

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
ACTION AGENDA SUMMARY

DEPT: PUBLIC WORKS *GP*  
Urgent \_\_\_\_\_ Routine   
CEO Concurs with Recommendation YES \_\_\_\_\_ NO \_\_\_\_\_  
(Information Attached)

BOARD AGENDA # \*C-4  
AGENDA DATE JUNE 12, 2001  
4/5 Vote Required YES \_\_\_\_\_ NO

SUBJECT: APPROVAL TO AWARD THE TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT CROWS LANDING ROAD AND SCHOOL AVENUE PROJECT TO COLLINS ELECTRIC COMPANY

STAFF  
RECOMMEN-  
DATIONS:

1. APPROVE CONTRACT AWARD FOR THE TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT CROWS LANDING ROAD AND SCHOOL AVENUE PROJECT TO COLLINS ELECTRIC COMPANY; AND,
2. AUTHORIZE THE PURCHASING DEPARTMENT TO ESTABLISH A CONTRACT WITH COLLINS ELECTRIC COMPANY.

FISCAL  
IMPACT:

The project is funded using 100% local monies. Local funding is available in the Public Works budget.

BOARD ACTION AS FOLLOWS:

No. 2001-438

On motion of Supervisor Caruso, Seconded by Supervisor Simon  
and approved by the following vote,  
Ayes: Supervisors: Mayfield, Blom, Simon, Caruso, and Chair Paul  
Noes: Supervisors: None  
Excused or Absent: Supervisors: None  
Abstaining: Supervisor: None

- 1)  Approved as recommended
- 2) \_\_\_\_\_ Denied
- 3) \_\_\_\_\_ Approved as amended

MOTION:

*Christine Ferraro*

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

By: Deputy

File No.

**SUBJECT:** APPROVAL TO AWARD THE TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT CROWS LANDING ROAD AND SCHOOL AVENUE PROJECT TO COLLINS ELECTRIC COMPANY

**PAGE:** 2

**DISCUSSION:** The Department of Public Works proposes to install traffic signals and intersection improvements at the intersection of Crows Landing Road and School Avenue. Additionally, we propose to install sidewalk along the Crows Landing Road frontage adjacent to the project. This intersection lies adjacent to the Shackelford Elementary School.

On May 16, 2001, four bids were received for the project. A summary of the bids received is as follows:

Collins Electrical Company, Inc. Stockton, California	\$170,600.00
Richard A. Heaps Electrical Contractor, Inc. Sacramento, California	\$174,555.00
Steiny and Company, Inc. Vallejo, California	\$193,212.00
Tim Paxin's Pacific Excavation Inc. Elk Grove, California	\$209,854.00

The engineer's estimate for the project was \$182,170.00. The Public Works Department recommends that you award the contract to Collins Electrical Company, Inc., of Stockton, California, in the amount of \$170,600.00 for the subject project.

**POLICY**

**ISSUE:** This action is consistent with the Board's policy of providing a safe, healthy community.

**STAFFING**

**IMPACT:** There is no staffing impact associated with this item.

SE:dh

**FORM OF PROPOSAL**

HONORABLE BOARD OF SUPERVISORS  
STANISLAUS COUNTY, CALIFORNIA

The undersigned bidder has examined the site and all of the documents, plans and specifications for

**"TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT  
"CROWS LANDING ROAD AT SCHOOL AVENUE"**

The bidder will perform all work and provide all labor, equipment and materials for the completion and operation of the project for which this proposal is made, all as set forth on the plans and in the specifications, provided by the Director of the Department of Public Works or other specified agent of the Stanislaus County Board of Supervisors, at bid amounts as stated below:

**"TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT  
CROWS LANDING AT SCHOOL AVENUE ESTIMATE**

<u>Item No.</u>	<u>Item</u>	<u>Unit of Measure</u>	<u>Estimated Quantity</u>	<u>Item Price (In Figures)</u>	<u>Total (In Figures)</u>
1.	Traffic Control	L.S.	L.S.	\$ _____	\$ <u>4,000.00</u>
2.	Clearing and Grubbing	L.S.	L.S.	\$ _____	\$ <u>6,000.00</u>
3.	Aggregate Base	TONS	2	\$ <u>250.00</u>	\$ <u>500.00</u>
4.	Concrete Flat Work	S.F.	3,640	\$ <u>3.80</u>	\$ <u>13,832.00</u>
5.	Concrete Stem Wall	C.Y.	3	\$ <u>700.00</u>	\$ <u>2,100.00</u>
6.	Curbs and Gutters	L.F.	290	\$ <u>20.00</u>	\$ <u>5,800.00</u>
7.	Traffic Stripe, Detail 10	L.F.	600	\$ <u>.40</u>	\$ <u>240.00</u>
8.	Traffic Stripe, Detail 23 (Thermoplastic)	L.F.	150	\$ <u>1.00</u>	\$ <u>150.00</u>
9.	Traffic Stripe, Detail 25A (Thermoplastic)	L.F.	200	\$ <u>.40</u>	\$ <u>80.00</u>
10.	Traffic Stripe, Detail 33	L.F.	275	\$ <u>1.60</u>	\$ <u>440.00</u>
11.	Traffic Stripe, Detail 38 (Thermoplastic)	L.F.	100	\$ <u>.55</u>	\$ <u>55.00</u>
12.	Pavement Markings (Thermoplastic)	S.F.	1,100	\$ <u>4.00</u>	\$ <u>4400.00</u>
13.	Traffic Signs and Mailboxes	L.S.	L.S.	\$ _____	\$ <u>3000.00</u>
14.	Traffic Signals	L.S.	L.S.	\$ _____	\$ <u>113,503.00</u>
15.	Supplemental Work	L.S.	L.S.		\$ <u>16,500.00</u>
				PROJECT TOTAL	\$ <u>170,600.00</u>

ADDENDUM NO. \_\_\_\_\_ DATED \_\_\_\_\_ DATE RECEIVED \_\_\_\_\_ INITIALS \_\_\_\_\_

ADDENDUM NO. \_\_\_\_\_ DATED \_\_\_\_\_ DATE RECEIVED \_\_\_\_\_ INITIALS \_\_\_\_\_

CONTRACTOR COLLINS ELECTRICAL COMPANY, INC.

ADDRESS 611 W. Fremont Street, Stockton, CA 95203

PHONE (209) 466-3691 FAX ( 209 ) 466-3146

The undersigned also agrees as follows:

1. Within eight (8) working days from date of the notice of acceptance of proposal, the Contractor shall execute the contract and furnish to the Board of Supervisors of Stanislaus County satisfactory insurance and contract bonds guaranteeing the faithful performance of the work and General Conditions thereto.
2. To begin work on the date specified in the Notice to Proceed and to prosecute said work in such a manner as to complete it within

**THIRTY (30) WORKING DAYS**

The work shall be so scheduled that existing facilities shall not be disrupted, but shall remain in continuous operation on present schedules.

Accompanying this proposal is a bidder's bond issued by a California admitted surety, certified or cashier's check, or cash in the amount of ten percent (10%) of the proposal, made payable to Stanislaus County, which bond or check is to be retained as liquidated damages should the undersigned be awarded the contract and fail to execute the contract and furnish satisfactory bonds according to the conditions herein specified; otherwise said bidder's bond or check will be returned.

Dated: May 16, 2001

Bidder: COLLINS ELECTRICAL COMPANY, INC.

By  \_\_\_\_\_

Philip J. Asborno

Secretary-Treasurer

Address: 611 W. Fremont Street

Stockton, CA 95203

Telephone: (209) 466-3691 Classification C10 A & B License 115427

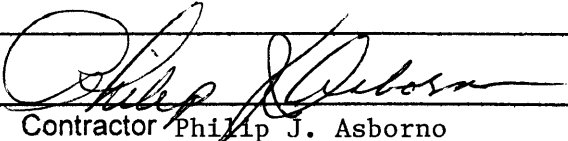
License Expiration Date 11/30/2002

If incorporated, President, Secretary or Treasurer should sign as such. If partnership, by all partners thereto.

CROWS LANDING ROAD AT SCHOOL AVENUE

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

<u>TYPE OF SUBCONTRACT</u>	<u>LICENSE NO.</u>	<u>NAME &amp; ADDRESS OF SUBCONTRACTOR</u>
1. Concrete	WBE#CT-007799	SJD CONSTRUCTION, P.O. Box 1301, Oakdale, 95361
2. Striping	#403896	Central Striping 3489 Luyung Drive, Ranch Cordova, CA 95742
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		

(Signed)   
Contractor Philip J. Asborno  
Secretary-Treasurer

**STANISLAUS COUNTY**

**NON-DISCRIMINATION OF THE HANDICAPPED**

**POLICY STATEMENT**

In compliance with Section 51.55, Office of Revenue Sharing, Department of the Treasury, it is the policy of Stanislaus County that it will not aid or perpetuate discrimination against a qualified handicapped individual by funding an agency, organization, or person that discriminates on the basis of handicap in providing any aid, benefit, or service to beneficiaries of the program or activity.

The County is committed to provide access to all County services, programs and meetings open to the public to people with disabilities.

In this regard, County and all of its contractors and subcontractors will take all reasonable steps in accordance with GRS Section 51.55 to ensure that handicapped individuals have the maximum opportunity for the same level of aid, benefit or service as any other individual.

**CERTIFICATION**

Each agency, organization, or person seeking a bid, contract or agreement with Stanislaus County shall sign a Certification of Compliance with Section 504 of the Rehabilitation Act of 1973 as incorporated in the Revenue Sharing Act.

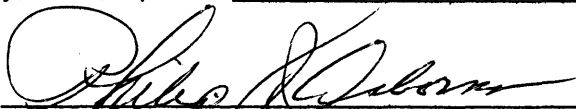
**CERTIFICATION OF BIDDER REGARDING  
NON-DISCRIMINATION OF THE HANDICAPPED**

The bidder hereby certifies that he/she/it is in compliance with Section 504 of the Rehabilitation Act of 1973 as incorporated in the Revenue Sharing Act, the applicable administrative requirements promulgated in response thereto, and any other applicable Federal laws and regulations relating to handicap discrimination and participation.

Name of Bidder COLLINS ELECTRICAL COMPANY, INC.

Business Address 611 W. Fremont Street Telephone (209) 466-3691

City, State, Zip Code Stockton, CA 95203

By  Title Secretary-Treasurer  
(Signature) Philip J. Asborn

Date May 16, 2001



**BOARD OF SUPERVISORS**

**Pat Paul, 1<sup>st</sup> District**  
**Thomas W. Mayfield, 2<sup>nd</sup> District**  
**Nick W. Blom, 3<sup>rd</sup> District**  
**Raymond Clark Simon, 4<sup>th</sup> District**  
**Paul W. Caruso, 5<sup>th</sup> District**

BOARD OF SUPERVISORS

1010 Tenth Street, Suite 6500, Modesto, CA 95354  
Phone: 209.525.4494 Fax: 209.525.4410

2001 SEP 28 P 1:39

September 10, 2001

Collins Electrical Company, Inc.  
611 W. Fremont Street  
Stockton, CA 95203

IN RE: CROWS LANDING ROAD AT SCHOOL AVENUE

To Whom It Concerns:

Enclosed is your completed contract for the above-mentioned project. This is your Official Notice to Proceed.

Yours truly,

LILLIE L. FARRIESTER, Assistant Clerk  
of the Board of Supervisors  
of the County of Stanislaus  
State of California

Enclosure



STANISLAUS COUNTY  
DEPARTMENT OF PUBLIC WORKS

**INVITATION TO BIDDERS**

AND

**SPECIAL PROVISIONS**

FOR TRAFFIC SIGNALIZATION  
AND INTERSECTION IMPROVEMENTS AT

**CROWS LANDING ROAD**

**AT**

**SCHOOL AVENUE**

IN

STANISLAUS COUNTY

FOR USE IN CONNECTION WITH STANDARD  
SPECIFICATIONS DATED JULY 1992  
STANDARD PLANS DATED JULY 1992  
GENERAL PREVAILING WAGE RATES  
LABOR SURCHARGE AND EQUIPMENT RENTAL RATES

## AGREEMENT

This Agreement, made this JUNE 12, 2001, by and between COLLINS ELECTRICAL COMPANY, INC., hereinafter called "Contractor", and the County of Stanislaus, State of California, hereinafter called "County".

## WITNESSETH

### ARTICLE I

The Contractor will provide all the materials, tools, equipment and labor and perform all the work necessary to complete in a good workmanlike manner

#### **"TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT CROWS LANDING ROAD AT SCHOOL AVENUE"**

as set forth in the Proposal of the Contractor and in accordance with the bid, Notice to Bidders, Information for Bidders, General Conditions, plans and specifications, bonds, addenda, and any documents particularly required or provided, all of which are attached hereto and made a part hereof. All of the foregoing documents, together with this Agreement, comprise the contract.

### ARTICLE II

All of the work included in this contract is to be performed under the direction of the County, and in conformity with the true construction and meaning of the contract, as determined solely by the County.

### ARTICLE III

No alterations in the work shall be made except upon written order of the County. The amount to be paid by the County or to be deducted from the contract price by virtue of such alterations shall be stated in said order and shall be approved in writing by the County and the Contractor.

Changes, additions, and alterations in the work which do not exceed \$500.00 may be ordered in writing by the Director of the Department of Public Works of the County of Stanislaus. All other changes, additions, or alterations in the work shall be by order of the Board of Supervisors of the County of Stanislaus.

#### ARTICLE IV

The Contractor shall commence the work within five (5) calendar days after the date specified in the Notice to Proceed given to him, and shall prosecute said work in a prompt, diligent and workmanlike manner. The Contractor shall complete the work within

#### **"THIRTY (30) WORKING DAYS"**

of the date of the Notice to Proceed, unless extension or suspension of the work is agreed to in writing by the County. Time is of the essence in this Agreement.

#### ARTICLE V

The County agrees to pay and the Contractor agrees to receive and accept the unit prices contained in his proposal as full compensation for furnishing all materials and for doing all the work contemplated and embraced in this agreement.

The County shall pay to the Contractor in due course and at the usual time for payment of County obligations after the last day of each month, ninety percent (90%) of the cost of the work completed and material properly stored on the job site, which cost shall be determined by the County. A final payment of ten percent (10%) of the contract price shall be due the Contractor 35 days after acceptance of the work, provided that the Contractor furnishes to the County satisfactory evidence that all obligations for labor and materials have been satisfactorily fulfilled within the said 35 day period, and further provided that no payment shall be construed to be an acceptance of defective work or improper materials.

Except as otherwise prohibited by law, the Contractor may elect to receive all payments due under the contract without any retention. If the Contractor so elects, he shall deposit with the County securities with a value equal to the monies which would otherwise be withheld by the County. Said securities shall be as provided in Section 22300 of the Public Contract Code and shall be approved by the County as to both sufficiency and form.

#### ARTICLE VI

Prior to commencing the work, the Contractor shall file a bond issued by a surety company, approved by the County, and in the form acceptable to the County in the amount of one hundred percent (100%) of the contract price for the faithful payment and satisfaction of all lawful claims of all persons for labor and materials furnished in the prosecution of the contract work. Prior to commencing the work, the Contractor shall file a bond issued by a surety company, approved by the County, and in the form acceptable to the County in the amount of one hundred percent (100%) of the contract price to guarantee the faithful performance of the contract.

#### ARTICLE VII

The Contractor shall take out, and maintain during the life of the contract, insurance policies as described in Section 2.16 of the General Conditions of the contract documents.

## ARTICLE VIII

The Contractor shall indemnify, defend, and save harmless Stanislaus County and all officers and employees thereof connected with the work from all claims, suits or actions of every name, kind and description, brought forth or on account of injuries to or death of any person, including, but not limited to, workmen and the public, or damage to property resulting from the performance of the contract, except as otherwise provided by statute. The duty of the Contractor to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code.

The Contractor waives any and all rights to any type of express or implied indemnity against the County, its officers or employees.

## ARTICLE IX

When the work is completed and ready for final inspection, the Contractor shall notify the County which shall make such final inspection within five (5) days after notice.

If the County shall approve the work and find that the work is complete and ready for acceptance and shall accept the same, the final payment of the contract price shall be due as provided in Article V, hereof.

## ARTICLE X

The Contractor shall comply with all the provisions of state and local laws relating to contracts for the prosecution of public works, and Sections 2.13, 2.18, 2.19, 2.20, 2.21, and 2.22 of the General Conditions are hereby referred to and incorporated herein as if fully set forth. Pursuant to law, the County has ascertained the general prevailing rate of per diem wages in the locality of the work for each craft or type of workman required for performance of the contract, which rates are as stated in the Notice to contractors, and the Contractor shall be required to pay not less than said prevailing rates.

## ARTICLE XI

Whenever any act is directed to be done or notice directed to be given by or to the County hereof, the same may be done or given by or to the Director of the Department of Public Works.

## ARTICLE XII

The Contractor shall not assign the contract or sublet it as a whole without the written consent of the County, nor shall the Contractor assign any monies due or to become due to him hereunder without the previous written consent of the County. This contract shall be binding upon the parties hereto, their heirs, successors, assigns, subcontractors, and legal representatives.

ARTICLE XIII

Any alteration or alterations made in this contract, or any part hereof, shall not operate to release any surety from liability of any bond given pursuant to the provisions of this contract and the consent of such surety to such alteration or alterations is hereby given, the surety expressly waiving hereby the provisions of Section 2819 of the Civil Code.

ARTICLE XIV


Neither the final certificate nor payment, nor any provision of the related documents, shall relieve the Contractor of responsibility for faulty workmanship or materials, and less otherwise specified, he shall remedy any defects due thereto and pay for any damage to other work resulting therefrom which shall appear within a period of one (1) year from the date of filing Notice of Completion. The County shall give notice of observed defects with reasonable promptness. All questions arising under this Article shall be decided by the Director of the Department of Public Works.


In Witness Whereof, the parties have hereunto set their hands the day and year first above written.

CONTRACTOR

COUNTY OF STANISLAUS

COLLINS ELECTRICAL COMPANY, INC.

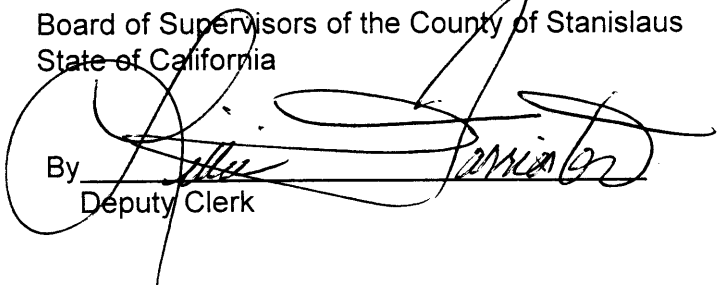
By   
Philip J. Asborno  
Title Secretary-Treasurer

By   
PAT PAUL  
Chair of the Board of Supervisors

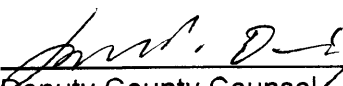
ATTEST:

Federal Employer ID No.  
94-1134154

CHRISTINE FERRERO TALLMAN, Clerk of the Board of Supervisors of the County of Stanislaus State of California

By   
Deputy Clerk

APPROVED AS TO FORM  
MICHAEL H. KRAUSNICK

By   
Deputy County Counsel  
John P. Doering  
Deputy County Counsel

(NOTE: The agreement must be acknowledged before a Notary Public by the Contractor.)

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

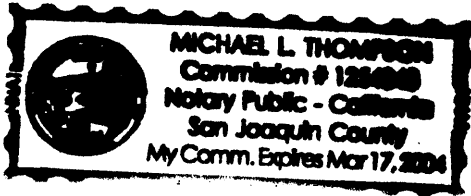
State of California }  
County of San Joaquin } ss.

On July 31, 2001, before me, Michael L. Thompson, Notary Public,  
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Philip J. Asborno,  
Name(s) of Signer(s)

personally known to me  
 proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.  
*[Signature]*  
Signature of Notary Public

Place Notary Seal Above

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

**Description of Attached Document**

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer**

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

**RIGHT THUMBPRINT OF SIGNER**

Top of thumb here

CONTRACT DOCUMENTS  
AND SPECIFICATIONS FOR  
**TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS**  
**AT CROWS LANDING ROAD AND SCHOOL AVENUE**  
IN  
STANISLAUS COUNTY  
OWNER - STANISLAUS COUNTY  
BOARD OF SUPERVISORS

PAT PAUL, CHAIR	DISTRICT NO. 1
THOMAS W. MAYFIELD	DISTRICT NO. 2
NICK W. BLOM	DISTRICT NO. 3
RAY SIMON	DISTRICT NO. 4
PAUL CARUSO	DISTRICT NO. 5

REAGAN WILSON -- CHIEF EXECUTIVE OFFICER  
GEORGE STILLMAN DIRECTOR OF PUBLIC WORKS

APRIL, 2001

**TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT CROWS  
LANDING ROAD AND SCHOOL AVENUE PROJECT**

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

*Steven L. Erickson*  
Signature

4-12-01  
Date





**NOTICE TO CONTRACTORS**

Contractors are invited to submit written, formal bids for

**TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS  
AT CROWS LANDING ROAD AND SCHOOL AVENUE**

Bid envelopes must be delivered to the Clerk of the Board of Supervisors, Tenth Street Place, Joint Stanislaus County/City of Modesto Administration Building, 1010 10<sup>th</sup> Street, Modesto, CA, located on the Sixth floor of Tenth Street Place, **PRIOR TO 2:30 P.M. ON MAY 16, 2001**, as evidenced by the date/time stamp on the envelope by the Clerk. After bid closing, the bids will be publicly opened and read by the Clerk in Conference Room Number 6709, located off the Lobby on the 6<sup>th</sup> Floor of Tenth Street Place.

Bids shall be submitted in sealed envelopes on the forms provided with the plans and specifications for that purpose. Envelopes shall be addressed to the Clerk of the Board of Supervisors, Tenth Street Place, Joint Stanislaus County/City of Modesto Administration Building, 1010 10<sup>th</sup> Street, 6<sup>th</sup> Floor, Modesto, CA 95354, and plainly marked:

**"TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT  
CROWS LANDING ROAD AT SCHOOL AVENUE"**

The work to be accomplished includes the installation of traffic signals and safety lighting at one intersection, the installation of traffic medians and sidewalk and other sections not mentioned herein that are required by the plans and specifications.

Specifications are available at the Department of Public Works Office, 1716 Morgan Road, Modesto, CA 95358, upon the receipt of \$10.00 **(NON-REFUNDABLE)** fee (make checks payable to: "STANISLAUS COUNTY PUBLIC WORKS") during the office hours of 7:30 a.m. to 12:00 and from 1:00 p.m. to 5:00 p.m., Monday through Friday. For any questions, please call the ENGINEERING DIVISION AT (209) 525-4193. For technical questions, please call Bill Cardoza at (209) 525-4165.

Your particular attention is directed to the "Information for Bidders" and "General Conditions" included in the specifications, which are to be followed in all respects. In particular, your attention is directed to the handicapped, non-discrimination clause contained in the General Conditions, Section 2.47 that complies with Section 504 of the Rehabilitation Act of 1973. A bidders bond or its equivalent will be required.

Pursuant to Sections 1770 and 1773 of the Labor Code, the Board of Supervisors has ascertained the general prevailing rate of per diem wages applicable to the work to be done for straight time, overtime, Saturday, Sunday, and holiday work. These wage rates are set forth by the Director of the Department of Industrial Relations, and are now on file with the Department of Public Works, and a part of the contract.

Pursuant to and in accordance with the provisions of Public Contract Code Section 22300, the contractor may elect to substitute securities for retention monies withheld by the County or to request payment of retention monies earned to an escrow agent.

By order of the Board of Supervisors of the County of Stanislaus, State of California, made and entered this April 24, 2001.

ATTEST: REAGAN WILSON, Clerk of the  
Board of Supervisors, Stanislaus County,  
State of California

BY: \_\_\_\_\_  
Deputy

**FORM OF PROPOSAL**

HONORABLE BOARD OF SUPERVISORS  
STANISLAUS COUNTY, CALIFORNIA

The undersigned bidder has examined the site and all of the documents, plans and specifications for

**"TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT  
"CROWS LANDING ROAD AT SCHOOL AVENUE"**

The bidder will perform all work and provide all labor, equipment and materials for the completion and operation of the project for which this proposal is made, all as set forth on the plans and in the specifications, provided by the Director of the Department of Public Works or other specified agent of the Stanislaus County Board of Supervisors, at bid amounts as stated below:

**"TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT  
CROWS LANDING AT SCHOOL AVENUE ESTIMATE**

<u>Item No.</u>	<u>Item</u>	<u>Unit of Measure</u>	<u>Estimated Quantity</u>	<u>Item Price (In Figures)</u>	<u>Total (In Figures)</u>
1.	Traffic Control	L.S.	L.S.	\$ _____	\$ <u>4,000.00</u>
2.	Clearing and Grubbing	L.S.	L.S.	\$ _____	\$ <u>6,000.00</u>
3.	Aggregate Base	TONS	2	\$ <u>250.00</u>	\$ <u>500.00</u>
4.	Concrete Flat Work	S.F.	3,640	\$ <u>3.80</u>	\$ <u>13,832.00</u>
5.	Concrete Stem Wall	C.Y.	3	\$ <u>700.00</u>	\$ <u>2,100.00</u>
6.	Curbs and Gutters	L.F.	290	\$ <u>20.00</u>	\$ <u>5,800.00</u>
7.	Traffic Stripe, Detail 10	L.F.	600	\$ <u>.40</u>	\$ <u>240.00</u>
8.	Traffic Stripe, Detail 23 (Thermoplastic)	L.F.	150	\$ <u>1.00</u>	\$ <u>150.00</u>
9.	Traffic Stripe, Detail 25A (Thermoplastic)	L.F.	200	\$ <u>.40</u>	\$ <u>80.00</u>
10.	Traffic Stripe, Detail 33	L.F.	275	\$ <u>1.60</u>	\$ <u>440.00</u>
11.	Traffic Stripe, Detail 38 (Thermoplastic)	L.F.	100	\$ <u>.55</u>	\$ <u>55.00</u>
12.	Pavement Markings (Thermoplastic)	S.F.	1,100	\$ <u>4.00</u>	\$ <u>4400.00</u>
13.	Traffic Signs and Mailboxes	L.S.	L.S.	\$ _____	\$ <u>3000.00</u>
14.	Traffic Signals	L.S.	L.S.	\$ _____	\$ <u>113,503.00</u>
15.	Supplemental Work	L.S.	L.S.		\$ <u>16,500.00</u>
PROJECT TOTAL					\$ <u>170,600.00</u>

ADDENDUM NO. \_\_\_\_\_ DATED \_\_\_\_\_ DATE RECEIVED \_\_\_\_\_ INITIALS \_\_\_\_\_

ADDENDUM NO. \_\_\_\_\_ DATED \_\_\_\_\_ DATE RECEIVED \_\_\_\_\_ INITIALS \_\_\_\_\_

CONTRACTOR COLLINS ELECTRICAL COMPANY, INC.

ADDRESS 611 W. Fremont Street, Stockton, CA 95203

PHONE (209) 466-3691 FAX ( 209) 466-3146

The undersigned also agrees as follows:

1. Within eight (8) working days from date of the notice of acceptance of proposal, the Contractor shall execute the contract and furnish to the Board of Supervisors of Stanislaus County satisfactory insurance and contract bonds guaranteeing the faithful performance of the work and General Conditions thereto.
2. To begin work on the date specified in the Notice to Proceed and to prosecute said work in such a manner as to complete it within

**THIRTY (30) WORKING DAYS**

The work shall be so scheduled that existing facilities shall not be disrupted, but shall remain in continuous operation on present schedules.

Accompanying this proposal is a bidder's bond issued by a California admitted surety, certified or cashier's check, or cash in the amount of ten percent (10%) of the proposal, made payable to Stanislaus County, which bond or check is to be retained as liquidated damages should the undersigned be awarded the contract and fail to execute the contract and furnish satisfactory bonds according to the conditions herein specified; otherwise said bidder's bond or check will be returned.

Dated: May 16, 2001

Bidder: COLLINS ELECTRICAL COMPANY, INC.

By  \_\_\_\_\_

Philip J. Asborno

Secretary-Treasurer

Address: 611 W. Fremont Street

Stockton, CA 95203

Telephone: (209) 466-3691 Classification C10 A & B License 115427

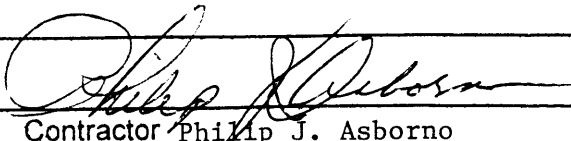
License Expiration Date 11/30/2002

If incorporated, President, Secretary or Treasurer should sign as such. If partnership, by all partners thereto.

CROWS LANDING ROAD AT SCHOOL AVENUE

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

<u>TYPE OF SUBCONTRACT</u>	<u>LICENSE NO.</u>	<u>NAME &amp; ADDRESS OF SUBCONTRACTOR</u>
1. Concrete	WBE#CT-007799	SJD CONSTRUCTION, P.O. Box 1301, Oakdale, 95361
2. Striping	#403896	Central Striping 3489 Luyung Drive, Ranch Cordova, CA 95742
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		

(Signed)   
Contractor Philip J. Asborno  
Secretary-Treasurer

**STANISLAUS COUNTY**

**NON-DISCRIMINATION OF THE HANDICAPPED**

**POLICY STATEMENT**

In compliance with Section 51.55, Office of Revenue Sharing, Department of the Treasury, it is the policy of Stanislaus County that it will not aid or perpetuate discrimination against a qualified handicapped individual by funding an agency, organization, or person that discriminates on the basis of handicap in providing any aid, benefit, or service to beneficiaries of the program or activity.

The County is committed to provide access to all County services, programs and meetings open to the public to people with disabilities.

In this regard, County and all of its contractors and subcontractors will take all reasonable steps in accordance with GRS Section 51.55 to ensure that handicapped individuals have the maximum opportunity for the same level of aid, benefit or service as any other individual.

**CERTIFICATION**

Each agency, organization, or person seeking a bid, contract or agreement with Stanislaus County shall sign a Certification of Compliance with Section 504 of the Rehabilitation Act of 1973 as incorporated in the Revenue Sharing Act.

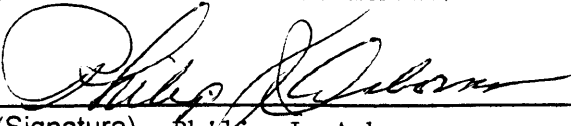
**CERTIFICATION OF BIDDER REGARDING  
NON-DISCRIMINATION OF THE HANDICAPPED**

The bidder hereby certifies that he/she/it is in compliance with Section 504 of the Rehabilitation Act of 1973 as incorporated in the Revenue Sharing Act, the applicable administrative requirements promulgated in response thereto, and any other applicable Federal laws and regulations relating to handicap discrimination and participation.

Name of Bidder COLLINS ELECTRICAL COMPANY, INC.

Business Address 611 W. Fremont Street Telephone (209) 466-3691

City, State, Zip Code Stockton, CA 95203

By  Title Secretary-Treasurer  
(Signature) Philip J. Asborno

Date May 16, 2001

CROWS LANDING ROAD AT SCHOOL AVENUE

**BIDDER'S BOND  
COUNTY OF STANISLAUS  
DEPARTMENT OF PUBLIC WORKS**

We, Collins Electrical Company, Inc.  
as Principal, and Lumbermens Mutual Casualty Company

as Surety  
are bound unto the County of Stanislaus, Department of Public Works, hereinafter referred to as "Obligee", in the penal sum of ten percent (10%) of the total amount of the bid of the Principal submitted to the Obligee for the work described below, for the payment of which we bind ourselves, jointly and severally.

**THE CONDITION OF THIS OBLIGATION IS SUCH THAT:**

WHEREAS, the Principal is submitting a bid to the Obligee, for

**"TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS  
AT CROWS LANDING ROAD AT SCHOOL AVENUE"**

for the bids are to be opened at Modesto, California on May 16, 2001  
(Date of Bid Opening)

NOW, THEREFORE, if the Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in accordance with the bid, and files two bonds with the Obligee, one to guarantee faithful performance of the contract and the other to guarantee payment for labor and materials as provided by law, then this obligation shall be null and void; otherwise, it shall remain in force.

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

Dated: May 16, 2001.

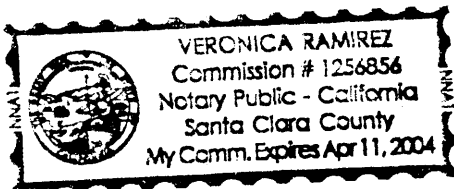
Collins Electrical Company, Inc.  
Principal Philip J. Asborno, Secretary-Treasurer  
Lumbermens Mutual Casualty Company  
Surety  
By Lisa M. Lucas  
Attorney-in-Fact Lisa M. Lucas

**CERTIFICATE OF ACKNOWLEDGMENT**

State of California  
County of Alameda SS

On this 16th day of May in the year 2001, before me, a notary public in and for the county and state aforesaid, personally appeared Lisa M. Lucas known to me to be the person whose name is subscribed to this instrument and known to me to be the attorney-in-fact of Lumbermens Mutual Casualty Company and acknowledged to me that he subscribed the name of said company thereto as surety, and his own name as attorney-in-fact.

(Seal)



Veronica Ramirez  
Notary Public

Home Office: Long Grove, IL 60049

## POWER OF ATTORNEY

Know All Men By These Presents:

That the Lumbermens Mutual Casualty Company, the American Motorists Insurance Company, and the American Manufacturers Mutual Insurance Company, corporations organized and existing under the laws of the State of Illinois, having their principal office in Long Grove, Illinois, (hereinafter collectively referred to as the "Company") do hereby appoint

John W. Bowen, Veronica Ramirez, Lisa M. Lucas and Andrew Kammerer of Pleasanton, California (EACH)\*\*

their true and lawful agent(s) and attorney(s)-in-fact, to make, execute, seal, and deliver during the period beginning with the date of issuance of this power and ending on the date specified below, unless sooner revoked for and on its behalf as surety, and as their act and deed:

Any and all bonds and undertakings\*\*\*\*\*

EXCEPTION: NO AUTHORITY is granted to make, execute, seal and deliver any bond or undertaking which guarantees the payment or collection of any promissory note, check, draft or letter of credit.

This authority does not permit the same obligation to be split into two or more bonds in order to bring each such bond within the dollar limit of authority as set forth herein.

This appointment may be revoked at any time by the Company.

The execution of such bonds and undertakings in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by their regularly elected officers at their principal office in Long Grove, Illinois.

THIS APPOINTMENT SHALL CEASE AND TERMINATE WITHOUT NOTICE AS OF December 31, 2001

This Power of Attorney is executed by authority of resolutions adopted by the Executive Committees of the Boards of Directors of the Company on February 23, 1988 at Chicago, Illinois, true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:

"VOTED, That the Chairman of the Board, the President, or any Vice President, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings, obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the Executive Committee of the Boards of Directors of the Company at a meeting duly called and held on the 23rd day of February, 1988:

"VOTED, That the signature of the Chairman of the Board, the President, any Vice President, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to resolution adopted by the Executive Committee of the Board of Directors on February 23, 1988 and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company."

In Testimony Whereof, the Company has caused this instrument to be signed and their corporate seals to be affixed by their authorized officers, this September 6, 2000.

Attested and Certified:

Lumbermens Mutual Casualty Company  
American Motorists Insurance Company  
American Manufacturers Mutual Insurance Company



Robert P. Hames, Secretary

by

J. S. Kemper, III, Exec. Vice President



STATE OF ILLINOIS    SS  
COUNTY OF LAKE

I, Irene Klewer, a Notary Public, do hereby certify that J. S. Kemper, III and Robert P. Hames personally known to me to be the same persons whose names are respectively as Exec. Vice President and Secretary of the Lumbermens Mutual Casualty Company, the American Motorists Insurance Company, and the American Manufacturers Mutual Insurance Company, Corporations organized and existing under the laws of the State of Illinois, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seals and delivered the said instrument as the free and voluntary act of said corporations and as their own free and voluntary acts for the uses and purposes therein set forth.



My commission expires 1-28-02

Irene Klewer, Notary Public

CERTIFICATION

I, J.K. Conway, Corporate Secretary of the Lumbermens Mutual Casualty Company, the American Motorists Insurance Company, and the American Manufacturers Mutual Insurance Company, do hereby certify that the attached Power of Attorney dated September 6, 2000 on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said J. S. Kemper, III and Robert P. Hames, who executed the Power of Attorney as Executive Vice President and Secretary respectively were on the date of the execution of the attached Power of Attorney the duly elected Executive Vice President and Secretary of the Lumbermens Mutual Casualty Company, the American Motorists Insurance Company, and the American Manufacturers Mutual Insurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Lumbermens Mutual Casualty Company, the American Motorists Insurance Company, and the American Manufacturers Mutual Insurance Company on this

May 16, 2001



J. K. Conway, Corporate Secretary

This Power of Attorney limits the acts of those named therein to the bonds and undertakings specifically named therein and they have no authority to bind the Company except in the manner and to the extent herein stated.

# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

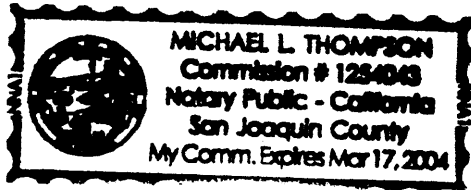
State of California }  
 County of San Joaquin } ss.

On May 7, 2001, before me, Michael L. Thompson, Notary Public,  
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Philip J. Asborno,  
Name(s) of Signer(s)

personally known to me  
 proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

*[Handwritten Signature]*  
 Signature of Notary Public

Place Notary Seal Above

## OPTIONAL

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

### Description of Attached Document

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

### Capacity(ies) Claimed by Signer

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

**RIGHT THUMBPRINT OF SIGNER**

Top of thumb here

## **SPECIAL PROVISIONS**

### **1.00 INFORMATION FOR BIDDERS.**

**1.01 DATE AND PLACE FOR OPENING PROPOSALS.** Pursuant to the "Notice to Contractors", sealed proposals for performing the work will be received by the Clerk of the Board of Supervisors of Stanislaus County.

At the place and time set forth in said notice, they will be publicly opened and read. Said Board of Supervisors, if awarded, will make the awarding of the contract, as soon thereafter as practicable.

**1.02 PRINTED FORM OF PROPOSALS.** All proposals must be made upon the blank Form of Proposal attached hereto, and should give the price data in figures, and must be signed by the bidder. In accordance with the directions in the Form of Proposal, in order to insure consideration the proposal should be enclosed in a return envelope furnished by the bidder, and plainly marked: Proposal For

### **"TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT CROWS LANDING ROAD AT SCHOOL AVENUE"**

and addressed to the Clerk of the Board of Supervisors of Stanislaus County, Tenth Street Place, Joint Stanislaus County/City of Modesto Administration Building, 1010 10<sup>th</sup> Street, Modesto, California 95354. No bid may be withdrawn within 30 days after time of opening.

**1.03 OMISSIONS AND DISCREPANCIES.** Should a bidder find discrepancies in, or omissions from, the drawings or other contract documents, or should he be in doubt as to their meaning, he should at once notify the Engineer who may send a written instruction to all bidders.

**1.04 ACCEPTANCE OR REJECTION OF PROPOSALS.** The Board of Supervisors reserves the right to reject any or all proposals. Without limiting the generality of the foregoing, any proposal, which is incomplete, obscure, or irregular, may be rejected. Any proposal having erasures or corrections in the price sheet may be rejected. Any proposal, which omits a bid on any one or more items in the price sheet, may be rejected. Any proposal in which unit prices are obviously unbalanced may be rejected. Any proposal accompanied by an insufficient or irregular bidder's bond may be rejected. Any proposal, which does not include and have attached a list of all subcontractors, complete with names and addresses, may be rejected.

Also, the Board reserves the right to reject the proposal of any bidder who is not responsible. The successful bidder shall be licensed by the State of California to perform the work required by the plans and specifications and shall endorse his license number on the proposal. The Board may require additional evidence of experience, financial responsibility, or corporate existence, at its option. Each bidder shall endorse his address to which notices hereunder may be directed on the proposal.

A bidder may be deemed not to be responsible and his bid rejected if a listed subcontractor is not responsible. Responsibility of any bidder or of any listed subcontractor shall be determined at the sole discretion of the Board.

**1.05 CASH, CERTIFIED CHECK, CASHIER'S CHECK OR BIDDER'S BOND.** All proposals shall be accompanied by cash, a certified check, certified to by some responsible bank or banker, a cashier's check on a bank, or a bidder's bond prepared and guaranteed by an admitted corporate surety made payable to the "County of Stanislaus" in the amount of ten percent (10%) of the total bid, unless otherwise specified. All such cash or checks will be returned to the respective bidder within ten (10) days after the proposals are opened, except those, which the Board of Supervisors elects to hold until the successful bidder has executed the contract. Thereafter, all remaining cash or checks, including that of the successful bidder, will be returned within five (5) days.

**1.06 ACCEPTANCE OF PROPOSALS AND ITS EFFECT.** Within 30 days after the opening of the proposals, the Board of Supervisors will act upon them. The acceptance of a proposal will be notice in writing signed by a duly authorized representative of the Board of Supervisors and no other act of the Board of Supervisors shall constitute the acceptance of a proposal. The acceptance of a proposal shall bind the successful bidder to execute the contract and to be responsible for liquidated damages, as provided in Paragraph 1.07. The rights and obligations provided for in the contract shall become effective and binding upon the parties only with its formal execution by the Board of Supervisors.

**1.07 TIME FOR EXECUTING CONTRACT AND DAMAGES FOR FAILURE TO EXECUTE.** Any bidder whose proposal shall be accepted will be required to execute the contract within 15 days after the date that the contract documents are mailed to him by the Department of Public Works. Failure or neglect to do so shall constitute a breach of the agreement effected by the acceptance of the proposal.

The damages to the County for such breach will include loss from interference with its construction program and other items whose accurate amount will be difficult or impossible to compute. The amount of the cash, certified check, cashier's check or bidder's bond accompanying the proposal of such bidder shall be forfeited and applied by the Board of Supervisors as liquidated damages for such breach. In the event any bidder whose proposal shall be accepted shall fail or refuse to execute the contract as accepted as hereinbefore provided, the Board of Supervisors may, at its option, determine that such bidder has abandoned the contract and thereupon his proposal and the acceptance thereof shall be null and void and the County shall be entitled to liquidated damages as provided in the General Conditions. In such event, the Board of Supervisors may award the contract to the next low responsible bidder or bidders.

**1.08 DETERMINATION OF LOW BIDDER.** Except where the Board of Supervisors exercises the right reserved herein to reject any or all proposals, the contract will be awarded by said Board to the bidder who has submitted the lowest bid determined by lowest unit price based on the quantities given in the schedule. Quantities are approximate, only being as a basis for the comparison of bids. The Board of Supervisors reserves the right to increase, decrease or omit portions of the work as may be deemed necessary or advisable by the Engineer.

**1.09 TIME FOR BEGINNING AND COMPLETING THE WORK.** The Contractor shall commence the work within five (5) calendar days after the date specified in the Notice to Proceed given to him by the Clerk of said Board of Supervisors to commence work, and he shall complete the work within the specified time. The date of the Notice to Proceed shall constitute the first working day.

**1.10 PRICES.** The prices are to include the furnishing of all materials, plant, equipment, tools, scaffolds, and all other facilities, and the performance of all labor and services necessary or proper for completion of the work, except such as may be otherwise expressly provided in the contract documents.

**1.11 INTERPRETATION OF ADDENDA.** Oral interpretations shall not be made to any bidder as to the meaning of any of the contract documents, or be effective to modify any of the provisions of the contract documents. Every request for an interpretation shall be made in writing, addressed and forwarded to the Engineering Department, TRAFFIC SIGNALIZATION AND INTERSECTION IMPROVEMENTS AT CROWS LANDING ROAD AT SCHOOL AVENUE, 1716 Morgan Road, Modesto, California 95358, Fax number (209) 525-4188.

**1.12 RIGHT TO MAKE CORRECTIONS.** The Engineer/Architect shall have the right to make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the specifications. The Contractor shall be responsible for calling apparent errors or omissions to the attention of the Engineer/Architect for his corrections and/or interpretation. The Contractor shall not take advantage of said apparent errors or omissions.

**1.13 SUBSTITUTION OF SECURITIES FOR WITHHELD PAYMENTS** Section 9-1.065, "Payment of Withheld Funds," of the 1992 Standard Specifications, is deleted in its entirety.

Pursuant to and in accordance with the provisions of Public Contract Code Section 22300, the contractor may elect to substitute securities for retention monies withheld by the County or to request payment of retention monies earned to an escrow agent.

**2.00 GENERAL CONDITIONS.**

**2.01 OWNER.** The term "Owner", where used herein, shall mean the County of Stanislaus, a political subdivision of the State of California.

**2.02 BOARD.** The term "Board", where used herein, shall mean the Board of Supervisors of the County of Stanislaus, California.

**2.03 ENGINEER.** The Director of Public Works shall supervise and be responsible for the work, and whenever the word "Director" or the word "Engineer" is used herein, it shall mean the Director of Public Works of Stanislaus County, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them.

**2.04 CONTRACTOR.** The term "Contractor", where used herein, shall mean the Contractor to whom the contract for the work described and specified herein has been awarded to by the Board.

**2.05 SUBCONTRACTOR.** The term "Subcontractor", where used herein, includes only those having a direct contract with the Contractor for the work or portion of the work described and specified herein.

**2.06 WORK.** The term "Work", where used herein, includes all labor, materials and any necessary equipment required for complete performance of the contract.

**2.07 CONTRACT DOCUMENTS.** The term "Contract Documents", where used herein, includes the following: The Notice to Bidders, the Instructions to Bidders, the General Conditions, the plans and specifications, the bid, the Agreement, the general bond and insurance certificates. The contract documents are complementary, and what is called for by one shall be as binding as if called for by all.

**2.08 DOCUMENT CLARITY.** The Contractor's attention is directed to the following requirement:

Government Code 27361.7 - Requirement that document will reproduce readable photographic record substitution of legible original document or preparation of true copy of first document:

Whenever the text of a document presented for record may be made out but is not sufficiently legible to reproduce a readable photographic record, the Recorder may require the person presenting it for record to substitute a legible copy of the first document by handwriting or typewriting and attach the same to the original as part of the document for making the permanent photographic record. The handwritten or typewritten legible copy shall be certified by the party creating the copy under penalty of perjury as being a true copy of the original. As used in this section, the word "text" includes the notary seal, certificates and other appendices, thereto.

**2.09 COMPLETE CONTRACT.** The complete contract consists of all of the contract documents.

**2.10 PLANS AND SPECIFICATIONS.** The term "Plans and Specifications", where used herein, shall mean and include all specifications and provisions of any kind, whether general, detailed or otherwise, relating to the labor, equipment, material or work in the installation thereof, and the plans and drawings, if any, accompanying same which are made a part hereof.

**2.11 AGREEMENT.** The Contractor to whom the work is awarded shall, within eight days after receipt of the contract documents as mailed by the Department of Public Works, enter into an agreement with the owner. The form of agreement is attached herein and made a part of these General Conditions.

**2.12 MATERIAL, LABOR, EQUIPMENT AND OTHER FACILITIES.** Unless otherwise provided, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, lights, power, transportation and other facilities necessary for the execution and completion of the work.

**2.13 PERMITS AND LICENSES.** All permits and licenses necessary for the prosecution of the work shall be secured and paid for by the Contractor, except those secured by Stanislaus County and so noted.

**2.14 INSPECTION OF WORK.** A representative of the Owner shall, at all times, have access to the work and the Contractor shall provide proper facilities for such access and for inspection. The Contractor's attention is directed to Government Code Section 1126 and Stanislaus County Department of Public Works regulations wherein the County's representative is prohibited from accepting from the Contractor, his employees, and subcontractors any gratuity, gift, service or material of any value or use of equipment or facilities, and agrees to abide by the section and regulations.

**2.15 BONDS.** The Contractor shall furnish and deliver to the Board a surety bond in the amount equal to one hundred percent (100%) of the contract price to guarantee the faithful performance of the contract, and a surety bond in an amount equal to one hundred percent (100%) of the contract price for the faithful payment and satisfaction of all lawful claims of all persons for labor and material furnished and the prosecution of the contract. Such surety bonds shall be issued by a corporation duly and legally licensed to transact surety business in the State of California and approved by the Board. All participating signatures on the bonds shall be notarized.

## **2-16 INSURANCE.**

### **A. Indemnity**

The Contractor shall indemnify, defend, and save harmless the County of Stanislaus, its officers, agents, and employees, from any and all claims, demands, suits, and legal actions of any kind or nature including all costs, attorneys' fees, and expenses incurred therefrom; whether arising before or after final acceptance of this contract/ agreement; and whether in any manner directly or indirectly caused, occasioned, or contributed to in whole or in part by reason of any act, omission, active or passive negligence of the Contractor or of anyone acting under the Contractor's direction and control. The Contractor's aforesaid indemnity and hold harmless agreement shall not be applicable to any said liability caused solely by the negligence of the County of Stanislaus.

### **B. Minimum Scope of Insurance:**

Insurance coverage shall be at least as broad as:

#### **1. General Liability:**

\$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply

separately to any act or omission to act by Contractor under this Agreement or the general aggregate limit shall be twice the required occurrence limit.

2. Fire Insurance:

Builder's Risk Fire Insurance, including Extended Coverage and Vandalism and Malicious Mischief endorsements, jointly in the name of the County and the Contractor, such insurance at all times to be of sufficient amount to cover fully all loss or damage to the work under this agreement, resulting from fire and perils covered by the above-referenced endorsements, in not less than 100% of the contract price.

3. Automobile Liability Insurance:

Owned/Non-owned automobile liability insurance providing combined single limits covering bodily injury liability with limits of no less than One Million Dollars (\$1,000,000) per accident, and providing property damage liability of no less than One Hundred Thousand Dollars (\$100,000) per accident.

4. Workers' Compensation Insurance:

Workers' Compensation insurance as required by the Labor Code of the State of California.

**C. Labor Code Certification:**

In signing this contract, the Contractor makes the following certification, required by Section 1861 of the California Labor Code. I am aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for workmen's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

**D. Deductibles, Self-Insured Retentions, Named Insureds:**

Any deductibles, self-insured retentions or named insureds must be declared in writing and approved by County. At the option of the County, either: the insurer shall reduce or eliminate such deductibles, self-insured retentions or named insureds; or the Consultant shall provide a bond, cash or letter of credit guaranteeing payment of the self-insured retention, deductible, or payment of any and all costs, losses, related investigations, claim administration and defense expenses.

**E. Other Insurance Provisions:**

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

1. General Liability and Automobile Liability Coverages

- a. The Contractor shall provide a specific endorsement naming the County and County's officers, officials, employees, and volunteers as insureds regarding: liability arising from or in connection with the performance or omission to perform any term or condition of this Agreement by or on behalf of the Contractor, including the insured's general supervision of the Contractor; services, products



and completed operations of the Contractor; premises owned, occupied or used by the Contractor; and automobiles owned, leased, hired or borrowed by the Contractor.

- b. The Contractor's insurance coverage shall be primary insurance regarding the County and County's officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the County or County's officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with Contractor's insurance.
- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to County or County's officers, officials, employees, or volunteers.
- d. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

2. Workers' Compensation and Employers Liability Coverage:

The insurer shall agree to waive all rights of subrogation against the County and County's officers, officials, employees, and volunteers for losses arising from the performance of or the omission to perform any term or condition of this Agreement by the Contractor.

3. All Coverages:

Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to County.

**F. Acceptability of Insurers:**

Insurance is to be placed with California admitted insurers (licensed to do business in California) with a Best's rating of no less than A-:VII.

**G. Verification of Coverage:**

At the time required for the submittal of executed bonds and signed agreement, Contractor shall furnish County with certificates of insurance and with original endorsements effecting coverage required by this section. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements shall be received and, in County's sole and absolute discretion, approved by County. County reserves the right to require complete copies of all required insurance policies and endorsements, at any time.

**H. Subcontractors:**

Contractor shall require that all of its subcontractors are subject to the insurance and indemnity requirements stated herein, or shall include all subcontractors as additional named insureds under its insurance policies.

**I. Insurance Limits Do Not Limit Contractor Liability:**

The limits of insurance described herein shall not limit the liability of the Contractor and Contractor's agents, representatives, employees or subcontractors.

**2.17 ASSIGNMENT OF CONTRACT.** The Contractor shall not assign the contract or sublet it as a whole without written consent of the owner, nor shall the Contractor assign any monies due or to become due to him hereunder without the written consent of the Owner.

**2.18 EIGHT-HOUR DAY.** The time of service of any laborer, workman, or mechanic employed upon any of the work herein specified is limited and restricted to eight (8) hours during any one calendar day, and 40 hours during any one calendar week, except that work performed by employees of contractors in excess of eight (8) hours per day, and 40 hours during any one week, shall be permitted upon public work upon compensation for all hours worked in excess of eight (8) hours per day and not less than one and one-half (1-1/2) times the basic rate of pay.

The Contractor shall forfeit, as a penalty to the owner \$25.00 for each laborer, workman or mechanic employed in the execution of this contract by him or by any subcontractor under him, upon any public work herein specified for each calendar day or week during which any laborer, workman or mechanic is required or permitted to labor more than eight (8) hours in any one calendar day or 40 hours in any one calendar week in violation of the provisions of Article 3 of Chapter 1, Part 7, Division 2 of the Labor Code of the State of California, and said sums and amount which shall have been so forfeited pursuant to this paragraph and said provisions of said Labor Code shall be withheld and retained from payment due to the Contractor under this contract, pursuant to this contract and the said terms of said Code; but no sums shall be so withheld, retained, or forfeited except from the final payment without a full investigation by either the Division of Labor Law Enforcement of the State Department of Industrial Relations or by said Board.

**2.19 PREVAILING WAGES.** The Contractor shall comply with Labor Code Section 1775. In accordance with said Section 1775, the Contractor shall forfeit, as a penalty to the County of Stanislaus, \$25.00 for each calendar day or portion thereof for each workman paid less than the stipulated prevailing rates for such work or craft in which such workman is employed for any work done under the contract by him or by any subcontractor under him. In addition to said penalty, the difference between such stipulated prevailing wage rates and the amount paid to each workman for each calendar day or portion thereof for which each workman was paid less than the stipulated prevailing wage rate shall be paid to each workman by the Contractor.

Pursuant to Sections 1770 and 1773 of the Labor Code, the Board of Supervisors has ascertained the general prevailing rate of per diem wages applicable to the work to be done for straight time, overtime, Saturday, Sunday and holiday work. These wage rates, which are set forth by the Director of the Department of Industrial Relations, are now on file with the Department of Public Works and are a part

of the contract. The Contractor is required to post a copy of these prevailing wage rates on the job site.

The County will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth as provided herein. The possibility of wage increases is one of the elements to be considered by the Contractor in determining his bid, and will not under any circumstances be considered as the basis of a claim against the County on the contract.

**2.20 PAYROLLS AND BASIC RECORDS.** The Contractor shall meet the requirements of Section 7-1.01A(3), "Payroll Records", of the State of California Standard Specifications. The Contractor shall be responsible for compliance by his subcontractors.

**2.21 REQUIRED LISTING OF PROPOSED SUBCONTRACTORS.** Each proposal shall have listed therein the name and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in the amount of ½ of one percent of his total bid or \$10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The bidder's attention is invited to other provisions of said Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractor or by making unauthorized substitutions.

A sheet for listing the subcontractors, as required herein, is included in the Proposal.

**2.22 STANDARD SPECIFICATIONS AND CODES.** All work herein specified shall be performed in accordance with applicable sections of the following Standard Specifications or Codes, which are herein, named and hereby made a portion of these specifications. In a case of conflict between these specifications and said Standards, these specifications shall be paramount.

Stanislaus County Ordinance Code Title 16 (Uniform Building Code,  
1991 Edition)  
Stanislaus County Ordinance Code Title 16 (Uniform Plumbing Code,  
1991 Edition)  
Stanislaus County Ordinance Code Title 16 (National Electric Code,  
1990 Edition)  
Stanislaus County Ordinance Code Title 16 (Uniform Mechanical Code,  
1992 Edition)  
Standard Specifications of the California Business and Transportation  
Agency, Department of Transportation, July, 1992  
Stanislaus County Improvement Standards  
Title 24 Cal State Building Code

**2.23 TAXES.** Any federal, state or city tax payable on articles furnished by the Contractor under the contract shall be included in the contract price paid by the Contractor.

**2.24 TIME FOR COMPLETION AND LIQUIDATED DAMAGES.** The work to be performed under this contract shall be completed within

**"THIRTY (30) WORKING DAYS"**

from the date of Notice to Proceed. Should the Contractor fail to complete this contract and the work provided for therein within the fixed time for such completion, the parties hereto agree that it would be impracticable or extremely difficult to fix the actual damage, and therefore agree that the Contractor shall be liable to the Owner and may be assessed by the Owner in the sum of **ONE THOUSAND DOLLARS (\$1,000.00) PER DAY** for each working day this contract is delayed beyond the time of completion above agreed upon by failure of the Contractor to complete the contract as specified. Such payment shall be construed to be liquidated damages by the Contractor in lieu of any other claim for damage because of such delay, and shall not be construed as a penalty.

**2.25 PREFERENCES.** Price and quality being equal, preference shall be given by the Contractor to Stanislaus County products.

**2.26 DEFECTS IN WORK.** The Contractor shall be responsible for and must make good any defects through faulty, improper or inferior workmanship or materials arising or discovered in any part of this work within one (1) year after the completion and acceptance of the same.

**2.27 DEVIATION FROM PLANS AND SPECIFICATIONS.** No deviation shall be made from the plans and specifications. If the Contractor shall vary from the plans and specifications in the form of quality or in the work or the amount or value of the materials herein provided for, the Owner shall have the right to order such improper work or materials removed, remade or replaced. In the event that the work is ordered changed, any other work disturbed or damaged by such alteration shall be made good at the Contractor's expense.

**2.28 BRANDS.** Wherever the name or brand of a manufacturer or an article is specified herein, it is used as a measure of quality and utility or a standard. If the Contractor desires to use any other brand or manufacturer of equal quality and utility to that specified, he shall make application to the Owner in writing and submit samples, if requested. The Contractor shall have 35 days after the award of the contract for submission of data substantiating any such request for substitution of "equal" items. The Owners will then determine whether or not the name brand or article is equal in quality and utility to that specified, and its decision shall be final.

Except in those instances in which the product is designated to match others presently in use, specifications herein calling for a designated material, product, thing or service by specific brand or trade name shall be deemed to be followed by the words "or equal" so that bidders may furnish any equal material, product, thing or service. The successful bidder shall have thirty-five (35) days after award of the contract for submission of data substantiating a request for a substitution of "an equal" item, pursuant to Section 3400 of the Public Contract Code.

**2.29 NEW MATERIALS.** All materials used in the work shall be new and the best market quality, unless specified or shown otherwise. All labor used on this contract shall be competent and skilled for

the work. All work executed under this contract shall be done in the best, most thorough substantial and workmanlike manner. All material and labor shall be subject to the approval of the Engineer as to quality and fitness, and shall be immediately removed if it does not meet with his approval.

**2.30 ABANDONMENT OF WORK.** Should the Contractor abandon the work called for under the plans and specifications and contract documents, or assign his contract, or if the Contractor unnecessarily and unreasonably delays the work, or if the Contractor willfully violates any of the conditions of the plans and specifications or contract documents, or performs the work in bad faith, the Owner shall have the power to notify the Contractor to discontinue all work or any part thereof under this contract, and thereupon the Contractor shall cease to continue said work or such part thereof as the Owner may designate, and the Owner shall thereupon have the power to employ such persons as it may consider desirable, and to obtain by contract, purchase, hire or otherwise, such implements, tools, material or materials as the Owner may deem advisable to work at and be used to complete the work herein described, or such part thereof as shall have not been completed, and to use such material as it may find upon the site of said work, and to charge the expense of such labor and material, implements and tools to the Contractor, and the expense so charged shall be deducted and paid by the Owner out of such monies as may be either due, or may at any time thereafter become due to the Contractor hereunder and by virtue of the contract.

In the case such expense is less than the sum which would have been payable under the contract, if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference, and in case such expense shall exceed the last said amount, then the Contractor or his bondsman shall pay the amount of such excess to the Owner on notice to either from the Owner the excess so due.

**2.31 OCCUPANCY OF BUILDING.** The Owner reserves the right to occupy or use any part or parts or the entirety of the building or project upon which the work is to be performed during the performance of the work. The exercising of this right shall in no way constitute an acceptance of such part or parts of the work, nor shall it in any way effect the date and time when the work is to be completed, nor shall it in any way prejudice the Owner's rights in the Contractor any bond guaranteeing the same; this contract is to be deemed completed only when all of the work contracted for shall be duly and properly performed and accepted by the Board.

**2.32 EXTENSION OF TIME.** If it appears to the Contractor that he will not complete the work herein specified in the time agreed, he shall make written application to the Owner at least five (5) calendar days prior to the expiration of the time for completion, stating the reasons why and the amount of extension which he believes he should be granted. The Owner may then, in its discretion, grant or deny such extension.

**2.33 SUSPENSION OF WORK.** Should the Owner, for any cause, authorize a suspension of work, the time of such suspension will be added to the time allowed for completion. Suspension of work by order of the Board shall not be deemed a waiver of the claim of the Owner for damages for non-completion of the work as above required.

**2.34 JUSTIFIABLE DELAYS.** The Contractor shall not be held responsible for delays in the completion of the work caused by strikes, labor disturbances, lack or failure of transportation, war, inability

to obtain materials due to war conditions, perils of the sea, insurrection, riot, acts of any government, whether foreign or domestic, federal or state, and/or any other causes similar to the foregoing which are beyond the control of and are not the fault of the Contractor, or if prevented by conditions directly resulting from the execution of contracts or the placing of orders by the Federal government or its authorized agencies or representatives, which are required by law to be given priority, but provided that whenever the Contractor shall claim that delays are due to any or all of the above named cause or causes of delay, request an extension of time in accordance with paragraph 2.31 of these General Conditions, and if the Board finds that such cause or causes of delay exist, it shall grant him an extension of time equal to the delay resulting from such cause or causes, or the Board may at its option, rescind said contract and pay said Contractor for the reasonable value of the work completed and let a new contract for the completion of the remainder of the work herein specified.

**2.35 PATENTS AND ROYALTIES.** If any material, composition, process or any other thing called for or required by the plans and specifications heretofore adopted by the Owner is covered by letter patent, all royalties and expenses thereof, all litigation therefrom, or other things whatsoever which may develop as a cost from the use of such material, composition, process or any other thing which is covered by letter patents shall be borne by the Contractor. The Contractor shall pay all license and/or royalty fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof.

**2.36 EXAMINATION OF SITE.** The Contractor shall be held to have examined the site, compared it with the drawings and specifications, and to have satisfied himself as to the conditions under which the work is to be performed. No allowance or claims on his behalf will be made for any expense to which he may be put as a result or failure on his part to thoroughly acquaint himself with conditions at the site.

**2.37 DAMAGE TO OTHERS.** The Contractor shall exercise due caution during his operations so as not to damage the property of others or Owner's property not directly involved under the plans and specifications, and shall be responsible for the protection of this property and shall replace any and all such property to its former condition as a result of his failure to provide protection or exercise due caution during his operations.

**2.38 SURVEYS AND GRADES.** The Engineer shall establish permanent type reference monuments or posts for the alignment and elevations of all work. For structures he will provide said monuments for reference data only. For general engineering contracts he shall provide the usual stakes sufficient for construction. The Contractor shall be charged with the responsibility of adequately protecting said stakes and monuments. The Contractor shall be requested to set supplemental posts for detailed construction needs.

**2.39 SHOP DRAWINGS.** The Contractor shall furnish two (2) copies of shop drawings for all steel, miscellaneous iron, electrical and sheet metal work at such time as to cause no delay in his own or other person's work. The Engineer shall, with reasonable promptness, check the drawings, making corrections, and return them for fabrication; two (2) copies of the corrected drawings used for fabrication shall be returned to the Engineer. The drawings shall not relieve the Contractor from any errors made in fabrication or deviation from original plans and specifications unless the Director of the Department of Public Works has specifically permitted such deviation in writing.

**2.40 CORRECTION OF WORK AFTER FINAL PAYMENT.** Neither the final certificate nor final payment, nor any provision of the contract documents shall relieve the Contractor of responsibility for faulty materials or workmanship, and unless otherwise specified, he shall remedy any defects due thereto and shall pay for any damage or other work resulting therefrom which shall appear within a period of one year from the date of substantial completion. The Owner shall give notice of observed defects with reasonable promptness. The Director of Public Works shall decide all questions arising under this article.

**2.41 CHANGES IN WORK.** The Owner, without invalidating the contract, may order extra work or make changes by altering, adding to or deducting from the work, the contract sum being adjusted accordingly. All such work shall be performed under the conditions of the contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering the change. The Engineer shall have authority to make minor changes not involving extra cost and not inconsistent with the purpose of the project.

The value of such extra work or change shall be determined in one or more of the following ways:

- A. By estimate and acceptance in a lump sum;
- B. By unit prices named in the contract or subsequently agreed upon;
- C. By cost and percentage and fixed fee.

Should conditions below surface of the ground be at variance with the conditions indicated by the drawings and specifications, the contract sum shall be equitably adjusted upon claim by either party made within a reasonable time after first observation of conditions.

The amount agreed upon as the value of any extra work resulting from any change order shall constitute full and complete compensation for all overhead, labor, material, tools, and equipment furnished in the performance of work required by that change order. Furthermore, the amount agreed upon as the value of extra work for any change order shall be accepted by the Contractor as full and complete compensation for any and all claims of any nature whatsoever, including, but not limited to, any actual or alleged claims for compensation by Contractor, or any subcontractor of Contractor for delays occasioned by or in any way arising out of stoppage of the work, coordination of the work with others, or processing of that change order.

**2.42 CLEANING UP.** Contractor shall at all times keep the premises free from accumulations of waste material or rubbish as a result of this operation. Upon completion of work he shall remove all rubbish, material and his equipment from the job and shall leave the job site in a "broom clean" or equivalent condition. In case of a dispute regarding this item, the Owner may remove rubbish or material and charge the cost to the several contractors, as the authorized representative shall deem just.

**2.43 SUPERVISION.** The Contractor shall, at all times during the working hours of the contract, have a competent foreman or superintendent on the job who shall be authorized to act as an agent of the Contractor. Such agent shall be familiar with the type of work hereunder and be aware of the hazards and the safety rules relating to this particular type of construction. Ignorance or incompetence of a foreman shall be due cause for his removal from the job and cessation of work under this contract until the intent of this paragraph is fulfilled, without recourse by the Contractor for any extension of the time

of completion as a result of the removal of such unsatisfactory agent.

**2.44 APPRENTICESHIP STANDARDS.** This contract is subject to the provisions in Sections 1777.5 (Chapter 1411, Statutes of 1968) and 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under him. Section 1777.5, as amended, requires the Contractor or subcontractor employing tradesmen in any apprenticeable occupation to apply to the Joint Apprenticeship Committee nearest the site of the public works project and which administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeymen that will be used in the performance of the contract. The ratio of apprentices to journeymen in such cases shall not be less than one to five, except:

- A. When unemployment in the area of coverage by the Joint Apprenticeship Committee has exceeded an average of fifteen percent (15%) in the 90 days prior to the request for certificate; or
- B. When the number of apprentices in training in the area exceeds a ratio of one to five; or
- C. When the trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis statewide or locally; or
- D. When the Contractor provides evidence that he employs registered apprentices on all of his contracts on an annual average of not less than one apprentice to eight journeymen.

The Contractor is required to make contributions to funds established for the administration of apprenticeship programs if he employees registered apprentices or journeymen in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions.

The Contractor and any subcontractor under him shall comply with the requirements of Sections 1777.5 and 1777.6 in the employment of apprentices.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

**2.45 ASSIGNMENT OF ANTI-TRUST ACTIONS AND UNFAIR BUSINESS PRACTICE CLAIMS.** In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S. C. Sec. 15) or under the Cartwright Act (Chapter 2, commencing with Section 16700) or Part 2 of Division 7 of the Business and Professions Code, arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

**2.46 EQUAL EMPLOYMENT OPPORTUNITY.** Contractor agrees for the duration of this contract that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap. The Contractor will take



affirmative action to insure that employees are treated during employment or training without regard to their race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

The Contractor will in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap.

The Contractor will send to each labor union or other representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the workers' representative of the Contractor commitments under this agreement.

The Contractor agrees that it will comply with the provisions of Titles VI and VII of the Civil Rights Act, Revenue Sharing Act Title 31, U.S. Code Section 2716, and California Government Code Section 12990.

The Contractor agrees that it will assist and cooperate with the County, the State of California and the United States Government in obtaining compliance with the equal opportunity clause, rules, regulations, and relevant orders of the State of California and United States Government issued pursuant to the Acts.

In the event of the Contractor's non-compliance with the discrimination clause, the affirmative action plan of this contract, or with any of the said rules, regulations or orders, this contract may be canceled, terminated, or suspended in whole or in part by the County.

**2.47 HANDICAPPED NON-DISCRIMINATION.** This project is subject to Section 504 of the Rehabilitation Act of 1973 as amended, (29 U.S.C. 794), and all requirements imposed by the applicable office of Revenue Sharing Regulations (31CFR Part 51) and all guidelines and interpretations issued thereto. In this regard, the County and all of its contractors and subcontractors will take all reasonable steps to ensure that handicapped individuals have the maximum opportunity for the same level of aid, benefit or service as any other individual.

**2.48 FAIR EMPLOYMENT AND HOUSING ACT ADDENDUM.** In the performance of this contract, the Contractor will not discriminate against any employee or applicant for employment because of race, sex, color, religion, ancestry, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, sex, color, religion, ancestry, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, promotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by the State or local agency setting forth the provisions of this Fair Employment and Housing Section.

The Contractor will permit access to his records of employment, employment advertisements, application forms, and other pertinent data and records by the State Fair Employment and Housing Commission, or any other agency of the State of California designated by the awarding authority, for the

purposes of investigation to ascertain compliance with the Fair Employment and Housing section of this contract.

Remedies for willful violation:

- A. The State or local agency may determine a willful violation of the Fair Employment and Housing provision to have occurred upon receipt of a final judgement having that effect from a court in an action to which Contractor was a party; or upon receipt of a written notice from the Fair Employment and Housing Commission that it has investigated and determined that the Contractor has violated the Fair Employment and Housing Act and has issued an order or obtained an injunction under Government Code Section 12900, et seq.
- B. For willful violation of this Fair Employment and Housing provision the State or local agency shall have the right to terminate this contract either in whole or in part, and any loss or damage sustained by the State or local agency in securing the goods or services hereunder shall be borne and paid for by the Contractor and by his surety under the performance bond, if any, and the State or local agency may deduct from any monies due or that thereafter may become due to the Contractor, the difference between the price named in the contract and the actual cost thereof to the State or local agency.

#### **2.49 CONTRACTS, WHICH INVOLVE DIGGING TRENCHES OR EXCAVATIONS.**

Note the required language in Public Contract Code Section 7104 concerning contracts, which involve digging trenches or excavations;

Any public works contract of a local public entity, which involves digging trenches or other excavations that extend deeper than four feet below the surface, shall contain a clause, which provides the following:

- A. That the Contractor shall promptly, and before the following conditions are disturbed, notify the public entity, in writing, of any:
  - 1. Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
  - 2. Subsurface or latent physical conditions at the site differing from those indicated.
  - 3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.
- B. That the public entity shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the contract.
- C. That, in the event that a dispute arises between the public entity and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase

in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all work to be performed under the contract. The Contractor shall retain any and all rights provided either by contract or by law, which pertain to the resolution of disputes and protests between the contracting parties.

**2.50 ARBITRATION** The last paragraph in Section 9-1.10, "Arbitration," of the Standard Specifications is amended to read.

Arbitration shall be initiated by a Complaint in Arbitration made in compliance with the requirements of said regulations. A Complaint in Arbitration by the Contractor shall be made not later than 180 days after the date of service in person or by mail on the Contractor of the final written decision by the Department on the claim.

**2.51 NOTICE OF POTENTIAL CLAIM** Section 9-1.04, "Notice of Potential Claim," of the Standard Specifications is amended to read:

**9-1.04 Notice of Potential Claim** The Contractor shall not be entitled to the payment of any additional compensation for any act, or failure to act, by the Engineer, including failure or refusal to issue a change order, or for the happening of any event, thing, occurrence, or other cause, unless he shall have given the Engineer due written notice of potential claim as hereinafter specified. Compliance with this Section 9-1.04 shall not be a prerequisite as to matters within the scope of the protest provisions in Section 4-1.03, "Changes," or Section 8-1.06, "Time of Completion," or the notice provisions in Section 5-1.116, "Differing Site Conditions," or Section 8-1.07, "Liquidated Damages," or Section 8-1.10, "Utility and Non-Highway Facilities," nor to any claim which is based on differences in measurements or errors of computation as to contract quantities.

The written notice of potential claim shall be submitted to the Engineer prior to the time that the Contractor performs the work giving rise to the potential claim for additional compensation, if based on an act or failure to act by the Engineer, or in all other cases within 15 days after the happening of the event, thing, occurrence, or other cause, giving rise to the potential claim.

The written notice of potential claim shall be submitted on Form CEM-6201 furnished by the Department and shall be certified with reference to the California False Claims Act, Government Code Sections 12650 - 12655. The notice shall set forth the reasons for which the Contractor believes additional compensation will or may be due and the nature of the costs involved. Unless the amount of the potential claim has been stated in the written notice, the Contractor shall, within 15 days of submitting said notice, furnish an estimate of the cost of the affected work and impacts, if any, on project completion. Said estimate of costs may be changed or updated by the Contractor when conditions have changed. When the affected work is completed, the Contractor shall submit substantiation of his actual costs. Failure to do so shall be sufficient cause for denial of any claim subsequently filed on the basis of said notice of potential claim.

It is the intention of this Section 9-1.04 that differences between the parties arising under and by virtue of the contract be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. The Contractor hereby agrees that he shall have no right to additional compensation for any claim that may be based on any such act, failure to act, event, thing or occurrence for which no written notice of potential claim as herein required was filed.

Should the Contractor, in connection with or subsequent to the assertion of a potential claim, request inspection and copying of documents or records in the possession of the Department that pertain to the potential claim, Contractor shall make its records of the project, as deemed by the Department to be pertinent to the potential claim, available to the Department for inspection and copying.

**2.52 FINAL PAYMENT AND CLAIMS** Section 9-1.07B, "Final Payment and Claims," of the Standard Specifications is amended to read:

**9-1.07B Final Payment and Claims.** After acceptance by the Director, the Engineer will make a proposed final estimate in writing of the total amount payable to the Contractor, including therein an itemization of said amount, segregated as to contract item quantities, extra work and any other basis for payment, and shall also show therein all deductions made or to be made for prior payments and amounts to be kept or retained under the provisions of the contract. All prior estimates and payments shall be subject to correction in the proposed final estimate. The Contractor shall submit written approval of the proposed final estimate or a written statement of all claims arising under or by virtue of the contract so that the Engineer receives such written approval or statement of claims no later than close of business of the thirtieth day after receiving the proposed final estimate. If the thirtieth day falls on a Saturday, Sunday or legal holiday, then receipt of such written approval or statement of claims by the Engineer shall not be later than close of business of the next business day. No claim will be considered that was not included in the written statement of claims, nor will any claim be allowed as to which a notice or protest is required under the provisions in Sections 4-1.03, "Changes," 8-1.06, "Time of Completion," 8-1.07, "Liquidated Damages," 5-1.116, "Differing Site Conditions," 8-1.10, "Utility and Non-Highway Facilities," and 9-1.04, "Notice of Potential Claim," unless the Contractor has complied with the notice or protest requirements in said sections.

On the Contractor's approval, or if he files no claim within said period of 30 days, the Engineer will issue a final estimate in writing in accordance with the proposed final estimate submitted to the Contractor and within 30 days thereafter the State will pay the entire sum so found to be due. Such final estimate and payment thereon shall be conclusive and binding against both parties to the contract on all questions relating to the amount of work done and the compensation payable therefor, except as otherwise provided in Sections 9-1.03C, "Records," and 9-1.09, "Clerical Errors."

If the Contractor within said period of 30 days files claims, the Engineer will issue a semifinal estimate in accordance with the proposed final estimate submitted to the Contractor and within 30 days thereafter the State will pay the sum so found to be due. Such semifinal estimate and payment thereon shall be conclusive and binding against both parties to the contract on all questions relating to the amount of work done and the compensation payable therefor, except insofar as affected by the claims filed within the time and in the manner required hereunder and except as otherwise provided in Sections 9-1.03C, "Records," and 9-1.09, "Clerical Errors."

Claims filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of said claims. If additional information or details are required by the Engineer to determine the basis and amount of said claims, the Contractor shall furnish such further information or details so that the information or details are received by the Engineer no later than the fifteenth day after receipt of the written request from the Engineer. If the fifteenth day falls on a Saturday, Sunday or legal holiday, then receipt of such information or details by the Engineer shall not be later than close of business of the next business day. Failure to submit such information and details to the Engineer within the time specified will be sufficient cause for denying the claim.

The Contractor shall keep full and complete records of the costs and additional time incurred for any work for which a claim for additional compensation is made. The Engineer or any designated claim investigator or auditor shall have access to those records and any other records as may be required by the Engineer to determine the facts or contentions involved in the claims. Failure to permit access to such records shall be sufficient cause for denying the claims.

Claims submitted by the Contractor shall be accompanied by a notarized certificate containing the following language:

Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code Section 12650 et. seq., the undersigned,

\_\_\_\_\_  
(name)  
\_\_\_\_\_ of  
(title)  
\_\_\_\_\_  
(company)

hereby certifies that the claim for the additional compensation and time, if any, made herein for the work on this contract is a true statement of the actual costs incurred and time sought, and is fully documented and supported under the contract between parties.

Dated \_\_\_\_\_  
/s/ \_\_\_\_\_

Subscribed and sworn before me this \_\_\_\_\_ day  
of \_\_\_\_\_.

\_\_\_\_\_  
Notary Public  
My Commission Expires \_\_\_\_\_

Failure to submit the notarized certificate will be sufficient cause for denying the claim.

Any claim for overhead type expenses or costs, in addition to being certified as stated above, shall be supported by an audit report of an independent Certified Public Accountant. Any such overhead claim shall also be subject to audit by the State at its discretion.

Any costs or expenses incurred by the State in reviewing or auditing any claims that are not supported by the Contractor's cost accounting or other records shall be deemed to be damages incurred by the State within the meaning of the California False Claims Act.

The District Director of the District which administers the contract will make the final determination of any claims which remain in dispute after completion of claim review by the Engineer. A board or person designated by said District Director will review such claims and make a written recommendation thereon to the District Director. The Contractor may meet with the review board or person to make a presentation in support of such claims.

Upon final determination of the claims, the Engineer will then make and issue his final estimate in writing and within 30 days thereafter the State will pay the entire sum, if any, found due thereon. Such final estimate shall be conclusive and binding against both parties to the contract on all questions relating to the amount of work done and the compensation payable therefor, except as otherwise provided in Sections 9-1.03C, "Records," and 9-1.09, "Clerical Errors."

**2.53 SUPPLEMENTAL WORK** A "Supplemental Work" item may be included in the contract to cover modifications to the work necessitated by field conditions. The amount of expenditure under this item may vary from zero to the total amount of the item. This amount may constitute the sum of several modifications. The engineer will notify the Contractor in writing when a portion of the work being performed will be paid for under this item.

**SECTION 3. (BLANK)**

**SECTION 4. (BLANK)**

**SECTION 5. (BLANK)**

**SECTION 6. (BLANK)**

**SECTION 7. (BLANK)**

## **SECTION 8. MATERIALS**

### **SECTION 8-1. MISCELLANEOUS**

**8-1.01 PREQUALIFIED AND TESTED SIGNING AND DELINEATION MATERIALS.** The Department maintains a trade name list of approved prequalified and tested signing and delineation materials and products. Approval of prequalified 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.

Said listing of approved prequalified and tested signing and delineation materials and products cover the following:

#### **MATERIALS AND PRODUCTS**

- Temporary pavement markers
- Striping and pavement marking tape
- Pavement markers, reflective and non-reflective
- Flexible Class 1 delineators and channelizers
- Railing and barrier delineators
- Sign sheeting and base materials
- Reflective sheeting for barricades
- Reflective sheeting for channelizers
- Reflective sheeting for markers and delineators
- Reflective sheeting for traffic cone sleeves
- Reflective sheeting for barrels and drums

None of the above listed signing and delineation materials and products shall be used in the work unless such material or product is listed on the Department's List of Approved Traffic Products. A Certificate of Compliance shall be furnished as specified in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for signing and delineation materials and products. Said certificate shall also certify that the signing and delineation material or product conforms to the prequalified testing and approval of the Department of Transportation, Division of Traffic Operations and was manufactured in accordance with the approved quality control program.

Materials and products will be considered for addition to said approved prequalified and tested list if the manufacturer of the material or product submits to the Division of Traffic Operations 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 Department may elect to perform.

The following is a listing of approved prequalified and tested signing and delineation materials and products:



## **PAVEMENT MARKERS, PERMANENT TYPE**

### **REFLECTIVE**

Adelite (4"x4")  
Apex (4"x4")  
Pavement Markers, Inc., "Hye-Lite" (4"x4")  
Ray-O-Lite, Models SS, RS, and AA (4"x4")  
Ray-O-Lite, Models 2002 (2.4"x4.7")  
Stimsonite, Model 88 (4" x4")

### **REFLECTIVE WITH ABRASION RESISTANT SURFACE**

Ray-O-Lite "AA" ARS (4" x4")(Not for use in recessed applications)  
Ray-O-Lite Mod. 2002 ARS (2.2"x4.7")  
Stimsonite, Model 911 (4"x4")(Not for use in recessed applications)  
Stimsonite, Model 944 SB (2"x4")  
Stimsonite, Model 948 (2.3"x4.7")  
Stimsonite, Model 953 (2.75"x4.5")(Not for use in recessed applications)

### **NON-REFLECTIVE FOR USE WITH EPOXY OR BITUMEN ADHESIVE**

Apex Universal (Ceramic)  
Highway Ceramics Inc. (Ceramic)  
Zumar, TM40W/Y (Polyester)

### **NON-REFLECTIVE FOR USE WITH BITUMEN ADHESIVE ONLY**

Apex Universal, Model 929 (ABS)  
Elgin Molded Plastics, "Empco-Lite" Model 900 (ABS)  
Hi-Way Safety Inc., Models P20-2000W and 2001Y (ABS)  
Interstate Sales, "Diamond Back" (ABS)  
Loomis Plastics, D-Dot (ABS)  
Pavement Markers Inc., (Marker Supply) - Models A1107 and AY1108 (ABS)  
Road Creations, Model RCB4NR (Acrylic)

## **PAVEMENT MARKERS, TEMPORARY TYPE**

### **TEMPORARY MARKERS FOR LONG TERM DAY/NIGHT USE (6 Months or less)**

Apex Universal, Model 924 (4"x4")  
Elgin Molded Plastics, "Empco-Lite" Model 901 (4" Round)  
Highway Technologies, Megalites (4"x4")  
Road Creations, Model R41C (4"x4")

### **TEMPORARY MARKERS FOR SHORT TERM DAY/NIGHT USE (14 days or less)**

Apex Universal, Model 932  
Davidson Plastics, Models TOM (Standard) with Reflexite PC-1000, or (WZ) with Reflexite AC-1000 Sheeting

Hi-Way Safety Inc., Model 1280/1281 with Reflexite PC-1000  
Stimsonite, Model 300 "Temporary Overlay Marker"

TEMPORARY MARKERS FOR SHORT TERM DAY/NIGHT USE (14 days or less at seal coat locations)

Apex Universal, Model 932

Davidson Plastics, Models TRPM (Standard) with Reflexite PC-1000, or (WZ) with Reflexite AC-1000 Sheeting

Davidson Plastics, Models "HH" (High Heat) TRPM (Standard) with Reflexite PC-1000, or (WZ) with Reflexite AC-1000 Sheeting

Hi-Way Safety Inc., Model 1280/1281 with Reflexite PC-1000  
Stimsonite, Model 301 Chip Seal Marker

## **STRIPING AND PAVEMENT MARKING MATERIAL**

PERMANENT TRAFFIC STRIPING AND PAVEMENT MARKING TAPE

(For use on high and low volume roadways)

Advanced Traffic Marking, Series 300 and 400

Brite-Line, Series 1000

Swarco Industries, "Director 60"

3M, "Stamark" Series 380, A420, A440 and 5730

(For use on low volume roadways only)

3M, "Stamark" Series A320 Bisymmetric

TEMPORARY REMOVABLE STRIPING AND PAVEMENT MARKING TAPE

Advanced Traffic Marking, ATM Series 200

Brite-Line, Series 100

P.B. Laminations, Aztec, Grade 102

Swarco Industries, "Director-2"

3M, "Stamark" Brand, Detour Grade, Series 5710 and A620

PREFORMED THERMOPLASTIC

Flint Trading, "Premark"

Pavemark, "Hotape"

REMOVABLE TRAFFIC PAINT

Belpro, Series 250/252 and No. 93 Remover

## **CLASS 1 DELINEATORS**

### **ONE-PIECE DRIVEABLE FLEXIBLE TYPE, 1200 mm (48")**

Carsonite, Curve-Flex CFRM-400  
Carsonite, Roadmarker CRM-375  
Davidson Plastics, "Flexi-Guide 400 and 566"  
GreenLine Model HWDI-66  
GreenLine Model CGDI-66

### **SPECIAL USE FLEXIBLE TYPE, 1200 mm (48")**

Carsonite, "Survivor" with 18" U-Channel anchor  
FlexStake, H-D  
GreenLine HWD with 18" soil anchor  
GreenLine CGD with 18" soil anchor  
Safe-Hit with 8" pavement anchor (SH248-GPR and SHAI-08-PI)  
Safe-Hit, with 15" soil anchor (SHA5-15C-GL)  
Safe-Hit, with 18" soil anchor (SH248-GPR and SHAI-18C-PL)

### **SURFACE MOUNT FLEXIBLE TYPE, 1200 mm (48")**

Bent Manufacturing Co., "Masterflex" Model MF-180EX-48"  
Carsonite, "Super Duck II"  
FlexStake, Surface Mount H-D

## **CHANNELIZERS**

### **SURFACE MOUNT TYPE 900 mm (36")**

Bent Manufacturing Co., "Masterflex" Models MF-360-36 (Round) and MF-180-36" (Flat)  
Carsonite, "Super Duck" (Flat SDF-436, Round SDR-336)  
Carsonite, Super Duck II "The Channelizer"  
FlexStake, Surface Mount H-D  
GreenLine SMD-36  
Repo, Models 300 and 400  
Safe-Hit, Guide Post, Model SH236SMA, with glue down base  
The Line Connection, "Dura-Post" Model DP36-3C

### **TYPE "K" OBJECT MARKERS 450 mm (18")**

Carsonite, Model SMD-615  
Repo, Models 300 and 400  
Safe-Hit, Model SH718SMA  
The Line Connection, Model DP21-4K (Vertical configuration only)

**TYPE "Q" OBJECT MARKERS, 450-600 mm (18-24")**

Carsonite, Super Duck II  
Repo, Models 300 and 400  
Safe-Hit, Models SH824SMA--WA and SH824GP3--WA  
The Line Connection, Model "DP21-4Q"

**CONCRETE BARRIER MARKERS (For use to the left of traffic.)**

**IMPACTABLE TYPE**

Astro Optics "FB"  
Davidson Plastics, Model PCBM-12  
Duraflex Corp., "Flexx 2020" and "Electriflexx"

**NON-IMPACTABLE TYPE**

Astro-Optics, JD Series  
Stimsonite, Model 967 (with 3 1/4" Acrylic cube corner reflector)  
Stimsonite, Model 967LS  
Vega Molded Products, Models GBM and JD

**THREE BEAM BARRIER MARKERS (For use to the left of traffic.)**

Duraflex Corp., "Railrider"  
Davidson Plastics, "Mini" (3"x10")

**CONCRETE BARRIER DELINEATORS 400 mm (16"). (For use to the right of traffic. When mounted on top of barrier, places top of reflective element at 48" [1200 mm])**

Davidson Plastics, Model PCBM T-16  
Safe-Hit, Model SH216RBM

**SOUND WALL DELINEATOR (On vertical surface, places top of reflective element at 48" [1200 mm].)**

Davidson Plastics, PCBM S-36

**GUARD RAILING DELINEATOR 685 mm (27") Wood Post Type. (For use to the right or left of traffic. Places reflective element at 48" [1200 mm].)**

Carsonite, Model 427  
Davidson Plastics FG 427 and FG-527  
GreenLine GRD 27-inch  
Safe-Hit, Model SH227GRD

**GUARD RAILING DELINEATOR 685 mm (27") Steel Post Type. (For use to the right or left of traffic. Places reflective element at 48" [1200 mm].)**

Carsonite, Model CFGR-327 with CFGRBK300 Mounting Bracket

## **REFLECTIVE SHEETING FOR:**

### **CHANNELIZERS, BARRIER MARKERS AND DELINEATORS**

- 3M, High Intensity (Long Term)
- Reflexite, PC-1000, Metalized Polycarbonate (Long Term)
- Reflexite, AC-1000, Acrylic (Long Term)
- Reflexite, AP-1000, Metalized Polyester (Short Term)
- Stimsonite, Series 4500 (For Carsonite CurveFlex and Roadmarker delineators only)

### **TRAFFIC CONES**

- 330 mm (13") Sleeves
  - Reflexite SB (Polyester), Vinyl or "TR" (Semi-transparent)
- 100 and 150 mm (4" and 6") Sleeves
  - 3M Series 3840
  - Reflexite Vinyl

### **BARRELS AND DRUMS**

- Reflexite, "Super High Intensity"
- 3M Series 3810

### **BARRICADES**

- Type I, Engineer Grade
  - American Decal, Adcolite
  - Avery Dennison, 1500/1600
  - Nikkalite, 8100 Series
  - 3M, Scotchlite, Series CW

### **SIGNS**

- Type II, Super Engineer Grade (State-Furnished Signs Only)
  - Avery Dennison, "Fasign" 2500 Series
  - Kiwalite, Type II
  - Nikkalite 1800 Series

- Type III, High Performance
  - 3M, High Intensity, Series 3870

- Type IV, High Performance
  - Stimsonite, Series 4200

- Type VI, Roll-Up Signs
  - Reflexite, Vinyl

Note: Sheeting Types conforming to the requirements of ASTM Designation: D 4956-93B

## SIGN SUBSTRATE FOR CONSTRUCTION AREA SIGNS

Aluminum  
Fiberglass Reinforced Plastic (FRP)  
Sequentia, "Polyplate"  
Fiber-Brite

### **SECTION 8-2.** **TESTING**

**8-2.01 COMPACTION.** Calif. Test 231 utilizing the nuclear gauge shall determine relative compaction. Calif. Test 231 shall be modified to use 30-second counts or one-minute counts at the option of the Engineer. Five 30-second warm-up counts shall be used instead of ten one-minute warm up counts for testing with 30-second counts.

Section "B" of Calif. Test 231 shall be amended as follows:

At the discretion of the Engineer, a guide plate measuring approximately 9-3/4" x 14" x 3/16" may be substituted for the standard plate. Additionally, a sliding sleeve impact hammer which incorporates a 13/16" diameter pin, and is manufactured specifically for use with a nuclear gauge and guide plate, may be used in lieu of Standard driving pin.

**8-2.02 CONCRETE STRENGTH.** Concrete compressive strength shall be determined by Calif. Test 521. Calif. test 521 shall be modified to use ASTM C617 or AASHTO T22 for capping at the discretion of the Engineer.

## **SECTION 9. (BLANK)**

## **SECTION 10. CONSTRUCTION DETAILS**

**10-1.01 ORDER OF WORK.** Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the Standard Specifications and these Special Provisions.

The first order of work shall be to place the order for the traffic signal equipment. The Contractor shall furnish the Engineer with a statement from the vendor that the order for said equipment has been received and accepted by said vendor.

All mailboxes and signs shall be relocated the same day of their removal at the County Engineer's approval.

The removal and replacement of the sidewalks shall be coordinated with the signal underground electrical work.

Prior to commencement of the traffic signal functional test at any location, all items of work related to signal control shall be completed and roadside signs and all pavement delineation and pavement markings shall be in place at that location.

At the end of each working day if a difference in excess of 0.15 foot exists between the elevation of the existing pavement and the elevation of any excavation within 8 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 the placing of the structural section commences, structural 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 4:1 or flatter to the bottom of the excavation. Full compensation for placing the material on a 4:1 slope, regardless of the number of times it is required, and subsequent removing or reshaping of the material to the lines and grades shown on the plans shall be considered as included in the contract price paid for the materials involved and no additional compensation will be allowed therefor. No payment will be made for material placed in excess of that required for the structural section.

**10-1.01A CARE AND CLEANUP.** The Contractor shall repair or replace all broken, damaged, or defective parts of his work. Prior to filling the Notice of Completion, the Contractor shall carefully clean and adjust all equipment, fixtures, etc., installed as part of his work. All unsuitable surplus materials and/or debris of any type and quantity resulting from the Contractor's work, shall be removed offsite. The work site shall be left neat and clean.

**10.1.01B DAMAGE TO PREMISES.** The Contractor shall be responsible for all damage to any part of the work site caused as a result of his work in connection with the Contract. The responsibility shall extend for a period of one year after final acceptance of the project by the County.

**10.1.01C PUBLIC NOTIFICATION.** Contractor shall provide and deliver by hand a written notice to each owner and/or resident of property located adjacent to the job site, 48 hours prior to the start of work. The notice shall describe the work, the anticipated duration of the work, the name and address of the Contractor and the telephone number to call for more information.

**10.1.1D EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK.** The bidder is required to examine carefully the site of the work, and the proposal, plan specifications, and contract forms for the work contemplated, and it will be assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character and quality of work to be performed and materials to be furnished, and as to the requirements of the specifications, special provisions, and the contract. It is mutually agreed that the submission of a proposal shall be considered prima facie evidence that the bidder has made such examination.

**10-1.02 PROGRESS SCHEDULE.** Progress schedules will be required for this contract and shall conform to the provisions in Section 8-1.04, "Progress Schedule," of the Standard Specifications. A progress schedule shall be furnished at the pre-construction meeting.

**10-1.03 OBSTRUCTIONS.** Attention is directed to Sections 8-1.10, "Utility and Non-Highway Facilities," and 15, "Existing Highway Facilities," of the Standard Specifications and these special provisions. See also Section 10-1.01, "Order of Work," of 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 workmen 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 greater than six inches in diameter or pipelines operating at pressures greater than 60 psi (gage); underground electric supply system conductors or cables, with potential to ground of more than 300 volts, either directly buried or in duct or conduit.



The Contractor shall notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least two working days, but not more than 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:

<u>Notification Center</u>	<u>Telephone Number</u>
Underground Service Alert-Northern California (USA)	1-800-642-2444
Underground Service Alert-Southern California (USA)	1-800-422-4133
South Shore Utility Coordinating Council (DIGS)	1-800-541-3447
Western Utilities Underground Alert, Inc.	1-800-424-3447

The aerial and underground utilities are under the jurisdiction of 1) Electrical MID Water & Power (209/526-7428 Ms. Diana Jagers), 2) Gas PG&E (209/847-6630 Mr. Gus Quiroz), 3) Telephone Pacific Bell (209/549-5829 Mr. Steve Hamlin), 4) Cable/Fiber Golden State Utility Co. (209/634-4981 Mr. Gary Schmidt), 5) Irrigation Modesto Irrigation District (209/529-7567 Mr. Dave Colby)

**10-1.04 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, "Construction Area Traffic Control Devices," of the Standard Specifications and these Special Provisions.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least two working days, but not more than 14 calendar days, prior to commencing any excavation for construction area signposts. The Regional Notification Centers include but are not limited to the following:

<u>Notification Center</u>	<u>Telephone Number</u>
Underground Service Alert-Northern California (USA)	1-800-642-2444
Underground Service Alert-Southern California (USA)	1-800-422-4133
South Shore Utility Coordinating Council (DIGS)	1-800-541-3447
Western Utilities Underground Alert, Inc.	1-800-541-3447

All excavations required to install construction area 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.

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

Type IV Reflective Sheeting for sign panels for portable construction area signs shall conform to the requirements specified under "Prequalified and Tested Signing and Delineation Materials" elsewhere in these Special Provisions.

Full compensation for conforming to the requirements of this article shall be considered as included in the prices paid for "Traffic Control System", and no separate payment will be made therefor.

**10-1.05 MAINTAINING TRAFFIC.** Attention is directed to Sections 7-1.08, "Public Convenience," 7-1.09, "Public Safety," and 12, "Construction Area Traffic Control Devices," of the Standard Specifications and to the Section entitled "Public Safety" elsewhere in these special provisions, and these special provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from the responsibilities specified in Section 7-1.09.

The minimum size specified for Type II Flashing Arrow Signs in the table following the second paragraph of Section 12-3.03, "Flashing Arrow Signs," of the Standard Specifications is amended to read "36 inches by 72 inches".

In the Standard Plans, Note 10 on Standard Plan T10, Note 9 on Standard Plan T10A, Note 5 on Standard Plan T11, Note 6 on Standard Plan T12, Note 5 on Standard Plan T13, and Note 4 on Standard Plan T14 are revised to read:

All traffic cones used for night lane closures shall have reflective cone sleeves as specified in the specifications.

The second and third paragraphs of Section 12-3.10, "Traffic Cones," of the Standard Specifications are amended to read:

During the hours of darkness traffic cones shall be affixed with reflective cone sleeves. The reflective sheeting of sleeves on the traffic cones shall be visible at 1,000 feet at night under illumination of legal high beam headlights, by persons with vision of or corrected to 20/20.

Reflective cone sleeves shall conform to the following:

1. Removable flexible reflective cone sleeves shall be fabricated from the reflective sheeting specified in the special provisions, have a minimum height of 13 inches and shall be placed a maximum of three inches from the top of the cone. The sleeves shall not be in place during daylight hours.

2. Permanently affixed semitransparent reflective cone sleeves shall be fabricated from the semitransparent reflective sheeting specified in the special provisions, have a minimum height of 13 inches, and shall be placed a maximum of three inches from the top of the cone. Traffic cones with semitransparent reflective cone sleeves may be used during daylight hours.
3. Permanently affixed double band reflective cone sleeves shall have two white reflective bands. The top band shall be six inches in height, placed a maximum of four inches from the top of the cone. The lower band shall be four inches in height, placed two inches below the bottom of the top band. Traffic cones with double band reflective cone sleeves may be used during daylight hours.

The type of reflective cone sleeve used shall be at the option of the Contractor. Only one type of reflective cone sleeve shall be used on the project

Lane closures shall conform to the provisions in the section of these Special Provisions entitled "Traffic Control System".

Personal vehicles of the Contractor's employees shall not be parked within the right of way.

Whenever vehicles or equipment are parked on the shoulder within six feet of a traffic lane, the shoulder 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 pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of nine cones or portable delineators shall be used for the taper. A C23 (Road Work Ahead) or C24 (Shoulder Work Ahead) sign shall be mounted on a telescoping flag tree with flags. The flag tree shall be placed where directed by the Engineer.

A minimum of one paved traffic lane, not less than 10 feet wide, shall be open for use by public traffic. When construction operations are not actively in progress, not less than two such lanes shall be open to public traffic. The periods of one lane traffic control shall be kept to a minimum.

Except as otherwise provided, the full width of the traveled way shall be open for use by public traffic on Saturdays, Sundays, and designated legal holidays; after 3:00 p.m. on Fridays and the day preceding designated legal holidays; and when construction operations are not actively in progress. On Saturdays, Sundays and designated legal holidays, one lane may be closed to public traffic for the sole purpose of maintaining the surface as required in Section 37-1.07, "Finishing," of the Standard Specifications. Lane closures on Saturdays, Sundays and designated legal holidays shall be restricted to daylight hours when public traffic will be least inconvenienced and delayed, as determined by the Engineer.

Designated legal holidays are: January 1st, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, November 11th, Thanksgiving Day, and December 25th. When a designated legal holiday falls on a Sunday, the following Monday shall be a designated legal holiday. When November 11th falls on a Saturday, the preceding Friday shall be a designated legal holiday.

Full compensation for conforming to the requirements of this article shall be considered as included in the lump sum price paid for "Traffic Control System" and no separate payment will be made therefor.

**10-1.06 TRAFFIC CONTROL SYSTEM.** During traffic stripe 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 84-1.04, "Protection From Damage," and Section 85-1.06, "Placement," of the Standard 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.

**STATIONARY TYPE LANE CLOSURE.** 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.

One-way traffic shall be controlled through the project in accordance with the plan entitled "Traffic Control System for Lane Closure on Two Lane Conventional Highways," and these special provisions.

Utilizing a pilot car will be at the option of the Contractor. If the Contractor elects to use a pilot car, the cones shown along the centerline on the plan need not be placed. The pilot car shall have radio contact with personnel in the work area, and the maximum speed of the pilot car through the traffic control zone shall be 25 miles per hour.

**MOVING TYPE LANE CLOSURE..** Flashing arrow signs used in moving lane closures shall be tuck-mounted crash cushions (TMCC) for use in moving lane closures shall be any of the following approved models, or equal:

(1)

Hexfoam TMA Series 3000 and  
Alpha 1000 TMA Series 1000 and  
Alpha 2001 TMA Series 2001

**Manufacturer:**

**Distributor(Northern):**

Energy Absorption Systems, Inc.  
One East Wacker Drive  
Chicago, IL 60601-2076  
Telephone (312) 467-6750

Traffic Control Service, Inc.  
8585 Thys Court  
Sacramento, CA 95828  
Telephone (800) 884-8274  
FAX (916) 387-9734

**Distributor(Southern):**

Traffic Control Service, Inc.  
1881 Betmor Lane  
Anaheim, CA 92805  
Telephone (800) 222-8274

(2)

Cal T-001 Model 2 or Model 3

**Manufacturer:**

**Distributor:**

Hexcel Corporation  
11711 Dublin Blvd.  
P.O. Box 2312  
Dublin, CA 94568  
Telephone (510) 828-4200

Hexcel Corporation  
11711 Dublin Blvd.  
P.O. Box 2312  
Dublin, CA 94568  
Telephone (510) 828-4200

(3)

Renco Rengard Model Nos.  
CAM 8-815 and RAM 8-815

**Manufacturer:**

**Distributor:**

Renco Inc.  
1582 Pflugerville Loop Road  
P.O. Box 730  
Pflugerville, TX 78660-0730  
Telephone (800) 654-8182

Renco Inc.  
1582 Pflugerville Loop Road  
P.O. Box 730  
Renco Inc.  
Pflugerville, TX 78660-0730  
Telephone (800) 654-8182

Each TMCC shall be individually identified with the manufacturer's name, address, TMCC model number, and a specific serial number. The names and numbers shall each be a minimum 1/2-inch high, and located on the left (street) side at the lower front corner. The TMCC shall have a message next to the name and model number in 1/2 inch high letters which states, "The bottom of this TMCC shall be \_\_\_\_\_ inches  $\pm$  \_\_\_\_\_ inches above the ground at all points for proper impact performance." Any TMCC, which is damaged or appears to be in poor condition shall not be used unless recertified by the manufacturer. The Engineer shall be the sole judge as to whether used TMCCs supplied under this contract need recertification. Each unit shall be certified by the manufacturer to meet the requirements for TMCCs in accordance with the standards established by the Transportation Laboratory Structures Research Section.

Approvals for new TMCC designs proposed as equal to the above approved models shall be in accordance with the procedures (including crash testing), established by the Transportation Laboratory Structures Research Section. For information regarding submittal of new designs for evaluation contact:

Transportation Laboratory  
Structures Research Section  
P.O. Box 19128  
5900 Folsom Boulevard  
Sacramento, CA 95819

New TMCCs proposed as equal to approved TMCCs or approved TMCCs determined by the Engineer to need recertification shall not be used until approved or recertified by the Transportation Laboratory Structures Research Section.

**PAYMENT.** The contract lump sum price paid for traffic control system shall include full compensation for furnishing all labor (including flagging costs), materials (including signs), tools, equipment and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of the traffic control system and for furnishing and operating the pilot car, (including driver, radios, and any other equipment and labor required), as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

The adjustment provisions in Section 4-1.03, "Changes," of the Standard Specifications, shall not apply to the item of traffic control system. 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. Such adjustment will be made on a force account basis as provided in Section 9-1.03, "Force Account Payment," of the Standard Specifications for increased work, and estimated on the same basis in the case of decreased work.

Traffic control system required by work which is classed as extra work, as provided in Section 4-1.03D of the Standard Specifications, will be paid for as a part of the "Supplemental Work", and no additional allowances will be made therefor.

**10-1.07 TEMPORARY PAVEMENT DELINEATION.** Temporary pavement delineation shall be furnished, placed, maintained and removed in accordance with the provisions in Section 12-3.01, "General," of the Standard Specifications and these Special Provisions. Nothing in these special provisions shall be construed as to reduce the minimum standards specified in the Manual of Traffic Controls published by the Department or as relieving the Contractor from his responsibility as provided in Section 7-1.09, "Public Safety," of the Standard Specifications.

**GENERAL.** Whenever the work causes obliteration of pavement delineation, temporary or permanent pavement delineation shall be in place prior to opening the traveled way to public traffic. laneline or centerline pavement delineation shall be provided at all times for traveled ways open to public traffic. On multilane roadways (freeways and expressways) edgeline delineation shall be provided at all times for traveled ways open to public traffic.

All work necessary, including any required lines or marks, to establish the alignment of temporary pavement delineation shall be performed by the Contractor. 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 and removable traffic type tape which conflicts with a new traffic pattern or which is applied to the final layer of surfacing or existing pavement to remain in place shall be removed when no longer required for the direction of public traffic, as determined by the Engineer.

**TEMPORARY LANELINE AND CENTERLINE DELINEATION.** Whenever lanelines and centerlines are obliterated the minimum laneline and centerline delineation to be provided shall be temporary reflective raised pavement markers placed at longitudinal intervals of not more than 24 feet. The temporary reflective raised pavement markers shall be the same color as the laneline or centerline the markers replace. Temporary reflective raised pavement markers shall be, at the option of the Contractor, one of the temporary pavement markers listed for short term day/night use (14 days or less) or long term day/night use (six months or less) in "Prequalified and Tested Signing and Delineation Materials" elsewhere in these Special Provisions.

Temporary reflective raised pavement markers shall be placed in accordance with the manufacturer's instructions and shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used to place pavement markers in areas where removal of the markers will be required.

Temporary laneline or centerline delineation consisting entirely of temporary reflective raised pavement markers placed on longitudinal intervals of not more than 24 feet, shall be used on lanes opened to public traffic for a maximum of 14 days. Prior to the end of the 14 days the permanent pavement delineation shall be placed. If the permanent pavement delineation is not placed within the 14 days, the Contractor shall provide, at his expense, additional temporary pavement delineation. The additional temporary pavement delineation to be provided shall be equivalent to the pattern specified for the permanent pavement delineation for the area, as determined by the Engineer.

Full compensation for furnishing, placing, maintaining, and removing the temporary raised reflective pavement markers, used for temporary laneline and centerline delineation and for removable traffic type tape shall be considered as included in the lump sum price paid for "Traffic Control", and no additional compensation will be allowed therefor.

**10-1.08 DUST CONTROL.** Dust control shall conform to the provisions in Section 10, "Dust Control," of the Standard Specifications.

**10-1.09 EXISTING HIGHWAY FACILITIES.** The work performed in connection with various existing highway facilities shall conform to the provisions in Section 15, "Existing Highway Facilities," of the Standard Specifications and these Special Provisions.

**10-1.09A REMOVE PAVEMENT MARKERS.** Existing pavement marking and markers, when no longer required for traffic lane delineation as directed by the Engineer, shall be removed and disposed of.

Full compensation for removing and disposing of pavement markers shall be considered as included in the lump sum price paid per ton for clearing and grubbing, and no separate payment will be made therefor.

**10-1.09B RELOCATE ROADSIDE SIGNS AND MAILBOXES.** Existing roadside signs and mailboxes shall be removed and relocated at new locations with new mountings as shown on the plans.

Each roadside sign and mailbox shall be installed at the new location on the same day said sign is removed from its original location.

Full compensation for conforming to the requirements of this article shall be considered as included in the lump sum price paid for "Clearing and Grubbing", and no separate payment will be made therefor.

**10-1.10 CLEARING AND GRUBBING.** Clearing and grubbing shall conform to the provisions in Section 16, "Clearing and Grubbing," of the Standard Specifications.

**10-1.11 WATERING.** Watering shall conform to the provisions in Section 17, "Watering," of the Standard Specifications and these Special Provisions.

Full compensation for developing water supply, loading and transporting water, and labeling as specified shall be considered as included in the various contract items and no additional compensation will be allowed therefor.

**10-1.12 AGGREGATE BASE..** Aggregate base shall be Class 2 and shall conform to the provisions in Section 26, "Aggregate Bases," of the Standard Specifications and these Special Provisions.

The first paragraph of Section 26-1.02A, "Class 2 Aggregate Base," of the Standard Specifications is amended by adding the following sentences:



Aggregate may include or consist of material processed from reclaimed asphalt concrete, portland cement concrete, lean concrete base, cement treated base, glass or a combination of any of these materials. Aggregate base incorporating reclaimed glass shall not be placed at locations where surfacing will not be placed over the aggregate base.

The fourth paragraph in said Section 26-1.02A, is amended by adding the following sentence:

Untreated reclaimed asphalt concrete and portland cement concrete will not be considered to be treated with lime, cement or other chemical material for purposes of performing the Durability Index test.

**10-1.13 ASPHALT CONCRETE** Asphalt concrete shall be Type "A" and shall conform to the provisions in Section 39, "Asphalt Concrete," of the Standard Specifications and these Special Provisions.

Full compensation for all materials, labor, tools, equipment, and incidentals furnished to install asphalt shall be considered as included in the lump sum price paid for traffic signals, and no additional compensation will be allowed, therefore.

**10-1.13A PAINT BINDER** Paint Binder shall be SS-1 and shall be furnished and applied in conformance with the Provisions set forth in Section 39-4.02 of the Standard Specifications. The addition of water to asphaltic emulsion shall be in the ratio of one to one unless prior approval is received.

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.

Road surfacing with patches and leveling course work have varying textures and densities. The spread rate of the paint binder shall be adjusted to provide a uniform rate on the existing surface. This may require a second application over the patches and leveling course work. Paint binder shall not be spread beyond controllable limits and shall be spread in front of paving with sufficient time for a complete break.

Full compensation for all materials, labor, tools, equipment, and incidentals furnished to apply paint binders shall be considered as included in the lump sum price paid for traffic signals, and no additional compensation will be allowed, therefore.

**10-1.14 MISCELLANEOUS CONCRETE CONSTRUCTION** Concrete curb, concrete curb and gutter, and concrete sidewalk shall conform to the provisions in Section 73, "Concrete Curbs and Sidewalks," of the Standard Specifications and these Special Provisions.

Measurement of curb and gutter and sidewalk shall be continuous through drives and curb ramps and around medians. No distinction will be made for curb cuts or additional shaping of curbs.

Full compensation for all labor, materials (including reinforcement where indicated), tools, equipment and incidentals to remove, prepare and construct the various items mentioned in this section shall be considered as included in the unit price paid per unit price for concrete work , and no additional compensation will be allowed therefor.

**10-1.14A CONCRETE STEM WALL** Concrete stem wall shall conform to the provisions in Section 51, "Concrete Structures " of the Standard Specifications and these Special Provisions.

Full compensation for all labor, materials (including reinforcement where indicated), tools, equipment and incidentals to remove, prepare and construct the stem wall mentioned in this section shall be considered as included in the unit price paid per unit price for stem wall concrete work , and no additional compensation will be allowed therefor.

**10-1.15 THERMOPLASTIC TRAFFIC STRIPES AND PAVEMENT MARKINGS.** Thermoplastic Traffic Stripes (traffic lines) and Pavement Markings shall conform to the provisions in Sections 84-1, "General," and 84-2, "Thermoplastic Traffic Stripes and Pavement Markings," of the Standard Specifications and these Special Provisions.

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

Thermoplastic material for traffic stripes shall be applied by extrusion methods in a single uniform layer with a minimum thickness of .070-inch.

Full compensation for all labor, materials (including pavement markers), tools, equipment, and incidentals to place the various thermoplastic striping details shall be considered as included in the unit price paid of each respective thermoplastic striping detail, and no additional compensation will be allowed therefor.

**10-1.16 PAVEMENT MARKERS.** Pavement markers shall conform to the provisions in Section 85, "Pavement Markers," of the Standard Specifications and these Special Provisions.

The second paragraph in Section 85-1.02, "Type of Markers," of the Standard Specifications shall not apply.

Certificates of Compliance shall be furnished for pavement markers as specified in "Prequalified and Tested Signing and Delineation Materials" elsewhere in these Special Provisions.

Attention is directed to "Traffic Control System" elsewhere in these Special Provisions regarding the use of moving lane closures during placement of pavement markers with bituminous adhesive.

Payment for Pavement Markers is included in the unit price paid per unit price paid of each respective Thermoplastic Striping Detail, and no additional compensation will be allowed therefor.

**SECTION 10-2 BLANK**

**SECTION 10-3 BLANK**

**SECTION 10-4 BLANK**

## SECTION 10-18

### SIGNALS, LIGHTING AND ELECTRICAL SYSTEMS

- 10-18.1.01** **DESCRIPTION:** This work shall include the furnishing of all labor, materials, tools and equipment to construct and complete in an efficient and workmanlike manner the installation of the traffic signal system in accordance with the approved plans, these specifications, the County Standard Details, and the State Standard Specifications and Standard Plans.

Traffic signal construction or modification work is to be performed at the following location:

#### Crows Landing Road at School Avenue

The Contractor shall furnish all labor, materials and equipment necessary to complete the work as shown on the Plans, as specified in these Special Provisions of the Specifications, and in strict accordance with the conditions of the Contract. All incidental work not shown on the Plans or specified herein which is necessary to complete the work necessary to provide the system described, or shown, shall be furnished and installed as part of this contract at no additional cost to the County. The work shall be complete and ready for service as shown on the Plans and/or specified to the satisfaction of the Engineer.

The Contractor is advised to inspect the site to observe actual field conditions prior to bidding the project.

- 10-18.1.02** **ORDER OF WORK:** Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the State Standard Specifications and these Special Provisions.

The first order of work shall be to place the order for the traffic signal equipment. The Contractor shall furnish the Engineer with a statement from the vendor that the order for said equipment has been received and accepted by said vendor.

- 10-18.2.01** **EQUIPMENT LIST, DRAWINGS, AND MAINTENANCE AND OPERATION MANUALS.**

Prior to the commencement of work, and within 10 days following the signing of the Contract by the County of Stanislaus and the Contractor, the Contractor shall submit seven copies in three-ring binders of a complete list of equipment and materials to be furnished, including all substitutions proposed to the Engineer for approval. Partial or incomplete material lists will not be considered. No substitutions will be considered thereafter. Only one request for substitution will be considered on each item of material or equipment. If the Contractor desires to make a substitution, he shall submit complete product information to document the equipment or material being offered as being equal to that specified. No substitutions will be allowed until requested and approved in writing. Only equipment and/or materials approved by the Engineer may be substituted. The Engineer

reserves the right to require the originally specified equipment and/or materials. See also Section 10-1.17 of these Specifications.

Installation of an approved substitution shall be the Contractor's responsibility, and any revisions necessary for the installation of approved substituted materials and/or equipment shall be made without additional expense to the County of Stanislaus.

Shop drawings shall be submitted in a complete package. Partial submittal will not be considered.

The controller cabinet schematic wiring diagram and intersection sketch shall be combined into one drawing, so that, when the cabinet door is fully open, the drawing is oriented with the intersection.

The Contractor shall furnish in a three-ring binder a maintenance manual for all controller units, auxiliary equipment, and vehicle detector sensor units, control units and amplifiers. The maintenance manual and operation manual may be combined into one manual. The maintenance manual or combined maintenance and operation manual shall be submitted at the time the controllers are delivered for testing or, if ordered by the Engineer, previous to purchase. The maintenance manual shall include, but need not be limited to, the following items:

- (a) Specifications
- (b) Design characteristics
- (c) General operation theory
- (d) Function of all controls
- (e) Trouble shooting procedure (diagnostic routine)
- (f) Block circuit diagram
- (g) Geographical layout of components
- (h) Schematic diagrams
- (i) List of replaceable component parts with stock numbers

**10-18.2.0150 AS-BUILT RECORD DRAWINGS:** The contractor shall maintain a complete set of drawings on site to be kept up to date on a day to day basis with all field modifications. This shall be available for review by the Engineer.

These plans shall be provided to the Engineer after the completion of construction and at the post construction meeting and prior to the final payment. All revisions shall be marked clearly and notes and dimensions shall be in red and be clear as to their meaning and legible.

Full compensation for furnishing, placing, maintaining these As-Built/Record Drawings shall be considered as included in the lump sum price for "Traffic Signals" and no additional compensation shall be allowed therefor.

**10-18.2.0210 PROGRESS SCHEDULES:** Progress schedules will be required for this contract and shall conform to the provisions in Section 8-1.04, "Progress Schedule," of the State Standard

Specifications and these Special Provisions.

The Contractor shall provide the Engineer with a typewritten project schedule at the pre-construction meeting.

No signal standard shall be delivered on-site until Contractor has all signal materials at hand.

Signal heads shall not be installed before traffic signal controller is installed and wired.

**10-18.2.03** **WARRANTIES, GUARANTEES, AND INSTRUCTION SHEETS:** Warranties, guarantees, and instruction sheets shall conform to the provisions in Section 86-1.04, "Warranties, Guarantees, and Instruction Sheets," of the State Standard Specifications and these special provisions.

The Contractor shall be responsible for all work and materials and/or equipment installed under these Plans and Specifications.

The Contractor shall repair or replace at his expense, any defective work, material, or equipment which may become evident within one year of the date of filing of the Notice of Completion. The Contractor shall be responsible for all damage to other materials, equipment, structures, etc., caused by defects for a one-year period if the defect is due to defective material, equipment or workmanship.

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 72 hours, including acquisition of parts.

The one-year guarantee on the repaired or replaced parts shall again commence with the date of re-assembly of the system.

**10-18.2.04** **INTERRUPTION OF EXISTING UTILITIES:** The Contractor shall bear the cost of any utility interruption, temporary relocation, modification, or other modifications as needed to install or remove any traffic signal equipment.

**10-18.2.05** **MAINTAINING EXISTING AND TEMPORARY ELECTRICAL SYSTEMS:** Existing traffic signal system shutdowns shall be limited to periods between the hours of 9:00 a.m. and 3:00 p.m.

The Contractor shall place "Stop Ahead" and "Stop" signs to direct vehicle and pedestrian traffic through the intersection during traffic signal system shutdown. All signal faces shall be covered if the system must be shut down for a 24-hour period. Contractor must request in writing the Engineer's approval 48 hours prior to a 24-hour signal system shutdown.

The Contractor shall wait for the Engineer's approval, in writing, prior to any 24-hour signal system shutdown. If written approval is not received by the Contractor within 48 hours of request, Contractor will assume the request has been denied. Temporary "Stop Ahead" and "Stop" signs shall be either covered or removed when the system is turned on.

One "STOP AHEAD" sign and one "STOP" sign shall be placed for each direction of traffic. For two-lane approaches, two "STOP" signs shall be placed. Location of the signs shall be as directed by the Engineer.

"Stop Ahead" and "Stop" signs shall be furnished by the Contractor and shall conform to the provisions in Section 12-3.06, "Construction Area Signs," of the State Standard Specifications except that the base material for the signs shall not be plywood.

Full compensation for furnishing, installing, maintaining and removing temporary "Stop Ahead" and "Stop" signs and for covering signs not in use shall be considered as included in the contract lump sum price for the signal item involved and no additional compensation will be allowed therefor.

**10-18.2.06** **TEMPORARY TRAFFIC SIGNAL SYSTEM:** The installation of a temporary traffic signal system by the Contractor shall require prior written authorization by the Engineer. Prior to installation, the Contractor shall submit a supplemental Equipment List and Drawings to the Engineer for approval of each such temporary traffic signal system and any modification thereto, including, but not limited to, equipment and location.

Full compensation for furnishing, installation, maintaining and removing temporary traffic signal equipment shall be considered as included in the contract lump sum price for the signal item involved and no additional compensation will be allowed therefor.

**10-18.2.07** **REGULATIONS AND CODE:** All work and materials shall conform with the latest codes, rules and regulations of the following:

- (a) State codes and ordinances
- (b) Local City and/or County ordinances
- (c) National Electrical Code
- (d) Uniform Building Code

Nothing in these Specifications is to be construed to permit work not conforming to the above; expense for compliance with the above shall be paid for by the Contractor. Whenever the Plans and Specifications require higher standards or larger sizes than those required by the Ordinances and Statutes, the Plans and Specifications shall take priority.

The Contractor shall have Special Dispensation from the California Occupational Safety and Health Administration to conduct operations no closer than six feet, but within 10 feet, of a high voltage line prior to erecting signal standards.

**10-18.2.08**     **ENCROACHMENT PERMITS.** Contractor shall be responsible for paying all encroachment permit fees required on this contract by other agencies.

**10-18.2.09**     **REMOVING, REINSTALLING OR SALVAGING ELECTRICAL EQUIPMENT:**  
Salvaged electrical materials shall be hauled to County of Stanislaus Corporate Yard, 1716 Morgan Road, Modesto, California, and stockpiled.

Full compensation for hauling and stockpiling electrical materials shall be considered as included in the lump sum contract price or prices paid for traffic signal and lighting work, and no additional compensation will be allowed therefor.

**10-18.2.10**     **STANDARDS, STEEL PEDESTALS AND POSTS:** Paragraph four of Section 86-2.04, "Standards, Steel Pedestals and Posts," of the State Standard Specifications is amended by adding the following after the second subparagraph:

Standards with an outside diameter of 12 inches or less shall be round. Standards with an outside diameter of greater than 12 inches shall be round or multi-sided. Multi-sided standards shall have a minimum of 10 sides which shall be convex and shall have a minimum bend radius of 4 inches.

Section 86-2.04, "Standards, Steel Pedestals and Post," of the State Standard Specifications is amended by adding the following after paragraph eleven:

All galvanized nuts, used on assemblies with a specified pre-load or torque, shall be lubricated in accordance with the requirements specified for galvanized Grade DH nuts in ASTM Designation: A 563.

The twelfth paragraph in said Section 86-2.04 of the State Standard Specifications is amended to read:

The sign mounting hardware, as shown on Detail U of Standard Plan ES-6T, shall be installed at the locations shown on the plans.

Where the plans refer to the side tenon detail at the end of the signal mast arm, the applicable tip tenon detail may be substituted.

Standards, steel pedestals and posts shall have ornamental base covers.

Standards, steel pedestals and posts shall be galvanized.

**10-18.2.11**     **SOLID-STATE TRAFFIC ACTUATED CONTROLLER.** The Contractor shall furnish one Model 170E controller assembly consisting of Model 170E controller unit, one wired Model 332 cabinet and all auxiliary equipment required to control the signal indications as shown on the Plans, and as specified in these Special Provisions. The controller shall be furnished complete with all equipment conforming to the requirements in the "Traffic Signal



Control Equipment Specifications," issued by the State of California. Controllers, cabinets, equipment, and all modifications thereto shall be type approved by the State of California Testing Laboratory, and shall have California State Quality Product listing.

The controller unit shall be supplied with BI Tran System Program #200CA. One diagnostic PROM module with C1 and C2 wraparound plugs compatible with and of the same manufacture as the controller units shall also be provided. The diagnostic PROM modules and intersection programs shall be accompanied by an operation/instruction manual.

The controller cabinet layout and component locations shall conform to the requirements for Model 332 cabinet in said "Traffic Signal Control Equipment Specifications," and addendum thereto.

The controller shall have four ACIA capability. Four ACIA's shall be integral to the controller unit.

The controller memory modules shall be model 412C as described in the Caltrans specification and provide for 32K EPROM (27256), 16K RAM, and 8K zero power RAM (memory method 2, memory select 4).

All compression connectors that terminate inside controller cabinet for low voltage circuits shall be soldered.

The controller shall be supplied with a Model 400F modem with anti-streaming capability module complete with terminal block and cable to connect to controllers ACIA port. The Contractor shall install terminal block and all cabinet wiring except incoming communication lines.

The cabinets shall be wired and fully equipped for traffic actuation and phasing shown on the Plans.

Cabinet shall be aluminum. Cabinet shall have the additional following items installed:

1. Fluorescent light with door switches
2. Auto/manual control with police panel cord.
3. Pull-out drawer/shelf assembly
4. Communications panels

The Contractor shall arrange to have a signal technician, qualified to work on the controller units and employed by the controller unit manufacturer or his representative, present at the time the equipment is turned on.

The convenience receptacle shall have ground-fault circuit interruption as defined by the Code. Circuit interruption shall occur on 6 milliamperes of ground-fault current and shall not occur on less than 4 milliamperes of ground-fault current.

Model 332 cabinets shall be furnished with a Corbin lock, keyed "State #2."

**10-18.2.12** **VEHICLE SIGNAL FACES AND SIGNAL HEADS**. Signal housings shall be polycarbonate manufactured from virgin material using lexan polycarbonate black in color.

Back plates shall be polycarbonate material black in color.

Reflectors shall be mounted with mechanical fasteners; adhesive mounting shall not be used.

Glass lenses shall be used.

All signals shall have tunnel visors and back plates black in color. All sections of all signals shall be 12".

All red yellow and green indications shall have Light Emitting Diode (LED's) signal modules that meet the Standard Specifications.

All lamps for traffic signal units will be Contractor-furnished, 130-volt 1950 lumen 25TS 8000 HR lamps.

Top openings of signal heads shall be sealed with neoprene gaskets.

**10-18.2.13** **PEDESTRIAN SIGNALS AND PEDESTRIAN PUSH BUTTONS**. Pedestrian signals shall be Type A black in color. International symbol indications shall be provided. The pedestrian signal faces (International Hand symbol) shall have LED's signal modules orange in color. Pedestrian push buttons shall meet ADA requirements with rain covers. The push buttons sign shall be porcelain enameled metal.

The following type of screen shall be provided:

A 1 ½-inch deep egg crate-type screen either of 0.020-inch maximum thickness 3003 H14 aluminum alloy or of 0.030-inch nominal thickness polycarbonate. The assembly shall be mounted in a frame constructed of 0.040-inch minimum thickness aluminum alloy or polycarbonate black in color.

The egg crate-type screen shall be installed parallel to the face of the message plate and shall be held in place by the use of stainless steel screws.

The hood described in Section 86-4.05C, "Visors," of the State Standard Specifications is not required.

The screen and frame shall be anodized flat black or may be finished with flat black enamel as specified in Section 91-4.01, "Enamel: Traffic Signal Lusterless Black," of the Standard Specifications. Said enamel shall be applied in the shop at the Contractor's expense.

Alternate methods may be substituted for the above screening providing the results are equal to or superior to those obtained with the above-specified screen as determined by the Engineer.

**10-18.2.14** **LUMINARIES:** Glare shields are not required.

Luminaries shall be 200 watt, with high-pressure sodium, General Electric C265N579, ITT 133-62J3, Hubbel RM GT 20 S31 071 0340.

**10-18.2.15** **PHOTOELECTRIC CONTROLS.** Photoelectric controls shall be Type IV.

**10-18.2.16** **EMERGENCY VEHICLE DETECTOR SYSTEM.** None

**10-18.2.17** **TERMINAL COMPARTMENT.** Slip-fitters and terminal compartments shall be cast bronze.

**10-18.2.18** **DETECTORS.** Loop wire shall be Type 1.

Detector loops shall be six feet by six feet in size unless otherwise noted on the Plans.

Unless shown otherwise, each loop shall consist of three turns of loop conductor.

Conductor of each loop shall be run continuous, without splice, to the termination pull box where splice to detector lead-in cable is made. Conductors from loop to termination pull box shall be twisted together three turns per foot, before inserting in the saw cut slot and conduit.

Each loop shall be installed with the conductor wound in a clockwise rotation. Each individual conductor shall be banded "Start" and "End" in the termination pull box.

Each pair of loop conductors shall be identified and banded together in pairs, by lane, in the termination pull box. A minimum of five feet of loop conductors shall be provided, after splicing, in a termination pull box.

All banding shall be of the permanent, waterproof type.

Upon completion of the loop, and prior to connecting the loop to the lead-in cable, each loop shall be megohm tested and tested for continuity in the presence of the Engineer. The insulation resistance of the loop conductors, lead-in cables, and splices shall not be less than 100 megohms. In addition, testing shall meet Section 10-18.2.26.

Final loop connections shall be made such that each loop section is wound in the opposite rotation to an adjacent loop, whether such loop is in the same lane or in the adjacent lane.

The loops shall be joined in combination of series-parallel so that optimum sensitivity is obtained at the detector sensor unit, and shall be in accordance with the detector unit manufacturer's recommendation regarding series-parallel combinations.

Final splices between loops and lead-in cable shall not be made until the operation of the loops under actual traffic conditions is approved by the Engineer.

Loop detector lead-in cable shall be Type B. Splices to lead-in cable shall be soldered, insulated and installed in a heat-shrink tubing, or approved equal.

Each loop detector lead-in cable shall be identified and banded in each pull box and in the controller cabinet.

Detectors shall be Indicator Controls Corporation Series 3DLD with built-in loop diagnostics, transmission programs and serial port interface, or approved equal. Detectors shall have automatic reset capability and shall not require manual resetting upon opening and closing of loop circuit.

The sealant for filling slots shall be an ELASTOMERIC SEALANT, and shall conform to State Standard Specification 86-5.01A(5), 3M detector sealant, black 5000.

**10-18.2.19** **CONDUCTORS AND WIRING.** Subparagraphs 2, 4, and 5 of the first paragraph of Section 86-2.09D, "Splicing," of the State Standard Specifications is deleted.

Splices shall be insulated by "Method B", except detector lead-in cables.

Conductors shall be cabled in bundles, by phase, and identified by phase with permanent labels in the controller cabinet and at terminal pull boxes.

Multiple lighting conductors, signal light grounded conductors, and bonding conductors only, may be spliced.

"C" shaped compression connectors, as shown on the Plans, shall be used.

Insulation shall be THW rated, and shall comply with Section 86-2.08B of the State Standard Specifications.

The contractor shall install cable in lieu of individual conductors. The signal cable shall conform to the following:

The cable jacket shall be black polyethylene with an inner polyester binder sheath, and shall be rated for 600 volts and 75 degrees Celsius. All cables shall have clear, distinctive, and permanent markings on the outer surface throughout the entire length of the cable showing the manufacturer's name or trademark, insulation designation, number of conductors, conductor sizes, and the voltage rating of the jacket. Filler material, if used, shall be polyethylene material.

The individual conductors in the cable shall be solid copper with Type THWN insulation. The minimum thickness of the Type THWN insulation, at any point, shall be 13 mils for conductor sizes 14 and 12 and shall be 18 mils for conductor size 10. The minimum thickness of the nylon jacket shall be 4 mils at any point.

Three Conductor Cable - The 3 conductor signal cable shall consist of three No. 14 conductors. The cable jacket shall have a minimum average thickness of 45 mils and a minimum thickness at any point of 36 mils. The nominal outside diameter of the cable shall not exceed 0.40 inches. The color codes for the No. 14 conductors shall be as follows:

Blue/Black Stripe	-	Phase 2 or 6 Pedestrian push button
Blue/Orange Stripe	-	Phase 4 or 8 Pedestrian Push Button
White/Black Stripe	-	Pedestrian Common

Nine Conductor Cable - The 9 conductor cable shall consist of eight No. 14 conductors and one No. 12 conductor. The cable jacket shall have a minimum average thickness of 60 mils and shall have a minimum thickness at any point of 48 mils. The nominal outside diameter of the cable shall not exceed 0.65 inch. The color code for the No. 12 conductor shall be white. The color codes for the No. 14 conductors shall be as follows:

Red	Yellow/Black stripe
Yellow	Brown/Black stripe
Brown	Black (Walk)
Red/Black Stripe	White/Black Stripe (Don't Walk)

Twelve Conductor Cable - The 12 conductor cable shall consist of eleven No. 14 conductors and one No. 12 conductor. The cable jacket shall have a minimum average thickness of 60 mils and shall have a minimum thickness at any point of 48 mils. The

nominal outside diameter of the cable shall not exceed 0.70 inch. The color code of the No. 12 conductor shall be white.

The 12 conductor cable shall be used for vehicle signals, pedestrian signals spares and the signal common. The color code and functional; connections for the No. 14 conductors shall be as follows:

<b>Color Code</b>	<b>Termination</b>	<b>Phase</b>
Red	Vehicle Signal Red	Odd Phases
Yellow	Vehicle Signal Yellow	Odd Phases
Brown	Vehicle signal Green	Odd Phases
Red/Black Stripe	Vehicle Signal Red	Even Phases
Yellow/Black Stripe	Vehicle Signal Yellow	Even Phases
Brown/Black Stripe	Vehicle Signal Green	Even Phases
Black/Red Stripe	Railroad Pre-empt	
Brown/ Silver Stripe	Pedestrian Walk	
Black/White Stripe	Spare	
Black	Spare	

No splicing will be allowed in any pull boxes. The cable shall feed directly from one conduit to the next without any extra cable coiled in the pull box.

Pedestrian push buttons shall be connected to the 3 conductor cable and shall be installed from the push button housing to the controller cabinet with no splices.

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

Conductors shall be spliced by the use of "C" shaped compression connectors as shown on the plans.

**10-18.2.20** **FUSED SPLICE CONNECTORS.** Fused splice connectors will not be required.

**10-18.2.21** **BONDING AND GROUNDING:** Grounding jumper shall be attached by a 3/16 inch or larger brass bolt in the signal standard or controller pedestal and shall be run to the conduit, ground rod or bonding wire in adjacent pull box.

Grounding jumper shall be visible after cap has been poured on foundation.

Equipment grounding conductors will not be required in conduit containing loop lead-in cables only.

Green Wire #6 (cabinet ground) shall have a separate ground rod in pull box nearest to cabinet, with no other wire attached.

**10-18.2.22 CONDUIT:**

Conduit runs shown on the plans to be located behind curbs may be installed in the street, within 3 feet of and parallel with the gutter line of the curb, by trenching as provided for below. All pull boxes shall be located behind the curb or at the locations shown on the plans. Conduit runs under continuous runs of new sidewalk shall be installed behind the curb.

When using rigid metal conduit and a standard coupling cannot be used for coupling metal-type conduit, a UL listed threaded union coupling, as specified in the third paragraph in Section 86-2.05C, "Installation," of the State Standard Specifications may be used.

Insulated bonding bushings will be required on metal conduit. All metal conduit shall be grounded together in all pull boxes and cabinets by means of a grounding jumper.

At locations where conduit is to be installed by jacking or drilling as provided in Section 86-2.05C, "Installation", of the Caftans Standard Specifications, and if delay to any vehicle will not exceed 10 minutes, conduit may be installed by the trenching method as follows:

**Trenching Installation of Conduit:** Conduit shall be placed under existing in a trench approximately 2 inches wider than the outside diameter of the conduit to be installed. The trench shall not exceed 6 inches in width. Conduit depth shall not exceed 12 inches or the conduit trade diameter plus 10 inches, which ever is greater, except at pull boxes the trench may be hand dug to required depth. The top of the installed conduit shall be a minimum of 9 inches below finish grade.

In areas where additional pavement is to be placed, trenching installation shall be completed prior to placing the final pavement layer.

The outline of the areas to be trenched shall be cut to a minimum of depth of 3 inches with a rock cutting excavator specifically designed for such purpose. Cuts shall be neat and true with no shatter outside the removal area.

The conduit shall be placed in the bottom of the trench and the trench shall be backfilled with commercial quality concrete containing not less than 564 pounds of cement per cubic yard of concrete, to not less than 0.20 foot below the pavement surface for asphalt paved roadways.

The top 0.20 inches of trench shall be backfilled with asphalt concrete Type "A", ½ inch medium.

Prior to spreading asphalt concrete, paint binder (tack coat) shall be applied in conformance with the provisions of Section 39-4.02 of the Standard Specifications.

Spreading, feathering and compacting of asphalt concrete shall be performed by any method which produces an asphalt concrete surface of uniform smoothness, texture and density when compared to the adjacent pavement.

After conductors have been installed, the ends of conduits terminating in pull boxes, and in service and controller cabinets shall be sealed with an approved type of sealing compound.

**10-18.2.23** **PULL BOXES AND HAND HOLES.** Pull boxes shall be pre-cast reinforced concrete with "Traffic Signal" OR "Service" stamped on lids. Hand holes shall be Type A.

The bottoms of pull boxes shall be grouted. Contractor's attention is directed to Section 86-2.06C of the State Standard Specifications.

Recesses for suspension of ballasts will not be required.

Pull boxes shall be State #5 minimum. Larger sizes shall be installed where required by the National Electrical Code or where shown on the Plans.

**10-18.2.24** **FOUNDATIONS.** Portland cement concrete shall conform to Section 90-10, "Minor Concrete," of the State Standard Specifications and shall contain no less than 470 pounds of cement per cubic yard, except concrete for reinforced pile foundations shall contain not less than 564 pounds of cement per cubic yard.

**10-18.2.25** **SIGNS.** Signs shall be furnished and installed by the Contractor as shown on the Plans and as specified in the State of California Traffic Manual, issued March 1987.

The G7 street name signs shall be on a diamond-grade reflective sheeting.

Street name text shall be white, 10-inch upper case, D font, on a green background. Messages shall be on both sides of the signs unless otherwise indicated on the plans. G7 signs shall be provided as follows:

**School Avenue** \_\_\_\_\_ (Two G7 Signs)  
**Crows Landing Road** \_\_\_\_\_ (One G7 Sign)

The Contractor shall provide and install signs as called for on the plans.

Two wraps of stainless steel Band-It-Band strapping 3/4" thick shall be used to hang all overhead signs. Band-It-Band buckles type 201 stainless steel shall be used with strapping.



**10-18.2.26** **TESTING.** The Contractor shall make the signals fully operational including entering timing settings provided by the Public Works Department in the controller and peripheral equipment.

The Contractor shall have present, a qualified field technician, who shall be qualified to perform testing and servicing on all systems of the installation.

Prior to scheduled turn on, the field technician shall perform all testing assignments. This testing shall include measurement of each loop installation utilizing a field loop tester/analyzer. Based on the measurement of each loop, the final loop configuration shall be established in such manner as to generate a unique frequency for each adjacent loop system, (detector channel). This unique frequency shall be set such that in the natural state and in the detect state, the frequency does not enter the frequency range of any adjacent loop system. In addition to the frequency setting and adjustments, the loop configuration shall be such that peak tuning characteristics shall be maximized; i.e., the detect state shall be a minimum of a 3.0 reference value based on natural state reference. For loops rated less than a 3.5 reference value, the loops shall be configured to maximize the sensitivity of the loop closest to the stop bar.

The Contractor shall provide the Engineer with the detector test report as provided. This report shall include each detector as labeled on the drawing, and shall show the final loop configuration, the natural state frequency, the detect frequency, and the calculated reference value of each loop system.

The Contractor shall flash test all circuits of each signal phase and both circuits of each pedestrian phase to confirm that the signal is wired properly before the signal is requested to be energized. The Contractor shall provide the Engineer with the signal flash report as provided.

**10-18.2.27** **SIGNAL ENERGIZING.** The Contractor, after fully testing the new traffic signal equipment, will contact the Engineer to schedule signal energizing. Signals will only be allowed to be put into operation on Tuesdays, Wednesdays or Thursdays. The Contractor will have the signal fully tested at least 24 hours before the signal is energized.

**10-18.2.28** **FUNCTIONAL TESTING.** The first paragraph in Section 86-2.14B, "Field Testing," of the State Standard Specifications is amended to read:

Prior to start of functional testing, the Contractor shall perform the following tests on all circuits, in the presence of the Engineer.

The functional test for each lighting system shall consist of not less than 14 days. If unsatisfactory performance of the system develops, the conditions shall be corrected and the test shall be repeated until the 14 days of continuous, satisfactory operation is obtained.

## SECTION 11

### PAVEMENT MARKINGS

- 11.1.01**      **DESCRIPTION.** Traffic striping work shall conform to the provisions in Sections 15, 84, and 85 "Existing Highway Facilities," "Traffic Stripes and pavement Markings," and "Pavement Markers" of the California Standard Specifications, dated July 1992, applicable sheets of the California Standard Plans, dated July 1992, the details and notes a shown on the Plans, and these special provisions.
- 11.2.01**      **THERMOPLASTIC TRAFFIC STRIPES AND PAVEMENT MARKINGS.** This work shall consist of applying thermoplastic traffic stripes (traffic lines) and pavement markings, including applying glass spheres, at the locations shown on the plans in conformance with Section 84-1 "General," and 84-2 "Thermoplastic Traffic Stripes and Pavement Markings," of the Standard Specifications and these special provisions.
- 11.3.01**      **PAVEMENT MARKERS.** This work shall consist of furnishing and placing raised pavement markers at the locations shown on the plans in conformance with Section 85 "Pavement Markers," of the Standard Specifications and these special provisions.
- 11.4.01**      **REMOVAL OF TRAFFIC STRIPES AND PAVEMENT MARKINGS.** This work shall consist of removing existing traffic stripes (traffic lines) and pavement markings at the locations shown on the plans in conformance with Sections 15-1 "General," and 15-2 "Miscellaneous Highway Facilities" of the Standard Specifications and these special provisions.

# SIGNAL FLASH TEST REPORT

Intersection Of: Crows Landing Road at School Avenue

Date: \_\_\_\_\_

Tested By: \_\_\_\_\_

<u>PHASES</u>	<u>RED</u>	<u>AMBER</u>	<u>GREEN</u>
PHASE 1			
PHASE 2			
PHASE 3			
PHASE 4			
PHASE 5			
PHASE 6			
PHASE 7			
PHASE 8			

<u>PEDESTRIAN PHASES</u>	<u>WALK</u>	<u>DON'T WALK</u>
PHASE 1		
PHASE 2		
PHASE 3		
PHASE 4		

## DETECTOR LOOP TEST REPORT

Intersection Of: Crows Landing Road at School Avenue

Date: \_\_\_\_\_

Tested By: \_\_\_\_\_

<u>LOOP</u>	<u>FREQUENCY NO CALL</u>	<u>FREQUENCY WITH CALL</u>	<u>LOOP</u>	<u>FREQUENCY NO CALL</u>	<u>FREQUENCY WITH CALL</u>
1I1U			5J1U		
1I1L			5J1L		
1I9U			5J9U		
2I2U			6J2U		
2I2L			6J2L		
2I3U			6J3U		
2I3L			6J3L		
2I4U			6J4U		
2I4L			6J4L		
3I5U			7J5U		
3I5L			7J5L		
3I9L			7J9L		
4I6U			8J6U		
4I6L			8J6L		
4I7U			8J7U		
4I7L			8J7L		
4I8U			8J8U		
4I8L			8J8L		

(L:\ROADS\132-144\spec\CrowsLndingSpec.wpd)