

SPECIAL PROVISIONS

FOR

**RECTANGULAR RAPID FLASHING BEACON
INSTALLATION PROJECT**

Federal Project No.: HSIPL-5008(185)
City of Stockton Project No.: WT19004

DATE: November 15, 2021

CITY PROJECT NO. WT19004

The Special Provisions contained herein have been prepared by or under the direction of the following Registered Persons.


REGISTERED CIVIL ENGINEER

10/15/21
DATE

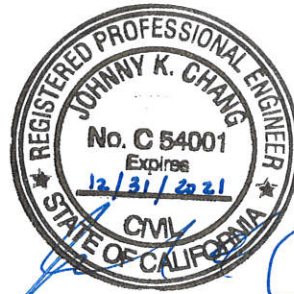


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DIVISION I GENERAL PROVISIONS

SECTION 1 – SPECIFICATIONS AND PLANS

1-1.01 Specifications

The work described herein shall be done in accordance with the current City of Stockton, Department of Public Works Standard Specifications and Plans, and the latest Editions of the State of California, Department of Transportation Standard Specifications and Standard Plans, California MUTCD, as referenced therein, and in accordance with the following Special Provisions. To the extent the California Department of Transportation Standard Specifications implement the STATE CONTRACT ACT, (or certain provisions of the Public Contracts code which are inapplicable to charter cities) they shall not be applicable since the City of Stockton is not subject to said ACT.

In case of conflict or discrepancy between any of the Contract Documents, the order of documents listed below shall be the order of precedence, with the first item listed having the highest precedence.

- a. Contract Change Order (changes last in time are first in precedence)
- b. Addenda to Contract Agreement
- c. Contract Agreement
- d. Permits
- e. Special Provisions
- f. Notice Inviting bids and Instructions to Bidders
- g. Project Drawings
- h. Revised Caltrans Standard Specifications
- i. City of Stockton Standard Plans
- j. Caltrans Standard Specifications
- k. Caltrans Standard Plans

In the event where provisions of codes, safety orders, contract documents, referenced manufacturer's specifications or industry standards are in conflict, the more restrictive and higher quality shall govern.

Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in these specifications, the Special Provisions, or the plans, the Contractor shall apply to the Engineer in writing for such further explanations as may be necessary and shall conform to them as part of the contract. All responses from the Engineer shall be in writing. In the event of any doubt or question arising respecting the true meaning of these specifications, the Special Provisions or the plans, reference shall be made to the Engineer, whose decision thereon shall be final.

The Contractor shall examine carefully the site of the work and the plans and specifications therefore. He/She shall investigate and satisfy himself/herself as to conditions to be encountered, the character, quality and quantity of surface, subsurface materials or obstacles to be encountered, the work to be performed, materials to be

furnished, and as to the requirements of the bid, plans and specifications of the contract.

1-1.02 Plans

The bidder's attention is directed to the provisions in Section 1-1.03, "Definitions", of the Standard Specifications and the Caltrans Specifications.

1-1.03 Terms and Definitions

Wherever in the Standard Specifications, Special Provisions, Notice to Contractors, Proposal, Contract, or other contract documents the following terms are used, the intent and meaning shall be interpreted as follows:

City or Owner -	City of Stockton
Director -	Director of Public Works, City of Stockton
Standard Specifications -	Current City of Stockton, Standard Plans and Specifications, inclusive of all current revisions, and amendments, unless otherwise stated.
Caltrans Specifications -	State of California, Department of Transportation, Current Standard Plans and Specifications inclusive of all current revisions, and amendments, unless otherwise stated.
Laboratory -	City of Stockton Department of Public Works consultant's laboratory
Department -	Department of Public Works, City of Stockton
Engineer -	City Engineer, City of Stockton, acting either directly or through properly authorized Engineer agents and consultants
California MUTCD -	Latest edition of California Manual on Uniform Traffic Control Devices (MUTCD), and any amendments and revisions thereto.
Working Day -	Defined as any eight-hour day, except as follows: Saturdays, Sundays, and City recognized holidays.

SECTION 2 – BIDDING AND BID PROTESTS

Refer to the Instructions to Bidders and Section 2, "Bidding" of the Standard Specification.

In case of Bid protests, attention is directed to the provisions in Section 2-1.51, "Bid Protests" of the Standard Specifications. The party filing the protest must have submitted a bid for the work. A subcontractor of a bidder may not submit a bid protest.

A copy of bid protests are to be sent to the following address:

Attention: Seng Lo

City of Stockton
Public Works Department
22 E. Weber Avenue, Room 301
Stockton, CA 95202

SECTION 3 – AWARD AND EXECUTION OF CONTRACT

The bidder's attention is directed to the provisions in Section 3, "Contract Award and Execution," of the Caltrans Specifications and these Special Provisions.

Bidders and subcontractors are required to be available the day of bid opening to answer questions.

The award of the contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed.

If the City awards the Contract, the award is made to the lowest responsible bidder within 90 days after the day of the bid opening.

SECTION 4 – SCOPE OF WORK

4-1.01 General

Attention is directed to the provisions in Section 4, "Scope of Work", of the Caltrans Specifications, Standard Specifications, and these Special Provisions.

At no time shall construction begin without receiving notice that the contract has been approved by the City Attorney or an authorized representative. The Contractor shall follow the sequence of construction and progress of work as specified in Section 10-1.01, "Order of Work", of these Special Provisions.

The Contractor shall diligently prosecute all work items to completion.

Full compensation for any additional costs occasioned by compliance with the provisions in this section shall be considered as included in the prices paid for the various contract items of work, and no additional work compensation will be allowed therefore.

Bidders will be required to carefully examine these Special Provisions and attachments to judge for themselves as to the nature of the work to be done and the general conditions relative thereto, and the submission of a proposal hereunder shall be considered prima-facie evidence that the bidder has made the necessary investigation and is satisfied with respect to the conditions to be encountered, the character, quantity, and quality of the work performed. For work to be completed, contractors are advised to visit and review the job site prior to the submission of their bid. Bids not presented on the City forms shall be cause for considering the bid as non-responsive.

Bidders must be thoroughly competent and capable of satisfactorily performing the work

covered by the proposal, and when requested shall furnish such statements relative to previous experience on similar work, the plan or procedure proposed, and the organization and the equipment available for the contemplated work, and any other as may be deemed necessary by the City Engineer in determining such competence and capability.

It shall be understood that the Contractor shall be required to perform and complete the proposed work in a thorough and diligent manner, and to furnish and provide in connection therewith all necessary labor, tools, implements, equipment, materials, and supplies. The Contractor is responsible to take all necessary precautions and use best practices in the industry to perform all work require completing the project.

4-1.02 Changes and Extra Work

Attention is directed to the provisions in Section 4-1.05A, "Changes and Extra Work - General", of the Standard Specifications and these Special Provisions.

4-1.03 Differing Site Conditions 23 CFR 635.109

Attention is directed to the provisions in Section 4-1.06, "Differing Site Conditions", of the Caltrans Specifications and the Standard Specifications. Contractor shall notify the Engineer if he/she finds physical conditions differing materially from contract documents.

4-1.04 Cleanup

The Contractor's attention is directed to Sections 4-1.13, "Cleanup", of the Caltrans Specifications.

The Contractor shall conduct and cause all working forces at the site to maintain the site in a neat orderly manner throughout the construction operations. The work shall be conducted in a manner that will control the dust. When ordered to provide dust control, the Contractor shall use water to reduce the dusty conditions all to the satisfaction of the Engineer. During construction, the Contractor shall remove all rubbish and debris as it is generated. Upon completion of the work, the Contractor shall remove all equipment, debris, and shall leave the site in a neat, clean condition all to the satisfaction of the Engineer.

SECTION 5 – CONTROL OF WORK

Attention is directed to the Instruction to Bidders, provisions in Section 5, "Control of Work", of the Caltrans Specifications, Standard Specifications, and these Special Provisions.

5-1.01 Contract Components

Attention is directed to the provision in Section 5-1.02, "Contract Components", of the Caltrans Specifications, Standard Specifications, and these Special Provisions. If a discrepancy is found or a confusion arises, submit a Request for Information (RFI).

5-1.02 Subcontracting

The Contractor shall **physically attach** the FHWA Form 1273 (revised May 1, 2012,

which is included in Instructions to Bidders) to all contracts, subcontracts, and lower tier subcontracts.

Attention is directed to the provisions in Section 5-1.13A, "Subcontracting - General", of the Standard Specifications and Caltrans Specifications.

Pursuant to the provisions of Section 1777.1 of the Labor Code, the Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations web site at: <http://www.dir.ca.gov/DLSE/Debar.html>

5-1.03 Disadvantaged Business Enterprises (DBE)

Attention is directed to the provisions in Section 5-1.13B, "Disadvantaged Business Enterprises" of the Caltrans Specifications and these Special Provisions. Refer to the DBE Instructions to Bidders and Federal Aid Contract Bidders Checklist for form submittal timeline. Also refer to DBE Instructions to Bidders for this project, listed on the City of Stockton's website on the Bid Flash webpage:

<http://www.stocktongov.com/services/business/bidflash/default.html>.

If a DBE is decertified before completing its work, the DBE must notify you in writing of the decertification date. If a business becomes a certified DBE before completing its work, the business must notify you in writing of the certification date. On work completion, complete a Disadvantaged Business Enterprises (DBE) Certification Status Change form. Submit the form within 30 days of Contract acceptance.

Upon work completion, complete a *Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors* form CEM-2402(F) (Exhibit 17-F). Submit within 90 days from the date of Contract acceptance. The City withholds \$10,000 until a satisfactory form is submitted. The City releases the withhold upon submission of the completed form.

The Contractor shall not terminate or substitute a listed DBE for convenience and perform the work with his own forces or obtain materials from other sources without authorization from the City. The City has established a project-specific DBE Goal of **11%**.

5-1.04 Permits

The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work. The Environmental Quality Act (Public Resources Code, Sections 21000 to 21176, inclusive) may be applicable to permits, licenses, and other authorizations which the Contractor must obtain from local agencies in connection with performing the work of the contract. The Contractor shall comply with the provisions of those statutes in obtaining the permits, licenses, and other authorizations, and they shall be obtained in sufficient time to prevent delays to the work. In the event that the City has obtained permits, licenses or other authorizations, applicable to the work, in conformance with the requirements in the Environmental Quality Act, the Contractor shall comply with the provisions of those

permits, licenses, and other authorizations. The following is a non-inclusive list of the required permits and/or licenses:

- Contractor's License. At a minimum the Contractor shall possess at the time of bid and maintain throughout the duration of the contract, a valid California Class A License.
- Business License. Contractor shall possess prior to the execution of the contract and maintain throughout the duration of the contract, a valid City of Stockton business license.
- Survey Monument Preservation Acknowledgement
- City of Stockton Encroachment Permit
- Construction Notification, dust control. The Contractor is responsible for the preparation and submittal of the San Joaquin Valley Air Pollution Control District Construction Notification Form. A copy of the form can be found at the following web site: <http://www.valleyair.org>.
- Construction Water. The Contractor is responsible for obtaining a permit for water from California Water Service, if needed, for construction water obtained from a City hydrant.
- Construction and Demolition Debris Recycling Report. The Contractor must complete the Construction and Demolition (C&D) Debris Recycling Report within sixty (60) days of construction or demolition project completion. The completed form must be accompanied by the official weight tags or receipts verifying the information provided in the report and must be submitted to the City of Stockton Public Works Department, Solid Waste Division, 22 E. Weber Avenue, Room 301, Stockton, CA 95202. Failure to provide the C&D Debris Recycling Report form will result in a 5" withholding of the contract amount.

All costs incurred shall be included in the various bid items and no additional compensation will be made therefore.

5-1.05 Submittals

The following is a list of anticipated submittals for the project. The list is provided to aid the Contractor in determining the scope of work, but is not intended to be all inclusive and additional submittals may be required:

1. Baseline Progress Schedule (Critical Path Method)
2. Temporary Traffic Control Plan (includes Pedestrian Detour Plan)
3. Portland Cement Concrete Mix Design
4. Staging Agreement with private property owners (if applicable)
5. Survey Monument Preservation Acknowledgement
6. City of Stockton Encroachment Permit
7. Lead Compliance Plan
8. Product Submittals
9. Water Pollution Control Program
10. List of Submittals

11. Asphalt Mix Design
12. City's Construction and Demolition Debris Recycling Report
13. Material Submittal
14. Schedule of Values
15. Emergency Contacts/Authorized Representatives

The Contractor shall transmit each submittal to the Engineer for review and approval with the submittal form approved by the Engineer. Submittals shall be sequentially numbered on the submittal form. Resubmittals shall be identified with the original number and a sequential resubmittal suffix letter. The original submittal shall be numbered X. The first resubmittal shall be numbered X-a and so on. Identify on the form the date of the submittal, Contractor, Subcontractor or supplier, pertinent drawing and detail number, and/or special provision number, as appropriate. The Contractor shall sign the form certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and contract documents. Any incomplete submittals will be returned for resubmittal.

Schedule submittals to expedite the Project and deliver to Engineer at the Engineer's office; see Section 10-1.01, "Order of Work", of these Special Provisions.

For each submittal for review, allow 15 calendar days excluding delivery time to and from the Contractor.

Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.

When revised for resubmission, identify all changes made since previous submission.

Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.

Submittals not requested either in the Contract Documents or in writing from the Engineer will not be recognized or processed.

Within 10 calendar days after Notice of Award submit a complete list of all submittals to be submitted and the dates when they will be submitted. **All submittals shall be submitted within 10 calendar days from the date the Notice of Award; otherwise project working days will commence, with or without issuance of the Notice to Proceed.**

Wherever called for in the Contract Documents, or where required by the Engineer, the Contractor shall furnish to the Engineer for review, 1 set, plus one reproducible copy, of each shop drawing submittal. The term "Shop Drawings" as used herein shall be understood to include detail design calculations, shop drawings, fabrication and installation drawings, erection drawings, list, graphs, catalog sheets, data sheets, and

similar items. Whenever the Contractor is required to submit design calculations as part of a submittal, such calculations shall bear the signature and seal of an engineer registered in the appropriate branch and in the state of California, unless otherwise directed.

Normally, a separate submittal form shall be used for each specific item or class of material or equipment for which a submittal is required. Transmittal of a submittal of various items using a single form will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole. A multi-page submittal shall be collated into sets, and each set shall be stapled or bound, as appropriate, prior to transmittal to the Engineer.

Except as may otherwise be indicated herein, the Engineer will return prints of each submittal to the Contractor with their comments noted on the submittal. The Contractor shall make complete and acceptable submittals to the Engineer by the second submission of a submittal item. The City reserves the right to withhold monies due to the Contractor to cover additional costs of the Engineer's review beyond the second submittal.

If a submittal is returned to the Contractor marked "NO EXCEPTIONS TAKEN", formal revision and resubmission of said submittal will not be required.

If a submittal is returned to the Contractor marked "MAKE CORRECTIONS NOTED", formal revision and resubmission of said submittal will not be required.

5-1.06 Job Site Appearance

Attention is directed to Section 4-1.13, "Cleanup", of the Caltrans Specifications, Section 5-1.31, "Job Site Appearance", of the Standard Specifications, and these Special Provisions.

The Contractor shall maintain a neat appearance to the work.

Broken concrete and debris developed during clearing and grubbing shall be disposed of concurrently with its removal. Contractor shall pay to the City of Stockton the sum of Two Hundred Fifty Dollars (\$250) for every calendar day where debris has remained on the job site overnight.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.07 Staging Area

Attention is directed to Section 5-1.36E, "Use of Private Property", of the Standard Specifications and these Special Provisions. The street right-of-way shall be used only for activities that are necessary to perform the required work. The Contractor shall not

occupy the right-of-way or allow others to occupy the right-of-way for material storage or other purposes that are not necessary to perform the required work.

5-1.08 Construction Staking

The Contractor shall be responsible for all construction survey stakes necessary to construct the project in accordance to the lines, grades, sections, stage construction/traffic handling, and traffic signalization, pavement delineation plan described in the plans and specifications.

The Contractor shall employ a Land Surveyor registered in the State of California or an appropriately registered Civil Engineer to perform such survey work. All stakes and marks set by the Contractor's Land Surveyor shall be carefully preserved by the Contractor. In case such stakes and marks are destroyed or damaged, they will be promptly replaced, at the direction of the Engineer at no additional cost to the City. Copies of all field notes and cut sheets shall be provided to the City at no additional cost to the City.

The Contractor shall measure the radius of all existing curb return prior to the start of construction. The Contractor shall be responsible to install the new improvements to match the original radius of each curb return.

Full compensation for conforming to the provisions in this section shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.09 Increased or Decreased Quantities

The City reserves the right to make such alterations, deviations, additions to, or omissions from the plans and specifications, including the right to increase or decrease the quantity of any item or portion of the work or to omit any item or portion of the work, as may be deemed by the Engineer to be necessary or advisable and to require such extra work as may be determined by the Engineer to be required for the proper completion or construction of the whole work contemplated, without adjustment in the unit price as bid.

Attention is directed to Section 4-1.02, "Changes and Extra Work", of these Special Provisions. Any such changes will be set forth in a contract change order, which will specify the work to be done in connection with the change made, adjustment of contract time, if any, and the basis of compensation for such work. A contract change order will not become effective until approved by the City Manager and / or City Council.

5-1.10 Stop Notice Withholds

Section 9-1.16E(4) "Stop Notice Withholds", of the Caltrans Specifications is amended to read as follows:

"The City of Stockton, by and through the Department of Public Works, may at its option and at any time retain out of any amounts due the Contractor, sums sufficient to cover claims, filed pursuant to Section 3179 et seq. of the Code of Civil Procedures."

5-1.11 Rights in Land

All work, equipment parking, or any other activity associated with the project shall be confined to the project limits within the street rights-of-way. The Contractor's use of any other property exclusively in connection with this project shall be by a written agreement between the property owner and the Contractor. A certified copy of any such agreement shall be furnished to the Engineer prior to the use of such property by the Contractor.

Full compensation for conforming to the provisions in this section shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.12 As-Built/Record Drawings

The Contractor shall maintain a complete set of drawings on-site for the purpose of keeping up to date all field modifications. This plan set shall be available for review by the project Inspector and the Engineer. These plans shall be provided to the Inspector after the completion of construction at the Post-Construction Meeting and prior to the final payment. All revisions, modifications, and/or changes shall be marked clearly. Notes and dimensions shall be in red and be clear and legible. These plans will be used by the Engineer to mark up the original plan sheets with the revisions made during construction.

A list shall be maintained of any trees removed during the course of construction by the Contractor or his Subcontractor, identifying the location, size, and species (common name). This list shall be submitted at the Post-Construction Meeting.

Full compensation for furnishing the As-Built/Record Drawings shall be considered included in the prices paid for the various bid items of work, and no additional compensation will be considered therefore.

5-1.13 Notice of Potential Claim

The Contractor shall not be entitled to the payment of any additional compensation for any cause, or for the happening of any event, thing, or occurrence, including any act or failure to act, by the Engineer, unless he has given the Engineer due written notice of potential claim as hereinafter specified. However, compliance with this section shall not be a prerequisite for matters within the scope of the protest provisions under "Changes" or "Time of Completion" or within the notice provisions in "Liquidated Damages". The written notice of potential claim shall set forth the items and reasons which the Contractor believes to be eligible for additional compensation, the description of work, the nature of the additional costs and the total amount of the potential claim. If based on an act or failure to act by the Engineer, written notice for potential claim must be given to the Engineer prior to the Contractor commencing work. In all other cases, written notice for potential claims must be given to the Engineer within 15 days after the happening of the event, thing or occurrence giving rise to the potential claim.

It is the intention of this Section that potential differences between the parties of this Contract be brought to the attention of the Engineer at the earliest possible time so that

appropriate action may be taken and settlement may be reached. The Contractor hereby agrees that he shall have no right to additional compensation for any claim that may be based on any act or failure to act by the Engineer or any event, thing or occurrence for which no written notice of potential claim was filed.

5-1.14 Records

The Contractor shall maintain cost accounting records for the contract pertaining to, and in such a manner as to provide a clear distinction between, the following 6 categories of costs of work during the life of the contract:

- A. Direct costs of contract item work.
- B. Direct costs of changes in character in conformance with Sections 4-1.05B and 9-1.15, "Work-Character Changes", of the Caltrans Specifications.
- C. Direct costs of extra work in conformance with Section 4-1.02, "Changes and Extra Work", of these Special Provisions.
- D. Direct costs of work not required by the contract and performed for others.
- E. Direct costs of work performed under a notice of potential claim in conformance with the provisions in Section 5-1.43, "Potential Claims and Dispute Resolution", of the Caltrans Specifications.
- F. Indirect costs of overhead.

Cost accounting records shall include the information specified for daily extra work reports in Section 5-1.27, "Records", of the Caltrans Specifications. The requirements for furnishing the Engineer completed daily extra work reports shall only apply to work paid for on a force account basis.

The cost accounting records for the contract shall be maintained separately from other contracts, during the life of the contract, and for a period of not less than 3 years after the date of acceptance of the contract. If the Contractor intends to file claims against the Department, the Contractor shall keep the cost accounting records specified above until complete resolution of all claims has been reached.

5-1.15 Noncompliant and Unauthorized Work

Attention is directed to Section 5-1.30, "Noncompliant and Unauthorized Work", of Caltrans Specifications.

5-1.16 Preservation of Property and Facility Preservation

Attention is directed to Section 5-1.36, "Property and Facility Preservation", of Caltrans Specifications and these Special Provisions. Due care shall be exercised to avoid injury to existing highway improvements or facilities, utility facilities, adjacent property, and roadside trees shrubs and other plants that are not to be removed. Roadside trees, shrubs and other plants that are not to be removed, and pole lines, fences, signs, markers and monuments, buildings and structures, conduits, pipelines under or above ground, sewer and water lines, all highway facilities and any other improvements or facilities within or adjacent to the highway shall be protected from injury or damage, and if ordered by the

Engineer, the Contractor shall provide and install suitable safeguards, approved by the Engineer, to protect the objects from injury or damage. If the objects are injured or damaged by reason of the Contractor's operations, the objects shall be replaced or restored at the Contractor's expense.

The facilities shall be replaced or restored to a condition as good as when the Contractor entered upon the work, or as good as required by the specifications accompanying the contract, if any of the objects are a part of the work being performed under the contract. The Engineer may make or cause to be made those temporary repairs that are necessary to restore to service any damaged highway facility. The cost of the repairs shall be borne by the Contractor and may be deducted from any moneys due or to become due to the Contractor under the contract. The fact that any underground facility is not shown upon the plans shall not relieve the Contractor of the responsibility under this Section of these Special Provisions. It shall be the Contractor's responsibility, pursuant thereto, to ascertain the location of those underground improvements or facilities which may be subject to damage by reason of the Contractor's operations.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in protecting or repairing property as specified in this Section shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore.

5-1.17 Pre-construction Survey

Attention is directed to Section 5-1.36D, "Survey Monuments", of the Caltrans Specifications and these Special Provisions. The Contractor shall perform a pre-construction survey of all existing structures, pavements, and other aboveground facilities within the project limits prior to beginning any work, noting their condition by means of photographs and video tapes supplemented by written documentation, where applicable.

Color photographs shall be taken with a digital camera at locations that are appropriate to show pre-existing conditions. Each photograph shall show the date and time the photograph was taken and clearly labeled showing the location, viewing direction, and any special features noted. Digital files of each photograph and a copy of videotapes shall be submitted to the Engineer.

Preserving and Perpetuating Survey Monuments

Action by:

Contractor's Land Surveyor

Action:

1. Identifies existing survey monuments.
2. Lists all existing survey monuments.
3. Ties out / performs construction staking of survey monuments.
4. Indicates survey monuments on construction plans.
5. Complete and submit the Survey Monument Preservation Acknowledgement form.
6. Files all pre-construction Corner Records or

Records of Survey with San Joaquin County. The Corner Records or Record of Survey will show monuments within the area of construction reasonably subject to removal or disturbance not shown on a recent record document (recent record document is a filed survey map or corner record document completed with acceptable modern survey methods that includes survey ties from monuments within the construction area to monuments outside of the construction area).

Contractor

7. Submits copies of pre-construction Corner Records or Records of Survey filed with San Joaquin County to City Engineer/Project Manager
8. Preserves/perpetuates all survey monumentation during construction, including, but not limited to, those listed.
9. Restores survey monuments disturbed by construction.

Contractor's Land Surveyor,

10. Files all post-construction Corner Records and Records of Survey with San Joaquin County for all monuments disturbed during construction
11. Submits copies of Corner Records or Records of Survey filed with San Joaquin County to City Engineer/Project Manager.

Monuments set shall be sufficient in number and durability and efficiently placed so as not to be readily disturbed, to assure, together with monuments already existing, the perpetuation or facile reestablishment of any point or line of the survey.

When monuments exist that control the location of subdivisions, tracts, boundaries, roads, streets, or highways, or provide horizontal or vertical survey control, the monuments shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer prior to the time when any streets, highways, other rights-of-way, or easements are improved, constructed, reconstructed, maintained, resurfaced, or relocated, and a corner record or record of survey of the references shall be filed with the county surveyor. They shall be reset in the surface of the new construction, a suitable monument box placed thereon, or permanent witness monuments set to perpetuate their location if any monument could be destroyed, damaged, covered, or otherwise obliterated, and a corner record or record of survey filed with the county surveyor prior to the recording of a certificate of completion for the project. Sufficient controlling monuments shall be retained or replaced in their original positions to enable property, right-of-way and easement lines, property corners, and subdivision and tract boundaries to be reestablished without devious surveys necessarily originating on monuments differing from those that currently control the area. It shall be the responsibility of the governmental agency or others performing construction work to provide for the monumentation required by this section. It shall be the duty of every land surveyor or civil

engineer to cooperate with the governmental agency in matters of maps, field notes, and other pertinent records. Monuments set to mark the limiting lines of highways, roads, streets or right-of-way or easement lines shall not be deemed adequate for this purpose unless specifically noted on the corner record or record of survey of the improvement works with direct ties in bearing or azimuth and distance between these and other monuments of record.

The decision to file either the required corner record or a record of survey shall be at the election of the licensed land surveyor or registered civil engineer submitting the document.

Full compensation for pre-construction survey shall be included in the contract price for the various items of work involved, and no additional compensation will be allowed therefore.

5-1.18 Cooperation

Should construction be under way by other forces or by other contractors within or adjacent to the limits of the work specified or should work of any other nature be under way by other forces within or adjacent to those limits, the Contractor shall cooperate with all the other contractors or other forces to the end that any delay or hindrance to their work will be avoided. The right is reserved to perform other or additional work at or near the site (including material sources) at any time, by the use of other forces. When 2 or more contractors are employed on related or adjacent work, or obtain materials from the same material source, as provided in Section 6, "Control of Materials", of the Caltrans Specifications, each shall conduct their operations in such a manner as not to cause any unnecessary delay or hindrance to the other. Each Contractor shall be responsible to the other for all damage to work, to persons or property caused to the other by their operations, and for loss caused the other due to unnecessary delays or failure to finish the work within the time specified for completion.

The Contractor shall protect from damage any utility facilities that are to remain in place, be installed, relocated, adjusted, or otherwise rearranged.

The Contractor should note that the following utility companies and other agencies maintain facilities within the project area and may have forces in the project area or adjacent thereto:

- PG&E
- AT&T and other phone companies
- City of Stockton Municipal Utilities Department
- Comcast Cable Water Service Company
- California Water Service Company

The Contractor shall verify the horizontal and vertical locations of all existing utilities prior to start of construction. The Contractor shall be responsible for the repair and replacement of these or any other facilities damaged during construction. A minimum of forty-eight

(48) hours or two (2) working days prior to beginning construction, the Contractor shall notify Underground Services Alert (USA), telephone (800) 227-2600, to have existing facilities marked in the field.

The Contractor shall take care to avoid working in any area of the project, which may conflict with the work underway by the utility companies. The Contractor's construction schedule shall be prepared to avoid utility work.

The Contractor shall cooperate completely with all utility companies having facilities within the project area.

Attention is directed to the possible existence of underground facilities not known to the City or in a location different from that which is shown on the plans or in these Special Provisions. The Contractor shall take steps to ascertain the exact location of all underground facilities prior to doing work that may damage such facilities or interfere with their service.

Payment for complying with this Special Provision shall be included in the various items of work, and no additional compensation will be allowed therefore.

SECTION 6 – CONTROL OF MATERIALS

Attention is directed to the provisions in Section 6, "Control of Materials", of the Standard Specifications and these Special Provisions.

6-1.01 City-Furnished Materials

There are no City-Furnished material for this project.

6-1.02 State-Furnished Materials

Blank.

6-1.03 Buy America Requirements

Attention is directed to the "Buy America" requirements of the Surface Transportation Assistance Act of 1982 (Section 165) and the regulations adopted pursuant thereto. Furnish steel and iron materials to be incorporated into the work with certificates of compliance. Steel and iron materials must be produced in the U.S. except:

1. Foreign pig iron and processed, pelletized, and reduced iron ore may be used in the domestic production of the steel and iron materials [60 Fed Reg 15478 (03/24/1995)];
2. If the total combined cost of the materials does not exceed the greater of 0.1 percent of the total bid or \$2,500, materials produced outside the U.S. may be used.

Production includes:

1. Processing steel and iron materials, including smelting or other processes that

alter the physical form or shape (such as rolling, extruding, machining, bending, grinding, and drilling) or chemical composition;

2. Coating application, including epoxy coating, galvanizing, and painting, that protects or enhances the value of steel and iron materials.

6-1.04 Quality Assurance Program

Refer to Instruction to Bidders.

6-1.05 Testing

Testing of materials and work shall conform to the provisions in Section 6, "Control of Materials", of the Caltrans Specifications and these Special Provisions. Whenever the provisions of Section 6 of the Caltrans Specifications refer to tests or testing, it shall mean tests to assure the quality and to determine the acceptability of the materials and work. Contractor's attention is directed to the City's Quality Assurance Program in Instructions to Bidder Package.

The Engineer will deduct the costs for testing of materials and work found to be unacceptable, as determined by the tests performed by the Department and the costs for testing of material sources identified by the Contractor which are not used for the work, from moneys due or to become due to the Contractor. The amount deducted will be determined by the Engineer.

Full compensation for conforming to the provisions in this section shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

6-1.06 Pre-qualified and Tested Signing and Delineation Method

The California Department of Transportation maintains the list of Prequalified and Tested signing and delineation materials and products. Approval of pre-qualified and tested products and materials shall not preclude the Engineer from sampling and testing any of the signing and delineation materials or products at any time.

None of the listed signing and delineation materials and products shall be used in the work unless such material or product is listed on the California Department of Transportation's List of Approved Traffic Products. A Certificate of Compliance shall be furnished as specified in Section 6, "Control of Materials", of the Caltrans Specifications for signing and delineation materials and products. Said certificate shall also certify that the signing and delineation material or product conforms to the pre-qualified testing and approval of the California Department of Transportation, Division of Traffic Operations, and was manufactured in accordance with the approved quality control program.

For those categories of materials included on the list of Prequalified and Tested Signing and Delineation Materials, only those products shown within the listing may be used in the work. Other categories of products, not included on the list of Prequalified and Tested Signing and Delineation Materials, may be used in the work provided they conform to the

requirements of the Standard Specifications.

Materials and products will be considered for addition to said approved pre-qualified and tested list if the manufacturer of the material or product submits to the Division of Traffic Operations of the California Department of Transportation a sample of the material or product. The sample shall be sufficient to permit performance of all required tests. Approval of such materials or products will be dependent upon a determination as to compliance with the Specifications and any test the California Department of Transportation may elect to perform. The list of approved pre-qualified and tested signing and delineation materials and products can be found at the California Department of Transportation Web Site:

<https://dot.ca.gov/-/media/dot-media/programs/engineering/documents/mets/signing-and-delineation-materials-a11y.pdf>

SECTION 7 – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-1.01 General

Attention is directed to Section 7, "Legal Relations and Responsibility to the Public", of the Caltrans Specifications, Standard Specifications, and these Special Provisions.

7-1.02 Maintaining Public Convenience and Safety

Attention is directed to Sections 7-1.03, "Public Convenience", 7-1.04, "Public Safety", and Section 12, "Temporary Traffic Control", of the Caltrans Specifications. Attention is also directed to Part 6 of the California MUTCD and Sections 7-1.03, "Public Convenience", 7-1.04, "Public Safety", of the Standard Specifications, and Section 12-1.01, "Maintaining Traffic" of these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in said sections and Part 6 of the California MUTCD.

7-1.03 Public Convenience

Contractor's attention is directed to the Section 12-1.01, "Maintaining Traffic", of these Special Provisions, Section 7-1.03, "Public Convenience", of the Standard Specifications, and these Special Provisions.

The Contractor shall notify San Joaquin Regional Transit District (SJRTD) a minimum of five (5) working days prior to beginning work. The Contractor shall coordinate with SJRTD if any bus stops and bus routes are affected.

The Contractor shall inform the City Fire Department, City Police Department, City Traffic Department, Municipal Utilities Department (MUD), and all affected utilities no later than three (3) working days before work is to begin.

The Contractor shall provide the City with the name and telephone number (business, home and mobile) of three (3) representatives available at all times during the duration of the contract. Said names and telephone numbers shall be provided to the City of Stockton

Public Works, Fire, and Police Departments.

The Contractor shall circulate printed form letters, approved by the Engineer, explaining the project to be done and the length of time inconvenience will be caused by the project and deliver same to the residents and businesses to be affected at least three (3) working days before work is to commence on their street. In addition, the Contractor shall provide temporary "No Parking" signs posted three (3) working days in advance of the work. Such signs shall be placed no further than fifty (50) feet apart. The additional "No Parking" signs shall be removed upon completion of the work and the opening of the street to traffic. It shall be the Contractor's responsibility to remove any vehicles obstructing his operations.

Full compensation for conforming to the provisions in this section shall be included in the prices paid for various bid items, and no additional compensation will be made therefore.

7-1.04 Public Safety

Contractor's attention is directed to the Section 12-1.01, "Maintaining Traffic", of these Special Provisions, Section 7-1.04, "Public Safety", of the Standard Specifications, and these Special Provisions. Nothing in the specifications voids the Contractor's public safety responsibilities.

All safety devices, their maintenance, and use shall conform to the latest requirements of OSHA and shall conform to the applicable provisions of the Part 6, "Temporary Traffic Control", of the California MUTCD. It shall be the complete responsibility of the Contractor to protect persons from injury and to avoid property damage. Adequate barricades, construction signs, flashers, and other such safety devices, as required, shall be placed and maintained during the progress of the construction work, until the project is completed. Whenever required, flaggers shall be provided to control traffic.

The Contractor shall provide for the proper routing of vehicles and pedestrian traffic in a manner that will hold congestion and delay of such traffic to practicable minimum by furnishing, installing, and maintaining all necessary temporary signs, barricades, and other devices and facilities, as approved by the City Traffic Engineer. As the work progresses, the Contractor shall relocate, subject to the City Traffic Engineer's approval, such devices and facilities as necessary to maintain proper routing. The Contractor shall notify the City Traffic Engineer a minimum of three (3) working days prior to the relocation of any traffic control devices.

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

Full compensation for furnishing, installing, moving, and removing of all necessary traffic control devices including, but not limited to, signing, striping, barricades, and flagging shall be included in the bid item for "Construction Area Signs and Traffic Control System",

as shown on the bid schedule, and no additional compensation will be allowed therefore.

7-1.05 Indemnification and Insurance

Attention is directed to Section 7-1.05, "Indemnification," and Section 7-1.06, "Insurance", of the Standard Specifications and the Instruction to Bidders for this project.

Indemnification and Insurance shall conform to an Exhibit, which is attached to this project bid package and incorporated by this reference.

Contractor shall at all times maintain at Contractors' expense liability insurance coverage. Contractor shall provide thirty (30) days written notice to the City prior to canceling or changing the terms of such coverage. Contractor shall comply with the insurance requirements set forth by the City's Risk Manager.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

7-1.06 Federal Laws for Federally-Aid Contracts (Form 1273)

Attention is directed to Section 7-1.11 "Federal Laws for Federal-Aid Contracts" of the Caltrans Specifications and the Instruction to Bidders for this project.

Prime contractors and any lower-tier subcontractors with subcontracts in excess of \$10,000 must complete form FHWA-1391 report for work performed during **the last PAY PERIOD of July**. Prime contractors are subject to a progress pay deduction (minimum amount of \$1,000) for failure to submit form FHWA-1391s, including failure to submit form FHWA-1391s for applicable subcontractors, or if the report they submit are unsigned, illegal, or incomplete.

7-1.07 Lead Compliance Plan

Attention is directed to Section 7-1.02K(6)(j)(ii), "Lead Compliance Plan", of the Caltrans Specifications.

A lead compliance plan for worker health and safety must be prepared by a Certified Industrial Hygienist (CIH) and must be submitted and implemented prior to the start of construction activities. This plan is needed in order to comply with California Occupational Safety and Health Administration (Cal OSHA) regulations addressing aeriably deposited lead for projects involving soil disturbance, and to minimize worker exposure to lead chromate or lead while handling paint and thermoplastic residue.

Allow 7 days for the Engineer's review. Obtain authorization for the plan before starting any activity that presents the potential for lead exposure.

The plan shall include items listed in Title 8 CA of Regs § 1532.1(e)(2)(B). Obtain authorization for the plan before starting any activity that presents the potential for lead exposure. Contractor shall provide a safety training program to employees who have no

prior training, including City employees. The safety training program shall comply with Title 8 CA Code of Regs § 1532.1 and the provided lead compliance plan. Contractor shall submit copies of air monitoring or job site inspection reports made by or under the direction of the CIH under Title 8 CA Code of Regs § 1532.1 within 10 days after the date of monitoring or inspection.

Supply personal protective equipment, training, and washing facilities required by your lead compliance plan for five City employees.

Full compensation for conforming to the requirements of this section shall be considered as included in the bid item for "Remove Traffic Striping and Pavement Markings", and no additional compensation will be allowed therefore.

SECTION 8 – PROSECUTION AND PROGRESS

Attention is directed to the provisions in Section 8, "Prosecution and Progress", of the Standard Specifications and these Special Provisions.

8-1.01 Time of Completion

Attention is directed to the provisions in Sections 8-1.05, "Time", and 8-1.07, "Delay" of the Standard Specifications and these Special Provisions.

The contract for the performance of the work and the furnishing of materials shall be executed within ten (10) days after the approval thereof by the City Attorney. The City will issue the Notice to Proceed following execution of the contract.

Submittals shall be delivered to the Engineer within thirty (30) calendar days of execution of contract. Contract shall not start any work on the job site until the Engineer approves the submittals. Refer to section 5-1.05, "Submittals", of these Special Provisions. The Contractor shall only enter the jobsite prior to approval of the above submittals for purposes of measuring field dimensions and locating utilities.

The Contractor shall diligently prosecute the contract work to completion within twenty (20) working days. The days to finish the punch list, provided by the City, are included in the Original Working Days.

Notice to Proceed will not be issued until all complete submittals have been reviewed at least once. Correction indicated on submittals shall be considered as changes necessary to meet the requirements of the Contract Documents and shall not be taken as the basis for changes to the contract requirements. The Engineer's review of Contractor Shop Drawing submittals shall not relieve the Contractor of the entire responsibility for the correctness of details and dimensions. The Contractor shall assume all responsibility and risk for any misfits due to error in Contractor submittals. The Contractor shall be responsible for the dimension and the design of adequate connections and details.

Prior to Notice to Proceed, the Contractor shall indicate in writing when all the traffic signal hardware and equipment, which makes the traffic signal and communication system

operational, will be delivered to the project site. Based on the indicated delivery date, the date to commence the work will be issued by the City. If by any unforeseen action, the established delivery date cannot be made, the Contractor shall provide the City with a letter from the manufacturer indicating the reason why the delivery date cannot be met. The letter shall also indicate the revised delivery date. The City reserves the right to either accept the reason or to reject it. A letter from vendor is not acceptable.

Should the Contractor choose to work on a Saturday, Sunday, or on a holiday recognized by the labor unions, the Contractor shall reimburse the City of Stockton the actual cost of engineering, inspection, testing, superintendent, and/or other overhead expenses, which are directly chargeable to the contract. Should such work be undertaken at the request of the City, reimbursement will not be required.

8-1.02 Liquidated Damages

Attention is directed to the provisions in Section 8-1.10, "Liquidated Damages", of the Caltrans Specifications, Standard Specifications, and these Special Provisions.

The Contractor shall pay liquidated damages to the City of Stockton in the amount of two thousand and nine hundred dollars (**\$2,900**) per day for each and every calendar day that the work, with the exception of the maintenance period, remains incomplete after the expiration of the contract working days specified in these Special Provisions.

Full compensation for any costs required to comply with the provisions in this section shall be considered to be included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefore.

8-1.03 Progress Schedule

GENERAL

Attention is directed to Section 8-1.02, "Schedule", of the Caltrans Specifications.

Nothing in these special provisions shall be construed as relieving the Contractor from the responsibilities specified in Section 7, "Legal Relations and Responsibility", of the Standard Specifications.

A. SUMMARY

1. Contractor shall produce required Progress Schedules, including the initial, original, and monthly updates (described below), required under this Contract in accordance with the requirements of this Section.
2. Contractor shall develop a weekly bar chart schedule with a three week look ahead. The Contractor will attend a weekly construction meeting with the Engineer and the City. The look ahead schedule, Requests for Information (RFI), Field Order Directives (FOD) and general management issues relating to the work being conducted will be discussed during this weekly meeting.
3. Contractor shall facilitate monthly Progress Schedule Update Meetings.
4. Upon Notice of Award of Contract, Contractor shall immediately commence

development of the Original Progress Schedule to ensure compliance with requirements of this Section.

5. Contractor's obligations under this Section are hereby deemed material obligations justifying the City's remedies for default if Contractor fails to perform. Nothing in this Section or the lack of an express statement that any other contract Document provision is or is not material shall be considered in determining whether any such other provision is material.
6. Contractor shall employ competent scheduling personnel, or a schedule consultant, with experience performing scheduling.

B. GENERAL

1. Progress Schedule shall be the basis for monitoring and evaluating job progress, payment requests, and time extension requests.
2. By submitting a bid, Contractor represents it has reviewed the work required by the Contract Documents, including, but not limited to, the availability of materials, labor, equipment and supplies, constraints upon Contractor's own forces and resources, reasonable anticipated weather conditions and other factors, and agrees that the Contract Time and Liquidated Damages are reasonable under the circumstances.
3. City or City's representative may review the Progress Schedules for compliance with the Contract Documents. If the Contractor's Progress Schedule does not comply with the requirements of the Contract Documents, it may be returned to the Contractor for revisions necessary to bring the Progress Schedule into compliance with the Contract Documents. City's review or acceptance of the Progress Schedule shall not relieve Contractor of its responsibility for errors therein and shall not be regarded as a waiver of such errors by City. Contractor shall not be entitled to any claim or right of delay, acceleration, or other impact upon Contractor that may occur as a result of such errors.
4. Should Contractor fail or refuse for any reason, to properly and timely submit to Engineer, Contractor's Progress Schedule, Contractor agrees it thereby waives any claim it may have then or that may arise in the future for delay, acceleration, impact, or the like, no matter how characterized.
5. By submission of its Progress Schedule to Engineer for review, Contractor represents that it has reviewed the Progress Schedule with each of its subcontractors, and each subcontractor has agreed that as to the subcontractor's portion of the work, the Progress Schedule is reasonable, and further that each subcontractor will devote the resources necessary to complete its portion of the work as shown on the Progress Schedule.
6. Failure of Progress Schedule to include any element of the Work or any inaccuracy in Progress Schedule will not relieve Contractor from any responsibility for accomplishing the Work in accordance with the Contract.

City's acceptance of Progress Schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests, and delays and shall not, in any manner, impose a duty of care upon the City, or act to relieve Contractor of its responsibility for means and methods of construction.

7. Updating, changing, or revising of any schedule or narrative submitted to Engineer by Contractor under this Contract, or Engineer's review or acceptance of any such schedule or narrative shall not have the effect of amending or modifying, in any way, the contractual completion date or milestone dates or of modifying or limiting, in any way, Contractor's obligations under this Contract.
8. Failure by Contractor to include any element of work required for performance of the Work on the detailed construction schedule shall not excuse Contractor from completing all Work required within the Contract Time.

C. PROGRESS SCHEDULE FORMAT AND FLOAT

1. Contractor Original Progress Schedule, and all updates or revisions thereto, shall:
 - a. Use the Critical Path Method (CPM), time-scaled network diagram showing continuous flow from left to right, computer generated with a software program equal to Microsoft Project. Include copies of the complete Progress Schedule on computer readable compact disks.
 - b. Demonstrate adequate planning for the work including a practical plan to complete the work within the Contract Time.
 - c. Break up the Work into activities with durations of no more than 15 days, or as deemed acceptance by City. Project calendars shall reflect the nature of the activity to which they are assigned. Contractor shall provide a brief description of each work activity in a separate written document.
 - d. Identify all major work activities, including but not limited to, equipment, materials, building elements, items requiring City or Engineer's prior approval, submittals and review of submittals, procurements, off-site fabrication, system test dates, scheduled overtime, dates of City furnished items, dates for access to specific sites, dates for City or third party furnished utilities, connection and relocation of existing utilities, commissioning periods required by the specifications, punch list correction, and connection to and/or penetration of existing structures.
 - e. Indicate planned mobilization of materials, equipment, and work force.
 - f. Indicate planned sequence of early operations of procurement, including submittals.
 - g. Incorporate a minimum of ten (10) working days of City's review of each submittal.

- h. Indicate all dependencies and logic between activities.
 - i. Identify all work activities, which constitute the critical path.
 - j. For each activity, show early start, late start, early finish, late finish, durations measured in days, float, predecessor, and successor activities, and planned workday/week for the activity.
 - k. Incorporate milestone completion dates.
 - l. Not indicate the completion of the work required under these Contract Documents later than the contractual completion date set forth in these Contract Documents. If the Progress Schedule indicates a completion date sooner than the contractual completion date set forth in Section 8, "Prosecution and Progress," of these Special Provisions, then Contractor shall not be entitled to any right for delay, acceleration, or other impact that prevents Contractor from completing the work earlier than the contractual completion date set forth in these Contract Documents.
2. "Critical" work activities are those which if delayed or extended, will delay the scheduled completion of the total of the Work required under these Contract Documents. All other work activities are not "critical" and have greater float than the critical work activities. Float is the amount of time that a work activity that is not "critical" can be delayed or extended without delaying the completion of the total of the work required under these Contract Documents. The critical path calculation method which generates critical work activities for all submitted schedules shall be consistent throughout the project and utilize Primavera System "retained logic" option throughout the project or "progress override" throughout the project. Notwithstanding the calculation method shall always utilize Primavera Systems "forward and backward pass" option for automatic calculation.
 3. If the Progress Schedule indicates a completion date sooner than the contractual completion date and has been accepted by City, the Progress Schedule is considered to have Project Float. The Project Float is defined as the time between the scheduled completion of the Work and the contractual completion date.
 4. Float (including Project Float) Ownership: Neither City nor Contractor owns float. The Project owns the Float in that Float is a resource available to both the City and Contractor. As such, liability for delay of the contractual completion date rests with the party whose actions, last in time, actually cause delay to the contractual completion date.
 - a. For example, if Party A is responsible for delaying an activity for ten days and if the amount of float for that activity is fifteen days, then Party A is not responsible for delaying the project as the contractual completion date would be unaffected.
 - b. However, if subsequently, Party B delays the same activity for eight days then Party B is responsible for delaying the project three days, the difference between the remaining float and the amount of delay.

D. ORIGINAL PROGRESS SCHEDULE

1. Contractor shall submit the Original Progress Schedule for review at the Preconstruction Meeting and it shall serve as Contractor's Progress Schedule for up to 30 days after the date the Contract has been approved by City.
2. The Original Progress Schedule must indicate the Contractor's detailed plan for the Work to be completed in the first 30 days of the Contract and shall include details of planned mobilization of plant and equipment; sequence of early operations; submittal activities; and procurement of materials and equipment. Show the remainder of all Work beyond 30 days in summary form. The Original Progress Schedule must be accepted by the Engineer prior to beginning any Work other than mobilization activities. Acceptance of the Original Progress Schedule shall be limited to conformance with sequencing, coordination and milestone requirements of the Contract Documents. Contractor shall make corrections necessary to obtain acceptance of the Engineer and to comply with Contract Documents requirements and shall adjust schedule to incorporate any missing information requested. Contractor shall resubmit the Original CPM Schedule if requested by the Engineer. The Original Schedule shall represent the Contractor's detailed plan for the completion of the Work including all administrative, submittal and procurement activities. The Original Progress Schedule and all updates shall comply with all requirements and standards of this Section.

E. MONTHLY PROGRESS SCHEDULE UPDATES

1. Following acceptance of Contractor's Original Progress Schedule, Contractor shall monitor progress of Work and adjust the Progress Schedule each month to reflect actual progress and any anticipated changes to planned activities.
 - a. Timely receipt by City of each required Monthly Progress Schedule Update in full compliance with all of these Contract Documents shall be a condition precedent to City's obligation to pay or request payment for Contractor, sums due under this Contract.
 - b. Each Progress Schedule Update submitted shall be complete, including all information requested for the Original Progress Schedule submittal and all information under this Section.
 - c. Each Progress Schedule Update shall continue to show all Work activities including those already completed. These completed activities shall reflect "as built" information by indicating when activities were actually started and completed, and Contractor warrants the accuracy of as-built information as shown.
 - d. Each Progress Schedule Update should be submitted with three copies and the electronic version on or before the 15th of each month.

- e. Contractor shall make corrections to Progress Schedule Update necessary to comply with Contract requirements and shall adjust Progress Schedule Update to incorporate any missing information requested by City. Contractor shall resubmit Progress Schedule if requested by City.
2. Contractor shall meet with City to review and discuss each Progress Schedule (i.e. Initial, Original and monthly updates) within one week after each Progress Schedule has been submitted to City. This meeting will occur monthly and be facilitated by the Contractor.
 - a. At this meeting, at a minimum, the following items will be reviewed: percent complete for each activity; Time Impact Evaluations (TIEs) for Change Orders (see below) and Time Extension Requests; actual and anticipated activity sequence changes; actual and anticipated duration changes; and actual and anticipated Contractor delays.
 - b. These meetings are considered a critical component of overall Progress Schedule submittal; Contractor shall have appropriate personnel attend. At a minimum, Contractor's General Superintendent and Scheduler shall attend these meetings.
 - c. Contractor should plan on the meeting taking no less than two hours.
 3. Within five days after Progress Schedule meeting, Contractor shall submit the revised Progress Schedule.

F. LOOK AHEAD SCHEDULE

Contractor shall produce a three-week "look ahead," detailed daily bar chart schedule every week for discussion during the weekly construction meeting. The three-week "look ahead" shall be a snapshot of the Progress Schedule showing the activities to be worked on during the current and following weeks. These "look ahead" schedules shall be derived directly from the most recent Progress Schedule update which has been updated to include actual progress in the interim period and shall reflect an accurate plan for the period depicted. Total Float for each activity on the "look ahead" schedules shall be clearly shown. The City will utilize the "look ahead" schedules to assess Contractor's short-term progress and plan its own activities. The three-week "look ahead" schedule shall be reviewed at all the weekly meetings.

G. PROGRESS SCHEDULE REVISIONS

1. Reflecting actual progress on the Progress Schedule Updates is not considered a "revision" to the Progress Schedule. However, revisions to activity durations and sequences are a part of the scheduling process.
2. To reflect revisions to the Progress Schedule, Contractor shall provide City with a written narrative that includes a full description and reasons for each revision. For revisions affecting the sequence of Work, Contractor shall

provide a schedule diagram that compares the original sequence to the revised sequence of Work. Contractor shall provide the written narrative and schedule diagram for revisions three days in advance of the monthly Progress Schedule update meeting. Clearly show and discuss any changes in the critical path.

3. Progress Schedule revisions shall not be incorporated by Contractor into any Progress Schedule Update until City has reviewed and accepted the revisions. City may request further information and justification for Progress Schedule revisions. Contractor shall provide City with a complete written narrative response to these requests within three days.
4. If City does not accept Contractor's revisions, and Contractor disagrees with City's position, Contractor has seven days from receipt of City's letter rejecting revisions to provide a written narrative providing full justification and explanation for the revision. Contractor's failure to respond in writing within the seven days of City's written rejection of a Progress Schedule revision shall be contractually interpreted as acceptance of City's position, and Contractor waives its rights to subsequently dispute or file a claim regarding City's position. If Contractor files a timely response as provided in this paragraph, and the parties are still unable to agree, Contractor's sole right shall be to file a claim as provided in Section 7-1.07, "Legal Actions Against the Department", of the Standard Specifications.
5. At City's discretion, Contractor can be required to provide Subcontractor certifications of performance regarding proposed Progress Schedule revisions affecting said Subcontractors.

H. RECOVERY SCHEDULE

1. If, in the opinion of the City, the Contractor is 21 days behind schedule for an individual milestone completion date or for the contractual completion date, the Contractor shall submit to the City, within seven days of City notification, the proposed revisions to recover the lost time. As part of this submittal, Contractor shall provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, Contractor shall provide a schedule diagram comparing the original sequence to the revised sequence of Work. If requested by the City, the Contractor shall show the intended critical path; secure appropriate Subcontractor and supplier consent to the recovery Schedule; submit a narrative explaining trade flow and construction flow duration changes, added/deleted activities, critical path changes and identify all near critical paths and man hour loading assumptions for major Subcontractors.
2. The revisions shall not be incorporated into any Progress Schedule Update until City has reviewed and accepted the revisions.
3. If City does not accept Contractor's revisions, City and Contractor shall follow the procedures in paragraphs G(3), G(4) and G(5) of this Section.

4. At City's discretion, Contractor may be required to provide Subcontractor certifications for revisions affecting said Subcontractors.

I. TIME IMPACT EVALUATION (TIE) FOR CHANGE ORDERS AND OTHER DELAYS

1. When Contractor is directed to proceed with changed work, Contractor shall prepare and submit, within 14 days from the direction to proceed, a TIE that includes both a written narrative and a schedule diagram depicting how the changed work affects other schedule activities. The schedule diagram shall show how Contractor proposes to incorporate the changed work in the Progress Schedule, and how it impacts the current Progress Schedule Update; critical path or otherwise. Contractor is also responsible for requesting time extensions based on the TIEs impact on the critical path. The diagram shall be tied to the main sequence of scheduled activities to enable City to evaluate the impact of changed work to the scheduled critical path.
2. Comply with the requirements of paragraph I(1) of this Section for all types of delays such as, but not limited to, Contractor/Subcontractor delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.
3. All costs associated with the preparation of TIEs and the process of incorporating TIEs into the current Progress Schedule update, shall be considered included in the markup percentages identified in the Caltrans Standard Specifications for Change Orders. Contractor shall provide City with four copies of each TIE.

J. TIME EXTENSIONS

- 1 Contractor is responsible for requesting time extensions for time impacts that, in the opinion of Contractor, impact the critical path of the current Progress Schedule Update. Notice of time impacts shall be given to the Engineer.
- 2 Where an event for which City is responsible impacts the contractual completion date, Contractor shall, at City's request, provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. Also include a detailed cost breakdown of the labor, equipment, and material Contractor would expend to mitigate City-caused time impact. Submit mitigation plan to City within 14 days from the City's request to prepare the plan.
- 3 Failure to request time extensions, provide TIE, or provide the required mitigation plan will result in Contractor waiving its rights to a time extension and cost to mitigate the delay.
- 4 No additional Contract Time will be granted under the Contract Documents for cumulative effect of changes.
- 5 City will not be obligated to consider any time extension request unless requirements of Contract Documents are complied with.

- 6 Failure of Contractor to perform in accordance with the current Progress Schedule Update shall not be excused by submittal of time extension requests.
- 7 Notwithstanding any other provision of this Section, if Contractor does not submit a TIE within the required 14 days for any issue, Contractor hereby agrees that Contractor does not require a time extension for that issue.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for developing and providing the progress schedule, updates, and attending weekly construction meetings shall be included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed, therefore.

8-1.04 Federal Lobbying Restrictions

Refer to Instructions to Bidders.

8-1.05 Pre-Construction Meeting

The City of Stockton Public Works Department will schedule a pre-construction meeting with the Contractor following award of the contract and prior to commencing work (Seng Lo at 209-937-8389). The City will issue the Notice to Proceed following execution of the Contract. This meeting will be held in the City of Stockton, Public Works Department.

8-1.06 Post-Construction Meeting

The Contractor shall attend a post-construction meeting that will be arranged by the Public Works Department (Seng Lo at 209-937-8389) after completion of work and prior to acceptance and final payment. The project Design Engineer and the project Inspector will also attend this meeting. The purpose of the meeting will be to discuss the project and any related issues that can help improve future Public Works construction projects. This meeting will be held in the City of Stockton, Public Works Department.

SECTION 9 – PAYMENT

All measurements and payments for this work shall conform to all applicable provisions on Section 9, "Measurement and Payment", of the Standard Specifications, Instructions to Bidders, and these Special Provisions.

No partial payment will be made for any materials that are furnished on hand, but not yet installed or incorporated in the work. The work to be performed consists of furnishing all labor, materials, tools, transportation, supplies, equipment, appurtenances, fuel, and power, unless specifically excepted, necessary, or required to install RRFB assemblies, concrete sidewalk, curb, and gutter, striping, asphalt pavement, pavement markings, and wheel chair ramps, as further delineated on the plans and described in these Special Provisions.

All other work as may be necessary as indicated on the plans, in the specifications, and as required by the Engineer.

Upon completion of all of the work included herein, including approved contract change

orders as appropriate, the Contractor may request that the Engineer file a Notice of Completion for the purposes of relief of maintenance and release of retention.

All materials designated to be removed shall become the property of the Contractor, unless otherwise noted, and shall be disposed in accordance with local, State, and Federal laws and ordinances.

Full compensation for disposal of materials and performing the work in these Special Provisions shall be included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefore.

9-1.01 Schedule of Values

Submit a schedule of values within 10 days after Contract approval. Value schedules for each lump sum bid item shall be prepared and submitted to the Engineer as set forth in Section 9-1, "Lump Sum Contracts", of the Standard Specifications and Section 9-1.16B, "Schedule of Values", of the Caltrans Specifications. Unless otherwise approved by the Engineer, materials on hand, but not incorporated into the work, shall not be included for measurement or for purposes of payment.

9-1.02 Description of Work

The work to be performed consists of furnishing all labor, materials, tools, transportation, supplies, equipment, appurtenances, fuel, and power, unless specifically excepted, necessary, or required to install RRFB assemblies, concrete sidewalk, curb, and gutter, striping, asphalt pavement, pavement markings, and wheel chair ramps, as further delineated on the plans and described in these Special Provisions. The work shall include, but not be limited to, the following:

1. Mobilization

By lump sum. All costs connected with mobilization of Contractor's operations as described in Section 9 of the Standard Specifications will be paid for at the Contract price, these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

2. Clearing and Grubbing

By lump sum. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the plans and described in Sections 17 of the Caltrans Standard Specifications. Also includes pruning tree limbs, removing the 24" diameter tree and stumps all the way to ground level, cutting, removing and sealing roots encountered during this operation.

3. Construction Area Signs and Traffic Control System

By lump sum. Includes providing, installing, and maintaining all construction area signs as indicated on the plans and described in these Special Provisions. Also includes preparing temporary traffic control plans. Includes all labor and materials to provide in accordance with Section 12, "Temporary Traffic Control", of the Caltrans Specifications. Includes designing,

furnishing, installing, and maintaining traffic control as indicated on the plans and described in these Special Provisions. Also includes flagging costs, materials (including signs, cones, project information signs, portable delineators, portable changeable message signs, flashing arrows, and barricades and all other items shown on the traffic handling plans for which there is not a contract item in the estimate), tools, equipment, and incidentals (including overhead lighting, cellular phones and radios), and for doing all the work involved in placing, removing, storing, maintaining, relocating, replacing, and disposing of the components of the traffic control system shown on the Contractor-generated traffic control plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, including, but not limited to, temporary pavement markings (paint), temporary markers, temporary traffic striping (paint), and channelizers (surface mounted) and no additional compensation will be allowed therefore.

4. Water Pollution Control Program

By lump sum. Includes preparing the WPCP, implementation of erosion control BMPs identified in WPCP, providing all labor, materials, tools, equipment, and incidentals as described in Section 13 of the Caltrans Standard Specifications and these Special Provisions.

5. Remove Traffic Striping and Pavement Markings

By the square foot. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the plans and described in these Special Provisions. Traffic stripe of 4" would require 3 linear feet to constitute 1 square foot of removal and so on for a 6" and 8" stripe.

6. Remove Sign

By each. Includes providing all labor, materials, tools, equipment, and incidentals as indicated on the plans or as directed by the Engineer.

7. Install Truncated Dome

By the square foot. Truncated domes shall be case-in-place at all new curb ramps per the manufacturer specifications. For surface applied, truncated domes shall be applied with tactile bond and seal adhesive along with tamper proof stainless-steel axis fasteners. Includes full compensation for all labor, tools, equipment, and incidentals for furnishing the materials and forming to complete in place, as indicated on the plans and described in these Special Provisions.

8. Install Roadway Signs

By each. Includes providing all labor, materials, tools, equipment, and incidentals to install new signs, six new sign unistrut post, and/or metal brackets as indicated on the plans or as directed by the Engineer.

9. Install Thermoplastic Crosswalk and Pavement Markings
By the square foot. Includes cleaning surface, furnishing all labor, materials, tools, equipment and incidentals for all work involved as specified in the Caltrans Specifications for providing and placing thermoplastic crosswalk and pavement markings at the locations as indicated on the plans and described in these Special Provisions.
10. Install Curb Ramp
By square feet. Curb ramp limit includes the area of all ramps, tapers, curb, and level landing, and corresponds to the geometrics of the City Standard. Includes saw cutting, excavating and removing existing concrete, aggregate base, and soil, compacting and finishing subgrade, providing, placing and compacting aggregate base, supplying concrete to the site, forming, reinforcing, placing concrete, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans, as shown on the City Standard Drawings, and described in these Special Provisions.
11. Construct Concrete Sidewalk
By the square foot. Includes saw cutting, excavating and removing existing sidewalk, aggregate base, and soil, compacting and finishing subgrade, providing and placing and compacting aggregate base, supplying concrete to the site, forming, reinforcing, placing concrete, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans, City Standard Drawings, and described in these Special Provisions.
12. Construct Concrete Curb & Gutter
By the linear foot. Includes saw cutting, excavating and removing existing curb and gutter, aggregate base, and soil, providing and placing and compacting aggregate base, supplying concrete to the site, forming, reinforcing, placing concrete, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans, City Standard Drawings, and described in these Special Provisions.
13. Hot Mix Asphalt, Type A, $\frac{3}{4}$ ", PG-64-10
By the ton, verified by weigh slips from an approved weigh station. Includes saw cutting, excavating and removing existing aggregate base, soil, and asphalt, compacting and finishing subgrade, supplying and placing asphalt binder, supplying, preparing, placing, and compacting asphalt concrete, and constructing to the elevations, thickness, and locations as indicated on the plans and described in these Special Provisions.
14. Paint Curb Red

By the linear foot. Includes furnishing all labor, materials, tools, equipment and incidentals for all the work involved in, but not limited to, installing red paint treatment to the top and vertical face of existing curbs as specified in the Caltrans Specifications, these Special Provisions, and on the plans.

15.–18.Install Solar Rectangular Rapid Flashing Beacon (RRFB)

By lump sum per location. Includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing a solar powered rectangular rapid flashing beacon (RRFB) system consisting of multiple assemblies, signs, APS, pull boxes, micro-trenching, foundation, and conduits shall be considered as included in the contract lump sum prices paid for RRFB system per location as shown on the plans and as described in these Special Provisions, and no additional compensation will allowed therefore. Also includes pothole and investigate for utility conflict and all other components necessary to install and activate a complete RRFB system.

9-1.03 Quantities

The following estimate of the quantities of work to be done and materials to be furnished are **approximate only** and are intended as a basis for the comparison of bids. The City does not expressly or by implications agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work without increase or decrease in the unit price bid or to omit portions of the work that may be deemed necessary or expedient by the Engineer.

ITEM NO.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
1	MOBILIZATION	LS	1
2	CLEARING AND GRUBBING	LS	1
3	CONSTRUCTION AREA SIGNS AND TRAFFIC CONTROL SYSTEM	LS	1
4	WATER POLLUTION CONTROL PROGRAM	LS	1
5	REMOVE TRAFFIC STRIPING AND PAVEMENT MARKINGS	SF	761
6	REMOVE SIGN	EA	8
7	INSTALL TRUNCATED DOME	SF	84
8	INSTALL ROADWAY SIGNS	EA	24
9	INSTALL THERMOPLASTIC CROSSWALK AND PAVEMENT MARKINGS	SF	2044
10	INSTALL CURB RAMP	SF	552
11	CONSTRUCT CONCRETE SIDEWALK	SF	960
12	CONSTRUCT CONCRETE CURB AND GUTTER	LF	218

ITEM NO.	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY
13	HOT MIX ASPHALT, TYPE A, ¾", PG-64-10	TON	40
14	PAINT CURB RED	LF	97
15	RRFB (HUNTER ST & CHANNEL ST)	LS	1
16	RRFB (SUTTER ST & ALPINE AVE)	LS	1
17	RRFB (PACIFIC AVE & ELM ST)	LS	1
18	RRFB (EL DORADO ST & IRIS AVE)	LS	1

Each bidder shall bid each item on the Base Bid Schedule. Failure to bid an item shall be just cause for considering the bid as non-responsive. The City reserves the right to include or delete any Schedule or portion thereof, or to reject all bids.

Official bid documents, including plans and specifications are available online at <http://www.stocktongov.com/services/business/bidflash/pw.html?dept=Public Works>.

All bids submitted for this project, must conform to the requirements of the official bid documents, including plans and specifications.

9-1.04 Unsatisfactory Progress

If the number of working days charged to the contract exceeds 75 percent of the working days in the current time of completion and the percent working days elapsed exceeds the percent work completed by more than 15 percentage points, the City will withhold 10 percent of the amount due on the current monthly estimate.

The percent working days elapsed will be determined from the number of working days charged to the contract divided by the number of contract working days in the current time of completion, expressed as a percentage. The number of contract working days in the current time of completion shall consist of the original contract working days increased or decreased by time adjustments approved by the Engineer.

The percent work completed will be determined by the Engineer from the sum of payments made to date plus the amount due on the current monthly estimate, divided by the current total estimated value of the work, expressed as a percentage.

When the percent of working days elapsed minus the percent of work completed is less than or equal to 15 percentage points, the funds withheld shall be returned to the Contractor with the next monthly progress payment.

Funds kept or withheld from payment, due to the failure of the Contractor to comply with the provisions of the contract, will not be subject to the requirements of Public Contract Code 7107 or to the payment of interest pursuant to Public Contract Code Section 10261.5.

9-1.05 Mobilization

Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.

Full compensation for mobilization shall be considered as included in the lump sum price paid for Mobilization, and no additional compensation will be allowed therefore.

DIVISION II GENERAL CONSTRUCTION

SECTION 10 – GENERAL CONSTRUCTION

10-1.01 Order of Work

The order of work shall conform to the Contractor's approved project schedule described in Section 8-1.03, "Progress Schedule", of these Special Provisions.

Contractor's attention is directed to the Public Safety, Public Convenience, and Maintaining Traffic sections of these Special Provisions. Nothing in this section shall be construed as to relieve the Contractor of his/her responsibility to stage the work in a manner which complies with the requirements of these sections.

All permits and approvals as may be required for this project shall be secured or ordered immediately after award of the contract or their acquisition timing determined, such that the same is not a cause for delay. The cost of the permits shall be included in the total bid costs.

At those locations exposed to public traffic where guard railings or barriers are to be constructed, reconstructed, or removed and replaced, the Contractor shall schedule operations so that at the end of each working day there shall be no post holes open nor shall there be any railing or barrier posts installed without the blocks and rail elements assembled and mounted thereon.

Before obliterating any pavement delineation (traffic stripes, pavement markings, and pavement markers) that is to be replaced on the same alignment and location, as determined by the Engineer, the pavement delineation shall be referenced by the Contractor, with a sufficient number of control points to reestablish the alignment and location of the new pavement delineation. The references shall include the limits or changes in striping pattern, including one- and 2-way barrier lines, limit lines, crosswalks, and other pavement markings.

The Contractor shall provide the City with his approach for staging and sequence the work.

At the end of each working day if a difference in excess of 2 inches exists between the elevation of the existing pavement and the elevation of excavations within 4 feet of the traveled way, material shall be placed and compacted against the vertical cuts adjacent to the traveled way. During excavation operations, native material may be used for this purpose; however, once placing of the topsoil commences, topsoil material shall be used. The material shall be placed to the level of the elevation of the top of existing pavement and tapered at a slope of 1:4 (vertical:horizontal) or flatter to the bottom of the excavation.

Minor deviations from these requirements may be allowed by the Engineer, if in the opinion of the Engineer, the prosecution of the contract will be better served and the work expedited. Any Contractor request for such deviations shall not be adopted without the Engineer's prior written approval.

Full compensation for conforming to such requirements will be considered as included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefore.

10-1.02 Alternative Equipment

The City reserves the right to order discontinuance of any equipment in use. This will be determined at the discretion of the Engineer on the basis that the use of said equipment would prohibit obtaining the best possible end result.

Additional installation equipment may be requested by the Engineer for the above reason. Failure to comply with the Engineer's request concerning equipment use or removal will be deemed sufficient cause for shutting down all work until the requirements are met. Days lost for this type of shutdown will be charged as working days.

10-1.03 Inspections

All work under this contract shall be under the control and inspection of the City Engineer or his appointed representative. The Contractor shall notify the Public Works Department, at (209) 937-8381, three (3) working days in advance of any construction.

10-1.04 Obstructions

Attention is directed to Section 5-1.36, "Property and Facility Preservation", of the Caltrans Specifications, Sections 7-1.05, "Indemnification", and 7-1.06, "Insurance", of the Standard Specifications and Section 15, "Existing Facilities", of the Caltrans Specifications and these Special Provisions.

The Contractor's attention is directed to the existence of certain underground facilities that may require special precautions be taken by the Contractor to protect the health, safety, and welfare of workers and of the public. Facilities requiring special precautions include, but are not limited to, conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases, natural gas in pipelines six (6) inches or greater in diameter, or pipelines operating at pressures greater than 415 KPa (gage); underground electric supply system conductors or cables with potential to ground of more than 300 V, either directly buried or in duct or conduit, which do not have concentric grounded or other

effectively grounded metal shields on sheaths.

The Contractor shall notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least two (2) working days, but not more than fourteen (14) calendar days, prior to performing any excavation or other work close to any underground pipeline, conduit, duct, wire, or other structure. Regional notification centers include, but are not limited to, the following:

Notification Center	Telephone Number
Underground Service Alert – Northern California (USA)	(811) 227-2600 (800) 227-2600
South Shore Utility Coordinating Council (DICS)	(800)-541-3447

Relocations or repairs necessitated because of existing facilities, which are not shown on the plans or are shown at substantially different locations than existing, may be paid as extra work in accordance with Section 4-1.02, "Changes and Extra Work", of these Special Provisions, but only if the Engineer rules that the Contractor exercised due diligence in his operation. Due diligence may be determined by the Engineer by reviewing surface and subsurface conditions that were existing prior to exposing the facility and determining the absence of any signs sufficient to warn a diligent Contractor of the possible existence of a facility in the area.

Immediately upon encountering unknown existing facilities, the Contractor shall notify the Engineer in writing of the situation, request coverage of the work as extra work, and aid the Engineer in determining due diligence. Failure to do so may result in forfeiture of any rights to receive extra work compensation under Section 8-1.07, "Delay", of the Standard Specifications. Should the Contractor stop work, no compensation will be made for any "down time" prior to written notifications being received by the Engineer or his representative.

Delays due to encountering unexpected facilities shall be determined and compensated in accordance with the provisions of Section 8-1.07, "Delay", of the Standard Specifications, and as herein modified. Delays due to encountering unexpected facilities shall be compensated as additional contract working days to the Contractor. Contractor shall submit a written request to the Engineer requesting time extension due to the delay. No other compensation is allowed.

Payment for complying with this Special Provision shall be included in the various items of work, and no additional compensation will be allowed therefore.

10-1.05 Surface Restoration

Surface restoration shall consist of restoring all areas within the limits of work to their original existing condition prior to construction or to the condition shown on the plans or specified in the Specifications.

The Contractor shall restore all paved areas, such as driveways, curb and gutter,

sidewalk, roadway surfaces, ditches, etc., landscaped areas, and all other improvements disturbed or damaged by his operations.

Payment for the restoration of damaged areas, for which specific bid items are not provided, shall be included in the prices paid for various items of work and no additional compensation will be allowed therefore.

SECTION 11- BLANK

SECTION 12 – TEMPORARY TRAFFIC CONTROL

Attention is directed to Part 6 of the California MUTCD, and Section 12, "Temporary Traffic Control", of the Caltrans Specifications, Standard Specifications, and these Special Provisions.

12-1.01 Maintaining Traffic

Attention is directed to Part 6 of the California MUTCD, Sections 7-1.03, "Public Convenience", 7-1.04, "Public Safety", Section 12-4 "Maintaining Traffic", of the Caltrans Specifications, and Section 10-1.01, "Order of Work", of these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from the responsibilities specified in these sections.

The Contractor shall furnish, and maintain in good working order, all barricades and flashers, and provide flaggers as necessary to protect pedestrians, bicyclists, and vehicular traffic. The Contractor shall furnish and maintain all barricades, flashers, and any detour signs twenty-four (24) hours a day, including covering or removing signs during non-construction hours.

The Contractor shall provide adequate and continuous ingress and egress for all adjacent properties; except for the limited period of time it is necessary to perform work at a specific property. The Contractor shall diligently prosecute all work directly impacting businesses to completion. The Contractor shall coordinate limited closures with tenants or owners, as required by these Special Provisions, and as directed by the Engineer. The Contractor shall cover signal heads with traffic jackets, signs and other traffic control devices that may conflict with any detours.

The Contractor shall submit to the City Engineer a detailed "Traffic Control Plan" for review and approval. The "Traffic Control Plan" shall be submitted no later than ten (10) working days following the Notice to Proceed date and at least 3 working days prior to commencing any work which requires implementation of any component of the "Traffic Control Plan". The plan shall be approved by the Engineer prior to its implementation by the Contractor.

The "Traffic Control Plan" shall conform to the typical traffic control details included in the Caltrans Plans, Part 6 of the California MUTCD, and the requirements of Section 12-1.02, "Traffic Control System for Lane Closure", of these Special Provisions. The Traffic Control Plan shall include, but not be limited to, detailed requirements for the following:

- Traffic control devices, including signs and markings.
- Construction routes, phasing and/or staging of both the roadway and sidewalk areas.
- Employee, Customer, and Business/Delivery access to adjacent property.
- Emergency vehicles access.
- Bus, refuse collection, and mail delivery access.
- Any parking zones to be removed on a temporary basis.
- Pedestrian and bicyclist access.

The Traffic Control Plan shall consider the impacts of changes in traffic volumes and capacities related to the construction activities, and their impact on vehicular and bicycle traffic and pedestrian operations, on roadway pavements, including provisions to restore construction-damaged pavements.

Traffic Lane and Sidewalk Closures

Lanes and sidewalks may be closed only as indicated in Section 12 of these Special Provisions. Except for work required under Section 7-1.03, "Public Convenience", and Section 7-1.04, "Public Safety", of the Standard Specifications, work that interferes with public traffic shall be performed only as indicated. Traffic lane and sidewalk closures shall conform to the following requirements:

Lane closure, a maximum of one lane in each direction of travel, not less than twelve (12) feet wide, shall be permitted only between the hours of 9:00 a.m. and 3:30 p.m. Any lane closures other than specified shall be approved by the Engineer.

Standard working hours shall be 9:00 a.m. to 5:00 p.m. Any extended working hours require the approval of the Engineer.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders, including any section closed to public traffic.

Adequate ingress and egress shall be maintained throughout the project limits for fire, police, and other emergency vehicles. The Contractor shall provide adequate ingress and egress for residences, property owners, and abutting business owners to their respective properties except when performing work at their specific locations.

Also, the Contractor shall provide adequate signing, barricades and flashers or portable flashing beacons, flaggers, and other equipment and personnel necessary to adequately control and direct traffic in a safe manner. The Contractor shall maintain all barricades, flashers, and detour signs twenty-four (24) hours a day, including covering signs during non-construction hours. The Contractor shall also provide the City with the names and telephone numbers of three (3) representatives available at all times.

Except as otherwise allowed by the Engineer, "long term" and temporary closures shall be removed and the full width of the traveled way shall be open for use by public traffic when construction operations are not actively in progress during the working period or

successive working periods.

The Contractor shall provide for pedestrian and wheelchair access to at least one (1) intersection corner within each block and the abutting sidewalk facilities along each block, at all times. Simultaneous closure of both intersection corners to pedestrian traffic within the same block is not allowed.

The Contractor shall maintain at least one (1) north/south crosswalk and one (1) east/west crosswalk open to pedestrian and wheelchair access, where exists, at each intersection at all times.

Whenever Contractor's vehicles or equipment are parked within six (6) feet of a traffic lane, the area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the traffic lane at twenty-five (25) foot intervals to a point not less than twenty-five (25) feet past the last vehicle or piece of equipment. A minimum of nine (9) cones or portable delineators shall be used for the taper. A W20-1 (Road Work Ahead) sign shall be mounted on a portable sign stand with flags. The sign shall be placed where directed by the Engineer.

Temporary Pedestrian Access Routes

Attention is directed to Section 12-4.04, "Temporary Pedestrian Access Routes", of the Caltrans Specification and these Special Provisions.

When a pedestrian circulation path is temporarily closed by construction, alterations, maintenance operations, or other conditions, Contractor shall submit a work plan for a temporary pedestrian access route complying with Caltrans Specification Section 12-4.04A(3) and Sections 6D.01, 6D.02, and 6G.05 of the CA MUTCD, and State Standard Plans T30, T31, T32, T33, and T34 shall be provided. The work plan must be sealed and signed by an engineer who is registered as a Civil Engineer in the State.

Whenever possible work should be done in a manner that does not create a need to detour pedestrians from existing pedestrian routes. Extra distance and additional pedestrian street crossings add complexity to a trip and increase exposure of risk to accidents. The alternate pedestrian routes shall be accessible and detectable, including warning pedestrians who are blind or have low vision about sidewalk closures. Proximity-actuated audible signs are a preferred means to warn pedestrians who are blind or have low vision about sidewalk closures.

The surface shall be skid-resistant and free of irregularities. Pedestrian walkways shall be maintained in good condition and shall be suitable for wheelchair use. Walkways shall be kept clear of obstructions.

The Contractor shall cause the least possible disruption to the affected properties and restore suitable pedestrian access immediately following completion of the active work in progress.

At least one (1) continuous walkway along one (1) side of the street shall be available at all times. At locations where work is actively in progress, the pedestrian walkway within a single block may be temporarily closed at one (1) end of the block along one (1) side of the street. Pedestrians shall be rerouted to the walkway on the opposite side of the street.

Minor deviations from the requirements of this section, which do not significantly change the cost of the work, may be permitted upon the written request of the Contractor if, in the opinion of the Engineer, public traffic will be better served and the work expedited. These deviations shall not be adopted by the Contractor until the Engineer has approved them in writing. All other modifications will be made by contract change order.

Full compensation for furnishing a traffic control plan, furnishing, installing, maintaining, and removing all components of the required traffic control system, traffic lane and sidewalk closures, portable changeable message signs, flagging, temporary pavement delineation, maintaining drive and pedestrian traffic, and for maintaining traffic as specified in the Plans and these Special Provisions, and as directed by the Engineer, shall be included in the lump sum price paid for "Construction Area Signs and Traffic Control System", and no additional work compensation will be allowed therefor.

12-1.02 Traffic Control System for Lane Closure

A traffic control system shall consist of closing traffic lanes in accordance with the details shown on the plans, the provisions of Section 12, "Temporary Traffic Control", of the Caltrans Specifications, Standard Specifications, and these Special Provisions.

The provisions in this section will not relieve the Contractor from the responsibility to provide additional devices or take the measures that may be necessary to comply with the provisions in Section 7-1.04, "Public Safety", of the Standard Specifications and these Special Provisions.

During traffic striping operations and pavement marker placement operations using bituminous adhesive, traffic shall be controlled, at the option of the Contractor, with either stationary or moving type lane closures. During all other operations, traffic shall be controlled with stationary type lane closures. The Contractor's attention is directed to the provisions in Section 84-2.03, "Construction", of the Caltrans Specifications.

If any component in the traffic control system is displaced, or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair the component to its original condition or replace the component and shall restore the component to its original location.

When lane closures are made for work periods only, at the end of each work period, all components of the traffic control system, except portable delineators placed along open trenches or excavation adjacent to the traveled way shall be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations, approved by the Engineer, within the limits of the highway right-of-way.

Each vehicle used to place, maintain, and remove components of a traffic control system shall be equipped with a Type II flashing arrow sign, which shall be in operation when the vehicle is being used for placing, maintaining, or removing the components. Vehicles equipped with Type II flashing arrow signs not involved in placing, maintaining, or removing the components when operated within a stationary type lane closure shall only display the caution display mode. The sign shall be controllable by the operator of the vehicle while the vehicle is in motion. The flashing arrow sign shown on the plans shall not be used on the vehicles which are doing the placing, maintaining, and removing of components of a traffic control system, and shall be in place before a lane closure requiring its use is completed.

The Contractor shall pay fully the cost of furnishing all flaggers, including transporting flaggers, to provide for passage of public traffic.

Attention is directed to Part 6 of the California MUTCD. Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in Part 6 of California MUTCD.

Full compensation for furnishing all labor (including flagging costs), materials (including signs), tools, equipment, and incidentals, and for doing all the work involved in lane closures, including placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components of the traffic control system, as shown on the plans, as specified in the Caltrans Specifications and these Special Provisions, and as directed by the Engineer, shall be included in the lump sum price paid for "Construction Area Signs and Traffic Control System", and no additional work compensation will be allowed therefore.

Adjustments in compensation for traffic control system will be made only for increased or decreased traffic control system required by changes ordered by the Engineer and will be made on the basis of the cost of the increased or decreased traffic control necessary.

12-1.03 Temporary Pavement Delineation

Temporary pavement delineation shall be furnished, placed, maintained, and removed in conformance with the provisions in Section 12-6, "Temporary Pavement Delineation", of the Caltrans Specifications and these Special Provisions. Nothing in these Special Provisions shall be construed as reducing the minimum standards specified in the California MUTCD or as relieving the Contractor from the responsibilities specified in Section 7-1.04, "Public Safety", of the Caltrans Specifications, Standard Specifications, and these Special Provisions. Whenever the work causes obliteration of existing pavement delineation, temporary or permanent pavement delineation shall be in place prior to opening the traveled way to public traffic. Lane line or centerline pavement delineation shall be provided at all times for traveled ways open to public traffic.

The Contractor shall perform the work necessary to establish the alignment of temporary pavement delineation, including required lines or marks. Surfaces to receive temporary pavement delineation shall be dry and free of dirt and loose material. Temporary

pavement delineation shall not be applied over existing pavement delineation or other temporary pavement delineation. Temporary pavement delineation shall be maintained until superseded or replaced with a new pattern of temporary pavement delineation or permanent pavement delineation.

Temporary pavement markers, including underlying adhesive and removable traffic tapes which are applied to the final layer of surfacing or existing pavement to remain in place or which conflicts with a subsequent or new traffic pattern for the area, shall be removed when no longer required for the direction of public traffic, as determined by the Engineer.

Full compensation for furnishing, placing, maintaining, and removing the temporary pavement delineation and/or pavement markers used for temporary lane line and centerline delineation and for providing equivalent patterns of permanent traffic lines for these areas when required shall be considered as included in the lump sum price paid for "Construction Area Signs and Traffic Control System", and no additional work compensation will be allowed therefor.

12-1.04 Construction Area Signs

Construction area signs shall be furnished, installed, maintained, and removed when no longer required in accordance with the provisions in Section 12, "Temporary Traffic Control", of the Caltrans Specifications, Standard Specifications, and these Special Provisions.

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

All excavations required to install all the signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes. The post hole diameter, if backfilled with Portland cement concrete shall be at least 4 inches greater than the longer dimension of the post cross section.

Sign substrates for stationary mounted construction informational signs may be fabricated from fiberglass reinforced plastic, as specified under "Pre-qualified and Tested Signing and Delineation Materials" elsewhere in these Special Provisions.

Type IV reflective sheeting for sign panels for portable signs shall conform to the requirements specified under "Pre-qualified and Tested Signing and Delineation Materials" elsewhere in these Special Provisions.

The Contractor shall maintain accurate information on the signs. Signs that are no longer required shall be immediately covered and removed. Signs that convey inaccurate information shall be immediately replaced or the information shall be corrected. Covers shall be replaced when they no longer cover the signs properly. The Contractor shall immediately restore to the original position and location any sign that is displaced or overturned from any cause during the progress of work.

Full compensation for furnishing, installing, maintaining, and removing construction area signs shall be considered as included in the lump sum price paid for "Construction Area Signs and Traffic Control System", and no additional compensation will be allowed therefor.

12-1.05 Maintaining Existing and Temporary Electrical Systems

Maintaining existing electrical systems and communication systems shall conform to the provisions of Section 87, "Electrical Systems", of the Caltrans Specifications and these Special Provisions. Existing traffic signal systems and communication systems shall be kept in effective operation for the benefit of the traveling public during the progress of the work, except when shut down is permitted. The traffic signal shutdowns shall be limited to the hours of 9:00 a.m. to 3:30 p.m. and shall be permitted only during the switch over from existing to new controller operation, unless prior approval is obtained from the Engineer. Contractor required to obtain authorization at least three (3) working days before interrupting communication between an existing system and the traffic management center (TMC).

Temporary standards with signal equipment may be required during the construction of the new installation. The Contractor shall provide temporary equipment if deemed necessary by the Contractor or Engineer. The cost of the temporary systems shall be included in the lump sum price paid for the various contract items of work involved and no additional compensation shall be allowed therefore.

12-1.06 Barricades and Channelizers

Barricades shall be furnished, placed, and maintained at the locations shown on the approved Traffic Control Plan (TCP), specified in Part 6 of the California MUTCD, in the Standard Specifications, or in these Special Provisions or where designated by the Engineer. Barricades shall conform to the provisions in Section 12, "Temporary Traffic Control", of the Standard Specifications and these Special Provisions.

Attention is directed to Section 6-1.06, "Pre-qualified and Tested Signing and Delineation Material", of these Special Provisions regarding retroreflective sheeting for barricades. Construction area sign and marker panels conforming to the provisions in Part 6 of the California MUTCD and Section 12, "Temporary Traffic Control", of the Caltrans Specifications, Standard Specifications, and these Special Provisions shall be installed on barricades in a manner determined by the Engineer at the locations shown on the plans and the TCP. Where provided, pedestrian barricades and channelizing devices shall comply with sections 6F.63, 6F.68, and 6F.71 of the MUTCD.

Channelizers shall conform to the provisions in Section 12, "Temporary Traffic Control", of the Standard Specifications, Caltrans Specifications, and these Special Provisions.

Channelizers shall conform to the provisions in Section 6-1.06, "Pre-qualified and Tested Signing and Delineation Material", of these Special Provisions.

At the time of completion of the project, certain channelizers shall be left in place as determined by the Engineer.

When no longer required for the work as determined by the Engineer, channelizers (except channelizers to be left in place) and underlying adhesive used to cement the channelizer bases to the pavement shall be removed. Removed channelizers and adhesive shall become the property of the Contractor and shall be removed from the site of work.

12-1.07 Payment

Full compensation for all work under Section 12, "Temporary Traffic Control", shall be considered as included in the lump sum price paid for "Construction Area Signs and Traffic Control System", and no additional work compensation will be allowed therefore.

SECTION 13 – WATER POLLUTION CONTROL

13-1.01 General

Attention is directed to Sections 13, "Water Pollution Control", of the Caltrans Specifications, these Special Provisions, and as directed by the Engineer.

The Contractor shall develop and implement a Water Pollution Control Program (WPCP), which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off site into receiving waters. The Contractor shall inspect and maintain all BMPs.

Full compensation for water pollution control shall be considered as included in the lump sum price paid for "Water Pollution Control Program", and no additional work compensation will be allowed therefore.

SECTION 14 – ENVIRONMENTAL STEWARDSHIP

Attention is directed to Section 14, "Environmental Stewardship", of the Caltrans Specifications, these Special Provisions, and as directed by the Engineer.

14-1.01 Construction Site Waste Materials Management

Removal of existing traffic stripes and marking shall be per Caltrans Specifications Section 84-9, "Existing Markings".

Where grinding or other methods approved by the Engineer are used to remove thermoplastic traffic stripes and pavement markings, the removed residue, including dust, shall be tested for lead and chromium content. If the thermoplastic grindings are found to be hazardous, the materials shall be disposed of at a Class 1 facility.

Residue from removing traffic stripes and pavement markings which contains lead from the paint or thermoplastic. The average lead concentrations are less than 1,000 mg/kg total lead and 5 mg/L soluble lead. This residue:

1. Is a nonhazardous waste
2. Does not contain heavy metals in concentrations that exceed thresholds established by the Health and Safety Code and Title 22 of the CA Code of Regs
3. Is not regulated under the Federal Resource Conservation and Recovery Act (RCRA), 42 USC § 6901 et seq.

Submit a lead compliance plan under section 7-1.02K(6)(j)(ii) "Lead Compliance Plan", of the Caltrans Specifications.

Earth Material Containing Lead

This section includes specifications for handling, removing, and disposing of earth material containing lead.

Submit a lead compliance plan.

If earth material is disposed of:

1. Disclose the lead concentration of the earth material to the receiving property owner when obtaining authorization for disposal on the property
2. Obtain the receiving property owner's acknowledgment of lead concentration disclosure in the written authorization for disposal
3. You are responsible for any additional sampling and analysis required by the receiving property owner

If you choose to dispose of earth material at a commercial landfill:

1. Transport it to a Class III or Class II landfill appropriately permitted to receive the material
2. You are responsible for identifying the appropriately permitted landfill to receive the earth material and for all associated trucking and disposal costs, including any additional sampling and analysis required by the receiving landfill

Soil Handling

Excess soils must be handled as potential hazardous waste or the excess soils must be tested for concentrations of lead prior to disposal.

Contaminated Soil

Identify contaminated soil from spills or leaks by noticing discoloration, odors, or differences in soil properties. Soil with evidence of contamination must be sampled and tested by a laboratory certified by Environmental Laboratory Accreditation Program (ELAP).

If levels of contamination are found to be hazardous, handle and dispose of the soil as hazardous waste.

Prevent the flow of water, including ground water, from mixing with contaminated soil by

using one or a combination of the following measures:

1. Berms
2. Cofferdams
3. Grout curtains
4. Freeze walls
5. Concrete seal course

If water mixes with contaminated soil and becomes contaminated, sample and test the water using a laboratory certified by ELAP. If levels of contamination are found to be hazardous, handle and dispose of the water as hazardous waste.

Upon completion of underground facilities and backfilling of the trenches in each portion of the work, the sub-grade shall be prepared by compacting to a relative compaction of not less than ninety-five (95) percent for a minimum depth of zero point five (0.5) feet below the grading plane (sub-grade plane) for a total width of the area to be paved.

All Portland cement concrete flatwork shall be saw cut a minimum of 3-1/2 inches deep prior to removal. All monolithic Portland cement concrete shall be saw cut a minimum of 8 inches deep prior to removal.

Existing asphalt concrete sections to be removed shall be neatly saw cut two and one-half (2-1/2) inches deep and excavated to a depth of fifteen (15) inches. The vertical edges of the pavement shall be neatly trimmed. All debris shall be removed. The top six inches of the sub-grade shall be compacted to 90% of the maximum density at near optimum moisture content.

Payment

Full compensation for disposing, transporting, testing and preparation of lead compliance plan handling material contaminated, or potentially contaminated with aerially deposited lead, except as otherwise provided, shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

Payment for handling, removal, transporting, and disposal of pavement residue that is a nonhazardous waste is included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

14-1.02 Air Pollution Control

Attention is directed to Section 14-9.02, "Air Pollution Control", of the Caltrans Specifications.

Comply with air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the contract, including air pollution control rules, regulations, ordinances, and statutes provided in Government Code 11017 (Pub Cont Code 10231).

Do not burn material to be disposed of.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

14-1.03 Dust Control, Apply Water, Site Maintenance, and Cleanup

Dust control shall conform to any requirements set forth in the San Joaquin Valley Air Pollution Control District Construction Notification Form, the provisions in Section 14-9, "Air Quality", of the Caltrans Specifications, and these Special Provisions. Use of water except for recycled, reclaimed, or other non-potable water for the purpose of dust control or other construction uses unless for health or safety purposes is prohibited. All dust control operations shall be performed by the Contractor at the time, location and in the amount ordered by the Engineer. The application of either water or dust palliative shall be under the control of the Engineer at all times." Watering shall conform to the provisions of Section 13, "Water Pollution Control", of the Caltrans Specifications and these Special Provisions. Attention is also directed to Section 18, "Dust Palliatives", of the Caltrans Specifications and these Special Provisions.

During construction, the Contractor shall remove all rubbish and debris as it is generated. Upon completion of the work, the Contractor shall remove all equipment, debris, and shall leave the site in a neat, clean condition all to the satisfaction of the Engineer. A permit shall be obtained from the Municipal Utilities Department, or California Water Service, as applicable, for construction water obtained from City hydrants. This permit shall be approved by the City of Stockton Fire Department.

The Contractor shall conduct and cause all working forces at the site to maintain the site in a neat, orderly manner throughout the construction operations. The work shall be conducted in a manner that will control the dust. When ordered to provide dust control, the Contractor shall use water to reduce the dusty conditions all to the satisfaction of the Engineer. During construction, the Contractor shall remove all rubbish and debris as it is generated. The Contractor shall pay to the City of Stockton the sum of Two Hundred Fifty Dollars (**\$250**) for every calendar day where debris has remained on the job site overnight. Upon completion of the work, the Contractor shall remove all equipment and debris, and shall leave the site in a neat, clean condition all to the satisfaction of the Engineer.

14-1.04 Sound Control Requirements

The Contractor's attention is directed to Section 14-8.02, "Noise Control", of the Caltrans Specifications and the project specific equipment noise control measures listed in Table 8.1 below. Nothing in the Caltrans Specifications or these Special Provisions voids the Contractor's public safety responsibilities or relieves the Contractor from the responsibility to comply with other ordinances regulating noise level.

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. Each internal combustion engine, used for any purpose on the job or related to the job, shall be

equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without the muffler.

To minimize the construction impacts to residents, the Contractor is encouraged to select the bore method (directional drilling) over conventional trenching to install new conduits.

The noise level requirement shall apply to the 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. All equipment shall have sound-control devices that are no less effective than those provided on the original equipment. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

Project Specific Equipment Noise Control

Table 8-1 summarizes noise levels produced by construction equipment that is commonly used on roadway construction projects. Construction equipment is expected to generate noise levels ranging from 70 to 90 dB at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance. The noise levels generated by the boring machine would be lower than any equipment listed in the table.

Table 8-1. Construction Equipment Noise

Equipment	Maximum Noise Level (dBA at 50 feet)
Scrapers	89
Bulldozers	85
Heavy Trucks	88
Backhoe	80
Pneumatic Tools	85
Concrete Pump	82

Source: Federal Transit Administration 1995.

Further, implementing the following measures would minimize the temporary noise impacts from construction:

All equipment shall have sound-control devices that are no less effective than those provided on the original equipment. No equipment shall have an unmuffled exhaust.

As directed by the Engineer, the Contractor shall implement appropriate additional noise mitigation measures as warranted. These could include, but are not specifically limited to, changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources. Furthermore, construction activities shall be limited to the time period between 9:00 a.m. and 5:00 p.m.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

14-1.05 Pre-construction Migratory Bird Survey

The pre-construction migratory bird survey will be performed by San Joaquin Council of Government. The survey must be conducted to determine the presence of nesting migratory birds.

Pre-Construction Survey

The Contractor must coordinate with SJCOG to insure that the survey takes place no more than 14 days prior to any construction activities if construction occurs during the nesting season (February 15 to September 1). If active nests are observed within 0.25 miles of the project, the Contractor must coordinate with the SJCOG biologist to determine the need and applicability of any temporal restrictions, buffers, or monitoring for construction activities and/or consultation with the California Department of Fish and Game (CDFG 1994).

Contractor must request a copy of the preconstruction migratory bird survey report and should keep in a place where it can be available upon request.

14-1.06 Cultural Resources

If cultural materials are discovered during construction, including human remains, do not disturb the resources and immediately stop all work within a 60-foot radius of the discovery and within any nearby area suspected to overlie the discovery. Immediately notify all appropriate parties including the Caltrans District 10 Local Assistance archaeologist, the Local Assistance Engineer (DLAE), and the County Coroner if human remains are found. Do not move cultural materials or take them from the job site. Do not resume work within the discovery area until authorized. Additional protocols for human remains are given in the State Health and Safety Code Section §7050.5 and §5097.98.

Full compensation for doing all the work involved in trench excavation, water control, bedding and backfilling, placement of temporary paving, and cultural resources shall be considered as included in the contract prices paid for the various items of work and no additional compensation will be made therefore.

SECTION 15 – EXISTING FACILITIES

15-1.01 Existing Facilities

Contractor attention is directed to requirements of Section 5-1.16, "Property and Facility Preservation", of these Special Provisions, and 7-1.05, "Indemnification", and 7-106, "Insurance", of the Caltrans Specifications.

The work shall be performed in connection with various existing highway facilities (i.e., traffic signals and streetlights, storm drain pipe, catch basins, sidewalk drains, roadway

pavement, roadside signs, utility boxes, trees, fences, etc.) shall conform to the provisions in Section 15, "Existing Facilities", of the Caltrans Specifications and these Special Provisions.

All traffic control signs shall be maintained. If relocation is necessary to facilitate the construction, the Contractor shall notify the Public Works Department at (209) 937-8381 three (3) working days prior to said relocation and request for approval as to where sign is to be temporarily relocated. Full compensation for performing such removal and reinstallation shall be considered as included in the various items of work and no additional compensation will be allowed therefore.

Fire hydrants, water valves, curb-stop boxes, and other utility facilities shall be unobstructed and accessible during the construction period.

Should the Contractor desire to have any alterations made in any utility or other improvement for Contractor's own convenience in order to facilitate Contractor's construction operations and for Contractor's sole benefit, Contractor shall make all necessary arrangements with the owners and bear all expense in connection therewith.

Removed highway facilities that are not to be salvaged shall become the property of the Contractor and shall be disposed of according to these Special Provisions, Section 15, "Existing Facilities", of the Caltrans Specifications, and as indicated on the plans.

Items of work under this section, "Existing Facilities", for which specific bid items are not provided, shall be considered as included in the prices paid for the various items of work of the bid schedule, and no additional compensation will be provided therefore.

Any contract adjustment that may be warranted due to differing site conditions will be made in accordance with the provisions of Section 4-1.02, "Changes and Extra Work", of these Special Provisions.

Relocations or repairs necessitated because of existing facilities which are not shown on the plans, or are shown at substantially different locations than shown may be paid as extra work in accordance with Section 4-1.02, "Changes and Extra Work", of these Special Provisions, but only if the Engineer rules that the Contractor exercised due diligence in his operation. Due diligence may be determined by the Engineer by reviewing surface and subsurface conditions that were existing prior to exposing the facility and determining the absence of any signs sufficient to warn a diligent Contractor of the possible existence of a facility in the area.

Utility Facilities

Attention is directed to the possible existence of underground utilities not known to the City or in a location different from that which is shown on the plans or in these Special Provisions. The Contractor shall take steps to ascertain the exact location of such facilities prior to doing any work that may damage such facilities or interfere with their service.

Remove Existing Concrete

Existing concrete sidewalk, curb and gutter, driveways, wheelchair ramps, and other concrete surfacing where shown on the plans to be removed shall be removed and disposed of. Concrete removal includes removal of any steel embedded in the concrete. Sawcut concrete ramps, walks, curbs, and gutters to be removed at the nearest joint or score line at the locations indicated on the plans and as designated by the Engineer.

Remove Existing Pavement

Asphalt concrete pavement and aggregate base shall be removed by saw-cutting and excavating or cold planing to the lines, depths, and dimensions indicated on the plans and/or as directed by the Engineer.

Roadside Signs

Unless otherwise shown on the plans, the Contractor shall maintain existing roadside signs in place. The Contractor shall replace or repair all signs damaged by his operations and under this contract by using new material. Such material shall be a replacement of the original in regards to type of sign, posts, and construction. Relocation of the existing signs shall be done the same day the sign is removed from its original location.

At the Contractor's option, existing signs may be temporarily removed in order to facilitate the Contractor's construction of other improvements included under this contract. Any sign which is removed or damaged by the Contractor's shall be reinstalled at its original location using new unistrut posts in conformance with the Standard Specifications. Existing steel pipe sign posts shall be salvaged as directed by the Engineer. Each roadside sign shall be reinstalled on the same day that the sign is removed.

All new non-mast arm mounted signs shall have High Intensity Prismatic (HIP) reflective sheeting (reflectivity; ASTM type III) and covered with anti-graffiti film. The anti-graffiti film shall be transparent overlay for use on signs. The reflective sheeting and anti-graffiti film shall be from same manufacturer and guaranteed for the same number years.

Full compensation for any temporary removal and reinstallation of roadside signs and removing existing concrete and pavement shall be considered included in the various bid items, and no additional compensation will be allowed therefore.

SECTION 16 – BLANK

DIVISION III EARTHWORK AND LANDSCAPE

SECTION 17 – BLANK

SECTION 18 – BLANK

SECTION 19 – EARTHWORK

19-1.01 Roadway Excavation

Roadway excavation shall conform to the requirements of Section 19, "Earthwork", of the Standard Specifications, Caltrans Specifications, and these Special Provisions. Wherever relative compaction is specified, it shall be determined by ASTM D1557.

Surplus excavated material shall become the property of the Contractor and shall be disposed of outside the highway right-of-way in accordance with the provisions in Section 19-2.03B, "Surplus Material", of the Caltrans Specifications. All excavated material shall be loaded for off-haul from the site as it is generated. Material will not be allowed to accumulate within the right-of-way. If excavation exceeds 15 feet, water sampling will be required.

Full compensation for Roadway Excavation shall be considered included in the contract prices paid for the various items of work requiring "Earthwork" and no additional compensation will be allowed.

19-1.02 Trench Excavation and Backfill

Trench excavation, pipe bedding, and backfill shall conform to the requirements of Section 71, "Sanitary Sewers and Storm Sewers", of the Standard Specifications and Standard Plans R36 through R43, and any amendment and revisions, these Special Provisions, and as specified on the plans. Controlled Density Fill (CDF) shall be mandatory for trenches 8" wide or less. Contractor shall grind 3" deep, 12" each side of trench, and repave. If excavation exceeds 15 feet in depth, water sampling will be required.

Water control shall conform to the provisions of Section 19-3.03B(5), "Water Control and Foundation Treatment", of the Caltrans Specifications and these Special Provisions. The Contractor shall construct and maintain all necessary ditches, cofferdams, channels, drains, sumps, and temporary protective works, and shall furnish, install, and maintain all necessary pumping and other equipment for controlling flows, including ground water in the pipe trenches and structure excavations, so that no foundation will contain any free water. Full compensation for water control shall be included in the contract prices paid for various items of work, and no additional compensation will be made therefore.

The Contractor shall do all excavation of whatever substance is encountered to the lines and grades shown on the plans. Where it becomes necessary to excavate beyond the limits of normal excavation lines in order to remove boulders or other interfering objects, the void remaining after the removal of the boulders shall be backfilled with suitable material and density, as approved by the Engineer. The Contractor shall do such grading as is necessary to prevent surface water from entering the excavation. The Contractor shall remove and dispose of all water entering the excavation. Disposal of water shall be done in a manner to prevent damage or nuisance to adjacent properties.

Due to width limitations, proximity of existing utilities, structures, and access

requirements, the Contractor may be required to provide a vertical, open trench, shoring system for portions of this project. Shoring of all trench excavations shall conform to the Sheeting and Shoring Section of these Special Provisions.

The amount of open trench or plated trench permitted at any one time shall not exceed fifty (50) feet or as allowed by the Engineer. Trench excavation shall be closed, and all lanes shall be restored to traffic at the end of each workday. The Contractor shall furnish and install non-skid steel plates to span trench sections, which have not been backfilled. Non-skid trench plates shall have a manufactured surface with a coefficient of friction that equals or exceeds zero point thirty-five (0.35).

Approach and ending plates shall be attached to the roadway by a minimum of two (2) dowels predrilled into the corner of the plate and drilled a minimum of two (2) inches into the pavement. Interior plates are to be butted together. Fine graded asphalt concrete shall be compacted to form ramps with a maximum slope of eight and one-half percent (8.5%) with a minimum twelve- (12) inch taper to cover all exterior edges of the plates. When the plates are removed, the dowel holes in the pavement shall be backfilled with graded fines of asphalt concrete mix. A concrete slurry or equivalent slurry mix may be substituted with the approval of the Engineer.

All operations shall be carried out in an orderly fashion. Backfilling, compacting, and clean-up work shall be accomplished as the work is approved and traffic through the work shall be impeded or obstructed as little as possible.

The trench bottom shall be free of bumps or hollows and graded to provide uniform support along the length of pipe.

Excess excavated material shall become the property of the Contractor and shall be removed and disposed of away from the job site at the Contractor's expense. Full compensation for the removal and disposal of excess or unsuitable material shall be considered included in the contract unit prices paid for the various items of work and no additional compensation will be allowed therefore.

Pipe bedding and backfill shall be placed above and below the pipe to the lines and grades shown on Standard Plans R36 through R43, as shown on the plans, and as specified in these Special Provisions.

Delete Section 19-3.03E, "Structure Backfill", of the Caltrans Specifications and substitute the following:

"Pipe bedding, envelope, and trench backfill material shall consist of imported material, free from vegetable matter and other deleterious substances and shall form a firm, stable base when compacted. The percentage composition weight by weight shall conform to the following grading:

<u>Sieve Size</u>	<u>Percentage Passing</u>
1"	100
3/4"	90-100
No. 4	35-60
No. 30	10-30
No. 200	2-9

The material shall conform to the following quality requirements:

	<u>Requirements</u>
Resistance (R-value)	78 min.
Sand equivalent	25 min.

In no case shall native excavated material be used as pipe bedding, envelope, and trench backfill.

Bedding material shall be placed to approximately the same elevation on both sides of pipe to prevent unequal loading and displacement of the pipe. The difference in elevation of the bedding backfill on either side of pipe shall not exceed six (6) inches at any time.

Trench backfill shall consist of the trench area from the top of the pipe bedding to the ground surface, or if within a roadway, to the bottom of the roadway subgrade.

Backfill shall be compacted by impact, vibration, or by a combination of these methods, as approved by the Engineer. However, impact type compactors shall not be used around or over PVC pipe until backfill over the top of the pipe will permit compaction of the backfill material without deflecting or damaging the pipe. Jetting will not be permitted.

All backfill shall be placed in maximum eight (8) inch uncompacted lifts.

Compaction shall be determined by ASTM D1557.

The Contractor shall place temporary surfacing promptly after backfilling and shall maintain such surfacing until permanent paving work can be installed.

Temporary paving shall consist of asphalt cutback rolled to provide a smoother surface. All edges shall be contoured to provide a smooth transition between the existing grade and the cutback surface. The Contractor shall maintain the surface free of depressions, bumps, loose pieces, and other defects at all times. During wet weather, the Contractor shall provide a solid, non-skid surface over temporary pavement to protect the surface from damage by traffic.

Temporary pavement shall be replaced with permanent pavement, as soon as is practical after the trench is backfilled and as allowed by the Engineer.

Until the permanent pavement is placed, the base rock and temporary asphalt plant mix at the surface of the trench shall be maintained at all times. Continuous inspection and maintenance of the trench area will be required.

Any excavation shall also conform to the provisions in Section 100, "Street Opening and Pavement Restoration Regulations", of the Standard Specifications.

Full compensation for doing all the work involved in trench excavation, water control and dewatering, bedding and backfilling, and placement of temporary paving shall be considered as included in the contract prices paid for the various items of work requiring "Earthwork" and no additional compensation will be made therefore.

SECTION 20 – LANDSCAPE

20-1.01 Tree Removal and Pruning and Root Trimming

This work shall consist of removal and disposal off-site of trees if required. Tree removal shall be performed in accordance with these Special Provisions and as directed by the Engineer or City Arborist. Trees shall be felled in such a manner as not to injure improvements that are to be preserved. Trees shall be removed to a depth necessary to remove stumps and roots. All trees shall be completely removed where a structure is to be constructed, trenches are to be excavated, proposed trees will be replanted, or unsuitable material is to be removed.

Pruning shall be performed only by a certified arborist and with prior City approval. No pruning of new or existing trees shall be done without prior City Arborist approval. No hooks or any other climbing devices that might damage or puncture tree bark shall be used. The Contractor shall be responsible to report to the City Arborist in writing, any hazardous trees, dead structural limbs, or cavities so corrective action may be taken.

Tree root trimming shall be performed as directed by the City Arborist. Contractor shall request a root system inspection at least 48 hours prior to excavation and root cutting activities. City will issue a Notice to Resume Work to the Contractor. Contractor shall adhere to City's instructions and shall resume work no later than 48 hours after receiving said Notice to Resume Work. If during root trimming, the Engineer or City Arborist determines that a tree, not originally designated for removal is to be removed, compensation will be paid in accordance with Section 4-1.05, "Changes and Extra Work" of the Caltrans Specifications.

If in the opinion of the Engineer or City Arborist a tree not approved for removal has been damaged due to the Contractor's operation and cannot be saved, the Contractor shall, when so ordered by the Engineer, remove the tree in its entirety and replant with a 48" box container size tree of the same kind, or as designated by the City Arborist, at the Contractor's expense.

Trees removed for the construction of this project, whether shown or not shown on the plans, shall be considered included in the contract prices paid for various items of work,

and no additional compensation will be made therefore.

Should any direct or indirect damage or injury result to any public or private property by or on account of any act, omission, neglect, or misconduct in the execution of work, or as a consequence of the non-execution thereof on the part of the Contractor or any of his employees or agents, such property shall be restored at the expense of the Contractor to a condition equivalent to that existing before the damage or injury occurred by repairing or rebuilding the same, or by otherwise making restitution in an acceptable manner for such damage or injury.

The Contractor shall be required to provide and maintain barriers, guards, and lights when and where it may be necessary in order to effectively guard the public from the work being done. This includes open excavations resulting from tree removals. The Contractor shall also be required to post proper signage and traffic control for the public regarding detours and the condition of the work under construction, all in accordance with applicable provisions in Part 6 of the California MUTCD.

Material

All removed tree material, including debris, shall become the property of the Contractor who shall be responsible for its proper disposal. The Contractor shall not leave debris, including removed concrete, at the site overnight.

Imported Clements loam, or equal, shall be used to fill voids left by the removal of a stump. The Clements loam shall be free of rocks, clay balls, debris, noxious weeds and undecayed vegetable matter.

Workmanship

Trees shall be progressively cut down and not felled. All limbs, twigs, and leaves shall be removed from the site as a tree is cut down. On-site burning will not be permitted. All tree stump removal sites shall be reported to Underground Service Alert, USA [(800) 227-2600] a minimum of 48 hours to locate and mark all utilities prior to the removal work being performed at that site. The tree stumps shall be removed to a point twelve (12) inches below the top of the adjacent curb and/or sidewalk. In the absence of either curb or sidewalk, a small stump shall be removed twelve (12) inches below the adjacent ground level. All roots from said stump that are visible and within a ten (10) foot radius shall be removed.

All debris resulting from the tree and stump removal shall be cleaned up and removed from the site. This includes wood chips and saw-dust left in any hole caused by the removal of a stump.

Within the same day that a stump is removed or ground, its void shall be backfilled with imported Clements loam and compacted to the same density as the adjacent undisturbed soil and then install lawn turf to match existing.

All tree roots shall be cut and removed twelve (12) inches below the sidewalk or adjacent

ground level.

Contractor Work Procedure

The Contractor shall comply with the steps listed below:

1. The Contractor shall contact City of Stockton Inspector who will then contact the Street Tree Division for a root system inspection prior to root cutting and installation of sidewalk. Provide at least 3 working days' notice.
2. If tree removal is questionable, City of Stockton Tree Division will respond as soon as practicable (generally within 2 working days) to inspect tree and root system and will issue a decision on site.
3. Prior to resuming work and removing a tree, the City will obtain a Tree Removal Release from the property owner and the Contractor shall receive a Notice to Resume Work from a City Inspector.
4. Contractor shall adhere to City of Stockton Street Tree Division's instructions and shall resume work no later than 48 hours after receiving said Notice to Resume Work.

Replace curb, gutter and/or sidewalk in accordance with these Special Provisions, Section 73.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in tree removal and pruning and root trimming shall be considered as included in the lump sum price paid for "Clearing and Grubbing", and no additional work compensation will be allowed therefore.

SECTION 21 – EROSION CONTROL

Attention is directed to the provisions in Section 21, "Erosion Control", of the Caltrans Specifications.

DIVISION IV SUBBASES AND BASES

SECTION 26 – AGGREGATE BASE

Unless otherwise indicated in these Special Provisions or indicated on the plans, aggregate base shall conform to the requirements of Section 26, "Aggregate Bases", of the Caltrans Specifications for Class 2 aggregate base.

Aggregate base shall be placed in lifts no greater than eight (8) inches in loose thickness and in a manner that avoids segregation, moisture conditioned as necessary, and compacted to at least ninety-five percent (95%) relative compaction.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in construction of the various depths of aggregate base, complete in place, will be considered as included in the contract prices paid for various items of work requiring aggregate base, and other items of work, and no additional compensation will be allowed therefore.

DIVISION V SUBSURFACE AND PAYMENT

SECTION 39 – ASPHALT CONCRETE

39-1.01 Asphalt Concrete

Attention is directed to the provisions of Section 39-2, "Hot Mix Asphalt", of the Caltrans Specifications, and Section 39 of the Standard Specifications.

If requested by the Engineer, the Contractor shall provide a ski on the paving machine.

If poor quality paving joints show deterioration or open areas that allow water through the paving within one (1) year of paving, the Contractor will be required to fog seal for the full joint length for a minimum six (6) foot wide pass. All costs for seal will be at no additional cost to the City of Stockton.

Asphalt concrete shall not be placed adjacent to the curb and gutter until the area behind the curb and gutter is fully backfilled and compacted. It shall be the Contractor's responsibility, based on weather predictions, to schedule his paving operations to avoid paving in the rain or fog. If the day's operations are canceled because of predicted rain or fog, a non-working day will be allowed regardless of actual working conditions. The Engineer will determine whether the day's operation shall be canceled due to predicted rain or fog.

Asphalt concrete shall not be placed on any surface, which contains ponded water or excessive moisture in the opinion of the City Engineer.

If paving operations are in progress and rain or fog forces a shut down, loaded trucks in transit shall return to the plant, and no compensation will be allowed therefore.

The Contractor shall furnish and use canvas tarpaulins to cover all loads of asphalt from the time that the mixture is loaded until it is discharged from the delivery vehicle, unless otherwise directed in writing by the Engineer.

The area to which paint binder has been applied shall be closed to public traffic. Care shall be taken to avoid tracking binder material onto existing pavement surfaces beyond the limits of construction.

No traffic shall be allowed on to the area to which paint binder has been applied with the exception of vehicles unloading asphalt concrete. All vehicles involved with the Contractor's operations shall turn around within the road right-of-way. Driveways and other private property shall not be used without prior written consent of the involved property owner, a dated copy of which shall be delivered to the Engineer prior to the use thereof.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing asphalt concrete, complete in place,

shall be considered as included in the lump sum price paid for "Hot Mix Asphalt, Type A, 3/4", PG-64-10", and no additional work compensation will be allowed therefore.

DIVISION VI STRUCTURES

SECTION 52 – REINFORCEMENT

52-1.01 Reinforcement

Reinforcing steel reinforcement shall conform to the provisions in Section 52, "Reinforcement", of the Caltrans Specifications. All rebar shall be Grade 60.

Full compensation for furnishing and installing bar reinforcing steel and mesh reinforcement shall be considered as included in the contract price paid for the various contract items requiring bar reinforcing or mesh reinforcement, and no additional compensation will be allowed therefore.

DIVISION VII DRAINAGE FACILITIES – NOT USED

DIVISION VIII MISCELLANEOUS CONSTRUCTION

SECTION 73 – CONCRETE CURBS AND SIDEWALKS

73-1.01 Concrete Curbs, Sidewalks, and Wheelchair Ramps

Concrete curb, gutter, sidewalk, curb returns, including wheelchair ramps, grooving, driveways, and flat work, shall be in accordance with the provisions of Sections 73, "Concrete Curbs and Sidewalks", and 90, "Concrete", of the Caltrans Specifications, these Special Provisions, and as shown on the plans.

Portland cement concrete shall conform to Section 90-2, "Minor Concrete", of the Caltrans Specifications and shall contain not less than 505 pounds of cementitious material per cubic yard for all uses. Certification of the concrete shall be received from the vendor and delivered to the City Inspector at the time the concrete is poured.

The Contractor shall sawcut all existing concrete curb, gutter and sidewalks, driveways, and other concrete improvements that will be matched with new improvements at the locations indicated on the plans and where directed by the Engineer.

Expansion joints shall be constructed wherever required by the Standard Specifications, at the locations indicated on the plans, and where directed by the Engineer. Expansion joints shall be filled with 3/8"-thick pre-molded expansion joint filler conforming to ASTM D1751.

Concrete shall be cured using the curing compound method for curb, sidewalks, and gutters. The curing compound shall be the clear or translucent type conforming to the specifications of AASHTO M 148, Type 1, except that the loss of water in the water

retention test shall not exceed 0.040 grams per square centimeter or surface. The curing compound shall contain a fugitive dye and shall be applied at the approximate rate of one (1) gallon per one hundred fifty (150) square feet of area. The curing compound shall be applied in a manner that will provide a complete coating of all exposed faces of the concrete surface. Alternate curing methods shall be submitted to the Engineer for approval before use.

Reinforcing steel, where required, shall conform to Section 52, "Reinforcement", of the Caltrans Specifications and these Special Provisions. All rebar shall be Grade 60.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for concrete sidewalks, including ramps, including all grading necessary for installation of concrete sidewalk or concrete ramps, to finished grade, disposal of all excess material, all sawcuts, reinforcements where required, grading under concrete, providing and grading aggregate base subbase, backfill, compaction, watering, expansion joint filler, concrete and curing compound, grooving, and for doing all the work involved in furnishing and placing concrete sidewalks, or ramps, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be included in the prices paid for the various contract items of work, and no additional work compensation will be allowed therefore.

Broken pieces of concrete shall be immediately removed from the job site and disposed. No portions of broken concrete shall remain on the job site overnight. Contractor shall pay to the City of Stockton the sum of Two Hundred Fifty Dollars (\$250) for every calendar day where debris has remained on the job site overnight.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for concrete curb and gutter, including all aggregate subbase, reinforcement, sawcuttings, backfill, compaction, watering, expansion joint filler, and concrete curing compound, and for doing all the work involved in furnishing and placing concrete curb and gutter, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be included in the prices paid for the various contract items of work, and no additional work compensation will be allowed therefore.

SECTION 77-- LOCAL STRUCTURE

77-1 Electrical Systems for Pedestrian Push Button (PPB), Rectangle Rapid Flashing Beacon (RRFB), and Wireless Signal Interconnect systems.

Furnishing and installing PPB, RRFB, and wireless signal interconnect systems shall conform to Sections 86, "General", and 87, "Electrical Systems", of the Caltrans Specifications, Section 86, "Electrical Systems" of the Standard Specifications, California MUTCD, and these Special Provisions.

77-1.01 Scope

- a. Work covered under this division shall include furnishing all labor, material, tools, equipment, and incidentals and doing all work involved which is required for the complete installation of the electrical work.
- b. Work or equipment not specified or shown on the Plans which is necessary for the proper operation of the work in this area shall be provided and installed at no additional cost to the City.

77-1.02 Regulations and Code

Regulations and Code shall conform to Section 86-1.01D(1) of the Caltrans Specifications. Nothing in these plans or specifications shall be construed to permit work not conforming to the most stringent of applicable codes.

All individuals who perform work as electricians (kind of work apply to electrical connections 100 volt-amperes or more; Commercial and Industrial wiring, underground conduit installation, finish work and fixtures, and fire life safety), for contractors licensed as class A and C-10 electrical contractors, shall be certified according to Labor Code Sections 3099 and 3099.2. Additionally, the Contractor's representative in charge on-site shall possess an IMSA certificate.

77-1.03 Certificate of Compliance, Warranties, Guarantees and Instruction Sheets

Certificate of Compliance, Warranties, guarantees and instruction sheets shall conform to Sections 86-1.01C(6), 86-1.01C(8), and 87-2.01C of the Caltrans Specifications and these Special Provisions.

All equipment furnished shall be guaranteed to the City by the manufacturers for a period of not less than one- (1) year following the date of acceptance of the project. If any part (or parts) is found to be defective in materials or workmanship within the one year period and it is determined by the Engineer or by an authorized manufacturer's representative that said part (or parts) cannot be repaired on the site, the manufacturer shall provide a replacement part (or parts) of equal kind and/or type during the repair period and shall be responsible for the removal, handling, repair or replacement, and reinstallation of the part (or parts) until such time as the traffic signal equipment is functioning as specified and as intended herein; the repair period shall in no event exceed seventy-two (72) hours, including acquisition of parts.

The one- (1) year guarantee on the repaired or replaced parts shall again commence with the date of acceptance of the project.

77-1.04 Description

Electrical and PPB, RRFB, and wireless signal interconnect systems work is to be performed at the locations shown on the Plans. Work or equipment not specified or shown on the Plans which is necessary for the proper operation of the work in this section shall be provided and installed at no additional cost to the City.

Any Contractor-requested change, from approved Plans and Specifications, shall be made in writing to the City. No changes shall be made in the field without written approval of requested changes by the City.

The Contractor is responsible to take all necessary precautions and use best practices in the industry to perform all work require to complete the project.

77-1.05 Materials General

Attention is directed to Section 6 of the Standard Specifications. Except as provided under "City-Furnished Materials" of these Special Provisions, the Contractor shall furnish and install all other materials required to complete the work under this contract.

77-1.06 Equipment List and Drawings

Equipment list and drawings shall conform to the provisions in Section 86-1.01C(1) of the Caltrans Specifications, and these Special Provisions.

All equipment and materials that the Contractor proposes to install shall conform to these specifications and contract plans. A list of substitute equipment and/or materials along with a written descriptive summary, describing the functions of the components, which the Contractor proposes to install, shall be submitted along with his bid proposal. The list shall be complete as to the name of manufacturer, size and identifying number of each item. The list shall be supplemented by such other data as may be required. In all cases, the judgment of the Engineer shall be final as to whether substitute equipment and/or material recommended by the Contractor conform to the intent of these specifications.

The Contractor shall furnish final as-built drawings as part of this project at no additional cost to the city.

77-1.07 Foundations

Foundations shall conform to the provisions in Section 56-3, "Standards, Poles, Pedestals, and Posts", and Section 87-1.03E(3), "Concrete Pads, Foundations, and Pedestals", of the Caltrans Specifications and these Special Provisions.

Certification of the concrete shall be received from the vendor and delivered to the City Inspector at the time the concrete is poured. The foundation shall be cast monolithically up to the top 2 inches which shall be placed after the standards have been plumbed. Construction of Concrete foundations includes placement of reinforcement required per City standards.

Attention is directed to Section 51-1, "General", of the Caltrans Specifications regarding bonding, cold joints and construction preparations.

Dimensions of concrete footings for the 1-B pole standards are shown on City of Stockton Standard Plans. The 1-B pole foundation shall be installed in conformance with Caltrans latest specification standards drawings number ES-7B.

77-1.08 Standards, Steel Pedestals and Posts

Standards, steel pedestals and posts shall conform to the provisions in Section 56-3 "Standards, Poles, Pedestals and Posts", and Section 87-1.03J "Standards, Poles, Pedestals, and Posts" of the Caltrans Specifications and these Special Provisions.

The Contractor shall have the Engineer locate the position of mast arm poles to determine if mast arms will be in conflict with existing overhead utilities. If relocation of utilities is required, immediate notification shall be given to the appropriate utility company.

Type 1-B shall have four (4)-bolt foundation, utilizing a cast iron pipe flange with eight (8) holes, with ornamental bolt cover. On Type 1-B poles, the ornamental cover shall rest on grouted surface. The 1-B pole shall be installed in conformance with the details on the plans.

All unused signal head tenons shall be capped.

Grout height under poles shall be the height of the leveling nut plus a washer as a minimum and the height of the leveling nut, washer and one half inch as a maximum. This height will be measured from the highest point of grade under the pole.

All nuts used to attach standards to foundations and all bolts and nuts used to attach mast arms to standards shall be tightened with the correct size socket or box wrenches.

77-1.09 Conduit

Conduit shall conform to the provisions in Section 87-1.03B, "Conduit Installation", of the Caltrans Specifications and these Special Provisions.

All Conduits shall be Poly Vinyl Chloride (PVC), Schedule 80 with rigid steel sweeps. IMC conduit shall not be accepted. With the exception for bends to and from pull boxes and foundations the conduit shall run straight and true so that cable pulling forces are minimized. There shall be no more than 180 degree in bends. An intermediate pull box can be installed to relieve the need for additional bends at the Contractor's cost.

Insulated bonding bushings will be required on metal conduit. All nonmetallic conduits shall have a No.8 stranded (with green insulation) copper bounded/grounding wire. These bounding/grounding wires shall be connected in the pull box with cable connectors - Burndy-Servit No. KS -15 or an approved equal meeting Caltrans Specifications.

Conduits into pull boxes and pole foundations shall be rigid metal and have 90-degree sweeps. Plastic pulling bells shall be installed on all conduit ends before conductors are pulled through the conduits.

After conductors have been installed, the ends of conduits terminating in pull boxes and/or controller cabinets will be sealed with an approved type of sealing compound. Refer to the City of Stockton Standard Drawing R87 for conduit pull box details.

Refer to City of Stockton Standard Plan Drawing R37 for trench width and depth. All conduits shall be installed below the existing AC pavement regardless of the depth of the existing AC pavement.

All excavated areas in the street or sidewalk shall be completely backfilled or covered at the end of each working day and approved by the Engineer.

Where existing conduits are to be used, as directed by the Engineer, the existing conduit shall be cleaned and both old and new cables shall be pulled into the existing conduit as a unit per Caltrans Specifications Section 87-1.03F, "Conductors and Cable Installations".

77-1.10 Pull Boxes

Pull boxes shall conform to the provisions in Sections 86-1.02C "Pull Boxes" and 87-1.03C "Installation of Pull Boxes" of the Caltrans Specifications, these Special Provisions, and in conformance with the City of Stockton Standard Drawing R87.

When a pull box is subjected to vehicular traffic load, the cover shall be steel embossed with a non-skid pattern.

Pull boxes shall be placed at same elevation as adjacent standard base, service cabinet base, or signal controller cabinet base if an existing or future sidewalk area and elevation is not shown on plans. Pull boxes shall be five feet (5') from base or as shown on the plans. Pull boxes in existing or future sidewalk areas shall be placed at sidewalk elevation. The pull box elevation for pull boxes installed in median areas shall match the slope of the two adjacent curbs. The pull box elevation for pull boxes installed in planting areas adjacent to sidewalk or sidewalk area shall be at sidewalk grade. Pull boxes shall not be installed in part of wheelchair ramps, driveways or traveled way.

When pull boxes are placed in dirt and planting areas, a concrete collar shall be constructed around the pull box. The concrete collar shall be a minimum 12-inch concrete collar, 4 inches thick and at least 4 inches along the sides of the pull box to the bottom edge. The top of the pull box shall match slope of the adjacent top of curb. The surface elevation of the collar shall match the surface elevation of the pull box and slope away from the pull box at a rate of 1:50 (2%) slope.

The Contractor shall clean all existing pull boxes entered for installation of conduit or wire of all dirt and debris. All pull box lids damaged by Contractor operations shall be replaced at his/her expense. The wiring in these pull boxes shall be neatly bundled, recoiled, and reinstalled in the box. Where existing pull boxes are removed and replaced with new larger boxes, the existing conduits shall be cut back. When the conduits are cut, the existing conductors must either be removed or well protected. The ends of the cut conduits must have bushings placed on them.

Grout in bottom of pull boxes will not be required. Pull boxes shall be set on 6 inches of crushed rock for drainage. The conduits in the pull boxes shall be placed 2" above the crushed rock.

Recesses for suspension of ballasts will not be required.

All pull boxes shall be No. 5 unless otherwise noted on the plans.

All pull boxes shall have lids embossed with "TRAFFIC SIGNAL".

All pull boxes shall include copper grounding rods per City Standard Drawing No. R87.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing pull boxes and locking pull box lids shall be considered as included in the various contract prices paid for and no additional compensation will allowed therefore.

77-1.11 Street Lighting Pull Boxes

All street lighting pull boxes shall have security lids and be backfilled as indicated on City of Stockton Standard Drawing No. R87. All pull boxes shall have lids embossed with "STREET LIGHTING".

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing pull boxes and locking pull box lids shall be considered as included in the various contract prices paid for and no additional compensation will allowed therefore.

77-1.12 Conductors and Wiring

Conductors and wiring shall conform to the provisions in Sections 86-1.02F, 86-1.02I, 87-1.03F, 87-1.03H, 87-1.03I, and 87-1.03N of the Caltrans Specifications and these Special Provisions

All conductors that are to be spliced together shall be twisted a minimum of 5-turns and soldered. Then, the joint shall be held by mechanical means before insulating in accordance with Method "B".

All field wiring terminating in the traffic signal controller cabinet or service cabinet shall be fastened to the termination panels with one piece copper solderless/crimpleless wire lugs. Solderless/crimpleless lug shall have offset shank and have a maximum wire size capacity of 6.

RRFB light bar cable must be unshielded 4#18 awg conductor with color code black/red/white/green, PVC insulation, UL listed, CSA listed, RoHs, moisture resistant, 300V and 75°C minimum, stranded tinned copper.

APS cable must be unshielded, 8 conductors, 20 Awg, AWM style 2464, CSA listed, RoHS, moisture resistant, 300 V minimum, 75 minimum stranded tinned copper, PVC insulation, non-UV rated. Conductor color code as shown below:

RED

BLACK
BLUE
BROWN
RED/BLACK
BLUE/BLACK
ORANGE
YELLOW

77-1.13 Fused Splice Connectors

Fused splice connectors as specified in Sections 86-1.02N "Fused Splice Connectors" and 87-1.03N, "Fused Splice Connectors", of the Caltrans Specifications shall be required. Fused splice connectors shall be installed in the base of the poles, next to the inspection plate. No pigtail is allowed on the fuse holders.

77-2 Rectangular Rapid Flashing Beacons

77-2.01 General

Furnishing and installing a solar powered rectangular rapid flashing beacon (RRFB) system consisting of multiple assemblies shall conform to the latest applicable provisions of the Caltrans, California MUTCD, and Standard Specifications and Plans and the project plans and these Special Provisions. The system shall be capable of detecting ambient light level outside of the cabinet. System shall be warranted for at least five years.

Each RRFB assembly may consist of, but is not limited to, light indications, wireless communication equipment, solar power equipment, and electrical components (wiring, solid-state circuit boards, etc.). An assembly shall include the following items:

77-2.02 LED Light Indications

Each indication shall be a minimum size of approximately 7" wide x 3" high clear lens with Yellow LEDs.

Two indications shall be installed on an assembly facing each direction of approaching vehicular traffic. The two indications shall be aligned horizontally, with the longer dimension of the indication horizontal, and a minimum space between the two indications of approximately 7" measured from inside edge of one indication to inside edge of second indication.

A single indication shall be installed on an assembly facing in the direction of approaching pedestrian traffic to serve as a confirmation for the pedestrian that the system has been activated.

The outside edges of the two indications, including any housing, shall not protrude beyond the outside edges of the integral signage of the assembly.

The light intensity of the indications shall meet the minimum specifications of the Society of Automotive Engineers (SAE) Standard J595, "Directional Flashing Optical Warning

Devices for Authorized Emergency, Maintenance, and Service Vehicles", dated January 2005. Contractor shall furnish a Certificate of Compliance for this standard. Specifically, the certificate should state that the indications: Meet photometry of jurisdictional compliance standard(s) identical to 2 J595 Class 2 Nov08 Yellow Peak Cd and 2 J595 Class 1 Nov08 Yellow Cds/Min.

Each indication shall be located between the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque.

All exposed hardware shall be anti-vandal.

77-2.03 Sign

All signs shall be supplied and installed as part of this bid item, including the advance signs.

77-2.04 Control Circuit

The control circuit shall have the capability of independently flashing up to two independent outputs. The LED light outputs and flash pattern shall be completely programmable.

The flashing output shall be the wig-wag plus simultaneous (WW+S) pattern in accordance with FHWA official ruling number 4(09)-41 (I).

Flash rates with the frequencies of 5 to 30 flashes/second shall not be used to avoid inducing seizures.

When activated, the RRFB shall operate for a predetermined interval based on MUTCD procedures for timing of pedestrian clearance times for pedestrian signals. Coordinate with the Engineer for this interval.

The control circuit shall be installed in an NEMA 3R (minimum) rated enclosure.

All circuit connectors shall be rated dust proof and protected from temporary immersion in water.

77-2.05 Battery

Battery unit shall be rated for operation in northern climates and capable of between 200-500 daily actuations.

All batteries shall be sealed in a plastic film to provide moisture corrosion resistance.

All batteries shall operate between the temperatures of -20°C to +60°C.

All battery connectors shall be dust proof and protected from temporary immersion in water.

77-2.06 Wireless Radio

Radio shall integrate with communication of RRFB system control circuit to activate light indications from pushbutton input.

The Radio shall synchronize all of the remote light indications so they will turn on within 120msec of each other and remain synchronized through-out the duration of the flashing cycle.

Radio systems shall operate from 3.6vdc to 15vdc.

77-2.07 Solar Panel

The solar panel shall be size according to the weather and field conditions to maximize performance. It shall be at least 80W.

The solar panel shall be mounted to an aluminum plate and bracket at an angle of 45° - 60°.

All fasteners used shall be anti-vandal.

All solar panel connectors shall be dust proof and protected from temporary immersion in water.

77-2.08 Rectangular Rapid Flasher (RRFB) Accessible Pedestrian Signal (APS)

APS shall be an 8-wire pushbutton type system and shall conform to the latest applicable provisions of the California MUTCD, and these Special Provisions. The APS shall be from the same manufacturer of the RRFB and shall be furnished and installed as one package.

- A. The housing for the unit shall be 9"x12" and made of 356 Aluminum heat-treated to meet Spec. T-6. It shall be of a telescoping, vandal-proof design. The color shall be yellow. Adaptors may be required to install pushbutton housing and the sign plate. The PPB shall be installed rightside up.
- B. Each APS shall connect to a control unit located inside its associated RRFB housing. The Push Button Station (PBS) shall provide information and cues upon pedestrian actuation via an audible message saying; "**CROSS STREET WITH CAUTION, VEHICLES MAY NOT STOP**", and operation at a predetermined time, after the pedestrian clears the crosswalk. All sound shall emanate from the back of the unit. The weather-proof speaker shall be protected by a vandal resistant screen. The speaker volume shall be adjusted to accommodate the lowest ambient background noise. A sunlight visible red LED latched "ON" to confirm the button has been pushed. PBS shall include frame, sign ADA compliant push button and mounting hardware.

By interfacing with the Control Unit that is installed in the unit control box, the PBS shall provide the following standard features.

- Confirmation of button push via latching LED, and sound.
 - Standard voice messaging in English.
 - Button with arrow.
 - Standard City of Stockton locating tone.
 - All sounds automatically adjust to ambient over 60dbB range.
 - All sounds shall be synchronized.
 - Extended button push shall turn on and/or boost volumes.
- C. The button shall be located within five (5) feet of the crosswalk line, and mounted at a height of 42" above the finished grade.
- D. The pedestrian instruction sign shall be R10-25 and installed with security screws. The security screws shall be stainless steel, button head socket cap screws #8 diameter, 3/8 inch in length and 32 threads per inch. The socket shall be 3/32 inch Allen. The sign shall be integral with each pedestrian pushbutton.
- E. The duration of a predetermined period of operation of the RRFB following each actuation should be based on the MUTCD procedure for timing of pedestrian clearance times for pedestrian signals.

Full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing APS shall be considered as included in the contract lump sum prices paid for RRFB system and no additional compensation will be allowed therefor.

77-2.09 Pedestal Shaft

The pedestal shaft shall be furnished and installed in accordance to the pertinent provisions in Rectangular Rapid Flashing Beacon Assembly Detail as part of this bid item.

77-2.09 (1) Pedestal Base

The pedestal base shall be furnished and installed in accordance to the pertinent provisions in Rectangular Rapid Flashing Beacon Assembly Detail as part of this bid item.

77-2.09 (2) Concrete Base

The concrete base and anchor bolts shall be furnished and installed in accordance to the pertinent provisions in Rectangular Rapid Flashing Beacon Assembly Detail as part of this bid item.

77-2.10 Hardware

Furnish all hardware, connections, etc. to make the RRFB system fully operational.

77-3 Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing a solar powered rectangular rapid flashing beacon (RRFB) system consisting of multiple assemblies, signs, standards, solar equipment, APS, luminaires shall be considered as included in the contract lump

sum prices paid for RRFB system per location as shown on the plans, and no additional compensation will allowed therefore.

SECTION 84 – MARKINGS

84-1.01 Traffic Stripes, Pavement Markings, and Pavement Markers

Traffic stripes and pavement legends, including crosswalks, shall be placed as shown on the plans, must comply with the California MUTCD, as modified herein, and as directed by the Engineer. All pavement **traffic stripes**, legends, arrows and crosswalks shall be installed with hot applied thermoplastic pavement material. The width and patterns of striping lines shall conform to the striping details shown in Figures 3A-101 (CA) through 3A-113 (CA) in the California MUTCD.

The thermoplastic material shall be free of lead and chromium and conform to State Specification PTH-02ALKYD (for markings) and PTH-02SPRAY (for stripes). Thermoplastic material shall be applied to the pavement at a minimum thickness of 0.090 inches for long lines (4 inches stripes and 8 inches stripes in width) and 0.100 inches for all legends and arrows. The crosswalk lines and limit lines shall be installed at a minimum thickness of 0.125 inches.

The paint for red curbs must comply with the specifications for the paint type and color shown in following: Waterborne traffic line for the international symbol of accessibility and other curb markings (blue, red, and green) Federal Specification TT-P-1952E. The color paint must comply with ASTM D6628.

An extruded or sprayable thermoplastic traffic stripe consisting of two 4-inch wide yellow stripes is measured as 1 traffic stripes.

If the Contractor chooses to install stripes by using a cart rather than a striping vehicle, all striping shall be applied to the pavement at a minimum thickness of 0.090 inches. Glass beads shall conform to Caltrans Specifications Section 84-2.02D, 84-2.02E, and 84-2.03C(2)e. Thermoplastic pavement markings and stripes shall be free of runs, bubbles, craters, drag marks, stretch marks, and debris.

Use appropriate installation procedures according to manufacturer. If pavement markings are applied to existing surface over existing painted legends (arrows and crosswalks), existing pavement legends (arrows and sidewalks) shall be removed before thermoplastic material is applied. For either material, pavement shall be preheated to remove all residual moisture prior to installation.

At intersections where existing pavement is removed and replaced, Contractor shall install new crosswalk control points for the City to review and approve.

Configuration of traffic stripes, pavement markings, and crosswalks shall conform to the detail and methods as set forth in the latest issue of the California MUTCD and Caltrans Specifications, unless specifically modified on the plans.

All existing traffic stripes and pavement markings shall be removed where shown on the plans, where the existing striping conflicts with proposed striping, and as designated by the Engineer.

Existing pavement markers, including underlying adhesive, when no longer required for traffic lane delineation, as directed by the Engineer, shall be removed and disposed of.

Removal of traffic stripes and pavement markings, or the removal of objectionable material, shall be performed using methods approved in advance by the Engineer. All resulting residue and dust shall be removed immediately from the surface being treated. Such removal shall be by a vacuum attachment operating concurrently with the blast cleaning operation. **The removal of yellow paint and thermoplastic material shall include testing for lead prior to disposal of the material. Disposal of materials containing lead shall conform to state approved practices.** The removal of yellow paint and thermoplastic material shall also conform to the provisions in Section 14-1.01, "Construction Site Waste Materials Management", of these Special Provisions.

The Contractor shall place control points for the Engineer to review and approve. No additional "cat tracks" shall be placed until control points are approved by the Engineer. The Contractor shall obtain approval from the Engineer on all striping cat tracks prior to final application and striping and markers.

The Contractor shall place and remove any temporary striping required for routing traffic through the project area.

All thermoplastic shall be provided by the Contractor. Manufacturer and specifications shall be submitted for approval and shall conform to the specifications contained herein. All thermoplastic supplied shall conform to the local air pollution regulations. Traffic line markings shall be reflectorized conforming to the Caltrans Specifications, Section 84-2, "Traffic Stripes and Pavement Markings".

Existing surface which is to receive the thermoplastic material shall be mechanically wire brushed to remove all dirt and contaminants. Thermoplastic material shall be applied only to the dry pavement surfaces and only when the pavement surface temperature is above fifty (50°F) degrees Fahrenheit. Thermoplastic shall be applied only on a thoroughly dry surface and during periods of favorable weather.

The Contractor shall make all necessary conform striping as required. The completed stripes and markings shall be sharp and clear with clean, well-defined edges.

Any damage by the elements to the newly stripe or marking due to the failure of any Contractor to protect his work shall be repaired by him at no additional cost. Any over-spray or tracking of fresh thermoplastic material onto unpainted surfacing shall be removed by any methods to the satisfaction of the Engineer.

The noise level created by the combined grinding activities must not exceed 86 dBA when measured at a distance of 50 feet at right angles to the direction of travel.

The contract bid item paid for signs and striping shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing traffic stripes, painted curbs, pavement markings, pavement markers and legends, including any necessary cat tracks, dribble lines, and layout work, placement, removal, and disposal of any and all conflicting striping and pavement markers, complete in place, as shown on the plans, as specified in the Caltrans Specifications and these Special Provisions, and as directed by the Engineer.

DIVISION X ELECTRICAL WORK – NOT USED

DIVISION XI MATERIALS

SECTION 90 – CONCRETE

Attention is directed to the Section 90, "Concrete", of the Standard Specifications and these Special Provisions.

90-1.01 Minor Concrete

Section 90-2, "Minor Concrete", of the Caltrans Specifications is amended by adding the following:

Mineral admixture will be required in the manufacture of concrete containing aggregate that is determined to be "deleterious" or "potentially deleterious" when tested in accordance with ASTM C289. The use of mineral admixture in such concrete shall conform to the requirements in Section 90-1.02, "Materials", of the Caltrans Specifications, except the use of Class C mineral admixture will not be permitted.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved in placing minor concrete shall be including in the various item of work involving minor concrete work.