the top and one near the bottom of the sign. Mounting hardware shall be made of corrosion resistant material.

Payment

Payment for **BID ITEM NO. 2 - TRAFFIC CONTROL** shall include the preparation of Traffic Control and Detour Plans per fourth paragraph Subsection 7-10-1, including the implementation per Sections 7-8 and 7-10 and this Special Provisions, detour plans, alternate route plans and signage, and no additional compensation for Traffic Control Plans will be allowed therefor.

The cost for all information signs shall be included in the bit item of Traffic Control, and shall include full compensation for furnishing and full installation, including the mounted barricade, all necessary hardware to sustain the sign installation as specified, and place and replace, as necessary during changing conditions, the business and access signs. Contractor shall provide the barricades for mounting and shall retain ownership of them at the end of the project. Bid item prices shall include all labor materials and incidentals, and no additional payment will be provided therefor.

4. CHANGEABLE MESSAGE SIGNS

Unless directed otherwise, the Contractor shall provide and maintain Five (5) portable Changeable Message signboards throughout the construction on all major arterial streets as well as Higuera Street. The signboards shall be installed two weeks prior to begin construction. Contractor will be responsible to provide Five (5) Large (4' x 6') Changeable Message Signs (CMS) to be installed at a location approved by the City Engineer or his/her designee. The CMS shall be installed no later than 14 calendar days prior to start of work and shall remain in operation throughout the duration of the construction project. Contractor shall be responsible set up message board and submit text for approval by the City. CMS must be in operation at all time, unless the City Engineer or his/her designee has instructed the Contractor to temporarily turn off the CMS. Contractor shall be responsible to maintain or replace the CMS if they are not operational.

Payment for **BID ITEM NO. 3 - CHANGEABLE MESSAGE SIGNS** – shall be per each (EA) CMS. shall include full compensation for all labor, materials, tools equipment, transportation, delivery, message set-up, and incidentals necessary to do all the work involved thereof, complete, in place, and accepted.

5. COORDINATION WITH SOUTHERN CALIFORNIA EDISON RELOCATION WORK

On the south side of Higuera Street (at approximately Station 48+80), it is anticipated that Southern California Edison (SCE) will relocate existing guy wire and pole located in the private property of LA Gymnastics concurrently with the Contractor's street improvement and bridge replacement construction.

The Contractor is directed to coordinate its work with the SCE relocation work and in no case shall the existing curb/gutter be removed prior to the completion of relocation work. The stage construction shall be adjusted by the Contractor to allow such coordination.

Contractor's shall contact SCE's representative to verify its relocation schedule prior to preparing and submitting the street improvements project schedule to the Engineer. Contractor shall adjust its work plans/schedule accordingly, should there be work delays on the SCE relocation work at no additional cost to the City.

Payment for utility coordination shall be included in various bid items for the work is performed, and no additional or separate compensation is allowed therefor. No consequential damage is allowed.

---END OF SECTION F (GENERAL)---

SECTION F – TECHNICAL SPECIFICATIONS**PART 2
CONSTRUCTION MATERIALS****SECTION 200 - ROCK MATERIALS****200-1 ROCK PRODUCTS**

200-1.3 Gravel. Pea gravel for irrigation valve box drainage shall have 100 percent passing the 3/8-inch sieve and less than 5 percent passing the No. 8 sieve.

200-1.4 Aggregate. Coarse aggregate for Sump Drains shall be Concrete Aggregate No. 2.

200-2 UNTREATED BASED MATERIALS**200-2.2 Crushed Aggregate Base.**

200-2.2.3 Quality Requirements. The minimum R-value requirement will not be waived.

200-2.4 Crushed Miscellaneous Base.

200-2.4.3 Quality Requirements. The minimum R-Value requirement will not be waived. Contractor should provide test gradation results and R-value for actual material supplied to the project.

SECTION 201 - CONCRETE, MORTAR, AND RELATED MATERIALS**201-1 PORTLAND CEMENT CONCRETE****201-1.1 Requirements****201-1.1.1 General.**

The same brand, type, and source of cement and aggregate shall be used for all portland cement concrete.

Portland cement concrete shall achieve minimum flexural strength of 450 psi (for a equivalent of 2,500 psi compressive strength) in 72 hours. The Contractor may propose an alternate design (curing time, flexural strength) for consideration by the Engineer.

The Contractor shall submit concrete mix designs within 2 weeks from the award of the contract. An additional mix design for PCC pavement shall be submitted for approval at locations of small areas to be paved.

Contractor shall submit flexural strength and shrinkage information as part of submittals of mix design of PCC for pavement, including graphs of flexural and compressive strength over time for evaluation by the Engineer.

201-1.1.2 Concrete Specified by Class.

Concrete for Stamped Concrete Maintenance Work and Median Nose shall be Class 560-E-3250 with 4-inch maximum slump.

Concrete for irrigation controller cabinet, concrete header in tree well and concrete thickened edge in tree well shall be 560-C-3250 with a 4" maximum slump.

201-1.2 Materials.

201-1.2.4 Admixtures.

METHOD "A"

Color Hardener. Colored hardener for stamped concrete shall be equal to dry shake colored additive by Davis Colors be as shown in the table below:

Color Additive:	Davis Color – 10134 Terra Cotta
Release Agent:	Davis Color – 10134 Terra Cotta
Antiquing Agent	Davis Color – City Select

METHOD "B"

Colored concrete shall be equal to "Chromix" admixture for color-conditioned concrete by Davis Colors, or equal. Color shall be as shown in the table below:

Color:	Davis Colors – 10134 Terra Cotta
Clear Sealer:	W-111 Clear Cure and Seal – Color Seal II tinted to match color

Refer to Section 201-4.1.1 Color Curing Compound, in these Special Provisions.

Prior to start of colored stamped concrete work, Contractor shall submit three-color samples to the Engineer for approval, together with three copies of the manufacturer's printed instructions, bulletins, and specifications.

201-3 EXPANSION JOINT FILLER AND JOINT SEALANTS

201-3.1 General. Contractor shall submit materials to Engineer for approval.

201-3.4 Sealant shall be Type "A" with Polyethylene foam filler as required by plan details. Submit two samples to the Engineer for approval.

201-4 CONCRETE CURING MATERIALS

201-4.1 Membrane Curing Compounds

201-4.1.1 General. Concrete curing compound shall be Type 1-D.

Color curing compound for colored stamped concrete shall be the same color and manufacturer as the color hardener.

SECTION 203 - BITUMINOUS MATERIALS

203-6 ASPHALT CONCRETE

203-6.1 General. Asphalt concrete material used for asphalt concrete in AC areas behind driveways shall be Class and Grade C2-PG 64-10.

Asphalt concrete to construct AC pavement in the roadway shall be B- PG 64-10.

SECTION 209 – STREET LIGHTING AND TRAFFIC SIGNAL MATERIALS

Add new Section 209-6 LANDSCAPE ELECTRICAL SYSTEMS

209-6 LANDSCAPE ELECTRICAL SYSTEMS.

209-6.1 General. All materials and equipment shall be new and bear the label of or be listed by the Underwriter's Laboratories or the National Fire Protection Association, where applicable. All material shall be the standard products of manufacturer, regularly engaged in the production of such material, and shall be the latest improved design. All material of the same type or of one system shall be supplied by the same manufacturer.

In no case shall conduits, wires, etc., be smaller in size or less in number than that shown on Plans or called for in these Specifications, even though codes may accept otherwise.

209-6.2 Proposed Substitutions and "Or Equal." Refer to the Section E, Section 4-1.6.

Equipment and wiring shown on the plans is for materials as specified. Should equipment of other manufacturers be approved for use, the Contractor shall make all changes in other equipment, conduit, wiring, or location of equipment that may be required due to design or space allotment, as approved by the Engineer, without charge to the Agency.

It is the Contractor's responsibility to show that all products proposed for substitution are equal to the specified item by submitting sufficient information to permit a comparative check. The term "equal" shall mean that the product or materials offered shall have equivalent or more value to the Agency based on the value of the item set forth in the specifications or on the Plans, and then only after the Contractor's written submittal has been approved in writing. If, after installation, substituted equipment is found to be not equal to that specified, that equipment shall be replaced with approved item(s) at no cost to the Agency.

209-6.3 Inspection. At the time of electrical inspections, the Contractor shall make available a complete set of working drawings showing progress to date and detail variations from the plans. All variations must have prior approval of the Engineer.

209-6.3.1 Materials and Workmanship. Materials and workmanship, unless indicated or specified otherwise, shall be in strict conformity with the standards of the latest editions including revisions of the Electrical Code of the County, National Electric Code (current edition) of the National Board of Fire Underwriters, CAL/OSHA, Electrical Safety Orders, and the Standards of the National Electrical Manufacturers Association. Nothing in these Plans or Specifications shall be construed to permit work below the standards of these ordinances and those of OSHA. After acceptance of the contract, all work found which does not conform or comply with the applicable code shall be brought into conformance at no cost to the Agency.

209-6.4 Referenced Specification. Reference in this Specification to the STANDARD SPECIFICATIONS (STD. SPECS) shall mean the appropriate section of the STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, APWA/AGC, LATEST EDITION and all supplements thereto, as published by Building News, Inc., Los Angeles, California.

209-6.5 Materials.

- (a) Meter Pedestal. Existing.
- (b) Conductors. All conductors shall be copper, type "THWN" below grade and type "THHN/THWN" for exposed conditions and above grade.
- (c) Conduit. Exposed conduit shall be hot dipped galvanized rigid steel conduit. All ells shall be factory made rigid galvanized steel conduit. No PVC ells shall be used unless noted on drawings. All ells 45 degrees and larger shall be sweep bends. All rigid steel conduit exposed to earth 12-inches above finished grade shall be wrapped with 20 mil PVC tape, Scotch tape No. 40 green or equal. PVC conduit shall be U.L. listed "Schedule 40" with properly cemented fittings. All underground shall be PVC Schedule 40. PVC conduit shall contain a green grounding conductor. All stub ups into switchboards shall be green grounding conductor. All stub ups into switchboards shall be rigid galvanized steel conduit with ground bushings properly grounded. All PVC stub outs shall be equipped with non-cemented approved PVC pipe caps.
- (d) Bushings, Locknuts, and Conduit Fittings. Boxes, bushings, locknuts, and similar devices shall be galvanized cast steel or cast iron, malleable iron, or galvanized steel. Aluminum die cast or pot metal fittings or boxes are not approved. Conduit fiber-lined bushings are required to be used with locknuts at cabinets, switchboards, housing, and pull boxes, etc. All conduit with cable shall be sealed at each end. Grounding bushings shall be provided on underground rigid conduits.
- (e) Pull Boxes. Precast pull boxes by Brooks Concrete Products or Quickset are approved. Covers shall be cast iron and bolted down with tamperproof screws. Size by code.
- (f) Wire and Cable. Branch circuit wire shall be copper type THW-75 degrees or THHN/THWN in conduit and poles, as manufactured by General Electric, Paronite, General Circle, Cirro, or Anaconda, 600v. Ground wire shall be green TW or THW. Wires shall be color coded for each leg. Neutral shall be white THW or THWN. Identify cable by circuit number in each pull box by W.P. Tag. No. 6 and larger cable shall be type THW-75 degrees stranded copper. Approved manufacturers: General Electric, Paronite, Okonite, Anaconda, General. Cable underground shall be color-coded by phase. Stranded wire shall be used in poles from pull boxes to fixtures. Provide manufactured cable grips in poles to support cables.
- (g) Switches and Receptacles - Leviton Specification Grade or equal.
- (h) Circuit Breakers. All circuit breakers shall conform to Federal Specifications W-C-375, Class 2b or 2c for 120/240 volt and shall be provided with a device for locking circuit breakers in "OFF" position.

- (i) Contactors and Relays. Contactor shall be designed for 600 volts AC mechanically held and be rated for tungsten, mercury arc, or other reactive lighting loads and shall be equal to Square D - Type M, Class 8903 in NEMA 1 housing. Relays. Shall be 120V AC coil, 10 amp contacts housed in NEMA 1 housing. Relays shall be equal to Square D - Type M, Class 8903.

209-6.6 Submittals, Shop Drawings, and Record Drawings

209-6.6.1 Material List. Three copies of a complete materials list with brochures showing all equipment indexed with job title, date, etc., shall be submitted to the Engineer within 10 days after award of Contract. Submitting a catalog number and manufacturer's name, and stating that the material or item to be furnished will meet the specifications will not be acceptable.

List the following items by make and number in the submittal: Underground conduit, rigid galvanized steel conduit, cable, wire, pull boxes, main switchboard, poles, fixtures, lamps, control equipment, panels, outlets, boxes, etc.

209-6.6.3 Distribution and Control Section. Submit 3 sets of shop drawings for approval.

209-6.6.4 Record Drawings. Record drawings shall be prepared by the Contractor and maintained in the field. All changes in the work shall be recorded daily, accurately, on a set of blue line prints.

The location of all underground conduits and stub-outs shall also be shown, fully dimensioned to two points of architectural reference such as buildings, walks, walls, curbs, paving, monuments, etc., record junction and pull boxes not shown on the drawings.

Upon completion of each portion of the work, immediately transfer all such record information to the prints. All changes and dimensions shall be recorded legibly with a red-point pen to the satisfaction of the Engineer. Data shall be recorded daily and shall be subject to inspection at all times.

Failure to provide record drawings shall be cause to reschedule inspections and withhold approval of progress payment requests.

Upon completion of the work and final inspection, the record information shall be delivered to the Engineer. The Engineer's approval of record drawings is a condition of approval of final payment.

SECTION 212 - LANDSCAPE AND IRRIGATION MATERIALS

212-1 LANDSCAPE MATERIALS

212-1.1 Topsoil.

Topsoil shall be Class A or C.

All Class A topsoil shall be tested for agricultural suitability. The test results from samples taken at the source shall be delivered to the Engineer at least 10-working days prior to anticipated delivery date to the site. Should the proposed source material be unsatisfactory, the Contractor shall locate a suitable material, and shall pay all additional costs for testing.

Class C topsoil shall be tested for agricultural suitability. Three tests at three different locations shall be performed. Exact locations of tests shall be field verified and approved by Engineer.

212-1.1.2 Class "A" Topsoil

Add the following:

Soil for tree well backfill shall be Class A Topsoil with the following restrictions: Gradation limits shall be 85 percent through 95 percent sand, maximum 10 percent silt, maximum 5 percent clay. The permeability rate shall be not less than 38mm (1½ ") per hour and no greater than 75mm (3") per hour.

212-1.2 Soils Fertilizing and Conditioning Materials

212-1.2.3 Commercial Fertilizer.

Commercial fertilizer shall be 12-12-12 NPK.

Planting tablets shall be tightly compressed, long-lasting, slow-release fertilizer tablets weighing 21 grams, with a potential acidity of not more than 5 percent by weight and having an analysis of 20-10-5.

212-1.2.4 Organic Soil Amendment.

Organic soil amendment shall be Type 1.

212-1.2.5 Mulch.

Mulch shall be Type 5 graded fir Nitrolized wood chips, 1 inch to 3 inch in size by 3/8 inch to 5/8 inch in diameter.

212-1.2.6 Add New Section 212-1.2.6 Soil Conditioner:

212-1.2.6 Soil Conditioners.

Iron Sulfate. Iron sulfate shall be ferric sulfate or ferrous sulfate in pelleted or granular form, containing not less than 18.5 percent iron expressed as metallic iron and shall be registered as an agricultural mineral with the State Department of Agriculture in compliance with Article 2, "Fertilizing Materials," Section 1030 of the Agricultural Code.

212-1.4 Plants.

212-1.4.1 General. Add:

Varieties shall be as shown on the drawings.

All quantities shall be verified by an actual count on the drawings.

Plants, including trees, shrubs, and ground covers, shall have been grown in nurseries inspected by the State Department of Agriculture.

Inspection and approval of plants is required. Engineer may reject entire lot of plants represented by defective samples. Plants not approved are to be removed from site immediately and replaced with suitable plants. All plants will be inspected on site of work prior to installation.

212-1.4.2 Trees. Add:

- (a) Contractor Furnished Trees: All trees not noted as "Agency-Furnished" or "City-Furnished" shall be selected by the Contractor and inspected by the Engineer. All trees of 24-inch (600mm) box size or larger shall be inspected at the nursery. Inspections at no cost to the Contractor will be limited to three nurseries, all within a 30-mile radius of the site of work. Additional inspections and inspections out of the area will be charged to the Contractor at the Engineer's standard billing rate in effect at the date of bid, plus mileage costs, and will be deducted from payments due to the Contractor.
- (b) All trees of 24-inch (600mm) size or larger shall be guaranteed for 1 year. Guarantee period shall start on the date the Contractor is relieved of landscape maintenance responsibility.

212-1.5 Headers, Stakes and Ties.

212-1.5.3 Tree Stakes. Stakes shall be round, 10-feet (3m) long, conically pointed at one end, minimum 2-inch (50mm) diameter. Stake material shall be Lodgepole pine, pressure treated with wood preservative.

212-1.5.4 Tree Ties. Tree ties shall be V.I.T. rubber cinch ties or fabricated item approved by the Engineer. Wire devices shall not be used.

Add new Section 212-1.7 Landscape Materials.

212-1.7.1 Filter Cloth. Filter cloth shall be a geo-textile fabric, as specified in Table 213-2.2 (A), a Type 90N, or Mirafi 140s, Trevira Spunbond S 1115, or equal.

212-1.7.2 Moisture Barrier. Moisture barrier shall be single width sheet flexible PVC or PE membrane of 0.030 mil thickness.

212-1.7.3 Root Control Barrier. (Refer to Section 308-3.2) Root control barrier shall be 24-inches (600mm) wide by 0.080-inches (2mm) thick high impact polyethylene or polypropylene sheeting with reinforced double top edge, manufactured for root barrier purposes. Sheeting shall have integrally molded root deflector ribbing and integrally molded joiner strips.

212-1.7.4 Samples. Within 15 calendar days of award of contract, submit one 24-inch by 24-inch (600mm x 600mm) sample of each item with joining strip or seam and two copies of manufacturer's technical data for approval.

Add new Section 212-1.9 Tree Well Covers:

212-1.9.2 Tree Grates. Tree grates and frames shall be the type as specified on the drawings.

212-2 IRRIGATION SYSTEM MATERIALS

General. Within 15 days after award of contract, submit for review 3 copies of a complete materials list, including manufacturer's name and number, covering all material required under this contract, together with 3 copies of descriptive literature on all items listed. Commence no irrigation system construction prior to receipt of Engineer's determination.

Item Description	Item Description
Shut-off gate and butterfly valves (S.O.V.)	S.O.V. valve box, lid and sleeve/extension
Irrigation controller	Irrigation controller enclosure
Plastic pipe, pipe fittings, swivel joints	Primer and solvent for plastic pipe
Metal pipe, fittings	Pipe anchors
Remote control valves (R.C.V.)	R.C.V. valve box and lid
Identification wire and tape	Wire and connectors
Quick coupling valves (Q.C.V)	Q.C.V. valve box and lid
Irrigation heads, bodies, and nozzles	Check valves
Irrigation control wire and connectors	Control wire conduit and pull boxes
Hose swivels	Valve operating wrench
Quick couplers	

212-2.1 Pipe and Fittings. Plastic pipe $\frac{3}{4}$ inch (20mm) through 1½ inches (40mm) shall be PVC 1120, Schedule 40 solvent welded pipe. Pipe for reclaimed water systems shall be purple pigmented and marked "Reclaimed Water."

Plastic pipe 2 inches (50mm) and over shall be PVC 1120, Class 315 solvent welded pipe.

All pipe sleeving shall be PVC 1120, Schedule 40 solvent welded pipe.

Swing joints shall be as detailed on the drawings. Swing joints and all fittings shall be same pipe size as sprinkler body inlet. Pressure pipe risers and fittings shall be PVC Schedule 80.

Risers and fittings for backflow prevention device shall be red brass, standard weight.

212-2.1.3 Plastic Pipe and Fittings. All plastic pipe shall be new normal impact rigid polyvinyl chloride (PVC) 1220 or 1120 pipe extruded from 100 percent virgin materials. All pipe O.D. sizing shall be done in conformance with AWWA iron pipe sizing (I.P.S.). All pipe shall be National Sanitation Foundation approved.

Pipe shall be homogenous throughout, free from visible cracks, holes, blisters, dents, wrinkles, die and heat marks, and foreign materials.

Continuously and permanently mark pipe with manufacturer's name or trademark, kind and size pipe, material, manufacturer's lot number, schedule, or Class and NSF seal of approval.

The physical specifications of the Society of Plastic Industries for each type of pipe used shall be deemed and construed as a part of this Specification.

Pipe dating shall be done in conjunction with records held by the manufacturer for 2 years, covering quality control tests, raw material batch numbers, and any other information required by the manufacturer.

Nominal pipe sizes in I.P.S. and Metric shall be as shown in the table below:

Iron Pipe Size (I.P.S.)	Metric Standard Diameter Nominal (D.N.)
½"	15 mm
¾"	20 mm
1"	25 mm
1¼"	32 mm
1½"	40 mm
2"	50 mm
2½"	65 mm
3"	75 mm
4"	100 mm
6"	150 mm

Solvent weld fittings shall be PVC manufacture, heavy wall and of the IPS solvent welded types, Schedule 40. Fittings containing threads shall be Schedule 80.

Primer and solvent cement shall be of the type and make approved by the pipe manufacturer for use on its pipe. Unless noted otherwise by manufacturer, primer shall meet ASTM F-656, and cement shall meet ASTM D-2564.

212-2.2 Valves and Valve Boxes.

212-2.2.2 Shut-Off Valves (S.O.V.) Shut-off valves shall be as specified on the drawings.

212-2.2.4 Remote Control Valves. Remote control valves shall be as specified on the drawings.

212-2.2.6 Quick Coupling Valves and Assemblies. Quick coupling valves shall be two-piece type of the size as specified on the drawings.

212-2.2.7 Valve Boxes.

1. Gate valves. A round plastic or concrete box and locking cover shall be installed over each main shutoff valve in the system and as specified on the drawings.
2. Remote control valves. Provide rectangular plastic or concrete box with locking lid over remote control valves and shall be as specified on the drawings..

212-2.4 Irrigation Heads. Irrigation heads shall be the type(s) called out on the drawings.

212-3 ELECTRICAL MATERIALS

212-3.1 General. All wiring and pull box details shall conform to drawing details, these Specifications and as follows:

- (a) National Electrical Code.
- (b) Local Codes and Ordinances.
- (c) Recommendations as printed by the respective supplier.
- (d) All wiring shall be continuous, soldered and encapsulated in epoxy-filled Rainbird "Snap-Tite" containers or 3M "Scotchlok" containers, at connections to remote control valves.

It shall be the Contractor's responsibility to call out any conflict between the above-listed recommendations.

212-3.2 Conduit and Conductors.

212-3.2.1 Conduit. The first paragraph of Subsection 212-3.2.1 of the Standard Specifications is hereby deleted and replaced with the following:

Conduit shall be PVC 1120, Schedule 40 solvent welded pipe.

Conduit shall be a minimum size as shown in the table below:

Conduit Size	Maximum Number of Wires (#14 AWG)
15mm (½")	2
20mm (¾")	4
25mm (1")	6
32mm (1¼")	10
40mm (1½")	14
50mm (2")	25

212-3.2.2 Conductors. The second paragraph of Subsection 212-3.2.2 of the Standard Specifications is hereby deleted and replaced with the following:

LOW VOLTAGE CONDUCTORS

Pilot lines and common wire connecting remote control valves to automatic controller shall be direct burial, U.F. type with approved 4/64-inch thick waterproof coating, 600 volt, 75 degrees centigrade, copper single-strand wire, U.L. approved.

All "pilot" wires shall be black color. All "common" wires shall be white color.

Wire to moisture sensors shall be orange or blue coated.

212-3.3 Controller Unit. Automatic controller shall be as specified on the drawings.

212-4 ENCLOSURES

212-4.1 General. Materials for enclosures shall conform to Section 206 and fabrication shall conform to Section 304 of the Standard Specifications.

212-4.2 Controller Enclosure. Controller enclosure shall be as specified on the drawings.

---END OF SECTION F - PART 2

SECTION F – TECHNICAL SPECIFICATIONS**PART 3
CONSTRUCTION METHODS****SECTION 300 - EARTHWORK****300-1 CLEARING AND GRUBBING****300-1.1 General. Add:**

Demolition and removal of irrigation equipment, turf, root shaving, tree removal, and such other items not mentioned that are required by the Plans and Specifications, are part of this work in this section.

Soil backfill for holes caused by the removal of the existing structures foundations shall be filled with selected site soils and recompact in 6-inch layers to the density of 95-percent relative compaction.

Tree removal shall include grinding stumps and associated roots to the diameter of the trunk at existing grade and to 3-foot depth below existing grade. Grindings shall be removed from this 3-foot hole. The hole shall then be filled with soil and compacted to 95-percent relative compaction.

All equipment and facilities shown on the Plans to be salvaged, removed and stockpiled, adjusted, and/or relocated shall be measured, marked, and identified in the field.

Contractor shall note the locations, dimensions, and configurations of all existing equipment to be salvaged, and shall clearly mark or tag all equipment to be reused in the field prior to removal to facilitate reassembly; Contractor shall notify Engineer of any damaged or non-salvageable materials **prior** to commencing any removal or grading operations. Materials found to be damaged after the work commences shall be assumed to be the responsibility of the Contractor. Contractor will not be paid for the replacement or repair of facilities or equipment believed by the Engineer to be damaged after the work commences.

Contractor shall replace designated, unusable existing facilities and equipment, in kind, at the direction of the Engineer.

The application of herbicide to kill turf and weeds, shall be per manufacturers' recommendations, including roots; and the removal and disposal of soil and turf offsite, and such other items not mentioned that are required by the Plans and Specifications, are part of the work in this section.

The last paragraph of Subsection 200-1.1 is hereby deleted and replaced with the following:

Tree branches which hang within 13.5 feet above finished roadway grade or within 9 feet above finished sidewalk or parkway grade shall be removed to the branch collar in accordance with the current pruning standards of the International Society of Arboriculture (ISA). The Contractor shall remove additional tree branches, under the direction of the Engineer, in such a manner that the tree will present a balanced appearance. No paint or tree sealant shall be applied to the resulting scars. All pruning shall be done under the supervision of an ISA Certified Arborist in the Contractor's employ.

The following is hereby added to Subsection 300-1.1: All the root pruning required to place or replace walks, or other permanent facilities shall be limited to the minimum amount necessary to set forms.

All roots 2 inches and larger shall be cut with sharp tool such as axe or chainsaw. No roots shall be broken off by trenching or other heavy equipment.

No root shall be removed within five (5) diameters of the tree trunk measured at 4 feet, 9 inches above grade without the express written permission of the CITY. Any such root removed without the CITY's written permission may create a hazardous condition for which the Contractor shall be liable.

Should the Contractor create a hazardous condition in the sole judgment of the Engineer the Contractor shall remove the tree and replace it with a specimen of the same specie and value at the Contractor's expense.

All significant root pruning (3 inch diameter and larger) shall be performed under the direct supervision of an ISA Certified Arborist in the Contractor's employ.

(See Section 306-1.1 for Trench Excavation requirements).

300-1.3 Removal and Disposal of Material

300-1.3.2 Requirements. The text of Subsection 300-1.3.2(a) and (b) of the Standard Specifications is hereby deleted.

300-1.4 Payment. Add the following:

Full compensation for tree removal shall be considered included in the price bid for the tree removal bid item, and shall include providing and installing any fill and compaction necessary to make grade at the location of the tree removal.

300-2 UNCLASSIFIED EXCAVATION

300-2.1 General. Unclassified excavation shall consist of all excavation, including roadways, bituminous pavement, and concrete pavement, curb, gutter, and driveways.

For pavement excavation, the contractor shall follow the specifications Appendix II, "Log of Cores and Pavement Removal Schedule", as adjusted by actual field conditions. The logs represent the conditions only at the actual location at the time of exploration. Variations may occur and should be expected between locations. The Engineer reserve the right to make changes based on actual condition. As such, SSPWC Section 3-2.2.2 and 3-2.2.3 (25% increased or decreased quantity unit price adjustment) shall not apply to removal bid items. The same bid unit price shall apply regardless the actual field quantity.

300-2.1.1 Requirements. Subsection 300-2.1.1 is hereby added to Section 300 of the Standard Specifications as follows:

- (a) Bituminous Pavement. Bituminous pavement shall be removed to neatly sawed edges. Saw cuts shall be to a minimum depth of 3 inches. Where only the surface of existing bituminous pavement is to be removed, the method of removal shall be approved by the Engineer, and a minimum laying depth of 1 inch of new pavement material shall be provided at the join line. Where bituminous pavement adjoins a trench, the edges adjacent to the trench shall be saw cut to neat straight lines before resurfacing to ensure that all areas to be resurfaced are

accessible to the rollers used to compact the subgrade or paving materials. Contractor's attention is directed the existence of pavement fabric under existing AC surface. The removal of pavement fabric shall be included in the AC removal cost, under "UNCLASSIFIED EXCAVATION".

- (b) Concrete Pavement. Concrete pavement shall be removed to neatly sawed edges. Saw cuts shall be made to a minimum depth of 3 inches. If a saw cut in concrete pavement falls within 6 feet of a construction joint, cold joint, expansion joint, or edge, the concrete shall be removed to the joint or edge. The edges of existing concrete pavement adjacent to trenches, where damaged subsequent to saw cutting of the pavement, shall again be saw cut to neat straight lines for the purpose of removing the damaged pavement areas. Such saw cuts shall be either parallel to the original saw cuts or shall be cut on an angle which departs from the original saw cut not more than 25 1 inch in each 6 inches. Double sawcuts shall be provided 4 inch depth around all gas meter boxes. The first sawcut shall be 4 inches from the box and the second sawcut shall be 6 inches from the first sawcut.
- (c) Concrete Curb, Walk, Gutters, Cross Gutters, and Driveways, and Alley Intersections. Concrete shall be removed to neatly sawed edges with saw cuts made to a minimum depth of 2 inches. Concrete sidewalk or driveway to be removed shall be neatly sawed in straight lines either parallel to the curb or at right angles to the alignment of the sidewalk. No section to be replaced shall be smaller than 4 feet in either length or width. If the saw cut in sidewalk, or driveway would fall within 30 inches of a construction joint, expansion joint, or edge, the concrete shall be removed to the joint or edge, except that where the saw cut would fall within 12 inches of a score mark, the saw cut shall be made in and along the score mark. Curb and gutter shall be sawed to a depth of 2 inches on a neat line at right angles to the curb face.

The various concrete removal and replace items bid prices shall include the excavation and removal necessary for required base material.

300-2.7 Selected Material. The text of Subsection 300-2.7 of the Standard Specifications is hereby deleted and replaced with the following:

Selected materials encountered in the excavations within the project limits that meet the Specifications for base material, trench bedding, or backfill, topsoil, or other specified materials shall be used as shown on the Plans, in the Specifications, or as directed by the Engineer. Topsoil excavated may be considered only for the purpose of backfilling areas to be planted.

300-2.8 Measurement.

The Unclassified Excavation volume was determined based on information as indicated in the Specifications Appendix II, "Log of Cores and Pavement Removal Schedule". The total Unclassified Excavation quantity in the bid shall be considered to include the following volume of excavation:

The quantity for **Unclassified Excavation** bid item shall be considered a final quantity, and as a base quantity subject to adjustment only by a change in the quantities of the 3 bid items listed above and any change in 1) and 3) of the **Basis of Excavation Areas/Volumes** outlined above. These adjustments will be determined during construction.

Pertinent pavement removal bid items shall be measured based on average thickness of the PCC or AC on PCC removed times the area of removal.

Final payment quantities shall not exceed the theoretical volume of unclassified excavation based on the Plans.

300-2.9 Payment.

The first sentence of Subsection 300-2.9 of the Standard Specifications is hereby deleted and replaced with the following:

Full compensation for all unclassified excavation will be made at the contract unit price bid per cubic yard, as classified in the Bid Schedule, except for items in the Bid Schedule noted as "remove and construct." All unclassified excavation required as part of the work for "remove and construct" items; construction of tree wells; installation of signs; light standards, and similar items; shall be paid for as part of the work of that item, and no additional compensation will be allowed.

300-4 UNCLASSIFIED FILL

300-4.1 General. Subsection 300-4.1 of the Standard Specifications is hereby deleted and replaced with the following:

Unclassified fill shall consist of all fill unless separately designated. Construction of unclassified fill shall include preparing the area on which fill is to be placed, and the depositing, conditioning, and compacting, of fill material.

Rocks, broken concrete, or other solid materials which are larger than 1 inch in greatest dimension shall not be placed in fill areas that are to be planted.

Clods or hard lumps of earth 1 inch or more in greatest dimension shall be broken up before compacting the material in fill areas to be planted. Fill material containing large rocks, boulders, or hard lumps (such as hardpan or cemented gravel which cannot be broken readily) over 12 inches in greatest dimension shall not be incorporated in the fill. Such materials shall be removed from the site.

In landscape areas, the site shall be graded to the limit lines and elevations shown on the drawings with such allowances as may be required for the construction of walks, play areas, and other site improvements. Tolerance for rough grading is 1/10th of a foot, plus or minus, at drainage swales, building pads, and paved areas. At other areas, appearance shall be the governing factor.

Finish grades shall slope to drain without water pockets or irregularities and shall conform to the intent of all plans and sections, after thorough settlement, and compaction of the soil. Finished grades shall meet all existing or established controls of sidewalks, curbs, and walls and shall be of uniform slope and grade between points of fixed elevations or elevation controls from such point to established grades. Tolerance for finish grading is ¼ inch, plus or minus.

Selected material from the site that meets the requirements for Class C topsoil may be used in landscaped areas in the upper 12 inches of fill. (Ref: Sec. 300-2.7)

Make-up fill material in landscaped areas shall be Class A topsoil for the upper 12 inches of fill. (Ref: Sec 308-2)

300-4.5 Placing Materials for Fills. The last sentence of the first paragraph of Subsection 300-4.5 of the Standard Specifications is hereby deleted and replaced without the following:

Each layer spread for compaction shall not exceed 6 inches of compacted thickness.

The third paragraph of Subsection 300-4.5 of the Standard Specifications is hereby deleted.

300-4.9 Measurement and Payment. The text of Subsection 300-4.9 of the Standard Specifications is hereby deleted and replaced with the following:

Full compensation for furnishing all labor, materials, tools and equipment, and doing all the work involved in unclassified fill construction shall be considered included the associated items of work for which subgrade is prepared and no additional compensation will be made therefor.

Payment for Class A topsoil shall be at the contract bid unit price per cubic yard in place and graded to within 1/10th of a foot of finish grade. Measurement shall be at the theoretical volume per Plans.

SECTION 301 - TREATED SOILS, SUBGRADE PREPARATION AND PLACEMENT OF BASE MATERIALS

Subsections 301-1.6.1, 301-1.6.2, and 301-1.6.3 are hereby added to Section 301 of the Standard Specifications as follows:

301-1.6.1 Adjustment of Water Valve Box Frame, water meter box lid and cover, gas valve box frame and cover, pull box lid and cover, and survey monument lid and cover. Subsection 301-1.6.1 is hereby added to Subsection 301-1.6 of the Standard Specifications as follows:

Pull box lid and cover, water meter box and cover, and survey monument lid and cover within the area to be paved or graded shall be set to finish grade by the Contractor as required by the Plans and Specifications.

Gas meter will be adjusted to grade by utility companies. Contractor shall provide any minor adjustments to grade at time of PCC forming, with any associated costs to be included in other items of work.

Contractor shall coordinate his work and provide notification as necessary to allow for adjustment to grade or replacement of utility facilities where such work is to be performed by the utility company.

Adjustment of slip can type frame and covers to grade shall be the responsibility of the Contractor. Utility companies will be responsible for checking and ensuring that such frame and covers do slip properly, such that the Contractor can slip them to grade at time of paving. Payment for slipping to grade shall be included in the prices bid for other items of work. The exact number of such frames and covers may vary from the number shown on the plan, but it is the responsibility of the Contractor to survey the project and include the cost of all such adjustments in the bid. Contractor shall notify the Engineer at the earliest possible time after discovery if a frame and cover does not slip.

Immediately after execution of contract documents, Contractor shall inspect all utility boxes between curb and right-of-way line to inventory any damaged boxes. The utility companies have previously inventoried damaged boxes. Contractor shall attend a meeting at the site with the utility companies and the Engineer to resolve any discrepancies between the two inventories. After excavation of the parkway area, utility companies will replace all pre-existing damaged boxes. Any boxes damaged after start of excavation will be provided by the utility companies

with associated costs to be assessed to the Contractor.

301-1.6.2 Adjustment of Los Angeles County Sanitation District Manhole Frame and Cover sets to Grade. Los Angeles County Sanitation District manhole frames and covers shall be set to finish grade as follows:

1. Contractor shall notify the District's Superintendent of Maintenance, (310) 638-1161 or (310) 774-7270, 48 hours prior to commencement of any work in the area of the manhole.
2. If grade over manhole is to be lowered:
 - a. Contractor shall furnish and deliver a temporary steel cover plate of thickness and size approved by the District for said manhole.
 - b. Contractor shall excavate around the manholes to a depth and distance outside of the manhole as required by the District for said manhole.
 - c. District shall remove the existing manhole frame and cover and any interfering portion of the manhole shaft and shall place the steel cover plate over the manhole.
 - d. Steps (e) through (g) of 2 above shall be followed, except that if grade is to be raised more than 2 feet, the Contractor shall excavate around the manhole shaft under step (2) to a depth and diameter as necessary for the District to remove and reconstruct manhole shaft with required taper and as specified by the District.

301-1.6.3 Adjustment of Los Angeles County Flood Control District Manhole Frame and Cover Sets to Grade. Adjustments to grade of Los Angeles County Flood Control District Manhole Frame and Cover sets do not require a District permit. However, the Contractor shall notify the Inspection Department at (626) 458-3129, 24 hours in advance of any work in the area of the manhole.

301-2 UNTREATED BASE

301-2.1 General. Where the words aggregate base(s) appear it shall mean untreated base material(s).

After the excavation and removing of existing AC pavement and other material to the approximate grade for PCC thickness as shown on plans, the Contractor shall randomly perform exploratory excavations to 8 inch depth in the remaining aggregate base at locations as directed by the Engineer nominally on a 30x10 foot grid and report to the Engineer any depths less than 8 inches to subgrade below the aggregate base. As indicated on the specifications Appendix II, "Log of Cores and Pavement Removal Schedule":

If there is sufficient depth of un-yielding compacted existing base material as determined by the Engineer, the Contractor shall grade and proof compact the existing material to be ready for PCC pavement. The cost for re-compaction of existing base material shall be considered included within the bid prices for various PCC Pavement or other flat work.

If there is not sufficient depth of un-yielding compacted existing base material as determined by the Engineer, the Contractor may be directed to remove the existing base and native sub-grade to proper depth, compact the subgrade, and reinstall the stockpiled base material to 95% of compaction.

If there is no aggregate base remaining, the contractor shall excavate to the proper depth, grade and compact native soil, and import and compact existing material and new base material to be ready for PCC pavement.

The contract bid item for Crushed Miscellaneous Base (CMB) shall include all labor, work and materials necessary to construct CMB complete in place. The work shall include subgrade preparation, base placement, grading, compaction, and all other work necessary to construct CMB complete in place. Crushed Miscellaneous Base shall conform to the provisions of Section 200-2 and Section 301 of the Standard Specifications.

Crushed Miscellaneous Base shall include all CMB placed as base to the reconstruction areas, curb and gutter, cross gutter, drive approaches, and slot patches. This item shall include for placement, grading and compaction of the CMB to 95% relative compaction.

PAYMENT

Payment for **Crushed Miscellaneous Base (CMB) Bid Item** shall be at the contract bid item price per ton (TON) and shall include full compensation for all labor, materials, tools equipment, transportation and incidentals necessary to do all the work involved thereof, provide and install new base material, complete, in place, and accepted.

SECTION 302 - ROADWAY PAVEMENT AND SURFACING

302-5 ASPHALT CONCRETE PAVEMENT

302-5.1 General. The last sentence of Subsection 302-5.1 of the Standard Specifications is hereby deleted and replaced with the following:

302-5.4 Tack Coat. Tack coat for joints on trenches shall be uniformly applied at 0.2 gallons per square yard PG 64-10 or two coats SS-1h applied uniformly at 0.2 gallons per square yard each coat, the second coat to be applied after "break" of first coat.

Tack coat material for overlay shall be PG 64-10 applied at a rate of 0.05 gallons per square yard applied at a minimum of 350 degrees Fahrenheit from a distributor truck with a functioning heating element capable of raising the temperature by 3 degrees Fahrenheit per hour.

Tack coat shall not be placed so far ahead of paving that the tack coat is tracked away by trucks from more than 20 percent of the tacked area.

302-5.5 Distribution and Spreading. Contractor shall provide automatic screed control as directed by Engineer.

Joints shall be placed within 6 inches of a lane line unless otherwise specified.

At bowouts, the paving machine shall realign as needed such that joints are maintained per plans and specification.

Joints in the finish course of AC shall not fall within 9 inches of joints in base paving, except along lines aligning with joints adjacent to medians.

Finish course shall be B-PG 64-10.

302-5.6 Rolling. Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint.

Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint.

Three rollers shall be provided for installation of AC greater than 200 tons per hour, regardless of thickness.

302-5.8 Manholes (and Other Structures). Manhole patch material shall be C2 PG 64-10.

Leveling course paving shall be placed as soon as possible (not later than 48 hours) after the pavement grinding to avoid weakening the remaining existing structural section. The contractor will be responsible damage to the remaining pavement due to such prolonged lapse. AC leveling course shall be D2-PG 64-10.

PAYMENT

Payment for **Asphalt Concrete (AC) Pavement: Full Depth, Variable Depth, or Leveling Course** bid items shall be at the contract bid item price per ton (TON) and shall include full compensation for all labor, materials, tools, equipment, transportation, and incidentals necessary to do all the work involved thereof, complete, in place, and accepted.

COLD MILL (GRINDING) AND REMOVE VARIABLE THICKNESS EXISTING PAVEMENT

Cold milling shall conform to the provisions of Section 302 of the Standard Specifications, and shall be performed at locations and to depths corresponding to the plans and/or directives by the City Engineer. Cold milling in general shall be performed from edge of gutter (or curb, if there is no gutter) to the specified width and depth.

The Contractor is required to use smaller grind machines in cold mill areas that are inaccessible to the larger machine and around existing manhole, vaults or valve cans

All materials to be removed shall be disposed of outside of right-of-way as specified in subsection 300-1.3.1 of SSPWC. Existing paving fabric, if encountered, shall be cut and removed. The cost for removing existing asphalt with paving fabric shall be included in the unit price for cold milling.

Transverse header grind shall be 50 feet wide, as shown on plan, to meet existing grade.

Due to variable thickness of pavement cold milling depths, this bid item shall be measure as **per square foot** of material cold milled and removed. The amount to of each type of pavement/subgrade cold milled (asphalt or base) shall be measured together, no additional compensation is allowed for the various material cold milled or removed.

302-6 PORTLAND CEMENT CONCRETE PAVEMENT

Portland cement concrete pavement shall conform to Section 40 of Caltrans Standard Specifications, except as noted on plans and as modified herein.

Portland cement concrete shall achieve minimum flexural strength of 450 psi (for a equivalent of 2,500 psi compressive strength) in 72 hours. The Contractor may propose an alternate design(curing time, flexural strength) for consideration by the Engineer.

Longitudinal and transverse joints shall be constructed as shown on the plans. Alternate joint plans shall be subjected to the Engineer's approval.

Placement of PCC pavement by other than machine methods will be limited to 50 square yards without prior approval by the Engineer.

Finished surface shall subject to straightedge test. Non conforming finished PCC pavement surface shall be profiled and grinded to the required Profile Index by the contractor at his expense at no additional cost to the city.

When yielding subgrade is encountered, PCC Pavement may be placed on 8-inches of CMB over geotextile engineering fabric on compacted native.

The decorative crosswalk sawcut pattern shall be terminated such that the saw does not enter into the area of the edge band of the crosswalk.

Joint filler shall be Sikaflex®-15 LM SL Grade or approved equal.

40-1.13 MEASUREMENT. Portland Concrete Pavement shall be measured by square feet.

40-1.14 Payment for all construction involving **PCC/Concrete pavement bid items or otherwise** shall be considered to include full compensation for grade preparation(including proof grading and compaction of existing base), mixing design, forms, grades, PCC pavement, curing, finishing and all labor, equipment, materials and incidentals complete in place and no additional compensation will be provided therefor.

Construction joint shall be included as part of PCC pavement square footage price.

SECTION 303 - CONCRETE AND MASONRY CONSTRUCTION

303-1 CONCRETE STRUCTURES

303-1.11.1 Variation of Depth of Catch Basin and Connector Pipe. Subsection 303-1.11.1 is hereby added to the Standard Specifications as follows:

In order to assist in avoiding utilities, or for other reasons deemed necessary by the Engineer, the AGENCY reserves the right by direction of the Engineer to increase or decrease the depth of any catch basin from that shown on the drawings. If the "V" depth is increased or decreased by 1 foot or less, no adjustment or price bid will be made. If the "V" depth of a catch basin is increased or decreased by greater than 1 foot, by order of the Engineer, then an adjustment (greater or less than the price bid) for the increase or decrease will be made and the amount thereof will be based upon the method stipulated hereinafter; furthermore, any increase or decrease in cost of constructing the connector pipe resulting from the "V" change, or of the catch basin due to thickening of the concrete section or addition of steel reinforcement shall be included in said stipulated amounts. Determination of these stipulated amounts involves the exclusion of all metal work and reinforcing steel not necessary to the increase or decrease of the catch basin "V" depth. Such exclusion is accomplished by the factors .80, 0.48, and 0.55 used in the stipulated formulae below. If the adjustment is an increase in the total amount of money due to the Contractor, then the Contractor will be paid for such increase, in the same manner as Extra Work, as provided for in Section 9-3. If the adjustment is just a decrease in the total amount of money due to the Contractor, then the AGENCY will be entitled to and shall receive a monetary credit from the money due to the Contractor.

For purpose of these Specifications, catch basins are separated into three groups; namely, Group 1, side opening catch basins without grates and with the deepest and shallowest points of the catch basin not varying in depth by more than 6 inches; Group 2, side opening catch basins without grates and with the deepest and the shallowest points of the catch basin varying by more than 6 inches in depth; and Group 3, grating type catch basins.

For the purpose of these Specifications, the average depth will be the mean of the "V" depth of all the catch basins under one particular item of work.

In addition to the work listed in the Schedule of Prices, the Contractor agrees that, if directed by the Engineer, he will either increase or decrease the "V" depth of any given catch basin and that the amount to be paid to the Contractor or credited to the AGENCY therefor shall be based upon the following stipulated method:

Group 1 (Bid Price) (0.80) Average Depth on Which Bid was Based	=	Adjustment per foot change in average depth as ordered by the Engineer
Group 2 (Bid Price) (0.48) Average Depth on Which Bid was based	=	Adjustment per foot change in average depth as ordered by the Engineer.
Group 3 (Bid Price) (0.55) Average Depth on Which Bid was based	=	Adjustment per foot change in average depth as ordered by the Engineer.

Payment for PCC collars shall be made at the bid price for PCC collar and shall be full payment for furnishing all labor, materials, and all other work necessary to construct PCC collar.

303-4 MASONRY CONSTRUCTION

Masonry construction shall conform to Subsection 303-4 of the Standard Specifications and these Special Provisions. All brick and mortar bulkheads shall be double row.

Payment for brick and mortar bulkheads for junction structures and pipes shall be included in the price paid for other items of work involved and no separate payment shall be made therefore.

303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS, AND DRIVEWAYS

303-5.1 Requirements.

303-5.1.1 General.

All PCC flat work (except sidewalk) under this subsection shall be constructed over compacted 6" CMB.

Concrete areas behind sidewalks and driveways shall be considered as walks.

All median curb and gutter shall conform to the Modified Median Curb and Gutter Detail in the Appendix, except as directed by the Engineer.

Contractor shall block out full sidewalk panels around utility, traffic, or communications

pull boxes not replaced at time of PCC pour, existing street lights and traffic signal poles and equipment to be replaced, and likewise around new foundations, and in any case where new poles are not fully functional at time of sidewalk pour. It shall be assumed that new street light poles will be installed after sidewalk is poured. At the appropriate time Contractor shall pour in the blockouts.

The contract bid item for all PCC flat work shall include include sawcut, removal and disposal of existing materials, subgrade preparation, formwork, concrete material, curing, protection, adjustments to match existing improvements and all other work necessary to construct the work complete in place. The contract bid item for sidewalk or curb ramp shall include saw cutting, complete in place, including detectable warning surface and monolithic retaining curb 8 inches maximum as necessary.

Detectable warning surface (truncated domes) shall be Armorcast detectable warning tiles and color "Brick Red" (Armorcast Products Company, 13230 Saticoy Street, North Hollywood, CA 91605 Phone: 818.982.3600) or approved equal, and shall conform to SSPWC specifications. Tiles shall be cut to fit the radius. Installation shall conform to manufacturer's recommendations. The base for detectable warning surface dome tiles shall be minimum 4 inches thick PCC. Detectable warning surface (truncated domes) shall be included in ramp bid items, except for installation in existing ramps for which the bid item shall be considered to include sawcut, removal and excavation, base PCC under tiles and full installation of tiles in conformance with manufacturers recommendations.

The work shall include removal of existing curb ramps, adjacent sidewalk and curb, and gutter, subgrade preparation, formwork, concrete material, curing, protection, and all other work necessary to construct the work complete in place. New sidewalk and new curb ramps must match in pattern as directed.

For detectable warning surface to be installed in existing curb ramp, the PCC surface shall be sawcut and removed and shall be wet-set to be flush with surrounding surfaces.

Integral retaining curbs shall be constructed at the back of curb ramps as necessary to match existing landscape grades. Retaining curbs as necessary shall be included in this bid item. Ramps shall be constructed to Greenbook standard plans modified as necessary to match field conditions and shall meet all ADA requirements.

Irrigation System Restoration for PCC flat work

In areas where irrigation systems exist, they shall be protected in place or removed and replaced in-kind if damaged during construction. This work shall be done on the same day the system is damaged so that no damage is done to any landscaped areas due to lack of water. No additional payment will be made under this bid item for this work.

Landscaping Restoration for PCC flat work

Any grass or landscaping that is removed shall be replaced like for like with soil treatment per admixtures approved by the City Engineer or his designee. All grass shall be replaced in kind. Where existing landscaping areas consist of other than grass, the Contractor shall provide before and after digital close-up pictures (taken within 10 feet with copies to the Contractor and City Engineer or his designee of all sites to verify proper replacement of existing landscaping and landscape material). Contractor shall be responsible for 30-day maintenance period for re-establishment of any plant material. Said maintenance period shall commence on the day of the City Engineer or his designee accepts the Landscaping planting. No additional payment will be made under this bid item for this work.

303-5.2 Forms. Add the following:

303-5.2.3 Formwork Inspection. The layout for formwork shall be inspected prior to construction of forms. The Engineer may direct changes in line and grade to avoid interference with existing tree root system or facility placement.

Forms shall be inspected and approved in writing by the Engineer prior to placing any concrete.

303-5.9 Measurement and Payment.

Subsection 303-5.9 of the Standard Specification is hereby deleted and replaced with the following:

Payment for removal and construction of concrete curbs, walk, cross gutters, and driveways shall be made at the unit price bid as called out in the Bid Schedule, and shall include full compensation for all labor, materials, saw cutting, tools equipment, transportation and incidentals necessary to do all the work involved thereof, including irrigation and landscape restoration, complete, in place, and accepted. Placement of concrete at blockout location shall be paid at the same bid item price as for surrounding the blockout area (as applicable).

Detectable warning surface for new curb ramp shall be included as the per ramp bid price. Detectable warning surface for pedestrian islands and existing curb ramps shall be paid for each location installed as shown on plans.

All excavation and removal of existing material for 6" CMB under PCC flat work (except sidewalk) shall be paid under various PCC items of work for which it is performed. All CMB installed shall be paid under bid item CMB per ton.

SECTION 306 - UNDERGROUND CONDUIT CONSTRUCTION

306-1 OPEN TRENCH OPERATIONS, EXCAVATION, BEDDING AND BACKFILL

This section shall conform to Subsection 306-1 of the Standard Specifications and these Special Provisions.

When the actual elevation or portion of any existing pipe, conduit or other underground appurtenances cannot be determined without excavation, the Contractor shall excavate and expose the existing improvement (pothole) at the location shown on the Plans and any other locations deemed necessary by the Engineer. The pothole shall be done at least 2 weeks in advance of the pipe installation to identify any potential conflicts so that the necessary adjustments can be made.

The first sentence of the first paragraph of Subsection 306-1.1.2 of the Standard Specifications is hereby deleted and replaced with the following:

Except by permission of the Engineer, the maximum length of open trench where prefabricated pipe is used shall be the distance necessary to accommodate the amount of pipe installed in a single day. All trenches shall be backfilled or covered with steel traffic plates at the end of each working day.

If, in the opinion of the Engineer, the trench subgrade is wet, contaminated or contains unsuitable material due to no fault of the Contractor, the Contractor shall over excavate to a depth determined by the Engineer and place aggregate base as directed by the Engineer. Payment shall be made in accordance with Sub-Section 3-3 of the Standard Specifications.

The last two paragraphs of Subsection 306-1.1.3 of the Standard Specifications are hereby deleted.

The seventh and eighth paragraphs of Subsection 306-1.3.1 of the Standard Specifications are hereby deleted and replaced with the following:

Rocks greater than 4 inches in any dimension will not be permitted in backfill placed between 1 foot above the top of any pipe or cast-in-place structure box and 1 foot below pavement subgrade.

Installation of storm drain or curb drain pipe shall be according to Sub-Section 306-1.2 and City Standard Plan 1150C.

Subsection 306-1.3.3 is hereby deleted and replaced with the following:

Compaction of backfill by flooding or jetting will not be allowed.

Trench bedding and backfill shall be accomplished in accordance with the details shown on the plans, geotechnical recommendations, and shall consist of import sand bedding and backfill up to pavement subgrade. Placing backfill uniformly on all sides shall mean limiting the differential fill level to two feet or less.

The second, fourth and fifth paragraphs of Subsection 306-1.5.1 of the Standard Specifications are hereby deleted and replaced with the following:

Payment for all materials used by the Contractor or ordered to be placed by the Engineer, including that used to maintain the temporary resurfacing until the permanent resurfacing is placed, will be considered to be included in the other items of work.

The text of Subsection 306-1.6 of the Standard Specifications is hereby deleted and replaced with the following:

Pipe and conduit shall be measured along the longitudinal axis between the ends as laid and shall include the actual pipe in place and shall not include the inside dimensions of structures. Catch basin lateral shall be measured from the inside to the inside face of conduit or structure to which connection is being made.

It is the Contractor's option to take his own core samples to verify the existing conditions.

The price per linear foot for pipe and conduit in place shall be considered full compensation for all materials, labor, equipment, tools and incidentals for doing all the work including the removal of interfering portions of existing storm drains, curb drains and improvements; the closing or removing of abandoned conduit and structures; the excavations of the trench including bituminous pavement; the control of ground and surface waters; the preparation of subgrade; potholing; placing and joining pipe; bedding and backfill; temporary resurfacing; deep lift asphalt concrete pavement for permanent resurfacing; clean up; providing as-built plans and all other work necessary to install the pipe or conduit, complete in place and no additional compensation will be allowed therefore.

Full compensation for bedding and backfill for reinforced concrete pipe conduit, including trenching for shoring purposes, shoring, and bracing as required shall be considered as included in the Contract unit price bid per linear foot of pipe items and no additional compensation will be allowed therefore.

Shoring and Braced Excavation shall comply with Subsection 306-1.1.6 of the Standard Specifications. The last sentence of the fourth paragraph shall be hereby deleted and replaced with the following:

SUPPORTS FOR CONDUITS ACROSS TRENCHES

Protect in place existing utilities as indicated on the Plans or directed by the Engineer and maintain the utility service. The locations of existing utilities are approximate and some depths are unknown. The Contractor shall pothole and verify ALL existing utilities ahead of construction operations. Upon learning of the existence of any utility omitted from or shown incorrectly on the Plans, the Contractor shall notify the Engineer immediately. Damaged utility facilities shall be repaired at no additional cost.

The Contractor shall not interrupt the service function or disturb the support of any utility without authority from the owner or order from the Engineer. All valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.

Where protection is required to ensure support of utilities located within the project limits whether or not they are shown on the Plans, the Contractor shall, unless otherwise provided, furnish and place the necessary protection at its expense. The Contractor shall take special precautions when compacted around the utility to ensure that no voids exist.

TEMPORARY PAVING

All trenches shall be backfilled and have temporary pavement installed or covered with steel traffic plates at the end of each working day.

Within four consecutive calendar days following installation of the conduit, or after compaction is approved by the Engineer, whichever comes first, steel traffic plates shall be removed and two inches of temporary pavement installed.

Cross streets are to be paved with temporary pavement on the same day that excavation and backfill are completed. Temporary pavement shall be maintained so that a smooth traversable surface is available at all times for vehicular traffic, free from ruts, depressions, holes, and loose gravel. Temporary paving shall be removed and disposed of by the Contractor before the permanent resurfacing is placed. Payment for construction and maintaining temporary pavement shall be included in the price bid for other items of work, and no additional allowance will be made therefore.

The contractor shall construct temporary asphalt concrete with a slope of 1:1 at the edge of open excavation (remove and reconstruct section) if all the following occur:

1. Clearance between travel lane and open excavation is less than five (5) feet
2. Excavation depth is four (4) inches or deeper, and
3. If open excavation will last more than 24 hours

Payment for construction and maintaining temporary pavement shall be included in the price bid for other items of work, and no additional compensation will be made therefore.

T.V. INSPECTION

T.V. inspection shall be performed on the newly constructed storm drain pipes.

The scope of work includes the recording images, Digital Versatile Disc (DVD) format, all connections and lateral locations by footage or stationing, and providing the AGENCY with a hard copy of the findings. Contractor's proposed log format shall be approved by the Engineer.

During inspection, the operating technician shall provide, in addition to his/her image recording (with audio), record of conditions, log in writing the location of all defects, misalignments, and other conditions and data pertinent to the physical condition and operation of the storm drain. Conditions, defects and laterals shall be located by footage counter.

At all points within the storm drain where defects are shown, the Contractor shall stop the camera, rotate (up to 360°), and/or tilt the camera lens to ensure adequate video coverage.

The camera shall be stopped and/or backed up to view and analyze conditions that appear unusual or uncommon to a storm drain in good condition. There shall be no loss of video quality at any time.

The contract unit price per linear foot for T.V. inspection shall be considered full compensation for doing all appurtenance work, including furnishing all materials, labor, equipment, tools, traffic control and incidentals to accomplish the work, and no additional compensation will be allowed therefore.

DEWATERING

The Contractor shall provide and maintain at all times during construction ample means and devices with which to promptly remove and properly dispose of all water from any source entering the excavations or other parts of the work. Dewatering shall be accomplished by methods, which will ensure a dry excavation and preservation of the final lines and grades of the bottoms of excavations. The methods may include sump pumps, deep wells, well points, suitable rock or gravel placed below the required bedding for draining and pumping purposes, temporary pipelines, and other means. The Contractor shall protect all trench work, storm drain construction and sub-surface structures from rain damage and surface runoff.

The Contractor shall dispose of the water from the work in a suitable manner without damage to adjacent property.

Conveyance of the water shall be such as to not interfere with traffic flow or treatment facility operations. No water shall be drained into work complete or under construction without prior consent of the Engineer.

Payment for complying with all provisions of this section shall be considered to be included in the various items of work involved and no additional compensation will be allowed therefore.

CATCH BASINS

Catch Basin, types and widths per plan shall be per referenced Standard Plan 302, with local depression conforming to referenced Standard Plans, and shall be constructed at locations shown on the plans.

Full compensation for conforming to the requirements of Catch Basins including:

1. Furnish all labor, tools, equipment, and materials necessary for accomplishing work complete and in place,
2. Excavation,
3. Fill
4. Reinforcing Steel,
5. Manhole Frame & Cover,
6. Local Depression
7. Removing existing curb, gutter, and sidewalk
8. Reconstruction of monolithic curb

Shall be considered as included in the unit price per **each** Catch Basin and no additional compensation will be allowed therefore.

REINFORCED CONCRETE PIPE

REINFORCED CONCRETE PIPE shall conform to Subsection 207-2, "Reinforced Concrete Pipe," and Subsection 306-1, "Open Trench Operations," of the Standard Specifications, these Special Provisions, and as directed by the Engineer.

REINFORCED CONCRETE PIPE shall be of the size and strength designated as shown on the plans and as listed in the Proposal.

All work necessary for any given length of pipe placed, including excavation, bedding, pipe placement, backfill and temporary resurfacing, shall be accomplished during the same working day.

Bedding for the REINFORCED CONCRETE PIPE shall conform to Standard Plan 1150C, and as specified on the plans and in the geotechnical report.

Bedding placed in excess of the limits shown on Standard Plan 1150C and for the convenience of the CONTRACTOR shall not be subject to any additional compensation.

Compaction equipment or methods which may cause excessing displacement or may damage structures, such as sleeve tapers or other drop-weight type equipment, shall not be used.

Full compensation for conforming to the requirements of REINFORCED CONCRETE PIPE including:

1. Excavation,
2. Furnishing and laying pipe
3. Collars
4. Bedding per Standard Plan 1150C and Contract plans
5. Backfill
6. Bracing and protecting existing unidentified utilities, not otherwise shown on the plans or these Special Provisions
7. Placing and removal of temporary AC surfacing in roadway areas
8. All other labor, equipment, and material incidental to the pipe,

shall be considered as included in the CONTRACT unit price per linear foot (LF) for REINFORCED CONCRETE PIPE (size as noted) and no additional compensation will be allowed therefore.

JUNCTION STRUCTURE AND CONCRETE COLLAR

Cast-in-Place concrete shall conform to the provisions of Section 201 and Section 303-1 of the Standard Specifications and these Special Provisions.

Portland Cement Concrete for the transition structure shall be Class 565-C-3250P.

Testing of the concrete shall be done in accordance with Section 201-1.1.4 of the Standard Specifications. The result of any testing that does not meet the requirements shall be the rejection of the structure by the CITY, and the structure shall be reconstructed by the Contractor at no cost to the CITY.

Junction structure, concrete collar and bedding shall be constructed in accordance with referenced Standard Plans and these plans. The unit price per each for junction structure and concrete collar in place shall include full compensation for furnishing all materials, labor, equipment, tools and incidentals for the concrete, reinforcing steel, shop drawings, provide as-built plans, excavation of the trench, including bituminous pavement, the control and removal of ground and surface waters, the preparation of subgrade, bedding, structural backfill form work shoring, potholing, temporary resurfacing, deep lift asphalt concrete pavement for permanent resurfacing, clean-up, and all other works necessary to construct the conduit, complete in place and no additional compensation will be allowed therefore.

The price per linear foot for pipe and conduit in place shall be considered full compensation for all monolithic catch basin connections shown on the Plans; the excavations of the trench, temporary and permanent resurfacing; replacement of the affected portion of curb and gutter, cross gutter, and sidewalk; the control of ground and surface waters; the preparation of subgrade; potholing; placing and joining pipe; bedding and backfill, compaction; the reconstruction of interfering

surface improvements; temporary resurfacing, removal of trees, clean up; and all other work necessary to install the pipe or conduit, complete in place.

When it is necessary to lower the invert elevation of a pipe by 1 foot or less or raise the invert elevation any amount, no increase or decrease in the unit price bid for such pipe will be made.

SECTION 307 - STREET LIGHTING AND TRAFFIC SIGNAL SYSTEM

Add new Section 307-21 LANDSCAPE ELECTRICAL SYSTEMS

307-21 LANDSCAPE ELECTRICAL SYSTEMS

307-21.1 General. The intent of the drawings is to describe complete systems, and the Contractor shall furnish and install all components required to provide complete operating electrical systems.

Contractor shall remove, salvage, store and re-install light pole. See Plan for new location. Installation shall be in kind, including foundation and mounting plate. All work shall be per manufacturer's written instructions. Contractor shall be responsible, and at Contractor's expense, for foundation design and required calculations.

The following is a brief list of the electrical work to this Contract for the installation of equipment as listed below. The work shall be complete as described in the specifications and shown on the drawings, and shall result in complete operating electrical systems for the purpose intended.

Furnish and install all material, labor, and equipment necessary for complete, operating electrical systems, except as noted otherwise. The following list shall not be considered as a complete and detailed list of work and materials to be supplied, but shall be used as a guide:

- Underground distribution conduit, cable, and pull boxes.
- Shop drawings, material submittals, and work schedule.
- Connections to all work of other trades.
- Record drawings and guarantees.
- Excavation, backfill and compaction for trenches, and pull boxes.
- Disposal of excess earth.
- Repair all damage to existing facilities caused by this work.
- Apply for and obtain all necessary permits and building department inspections.

All materials and equipment shall be installed in a secure, neat and workmanlike manner by competent workmen, and any item not so installed shall be corrected to meet the complete approval of the Agency. If, at any time, the Contractor believes that he cannot secure proper results through the use of the materials and procedures specified, he shall immediately notify the Engineer and the Agency setting forth his reasons.

The Contractor assumes all responsibility for materials, storage, damage to equipment, and safety for all personnel and the public, until final acceptance by the Agency. Sensitive electrical equipment should not be installed until major construction work is completed. During and after installation, equipment shall be protected from damage by water, dust, paint, wet concrete, plaster, etc. Adequate barricades and lighting shall be provided for allowing trenches and excavations.

Drawings – Performance. All scale dimensions are approximate. Before proceeding with any work, the Contractor shall check and verify all locations and dimensions of equipment at the site of work.

All work specified, but not clearly defined by the drawings, must be installed as directed by the Engineer in a manner satisfactory to him. Work covered by notes on drawings must be furnished and installed, whether or not it is specifically mentioned in the Specifications.

The Contract Drawings indicate the extent and general arrangement of the new and existing equipment, conduit, and wiring systems, and are essentially diagrammatic. The drawings indicate the required sizes and points of termination of conduits and wires and routes to avoid obstructions and provide clearance; however, it is not the intention of these drawings to show all necessary offsets, etc., and it shall be the responsibility of the Contractor to install all of his work to specific conditions found on the site.

All changes from the drawings necessary to make the work conform to existing structures or substructures, or to fit the work of other trades, or to conform to laws and ordinances; and all other reasonable changes and adjustments in locations of equipment, etc., prior to the installation, shall be made at no additional expense to the Agency.

Schedule of Work. The Contractor shall schedule his work and shall coordinate with the Agency and all other contracts in progress on the site at all times. Necessary coordination will be specified during the preconstruction conference.

Contractor shall submit a complete work schedule at the preconstruction conference.

Trenching shall avoid, to the extent possible, damage to existing tree roots. Routing of trenching shall be approved by the Engineer 24 hours prior to trenching.

307-21.2 Trenching and Conduit Work. Trenching shall be coordinated with the irrigation system.

All irrigation lines damaged during prosecution of the work shall be repaired in compliance with the standards in Sections 212 and 308 of the STANDARD SPECIFICATIONS.

PVC conduit shall be laid properly and secured.

Provide warning tape at 6 inches below grade.

PVC conduit shall be 24 inches below grade. Backfill shall be placed in 6-inch layers, hand or mechanically tamped to 90 percent compaction. Flooding will not be permitted without the specific approval of the Engineer, and then only for the area approved. Backfill shall contain no rocks, broken concrete or trash.

Trenches shall be backfilled level with surrounding grades when fully compacted. Trenches in lawn areas shall be sodded in accordance with Section 308-4.8(c) of the STANDARD SPECIFICATIONS; sod type shall be approved by the Agency.

307-21.3 Pull Boxes. Install pull boxes where noted on drawings. No pull boxes shall be located in an athletic field area, or where it will pose a hazard to the using public.

Boxes shall be set flush with sidewalk or other paving. In lawn areas, set boxes 1-inch above finish grade, or as noted on plans. Notes on plans govern.

Concrete boxes shall be made in sections, and grouted or cemented together to form a watertight seal. Boxes shall have a 6-inch drain hole in the bottom. Boxes shall sit on 24-inch deep crushed clean 1-inch rock. The drain hole shall be opened and cleaned out before sealing the top. Top shall be sealed after inspection, and the entire box made watertight. Pre-cast pull boxes by Brooks or Christy may be submitted for approval.

307-21.4 Splicing and Cable Identification. No splices are permitted except in pull boxes or in pole base at hand hole.

All cable splices shall be made with ILSCO or 3M compression type crimp connectors (not bolted mechanical compression type).

All joints shall be made waterproof by two layers of rubber tape (Scotch No. 70) followed by two layers of 2-lap friction tape (Plymoth ASTM), covered by three layers of 2 lap No. 88 Scotch tape. Splices in underground boxes shall be made with splice kits as manufactured by 3M Company, Scotchcast #72 for inline and #78 for tap splices or equal.

Branch circuit splices in fixture shall be soldered and taped as noted above. Compression fittings (uninsulated "Scotchlok") may be substituted for solder, but must be taped, dipped in waterproof compound and made waterproof. Insulating "Scotchlok" may be used, but only with waterproof Unipack Scotchcast resin.

All cables shall be identified with a punched plastic tag, such as color-coded Dymo tags, in each pull box by circuit number, voltage, and phase.

307-21.5 Connections to Equipment or System. The Contractor shall connect to equipment furnished under other sections of the specifications where noted on drawings.

307-21.6 Grounding. Do not use water supply pipe as a ground. All fixtures shall be connected to system ground. Neutral to ground shall not exceed five ohms. Connect fixture to ground with No.10 TW wire. All rigid galvanized steel conduit shall be properly grounded. Use proper ground clamps and conduit fittings to ground cable and conduit to ground rods. Size, as required by Code.

Concrete: All concrete shall be 3000 psi and shall be ready mixed concrete, conforming to UBC Standard 26-13. Alternate 2 of Standard 26-13 shall be the basis of quality, and Items 1 through 4 are specified elsewhere in this section.

Packing: Cement shall be packed in strong paper or jute sacks with the brand and name of the manufacturer plainly marked thereon.

Aggregates: The grading of coarse aggregates for slabs shall be the 1-inch to No. 4 range as set forth in Table 26-2-A of UBC Standard 26-2. Grading of coarse aggregates for all other concrete shall be the ½-inch to No. 4 range of the same Table 26-2-A.

307-21.8 Cleaning Equipment and Materials. The Contractor shall thoroughly clean all fixtures, exposed piping, apparatus, and equipment installed under its Contract. Parts which are to be painted shall be thoroughly cleaned of cement, plaster, etc., brushed with steel brush to remove rust, etc., clean and painted.

All dirt, rubbish, paint spots, or grease on walls, walks, poles, equipment, or fixtures, for which the Contractor is responsible, shall be removed by the Contractor and the premises left in first-class condition in every aspect.

All rubbish resulting from the work shall be cleaned up and removed from the site by the Contractor; also from time to time during construction, and when so directed by the Engineer.

307-21.9 Tests. The Contractor shall make all tests required by the Engineer, or other authorities having jurisdiction.

The costs of all tests, repairing of all damage resulting from these tests, replacement of equipment and materials including labor and other necessary work, due to conformance

with the Electrical Ordinances, Safety Orders, these specifications and accompanying drawings, shall be borne by the Contractor.

Should the Contractor refuse or neglect to make any tests necessary to satisfy the Engineer that the work has been performed in accordance with the true intent and meaning of the contract documents, the Agency may make such tests and charge the expense to the Contractor and retain the cost of testing from the final payment to the Contractor.

All wiring and connections shall be tested for continuity grounds and short circuits before the devices and equipment are connected. Upon completion of the work, the contractor shall demonstrate to the Engineer the satisfactory operation of the entire electrical system(s).

At the time of the final inspection, the Contractor shall have a qualified electrician at the job site to make all required tests or demonstrate operation of electrical equipment and lighting system(s).

307-21.10 Protection of Existing Site Improvements. Restore disturbed turf areas, irrigation systems, etc. Repair damaged park equipment and turf caused by the Contractor to new condition, including backfill and sodding of trench surface to the Engineer's satisfaction.

307-21.11 Guarantee. The Contractor shall guarantee all work of this Contract to be free from defects in material and workmanship for a period of one (1) year from the date of acceptance of the work for filling of the Notice of Completion.

The Contractor shall repair or otherwise make good at its own expense all defects developed during the guarantee period. The Agency may notify the Contractor by the telephone or in writing, and all guarantee work shall be performed within 48 hours after receiving notice from the Agency.

The Contractor's general guarantee shall be on their letterhead, and shall include the foregoing provisions and emergency telephone numbers. Together with the required manufacturer's guarantees, the Contractor's guarantee shall be bound and furnished to the Engineer in at least three copies.

307-21.12 Turn-Over Items. Panel keys, spare parts, record drawings, maintenance manuals, guarantees; all items shall be delivered to the Engineer prior to authorization of final payment.

307-21.13 Payment. Payment for Electrical Work shall be considered included in those items of work and no separate payment will be made therefore; and shall be for complete operating electrical systems and connections, but not limited to, conduit, conductors, pull boxes, receptacles, trenching, boring, power supply connection, distribution; power supply feed, and other work appurtenant to the provisions of the electrical systems, as shown on the drawings.

SECTION 308 - LANDSCAPE AND IRRIGATION INSTALLATION

308-1 GENERAL

Irrigation and landscaping work shall be incorporated into various phases of roadway construction.

All existing lawn and landscape areas disturbed by the Contractor as part of or as a result of the work shall be prepared and resodded and/or replanted in kind, except as otherwise designated in

the Plans. Existing irrigation systems shall be repaired and restored to operating condition to the satisfaction of the Engineer.

Contractor shall field verify with Engineer exact location of all irrigation components such as, but not limited to, valves, sprinkler heads, piping, etc., prior to start of construction. All irrigation components shall be protected in place. However, where there are conflicts with new sidewalks, the water supply lines, valves, and sprinkler heads shall be modified and adjusted to grade or relocated, as necessary. The reinstallation of irrigation components shall be performed in the same manner in which they were originally installed.

Contractor shall not have the existing irrigation system inoperable for more than 48 hours continuously.

308-2 EARTHWORK AND TOPSOIL PLACEMENT

308-2.3 Topsoil Preparation and Conditioning

308-2.3.1 General. Add the following:

After Class A and/or Class C topsoil has been placed and prior to amendment, the topsoil will be sampled and tested by the Contractor to assure compliance with the Specifications and approved testing source. Supplemental tests may be made to assure compliance with amendment and fertilization specifications. All costs associated with testing shall be borne by the Contractor.

308-2.3.2 Fertilizing and Conditioning Procedures. Add the following:

The topsoil shall be amended as recommended by the testing laboratory. Should the amendment recommendations furnished by the laboratory exceed those required by the bidding documents, the laboratory recommendations shall be applied at no additional cost to the Agency.

Incorporate into the top 6" of the soil, using a mechanical tiller, tilling in two separate directions the following materials, in all areas to be planted:

Material	Rate per 1,076 square feet
Type I Amendment	3 cubic yards
Commercial Fertilizer	10 pounds
Agricultural Gypsum	100 pounds

308-3 HEADER INSTALLATION

Add new Section 308-3.1 MOISTURE BARRIER AND ROOT CONTROL BARRIER INSTALLATION

308-3.1.1 Moisture Barrier Installation. Moisture barrier membrane shall be installed in all median islands, completely surrounding the areas to be irrigated and planted. Membrane shall extend a minimum of 30-inches below top of curb.

Attach membrane securely and continuously to the back of curb with a mastic adhesive.

Lengths of sheeting shall be joined by folded and cemented lap seams, completely waterproof. Furnish two samples of a completed seam to the

Engineer for approval prior to start of this work. Seams shall be minimum 4-inches wide by width of sheet.

308-3.1.2 Root Control Barrier Installation. Install root control barrier in all tree wells to form a continuous barrier at the perimeter. Install and join sections in strict accordance with manufacturer's printed instructions.

308-4 PLANTING

308-4.1 General. Add the following:

The Contractor is responsible to schedule tree deliveries. Daily deliveries shall not exceed the Contractor's capability to place delivered trees on site unless the Contractor has provided adequate off-site storage space. All charges for extra handling shall be borne by the Contractor.

The Contractor shall provide off-loading and placing equipment of adequate capacity to safely handle the furnished trees.

308-4.3 Layout and Plant Location. Delete the first paragraph and replace with the following:

"The Contractor will layout all planting areas and stake locations of trees for the Engineer's approval prior to planting."

308-4.5 Tree and Shrub Planting. Delete the fourth paragraph of Subsection 308-4.5 of the Standard Specifications and replace it with the following:

All planting holes (except for palms) shall be backfilled with a prepared backfill mix consisting of the following:

A. Material	Rate per cubic yard
Topsoil	1.0 CY
Soil Amendment	0.25 CY
Iron Sulfate	2 lbs.
Commercial Fertilizer	1 lb.

Insert planting tablets in the manner and of the number specified by the manufacturer in its printed instructions.

308-4.10 Mulch.

308-4.10.1 Installation. Following acceptance of plant material installation, apply even layer of mulch, 2-inches thick, over all areas shown as planting areas on the Plans, except lawn areas. The mulch blanket inside watering basins shall be 2 inches thick. Taper thickness of mulch to meet pavement ½" minimum below the finished surface of pavement. Keep mulch 6 inches away from tree and shrub root crown.

308-5 IRRIGATION SYSTEM INSTALLATION

308-5.1 General.

- (a) Record Drawings. Show dimensioned location of all buried pipe and valves, and control pilot wires to valves and controllers. Take dimensions prior to backfilling trenches. All corrections on record drawings shall be done in red ink. Dimensions must be taken from above-ground, permanent, architectural objects. Do not dimension from plants or trees or sprinkler heads. Record drawings shall be reviewed prior to all progress payment approvals.
- (b) Charts. On the inside surface of the cover of the automatic controller, the Contractor shall prepare and mount a chart showing the valves and sprinkler heads serviced by that particular controller. All valves shall be numbered to match the operation schedule and the drawings. Only those areas controlled by that controller shall be shown. This chart shall be an entire sprinkler plot plan, including building, walks, roads, and walls. A photostatic print of this plan, reduced as necessary and legible in all details, shall be made to a size that will fit into the controller cover. This print shall be approved by the Engineer and shall be hermetically sealed in plastic. This shall then be secured to the inside of the cover in a manner approved by the Engineer.

308-5.1.2 Items to be Furnished by Contractor. Provide the following tools as a part of this contract:

- (a) Two sets of keys for automatic controller cabinet.
- (b) Two sets of keys for lock on controller enclosures.
- (c) One coupler for quick coupler valves; coupler shall be equipped with 3/4" diameter 12" tall bronze hose bib, bent-nose type, with handwheel.
- (d) Two loose keys for quick coupler valves installed under this contract.
- (e) Two special wrenches suitable for operating each type of shut-off valve installed under this contract.
- (f) Two tools for disassembly and assembly or adjustment of each type equipment used in this installation requiring such special tools.
- (g) One valve box key for lock-lid valve boxes used in this installation.
- (h) Two sets of operating instructions and a parts list as printed by each manufacturer of each type equipment included in this contract; refer to "Materials" section of the Specifications and legend on drawings.
- (i) One specified padlock for each controller enclosure, as approved by the City.

308-5.1.3 Guarantees. A letter guarantee from each manufacturer shall be submitted to the Agency guaranteeing materials for a period of 1 year against material defects and workmanship. In cases where longer guarantees are required by these Specifications, such guarantees are separate and distinct from the Contractor's general guarantee.

308-5.2 Irrigation Pipeline Installation.

308-5.2.5 Trench Backfill in Roadways and Parking Areas. Section 308-5.2.5 is hereby added to Section 308 of the Standard Specifications as follows:

1. All trenches for pipeline and electrical conduit under roadways shall be backfilled with a portland cement concrete treated slurry conforming to Subsection 201-1.1.2. Class Use Table for Trench Backfill Slurry. Sand bedding material shall extend at least 6 inches above the pipe or conduit.
2. Paving for trench cover shall meet the pavement requirements for this project and shall be at least the thickness of adjacent undisturbed paving plus 1-inch, thoroughly compacted in place, and finished to a neat continuous surface.

308-5.3 Installation of Valves, Valve Boxes, and Special Equipment. Add the following:

Pull boxes for control wires that are set in pavement shall be flush with the finish surface.

Pull boxes for control wires, valve boxes, etc., shall be offset from and parallel to walk.

308-5.5 Automatic Control System Installation

The Automatic Irrigation Controller Assembly shall include the following:

- Automatic Irrigation Controller, 6 station
- Master valve module and relay

Automatic Irrigation Controller Assemblies shall include supplemental irrigation control systems.

Supplemental irrigation control systems equipment shall include furnishing and installing the specified equipment in conformance with the manufacturer's written instructions and specifications, including communications equipment, sensors, wire, valve boxes, special connectors, terminal boards, and any other equipment required to provide a complete operating system.

308-5.6 Flushing and Testing.

308-5.6.1 General. The text of Subsection 308-5.6.1 of the Standard Specifications is hereby deleted and replaced with the following:

Flush Main Lines. Flushing of the lines will be done before quick coupling valves and remote control valves are in place. All open ends shall be piped (temporarily) to exhaust flushing water up and out of the trenches. No water will be permitted to fall into the trench. Flushing procedure will be to first open the ports nearest the source, then recap and move progressively toward the end of the line with only one open port flushing at any one time.

308-5.6.2 Pipeline Pressure Tests. The text of Subsection 308-5.6.2 of the Standard Specifications is hereby deleted and replaced with the following:

1. Main Lines: Pressure tests on main lines shall be made after lines have been flushed and after control valves and quick coupling valves are set in place. Close all control valves by hand. Pipes shall be centerloaded leaving all fittings exposed. Contractor shall furnish force pump and pressure gauges necessary to complete pressure tests.
2. Pipe: All metal main lines in the system shall be capped and pressure tested at 125 psi for a period of 1 hour with no drop in pressure. All

leaks found shall be corrected by turning the pipe in the fittings as no caulking or epoxy fillers will be permitted.

3. Plastic Pipe: All plastic main lines in the system shall be capped and pressure tested at 125 psi for a period of 1 hour with no drop in pressure. All leaks found shall be corrected by removing the leaking pipe or fittings and installing new material in place thereof and retesting.
4. Closing in Uninspected Work: The Contractor shall not allow nor cause any of this work to be covered or enclosed until it has been inspected, tested and approved by the Engineer. Should any of this work be enclosed or covered before such inspection and test, the Contractor shall uncover the work at his own expense and after it has been inspected, tested and approved, shall make all repairs with like materials necessary to restore all his work and that of the other contractors to its original condition.

308-5.6.5 Approval. Subsection 308-5.6.5 is hereby added to Section 308 of the Standard Specifications as follows:

Written approval and acceptance of the irrigation system must be obtained before final payment is considered.

308-6 MAINTENANCE AND PLANT ESTABLISHMENT

308-6.1 General.

The entire project shall be satisfactorily maintained, commencing from the time that all items of work have been completed as specified in the foregoing articles of these Special Provisions and to the satisfaction of the Engineer, and continuing through the plant establishment period and the landscape maintenance period until final acceptance of the project.

Project maintenance work shall consist of:

Description of work items:	
Applying irrigation water to tree wells	Sweeping pavement
Removing weeds	Removing litter and debris
Caring for plants	Preventing and repairing damage
Repairing landscape systems	

Project maintenance work shall consist of applying water (except initial watering of plants), weeding, caring for plants, edging, sweeping walks, litter pickup, and performing all general project maintenance.

308-6.3 Landscape Maintenance Period.

The landscape maintenance period shall be a minimum of 90 calendar days, commencing upon written authorization from the Engineer. This period shall not start until all construction work is complete, including the plant establishment period.

308-6.4 Plant Establishment and Landscape Maintenance Requirements.

308-6.4.1 General. In order to carry out the work, the Contractor shall maintain a sufficient number of men and adequate equipment to perform the work herein specified from the time any planting is done until the final approval.

If at any time the Contractor is not performing maintenance work in the opinion of the Engineer, maintenance period shall be suspended and not restarted until all deficiencies have been corrected to the satisfaction of the Engineer. No payments will be made for work required during the suspended period and the period shall be extended by the length of time of the suspension.

All plants and planted areas shall be kept well watered and kept well weed-free at all times. Weeds shall be removed and disposed of off the site.

(Refer to Section 308-4.5.1 (d) for palm tree maintenance.)

The Contractor shall be responsible for detecting diseases and pests as soon as their presence is manifested. He shall take immediate action to identify the disease and/or pest and apply such remedies as are necessary to control the infestation. He shall remove all rodents, taking control measures immediately upon discovery.

Apply commercial fertilizer on all planted areas as required to sustain growth. The Engineer shall be notified at least 2 days before starting this operation.

Damage to planting areas shall be repaired immediately.

308-6.4.3 Trees, Shrubs, and Ground Covers.

No pruning shall be performed by the Contractor unless directed in writing by the Engineer. The Agency's Certified Arborist must be present for any attempted pruning operations. Seventy-two (72) hours prior notice to the Agency is required before commencing pruning operations.

ANY TREES PRUNED WITHOUT PERMISSION OR IN A FASHION UNACCEPTABLE TO THE AGENCY SHALL BE REPLACED IN KIND AND SIZE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE AGENCY.

If pruning is permitted by the Engineer:

- All trees and shrubs shall be pruned to maintain natural structure. Clipping into formal shapes such as boxes and balls will not be allowed unless such is specified in the design.
- Young trees shall be pruned to select and develop permanent scaffold branches; to remove overlapping and rubbing limbs; to eliminate narrow crotches; and to maintain growth within space limitations. All cuts shall be made to lateral branches, or buds, or flush with branch bark collar. Side pruning of young trees, stubbing or heading back will not be permitted.
- Evergreen trees shall not be pruned, except under the direction of the Engineer.
- The objectives of shrub pruning are the same as for trees.

Ground covers shall be edged and trimmed to keep in bounds and to achieve an overall even appearance. Keep ground cover 12-inches (300mm) clear of the base of shrubs, and clear of low branches.

308-6.4.4 Replacement of plants. All plants that show signs of failure to grow at any time during the life of the contract or those plants so injured or damaged from any cause, including vandalism, as to render them unsuitable for the purpose intended shall be immediately replaced in kind and size at the expense of the Contractor.

308-6.4.5 Inspections. A written notice requesting an inspection should be submitted to the Engineer at least 48 hours prior to the anticipated date.

Prior to inspection, the site must be thoroughly cleaned up and all excess material and debris removed.

Prior to start of and at the end of the plant establishment and landscape maintenance periods, the Contractor will be required to have a complete inspection and approval of all landscape construction items.

An inspection shall be scheduled at 30-calendar day intervals during the landscape maintenance period.

308-7 GUARANTEE

- (a) Close Out. The irrigation system shall be ready for complete automatic operation to the satisfaction of the Engineer. Contractor shall provide all appurtenances, devices, record documents, and manufacturers literature necessary to operate and maintain the system, and guarantees, in writing.

308-8 PAYMENT Add the following:

Payment for Landscape Planting and Irrigation System shall be as follows:

- (a) Soil Preparation: Payment shall be at the contract bid unit price per square foot, and shall include all costs of furnishing and installing fertilizers and conditioners, tilling, soil testing, fine grading, and other work required to prepare soils for planting.
- (b) Moisture Barrier: Payment shall be at the contract bid unit price per linear foot in place, and shall include all costs for furnishing and installing moisture barrier.
- (c) Sump Drain Assembly: Payment shall be at the contract bid price per each and shall include all costs for excavation and removals, drain rock, geotextile fabric, catch basin assemblies, and appurtenant work, and no additional payment will be made therefore.
- (d) Root Control Barrier: Payment shall be at the contract bid unit price per linear foot in place, and shall include all costs for furnishing and installing root control barrier.
- (e) Metal Tree Grate and Tree Well Planting: Payment shall be at the contract bid unit price per each for removal and replacing existing concrete sidewalk, furnishing and installing tree well grate and frame assembly and shall include all costs for furnishing and installing tree, soil backfill, gravel sump with pipe and grate, and soil excavation and disposal.
- (f) Trees and Shrubs: Payment shall be at the appropriate contract unit bid price per each size of container, and shall include all costs for furnishing and installing trees and shrubs.

- (g) Mulch. Payment shall be at the contract bid unit price per cubic yard installed, and shall be full compensation for furnishing and installing mulch.
- (h) Irrigation Main Line: Payment for irrigation main line shall be at the contract bid unit price per linear foot in place for each size specified in the bid.
- (i) Control Wire Conduit. Payment for control wire conduit shall be at the contract bid unit price per linear foot in place of each size as shown on the bid form, and shall include all costs for furnishing and installing control wire conduit by trenching.
- (j) Shutoff Valve Assembly: Payment for shutoff valves shall be at the contract bid unit price per each valve of the size specified in the bid, and shall be for a complete operating assembly, including valve box.
- (k) Remote Control Valve Assembly: Payment for Remote Control Valve shall be at the contract bid unit price per each valve of the size specified in the bid, and shall be for a complete operating assembly, including valve box and cover and furnishing and installing control wires to controller.
- (l) Automatic Irrigation Controller Assembly: Payment for Automatic Irrigation Controller shall be at the contract bid lump-sum price, and shall include all costs for furnishing and installing a complete operating system, including conduit and enclosure, as required.
- (m) Control Wire: Payment for control wire shall be included in the contract bid unit price for Remote Control Valve Assembly.
- (n) Bored Pipe Sleeving: Payment shall be at the contract bid unit price per linear foot in place for each size specified in the bid form and shall include all costs for furnishing and installing pipe sleeving by boring, including pavement removals and replacement, excavation for set-up pits, potholing, and all other costs necessary for boring.
- (o) Wye Strainer-Pressure Regulator Assembly: Payment for the wye strainer-pressure regulator assembly shall be at the contract bid unit price for each, and shall be a complete operating assembly, including valve box.
- (p) Quick Coupling Valve Assembly: Payment for quick coupling valves shall be at the contract bid unit price per each, and shall be for a complete operating assembly, including valve box.
- (q) Irrigation Head Assembly: Payment for irrigation heads shall be at the contract bid unit price per each for each type of head specified, and shall include serving lateral piping between heads and from control valve, and all other appurtenant devices and work.
- (r) Rain Bird RWS: Payment for RWS shall be at the contract bid unit price per each as specified and shall include serving lateral piping between each unit and from control valve, and all other appurtenant devices and work.
- (s) Existing Medians Landscaping Repair and Irrigation System Modification: Payment for Medians Landscaping Repair and irrigation system modifications shall be at the contract bid lump-sum price, and shall include all costs for furnishing and installing a complete operating system as specified on the drawings, including lowering and/or raising and relocating existing valve boxes and valves, water supply and lateral lines and sprinkler heads; adjusting control wire servicing the valve; adjusting control wires to controller, lateral pipes, and splice boxes; sleeving, cutting and capping existing water supply and lateral lines to accommodate the new alignment; salvage irrigation controller; removing and/or abandoning irrigation equipment, conduit, boring under curbs and sidewalk, trenching for sleeving, and trenching for lateral pipe; backfilling, AC and PCC pavement

replacement, replacement of damaged plant material in kind, and all appurtenant devices and work, and no additional compensation will be made therefore.

This bid item shall include all costs for furnishing and installing replacement plant material and hardscape paving due to temporary removal of roadway medians as specified on plan, temporary relocation, maintenance and re-planting of existing Queen Palm on Slauson Avenue median shall be at the contract bid price per each and shall include all costs for removing, boxing, maintaining, re-planting and all appurtenant devices and work, and no additional compensation will be made therefore.

- (t) Landscape Maintenance Period: Payment shall be at the contract lump-sum bid price, and shall include all costs of labor, materials, equipment, tools, and appurtenances to maintain the landscape planting, tree well planting and watering, manual watering of trees, and irrigation system.

All costs for testing, record drawings, and other miscellaneous costs shall be distributed among the various items, and no additional payment will be made therefor.

---END OF SECTION F (PART 3)

SECTION F – TECHNICAL SPECIFICATIONS**SIGNALS, LIGHTING, AND ELECTRICAL SYSTEMS**

All equipment, materials, and components for traffic signal loop replacement shall conform to the Caltrans Standard Plans, latest edition and Standard Specifications, Section 86, "Signals, Lighting, and Electrical Systems," latest edition except as noted in the Special Provisions and on the Plans. These Plans and Specifications are hereinafter referred to as State Standard Plans and State Standard Specifications. Copies of these documents are available from the Caltrans, District 7 office at 100 South Main Street, Los Angeles, California 90012 or from Caltrans, 6002 Folsom Boulevard, Sacramento, California 95819, (916) 445-3520.

15-2 MISCELLANEOUS HIGHWAY FACILITIES**15-2.02 Removal Methods.**

All existing traffic signal and street lighting equipment and pole designed for removal shall be salvaged and delivered to city yard. If directed by the City Engineer otherwise, contractor shall remove and dispose of the un-wanted equipment and poles.

Existing City-owned street lighting system shall not be removed until the new system is functional.

Existing overhead sign structure shall be removed and salvaged complete. Foundation shall be removed and disposed of. Contractor shall deliver salvaged overhead sign structure to City Maintenance Yard. Coordinate location and delivery with City Inspector.

15-2.07 Payment. Payment for the removal of existing City-owned street lights, pull boxes, footings, appurtenances, delivery, disposal, foundation and recompaction at footings shall be included in the lump-sum price bid for Street Lighting System, and no additional compensation will be allowed therefor.

Payment for the removal of existing Overhead Sign Structure including sign panel, frame, delivery, disposal, foundation and recompaction at footing shall be included in the lump-sum price bid for removal of overhead sign structure, and no additional compensation will be allowed therefor.

86-1 GENERAL

86-1.03 Cost Breakdown. The cost breakdown shall be submitted to the Engineer in conjunction with equipment list and drawings.

86-1.04 Equipment List and Drawings. The equipment list shall be submitted to the Engineer within ten (10) working days after the date of the Notice of Contract Approval. Notice to procure equipment and material will be issued upon the approval of submittals.

Materials lists, manufacturer's data, brochures, technical data, etc., shall be labeled and identified, and shall be submitted in bound booklet form.

The Contractor shall retain one copy of all approved material lists and samples at the job site, readily accessible for inspection by the Engineer. Said materials lists and samples shall be the basis for approval or rejection of work.

86-1.05 Warranties, Guarantees, and Instruction Sheets. The Contractor shall guarantee the entire work constructed under this contract and will fully meet all requirements as to quality of workmanship and materials furnished by him. The Contractor shall make, at the Contractor's expense, any repairs or replacements made

necessary by defects in workmanship or materials that becomes evident within 1 year after acceptance of work by the Agency and to restore to full compliance with the requirements of these Specifications, any part of the work which during the 1-year period is found to be deficient with respect to any provision of the Plans and Specifications. The Contractor shall make all repairs and replacements promptly upon receipt of written orders from the Engineer. If the Contractor fails to make the repairs and replacements promptly, the City may do the work and the Contractor and his surety shall be liable to the City for the cost.

Whenever any work or equipment is to be guaranteed or maintained by a manufacturer, supplier, or subcontractor, said obligation shall be that of the Contractor.

All guarantees shall be in writing and delivered to the Engineer by the Contractor prior to final acceptance of the work.

86-1.06 Maintaining Existing and Temporary Electrical Systems. All work and materials required to keep the existing traffic signal and street lighting systems operational, including temporary traffic signal poles and wiring will be considered as included in the lump-sum price bid for traffic signal modification, and no additional compensation will be allowed therefor.

New traffic signal system shall be in operation before the removal of existing traffic signal.

Traffic signal shutdowns shall be limited to the hours between 9 a.m. and 3 p.m. and shall not be permitted on Friday, Saturday, or Sundays.

Where the Contractor-installed facilities are damaged prior to final acceptance by the Engineer, the Contractor shall repair or replace such facilities at his own expense.

86-1.07 Scheduling of Work.

Traffic signal work shall be incorporated into various phases of roadway construction. The Contractor shall maintain the traffic signal in operational at all times.

PCC flat work around poles and pull boxes shall coordinated with signal work. Box out or separate PCC placement due to the scheduling shall be made at no additional cost to the City.

The job site shall be maintained in a neat and orderly condition at all times and areas of sidewalk removal to be left open for less than 5 days shall be covered with plywood sheeting and barricades. Areas to be left open more than 5 days shall be patched with temporary AC pavement, smoothed to provide a level finished walking surface.

All striping, pavement markings, and signing shall be in place prior to signal turn on.

Turn on of the traffic signal system shall not be made on a Friday or the day preceding a legal holiday, and will be permitted between the hours of 9 a.m. and 2 p.m. only. The City shall be notified at least 48 hours prior to the intended turn on and the City's signal maintenance company must be present.

86-2 MATERIALS AND INSTALLATION

86-2.01 Excavation and Backfilling. Excavation for foundation shall be hand dug until clear of obstructions.

The last paragraph of Subsection 86-2.03 is hereby deleted and replaced with the following:

Existing footings for street lights and traffic signals shall be removed and the remaining hole backfilled and compacted.

86-2.04 Standards, Steel Pedestals, and Posts. Where the State Standard Plans refer to the side tenon detail at the end of the signal mast arm, the applicable tip tenon detail may be substituted.

86-2.05 Conduit. Conduit shall be rigid steel with metallic fittings for traffic signals and street lighting. Conduit installation shall be coordinated with the phased street improvement work at no additional cost to the city.

86-2.06 Pull Boxes. Pull boxes shall be pre-cast reinforced concrete. Grout-in bottom of pull boxes will not be required.

Electrical pull boxes, unless noted otherwise on the Plans, shall be No. 5 or larger and shall have plastic lined lids.

No pull box shall be located in or within 1-foot of any curb ramp.

86-2.08 Conductors.

86-2.08B Multiple Circuit Conductors. Multiple circuit conductors shall be THW type.

86-2.09 Wiring.

86-2.09D Splicing. Splices shall be Type C insulated by Method B, as shown on State Standard Plan ES-13A, except detector conductor (video, loop, et cetera) splices shall be Type S or T insulated by Method B, as shown on Standard Plan ES-13A, and shall also be soldered.

86-2.14 Testing. Materials and equipment furnished by the Contractor shall be tested at an independent testing facility designated by the City.

Cost for testing and delivery to and from the test site shall be considered as included in the lump-sum price bid for traffic signal modification, and no additional compensation will be allowed.

86-3 CONTROLLER ASSEMBLIES

Type 170E controller in a Type 332 cabinet per Section 86-3.03, "Model 170 and Model 2070 Controller Assemblies" of the State Standard Specifications. Controllers and cabinets shall be modified as shown on the Plans with all necessary equipment for the intended operation.

Install a Traffic Uninterruptible Power Supply (UPS) in a separate free-standing Myers cabinet and in accordance with the following Specification:

11.0 WARRANTY

The Contractor shall arrange to have a representative of the Engineer and a signal technician present at the time of the new controller operation is implemented. The technician shall be fully qualified to work on the controller assemblies, and shall be employed by the controller manufacturer or his authorized representative. The Engineer's representative shall be notified at least 48 hours prior to the turn on.

86-4 TRAFFIC SIGNAL FACES AND FITTINGS

Vehicle signal heads shall be in accordance with Sections 86-4.01, "Vehicle Signal Faces," 86-4.02 "Light Emitting Diode Signal Module" and 86-4.04, "Backplates," of the State Standard Specifications, except as modified or supplemented herein.

All replaced vehicular indications shall have 12-inch lenses, open-at-bottom circle visors, and louvered backplates per City Specifications.

Traffic signal faces, all traffic signal sections, shall utilize light emitting diode signal modules. Each light emitting diode (LED) signal module shall consist of an assembly that utilizes light emitting diodes as the light source in lieu of an incandescent lamp for use in traffic signal sections.

The LED module shall be Type 1 per Caltrans specifications. Please visit the following website for details of the Caltrans LED specifications:

http://www.dot.ca.gov/hg/esc/ttsb/electrical/electrical_index.htm

Plastic signal sections, lenses, visors and backplates shall not be used.

Pedestrian signal heads shall be in accordance with Sections 86-4.06, "Pedestrian Signal Faces," and 86-4.07 "Light Emitting Diode Pedestrian Signal Face 'Upraised hand' module" of the State Standard Specifications, except as modified or supplemented herein.

All pedestrian signal heads shall be modular with international symbols and conform to the following specifications:

- A. Dimensions. The maximum overall dimension of the signal shall be 18-1/2 inches wide, 18-3/4 inches high and nine inches deep, including Z-crate type visor and hinges.
- B. Pedestrian Signal Face: All new pedestrian signal faces shall be Type "A".
- C. Z-Crate Visor: Each signal shall be provided with a Z-crate type visor designated to eliminate sun phantom. Under strong ambient light conditions, the message shall "blank out" when the signal is not energized.
- D. Housing: The housing case shall be a one-piece corrosion resistant aluminum alloy die casting complete with integrally cast top, bottom, sides and back. Four integrally cast hinge lug pairs shall be provided for operation of a swing-open door.
- E. Maintenance Features: The case and door frame when properly mated to other pedestrian signal components and mounting hardware shall provide a dust-proof and weatherproof enclosure, and shall provide for easy access to and replacement of all components. In order to facilitate installation and maintenance, the signal shall be designed so that all components are readily accessible from the front by merely opening the signal door.
- F. Door Frame: The door frame shall be one-piece corrosion-resistant aluminum alloy die casting, complete with two hinge lugs and two latch slots cast for each door. The door shall be attached to the case by means of two Type 304 stainless steel spring pins. Two stainless steel hinge bolts with captive stainless steel wing nuts and washers shall be attached to the case with the use of stainless steel spring pins. Hence, latching or unlatching of the door shall require no tools.
- G. Countdown Pedestrian Signal Module (Combination Raised Hand and Walking Person with Two Digit Countdown Timer) shall be of the LED type. Countdown pedestrian signal

LED module shall comply with current LED pedestrian signal modules specifications from the Institute of Transportation Engineers and Caltrans with the following provisions:

1. All modules shall have a visual appearance similar to an incandescent lamp. They shall have a smooth, uniform, non-pixelated appearance. Hand and Person icons are to appear solid. No outline icons are allowed.
2. The module shall display the correct countdown display subsequent to the Walking/Person during a Flashing Red/Hand without an intervening display of Solid Red/Hand.
3. LED timer shall count down the duration of the "flashing Raised Hand" phase. Timer shall start at the beginning of the "Flashing raised Hand" signal phase and blank out after the end of the "Flashing Raised Hand" signal phase.
4. The countdown display shall be two digits, and the numbers 00 to 99 on the numerical display shall have a minimum height of 180 mm (7 inches) and shall be Portland Orange in color.
5. When Solid Fill Pedestrian Signal Face is displayed, both the raised hand and the walking man indications shall be formed with an array of LEDs such that the indications provides a filled-in/solid appearance.

86-5 DETECTORS

86-5.01 Vehicle Detectors. Vehicle detectors shall be of the inductive loop, Type E. Leading loops adjacent to crosswalk or limit line in each lane shall be Type D, as shown on the plans.

Loop detector wire shall be Type 2.

Loop detector lead-in cable shall be Type B.

Contractor to core drill a round traffic signal loop using a 6' diameter core bit with diamond impregnated segments. The slots shall be vertical and 0.5 inches wide by 5.0 inches in depth with 3.0 inches of cover from loop wire to pavement surface. No other holes or means of anchoring a router or flat saw to perform the cut will be accepted.

Sawcut to the appropriate pull box within 50 feet. Sawcut to be .250 inches to width x 5.0 inches in depth.

Detector loop locations shall be approved by Engineer in the field prior to installation.

PVC conduit per Standard Plan ES-5E, Curb Termination Detail, Type B, shall be installed wherever a loop-wire saw cut crosses an expansion joint or pavement type change.

The sides of the loop saw cut slots shall be vertical and the minimum radius of the slot entering and leaving the circular part of the loop shall be 1½-inches. Slot width shall be a maximum of ¾-inch. Slots of circular loops shall be filled with elastometric sealant.

Loops shall be installed on the same day in which the loop slots are cut. This shall include placement of the loop conductors and sealant.

86-5.02 Pedestrian Push Buttons. Pedestrian push buttons shall be Polara Model BDLM2-G with standard Option A plate marking assembly.

Pedestrian push button signs shall conform to the details shown on the plans, except that the message and symbols shall conform to the California Sign Specification Sheet No. R62D.

86-6 LIGHTING

All equipment, materials, and components for the installation of the street lighting conduit system shall conform to the project plans, specifications and requirements of the City of Culver City.

Street light pole shall be Ameron Model #1-C3-28-J-8, Drawing No. 47102B.

Induction fixtures for street lighting and safety lighting shall be US Lighting Tech, HA-120/240V-250W-4K-01.

All conduit, except crossing shall be behind curb in parkway, when practical.

86-6.065 Internally Illuminated Street Name Signs. New street name signs shall be non-illuminated regulatory signs.

The second paragraph of "Housing," of the fifth paragraph of Section 86-6.065, "Internally Illuminated Street Names" of the Standard Specifications is deleted.

Details of color, style, borders, City logo, and spacing shall conform to the standards established by the City. "Periods" shall not be used on abbreviations. A scale layout for each legend shall be submitted to the Engineer for approval prior to fabrication.

86-6.07 Photoelectric Controls. Photoelectric control shall be Type IV for all intersection lighting.

86-8 PAYMENT

86-8.01 Payment. The second paragraph of Section 86-8.01, "Payment," of the State Standard Specifications, is superseded by the following:

Payment for traffic signal improvements shall be included in the lump-sum price bid for each traffic signal modification (including all loops) as shown on the Plans, and shall include coordination with the phased street improvement work and no additional compensation will be allowed therefor.

Payment for street lighting improvements shall be included in the lump-sum price bid for each street lighting as shown on the Plans, and no additional compensation will be allowed therefor.

---END OF SECTION F (PART TS)

SECTION F – TECHNICAL SPECIFICATIONS**SIGNING, STRIPING, AND PAVEMENT MARKERS**

All equipment, materials, and components for signing and striping, and the installation thereof, shall conform to the Caltrans Standard Plans, latest edition and Standard Specifications, Section 56, "Signs," Section 84, "Traffic Stripes and Pavement Markings," and Section 85, "Pavement Markers," latest edition except as noted in the Special Provisions and on the Plans. These Plans and Specifications are hereinafter referred to as State Standard Plans and State Standard Specifications. Copies of these documents are available from Caltrans, District 7 office at 100 South Main Street, Los Angeles, California 90012 or from Caltrans, 6002 Folsom Boulevard, Sacramento, California 95819, (916) 445-3520.

All materials required for the completion of work as shown on the Plans shall be provided by the Contractor.

SECTION 56 - SIGNS**56-2 ROADSIDE SIGNS**

56-2.03 Construction. Relocated signs shall be installed using existing posts at new locations and shall be set at a minimum 30-inch depth and at a minimum 12-inch square portland cement concrete (PCC). The post depth of the concrete footing shall be sufficient to extend at least 6-inches below the bottom of the posts. ¼-inch expansion paper shall be placed between the sign foundation and sidewalk.

New signs shall be installed using metal posts set at a minimum of 30-inch depth in a minimum 12-inch square PCC, except as specified otherwise, the metal post shall be Schedule 40, galvanized steel pipe with a 2¾-inch outside diameter and a 2½-inch inside diameter. The length of the metal post shall be sufficient to extend from the top of the sign to 30-inches below the top of the concrete footing and provide a 7-foot clearance between the finished grade and the bottom of the sign. The depth of the concrete footings shall be sufficient to extend at least 6-inches below the bottom of the posts. ¼-inch expansion paper shall be placed between the sign foundation and sidewalk.

Marker and delineators shall conform to the provision in Section 82, "Markers and Delineators."

56-2.06 Payment. Payment for signing shall be included in the bid price for signing and striping, and no additional compensation will be allowed therefor.

SECTION 84 - TRAFFIC STRIPES AND PAVEMENT MARKINGS**84-1 GENERAL**

84-1.01 Description. Traffic stripes and pavement markings, shall be THERMOPLASTIC unless otherwise shown on the Plans. Curb markings shall be paint. Contractor shall repaint all curb markings within the project limits at the completion of the construction unless otherwise directed by the Engineer.

84-1.02 Control of Alignment and Layout. The Contractor shall furnish the necessary control points for all striping and markings, and shall be responsible for the completeness and accuracy thereof to the satisfaction of the Engineer.

The Contractor shall establish all traffic striping between these points by stringline or other method to provide striping that will vary less than ½-inch in 50-feet from the specified alignment.

When no previously applied figures, markings, or traffic striping are available to serve as a guide, suitable layouts shall be spotted in advance of the permanent paint application. Traffic lines may be spotted by using a rope as a guide for marking spots every 5-feet, by using a marking wheel mounted on a vehicle, or by any other means satisfactory to the Engineer.

The Contractor shall mark or otherwise delineate the traffic lanes in the new roadway or portion of roadway, or detour before opening it to traffic.

The Contractor shall provide an experienced technician to supervise the location, alignment, layout, dimensions, and application of the paint.

Spotting shall be completed prior to the removal of any existing stripes. Existing stripes and markings shall be removed prior to painting new stripes and markings, but in no case shall any section of street be left without the proper striping for more than 24 hours, or over weekends or holidays.

Existing traffic stripes (including raised pavement markers), pavement legends, and markings that do not conform to the plans shall be removed by wet sandblasting per Section 15-2.02B, "Traffic Stripes and Pavement Markings," and Section 15-2.02C, "Pavement Markers," of the State Standard Specifications.

84-2 THERMOPLASTIC TRAFFIC STRIPES AND PAVEMENT MARKINGS

84-2.02 Materials. Traffic striping shall be thermoplastic including crosswalks, arrows and other pavement legends. Contractor shall apply approved primer/sealer on PCC street surface prior to install the thermoplastic striping and markings.

84-2.05 The installation of traffic stripes includes placement of raised pavement markers when called for on the plans.

Adhesive for raised pavement markers shall be per Section 85, "Pavement Markers." Epoxy shall be the Rapid Set type.

84-2.07 Payment. Payment for striping details, pavement markings, and curb marking shall be included in the price bid for signing and striping, and no additional compensation will be allowed.

84-3 PAINTED TRAFFIC STRIPES AND PAVEMENT MARKINGS

84-3.02 Materials. Paint for curb markings shall be ready-mixed rapid dry type.

Ready-mixed paints shall be suitable for use on either asphalt concrete or portland cement concrete.

84-3.05 Application. Paint shall be applied in two coats.

The second coat of paint shall be applied no less than 24 hours from application of the first coat.

Each coat of paint shall include glass beads.

84-3.07 Payment. Payment for curb markings shall be included in the price bid for signing and striping, and no additional compensation will be allowed.

SECTION 85 – PAVEMENT MARKERS

85-1.06 Placement. Adhesive for raised pavement markers shall be rapid set type epoxy.

Removal of pavement markers shall be per Section 15-2.02C, "Pavement Markers."

85-1.09 Payment. Payment for pavement markers shall be included in the lump-sum price bid for signing and striping, and no additional compensation will be allowed therefor.

END SECTION F (PART SS)

APPENDIX I
PROJECT PLANS

APPENDIX II

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

