



# City of Sacramento City Council

915 I Street, Sacramento, CA, 95814  
[www.CityofSacramento.org](http://www.CityofSacramento.org)

**Meeting Date:** 4/26/2011

**Report Type:** Consent

12

**Title: Contract: Alhambra and Stockton Traffic Signal Modification Project**

**Report ID:** 2011-00290

**Location:** District 3

**Recommendation:** Adopt a Resolution: 1) approving plans and specifications for the project; 2) awarding the construction contract to Studebaker Brown Electrical in the amount of \$148,927 and; 3) authorizing the City Manager to execute a contract with Studebaker Brown Electrical in the amount of \$148,927 for the project.

**Contact:** John Matoba, Associate Electrical Engineer (916) 808-7891; Nicholas Theocharides, Engineering Division Manager, (916) 808-5065, Department of Transportation

**Presenter:** None

**Department:** Transportation Department

**Division:** Civil & Electrical Design

**Dept ID:** 15001131

## **Attachments:**

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- 1-Description/Analysis
- 2 - Background Information
- 3 - Resolution
- 4 - Exhibit A - Location Map
- 5- Contract Cover Sheet
- 6- Contract

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### **City Attorney Review**

Approved as to Form  
Jerry Hicks  
4/15/2011 9:47:55 AM

### **City Treasurer Review**

Prior Council Financial Policy Approval or  
Outside City Treasurer Scope  
Russell Fehr  
4/6/2011 12:17:02 PM

### **Approvals/Acknowledgements**

Department Director or Designee: Jerry Way - 4/14/2011 3:26:33 PM

Assistant City Manager: John Dangberg - 4/15/2011 9:39:54 AM

Eileen Teichert, City Attorney

Shirley Concolino, City Clerk  
Gus Vina, Interim City Manager

Russell Fehr, City Treasurer



## Description/Analysis

**Issue:** The Alhambra and Stockton Boulevards Traffic Signal Modification Project will install left turn lanes for the north and southbound directions to reduce traffic collisions. Six bids were received for the Alhambra and Stockton Boulevard Traffic Signal Modification Project. Studebaker Brown Electrical is the lowest responsive and responsible bidder. City Council approval is necessary to move forward with the awarding of the construction contract.

**Policy Considerations:** The action requested is consistent with the Title 3 of the Sacramento City Code and the City of Sacramento Strategic Plan goals of improving the transportation system and expanding public safety.

**Environmental Considerations:** The Community Development Department, Environmental Planning Division has reviewed the proposed action and determined that the project is exempt from the provisions of the California Environmental Quality Act (CEQA) under Categorical Exemption – State Class 1 and Section Number 15301.

**Sustainability Considerations:** This project is consistent with the City's Sustainability Master Plan. It is aimed at addressing the goals and targets set forth in Transportation Infrastructure and Air Quality Focus Areas by optimizing traffic signal timing, coordinating traffic flows, reducing travel time and congestion, traffic safety, and improving air quality.

**Rationale for Recommendation:** Studebaker Brown Electrical is the lowest responsive and responsible bidder. Project funding is sufficient to award the contract.

**Financial Considerations:** The Traffic Signal Safety Upgrade Program (S15074100) has a total budget of \$1,504,002 consisting of local transportation funds (Funds 2001, 2002, 2005, 2007). As of March 24, 2011, the Traffic Signal Safety Upgrade Program has an unobligated balance of \$979,805 which is sufficient to execute the construction contract in the amount of \$148,927 with Studebaker Brown Electrical and cover the remaining construction management costs. There are no general funds planned or allocated for this project.

The approval of this project will support 4 jobs in the City of Sacramento based upon the model provided by the Federal Highway Administration (FHWA) of one new job for every \$35,000 of transportation project investment.

**Emerging Small Business Development (ESBD):** The City's ESBE goal is 20%. To encourage small and emerging business participation, plans and specifications were sent to 19 plan rooms and construction service organizations for publication. All are directly involved with ESBE construction firms. The project was also announced on the City's Project Internet site at [www.cityofsacramento.org/bids](http://www.cityofsacramento.org/bids). Studebaker Brown Electrical company is certified ESBD with 100% SBE.

**Background**

A traffic collision history report from January 1, 2005 to May 1, 2010 indicated that the intersection of Alhambra and Stockton Boulevards has a higher than average rate of collisions. A high percentage of the accidents were caused by a conflict between left turn and through traffic movements. The goal of the Alhambra and Stockton Boulevards Traffic Signal Modification Project is to reduce traffic collisions by providing protected left turns for the northbound and southbound directions.

This project was advertised and a total of six bids were received on February 16, 2011. The results are summarized below:

| <b>Contractor</b>                      | <b>Bid Amount</b> | <b>E/SBE</b> | <b>Local</b> | <b>SBE</b> | <b>Responsive</b> |
|--|-------------------|--------------|--------------|------------|-------------------|
| Studebaker Brown Electrical            | \$148,927.96      | Yes          |              | 100%       | Yes               |
| M&M Electric                           | \$158,541.00      | Yes          | Yes          | 100%       | Yes               |
| Pacific Excavation                     | \$159,367.00      |              | Yes          | 22.5%      | Yes               |
| Richard A. Heaps Electrical Contractor | \$172,866.00      | Yes          | Yes          | 100%       | Yes               |
| Steiny and Company, Inc.               | \$204,688.00      |              |              | 29.9%      | Yes               |
| Tennyson Electric                      | \$224,719.00      | Yes          |              | 100%       | Yes               |

The engineer's estimate is \$150,000. It is recommended that the contract be awarded to Studebaker Brown Electrical as the lowest responsive and responsible bid.



## **RESOLUTION NO.**

Adopted by the Sacramento City Council

**APPROVE PLANS AND SPECIFICATIONS,  
AWARD CONTRACT, AND AUTHORIZE THE CITY MANAGER TO EXECUTE THE  
CONTRACT FOR THE ALHAMBRA BOULEVARD AND STOCKTON BOULEVARD  
TRAFFIC SIGNAL MODIFICATION PROJECT  
(S15074108)**

### **BACKGROUND**

- A. A traffic collision history report from January 1, 2005 to May 1, 2010 indicates that the intersection of Alhambra and Stockton Boulevards has a higher than average rate of collisions. A high percentage of the accidents were caused by a conflict between left turn and through traffic movements. The goal of the Alhambra Boulevard and Stockton Boulevard Traffic Signal Modification Project is to reduce traffic collisions by providing protected left turns for the northbound and southbound directions.
- B. The project was advertised and a total of six bids were received on February 16, 2011. Studebaker Brown Electric is the lowest responsible bidder.
- C. Contract award to Studebaker Brown Electric is recommended as the lowest responsive and responsible bidder.

### **BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:**

- Section 1. Plans and specifications for Alhambra Boulevard and Stockton Boulevard Traffic Signal Modification Project are approved.
- Section 2. The construction contract is awarded to Studebaker Brown Electric in the amount of \$148,927.
- Section 3. The City Manager is authorized to execute a contract with Studebaker Brown Electric in the amount of \$148,927 for the Alhambra Boulevard and Stockton Boulevard Traffic Signal Modification Project.
- Section 4. Exhibit A is made part of this Resolution.

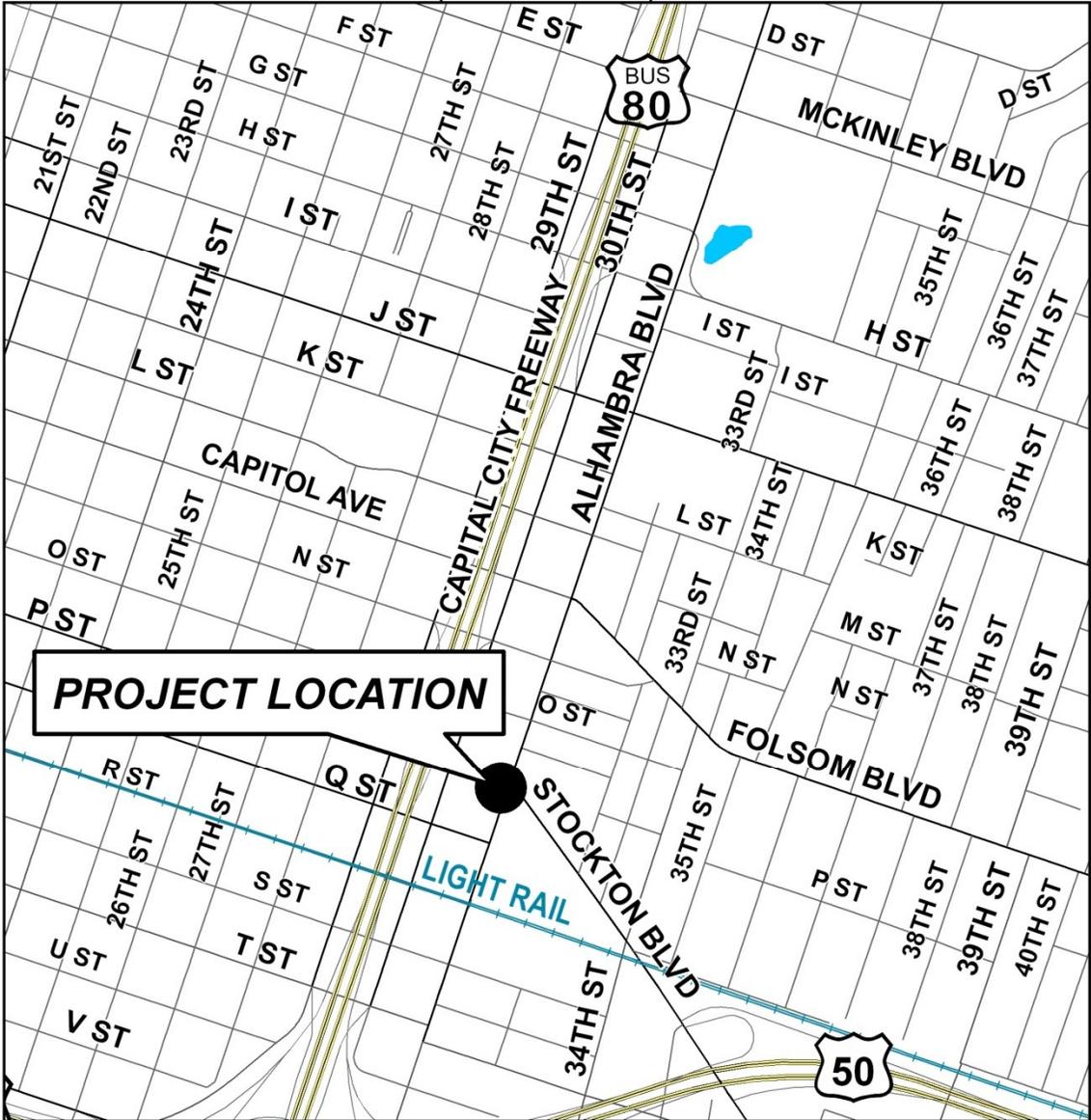
### **Table of Contents:**

- Exhibit A: Map of the Alhambra Boulevard and Stockton Boulevard Traffic Signal Modification Project (S15074108)



EXHIBIT A

Location Map for  
Alhambra Boulevard & Stockton Boulevard  
Traffic Signal Modification Project  
(S15074108)



Department of  
**TRANSPORTATION**  
City of Sacramento

Map Contact: S. Tobin  
Map Date: JUL.10

0 335 670 1,340 2,010  
Feet





## Unexecuted Contract/Agreements

- The Unexecuted Contract/Agreement is signed by the other party, is attached as an exhibit to the resolution, and is approved as to form by the City Attorney.
  
- The Unexecuted Contract/Agreement (Public Project) is NOT signed by the other party, is attached as an exhibit to the resolution, and is approved as to form by the City Attorney.
  
- The Unexecuted Contract is included as an exhibit to the Resolution, however, the Agreement(s) is with other another governmental agency and it is not feasible to obtain the other agency's signature prior to Council action (be they denominated Agreements, MOUs, MOAs, etc.); however, the City Attorney approves the forwarding of the report to Council even though the signed agreement is not in hand yet.
  
- The Unexecuted Contract is NOT included as an exhibit to the resolution because, due to special circumstances, and the City Attorney confirms in writing that it is okay to proceed with Council action even though the signed agreement is not in hand yet.

*All unexecuted contracts/agreements which are signed by the other parties are to be in the Office of the City Clerk before agenda publication.*



DEPARTMENT OF  
TRANSPORTATION

CITY OF SACRAMENTO  
CALIFORNIA

915 I ST  
RM 2000  
SACRAMENTO, CA  
95814-2702

ENGINEERING SERVICES  
DIVISION

PH 916-808-8300  
FAX 916-808-8281

**CONTRACT SPECIFICATIONS  
FOR**

**Alhambra Blvd and Stockton Blvd Traffic Signal Modification**

**(PN: S15074108)**

Non-Refundable Fee  
\$ 50.00

Separate Plans

For Pre-Bid Information Call:  
Kaleb Haile, Project Manager  
(916) 808-7020

Bids to be received before  
**2:00 P.M. Wednesday,  
February 16, 2011** at:  
City Clerk's Office  
Historic City Hall  
915 I Street, Suite 116  
Sacramento, CA 95814

**NEW PROGRAM REQUIREMENTS**

**ESBE PROGRAM**

For information on meeting the City of Sacramento's Small Business Enterprise (SBE) and Emerging Business Enterprise (EBE) project goals, please contact Noreen James at (916) 808-5470, or visit the City of Sacramento's small business web site at:  
[http://dev.cityofsacramento.org/econdev/business-open/Sub\\_small-business-certification.cfm](http://dev.cityofsacramento.org/econdev/business-open/Sub_small-business-certification.cfm)

Estimated Construction Cost: **\$150,000**

Construction Time: 45 Working Days



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ENGINEERING SERVICES  
DIVISION

PH 916-808-8300  
FAX 916-808-8281

January 19, 2011

**RE: City of Sacramento Construction Contracting Opportunities**

The City of Sacramento is currently soliciting bids for Alhambra Blvd and Stockton Blvd Traffic Signal Modification (PN: S15074108). The project will consist of installing all necessary equipment and material to install a new traffic signal. Also included in the work shall be fiber optic and signing and striping installation.

**Bids to be received Wednesday, February 16, 2011 at 2:00 p.m. The plans may be reviewed at the following locations:**

1. Construction Data & News,  
1791 Tribute Rd. Suite D, Sacramento, CA 95815
2. Greater Sacramento Small Business Development Center  
1410 Ethan Way, Sacramento, CA 95815
3. Sacramento Builders Exchange  
1331 T Street, Sacramento, CA 95814
4. Sacramento Builders Exchange, Roseville Office  
1 Sierragate, Suite 290-C, Roseville, CA 95678
5. El Dorado Builders Exchange  
3430 Robin Lane, Suite 7, Cameron Park, CA 95682
6. Placer County Builders' Exchange  
10656 Industrial Ave, Roseville, CA 95678
7. Construction Market Data  
1540 River Park Drive, Suite 117, Sacramento, CA 95815
8. Nevada County Contractors Association  
111-A New Mohawk Rd, Nevada City, CA 95959
9. Shasta Builder's Exchange  
2990 Innsbruck Dr, Redding, CA 96003
10. San Francisco Builders Exchange  
850 South Van Ness Ave, San Francisco, CA 94110-1911
11. Builders Exchange of Santa Clara  
400 Reed Street, Santa Clara, CA 95050
12. Sacramento Hispanic Chamber of Commerce  
1491 River Park Drive, Ste #101, Sacramento, CA 95815
13. Fresno Builders Exchange  
1244 Mariposa Street, Fresno, CA 93707-0111
14. Peninsula Builders Exchange  
735 Industrial Rd, Ste #100, San Carlos, CA 94070
15. California Small Business Entrepreneurs, Inc (CalSBE)  
3023 East Myrtle Street, Stockton, CA 95205

City Council  
Alhambra Blvd and Stockton Blvd Traffic Signal Modification  
(PN: S15074108)

January 19, 2011

16. Sacramento Asian Pacific Chamber of Commerce  
2012 H Street, Ste #202, Sacramento, CA 95814
17. Sacramento Black Chamber of Commerce  
2655 Del Monte St, West Sacramento, CA 95691
18. Russian Chamber of Commerce  
2929 Fulton Ave, Ste #6, Sacramento, CA 95821

Bidders may obtain the Contract Documents at Signature Reprographics, 620 Sunbeam Avenue, Sacramento, CA 95814, 916-454-0800. A non-refundable fee of \$ 50.00 will be charged. The construction estimate is **\$150,000**. **The City Project Manager is Kaleb Haile (916) 808-7020.**

**QUESTIONS AND RESOLUTION OF DISCREPANCIES:** Submit written questions about the Contract Documents to:

Department of Transportation, Engineering Services Division  
New City Hall  
915 I St, Room 2000  
Sacramento, CA 95814  
Attention: Angela Edwards (916) 808-6725

Respectfully,

Angela Edwards  
Contracts Services

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Sealed Proposals will be received by the City Clerk of the City of Sacramento at the office of the City Clerk, Historic City Hall, Ste 116, located at 915 I Street between 9th and 10th Streets, up to the hour of 2:00 PM on **February 16, 2011** and will be opened as soon thereafter as business allows, in the Planning Commission Conference Room, Historic City Hall for:

### **Alhambra Blvd and Stockton Blvd Traffic Signal Modification**

**(PN: S15074108)**

as set forth in the Contract Documents.

Proposals received and work performed thereunder shall comply with the requirements of Title 3 of the Sacramento City Code. Each Bid Proposal shall be accompanied by bid security of at least 10% of the sum of the Bid Proposal which conforms to the requirements of Section 7.0 of the Instructions to Bidders. The right to reject Proposals or to waive any error or omission in any Bid Proposal received is reserved by the City. Signed proposals shall be submitted on the printed forms contained in the Project Manual and enclosed in an envelope marked: Sealed Bid Proposal for:

### **Alhambra Blvd and Stockton Blvd Traffic Signal Modification**

**(PN: S15074108)**

Copies of the Contract Documents are available at

**SIGNATURE REPROGRAPHICS  
620 SUNBEAM AVE  
SACRAMENTO, CA 95814  
916-454-0800**

A non-refundable fee of **\$50.00** will be charged.

Subcontractors shall comply with the rates of wages currently established by the Director of Industrial Relations under provisions of Sections 1773 of the Labor Code of the State of California, a copy of which is on file in the office of the City Clerk. In accordance with Sacramento City Code Section 3.60.180 and Section 1771.5 of the California Labor Code, the payment of the general prevailing rate of per diem wages or the general prevailing rate of per diem wages for holiday and overtime is not required for any Public Construction project of \$25,000 or less, or Public Maintenance project of \$15,000 or less. The City of Sacramento has an approved Labor Compliance Program. **Electronic Web submittal of Labor Compliance Reports is effective May 1, 2007.** Each contractor and every lower-tier subcontractor is required to submit certified payrolls and labor compliance documentation electronically at the discretion of and in the manner specified by the City of Sacramento.

Electronic submittal will be a web-based system, accessed on the World Wide Web by a web browser. Each contractor and subcontractor will be given a Log On identification and password to access the City of Sacramento reporting system.

Use of the system may entail additional data entry of weekly payroll information including; employee identification, labor classification, total hours worked and hours worked on this project, wage and benefit rates paid, etc. The contractor's payroll and accounting software might be capable of generating a 'comma delimited file' that will interface with the software.

This requirement will be 'flowed down' to every lower-tier subcontractor and vendor required to provide labor compliance documentation.

All questions regarding this Labor Compliance Program should be directed to the department's contracts staff or Contracts Services at (916) 808-5524.

Pursuant to Sacramento City Code Section 3.60.250, any Agreement awarded pursuant to this Invitation to Bid shall contain a provision permitting the substitution of securities for any monies withheld to ensure performance under the Agreement. The terms of such provisions shall be according to the requirements and the form required by the City.

Bid protests must be filled and maintained in accordance with the provisions of Sections 3.60.460 through 3.60.560 of the Sacramento City Code. Bid protests that do not comply with Sections 3.60.460 through 3.60.560 of the Sacramento City Code shall be invalid and shall not be considered. A bid protest fee of \$750.00 is required at the time of filing to be considered valid in accordance with City of Sacramento Resolution No. 2003-231 dated April 29, 2003. As used herein, the term "bid protest" includes any bid protest that (1) claims that one or more bidders on this contract should be disqualified or rejected for any reason, or (2) contests a City staff recommendation to award this contract to a particular bidder, or (3) contests a City staff recommendation to disqualify or reject one or more bidders on this contract. A copy of Sections 3.60.460 through 3.60.560 of the Sacramento City Code may be obtained from the Project Manager, or from the City Clerk, located at 915 I Street, Ste 116, Sacramento, CA 95814.

ESBE REQUIREMENTS  
(City Contracts no Federal Funds Used)

I. **ESBE PROGRAM REQUIREMENTS**

On February 9, 1999, the Sacramento City Council adopted an Emerging and Small Business Development (ESBD) program to provide enhanced opportunities for the participation of small business enterprises (SBEs) and emerging business enterprises (EBEs) in the City's contracting and procurement activities. The ESBD program establishes an annual emerging and small business enterprise (ESBE) participation goal for the City's contracts, and authorizes City departments to require minimum ESBE participation levels in individual contracts so that the annual ESBE participation goal can be met. Under City Code Section 3.60.270, when the bid specifications for a City contract establishes a minimum participation level for ESBEs, **no bidder on the contract shall be considered a responsive bidder unless its bid meets the minimum ESBE participation level required by the bid specifications.**

The City has established a minimum 20% participation level for ESBEs on this contract. Pursuant to City Code Section 3.60.270, no bidder on this contract shall be considered a responsive bidder unless its bid meets or exceeds this minimum participation level.

Bidders shall include copies of their Certification as a SBE or EBE and the SBE or EBE Certifications for each subcontractor, trucker, material supplier, or other business entity listed on the forms submitted with the sealed proposal. **Failure to submit the required ESBE information by the close of business two days after bid opening will be grounds for finding the bid non-responsive.**

II. **ESBE CERTIFICATION**

- A. A SBE designated in the bid must be certified as such by the State of California or by the City, as defined herein, prior to the time bids are received.
- B. An EBE designated in the bid must be certified as such by the City, as defined herein, prior to the time bids are received.

III. **DETERMINATION OF ESBE PARTICIPATION LEVEL**

- A. The percent of ESBE participation shall be determined based on the dollar amount of the work to be performed by a certified ESBEs as that dollar amount is specifically stated on the **SUBCONTRACTOR and ESBE PARTICIPATION VERIFICATION FORM (FM 440)** in the bid package, relative to the total dollar amount of the bid, except as provided other wise below.
- B. To receive credit for participation, a ESBE must perform a commercially useful function; i.e., must be responsible for the execution of a distinct element of the work and must carry its responsibility by actually performing, managing, or supervising the work.
- C. Suppliers: Credit for supplies by ESBEs will be 100 percent.
- D. Truckers: Credit for trucking by ESBEs will be 100 percent.

**IV. ESBE REQUIREMENTS OF SUCCESSFUL BID/PROPOSAL**

- A. ESBE RECORDS - The Contractor shall maintain records of all subcontracts with certified ESBE subcontractors and records of materials purchased from certified ESBE vendors/suppliers for one (1) year after receiving final payment from the City. Such records shall show the name and business address of each ESBE subcontractor or vendor/supplier and the total dollar amount actually paid each ESBE subcontractor or vendor/supplier.

Upon completion of the contract, a summary of these records shall be prepared, certified correct by the Contractor's authorized representative and furnished to the City. The Contractor shall provide such other information, records, reports, certifications or other documents as may be required by City, to determine compliance with any provision of the ESBD program or these specifications.

- B. REPORTING REQUIREMENTS AND SANCTIONS - Failure to provide specific information, records, reports, certifications, or any other documents required for compliance with these specifications shall be considered noncompliance with the contract. If the Contractor fails to correct a deficiency within fifteen (15) days after notification, a deduction may be made from the contract amount. The deduction shall be ten (10) percent of the estimated value of the work done during the month, not to be less than \$1,000 nor exceed \$10,000 and shall be deducted from the next progress payment.

- C. PERFORMANCE OF ESBE SUBCONTRACTORS AND SUPPLIERS - The ESBEs listed by the Contractor shall perform the work and supply the materials for which they are listed unless the Contractor has received prior written authorization from the City to perform the work with other forces or to obtain the material from other sources. Reasons for requesting such authorization would include:

1. The listed ESBE fails to execute a written contract based upon the general terms, conditions, plans, and specifications for the project.
2. The listed ESBE becomes bankrupt or insolvent.
3. The listed ESBE subcontractor fails to meet the bond requirements of the Contractor.
4. The work performed by the listed subcontractor is unsatisfactory and/or is not in accordance with the plans and specifications, or the subcontractor fails to perform his/her obligations under the subcontractor contract.
5. It would be in the best interest of the City. The Contractor shall not be entitled to any payment for such work or materials unless it is performed or supplied by the listed SBE or EBE or other forces (including those of the Contractor) authorized in writing, by the City.

- D. SUBCONTRACTOR SUBSTITUTION - No substitution of an ESBE subcontractor shall be made at any time without compliance with the Subcontracting Listing Law and the written consent of the City. If a ESBE subcontractor is unable to perform successfully and is to be replaced, the Contractor will be required to make good faith efforts to replace the original ESBE subcontractor with another certified ESBE subcontractor. The new ESBE subcontractor must be certified at the time of substitution.

**V. DEFINITIONS**

A. Emerging Business Enterprise (EBE)

The City shall certify EBEs utilizing the small business certification criteria and standards of the State of California, General Services Department, Office of Small Business Certification and Resources, that were in effect on December 1, 1998, provided that the size standard, industry by industry, shall be set at 50% of the State small business certification criteria and standards that were in effect on December 1, 1998.

B. Small Business Enterprise (SBE)

The City shall certify SBEs utilizing the small business certification criteria and standards of the State of California, General Services Department, Office of Small Business Certification and Resources. The City will also accept State certified SBEs.

C. CONTRACTOR

The individual, partnership, corporation, joint venture or other legal entity entering into a contract with the City of Sacramento.

D. SUBCONTRACTOR

The individual, partnership, corporation, or other legal entity entering into a contract with the prime contractor to perform a portion of the work.

STATE OF CALIFORNIA - DEPARTMENT OF INDUSTRIAL RELATIONS - DIVISION  
OF APPRENTICESHIP STANDARDS  
EXCERPTS FROM THE CALIFORNIA LABOR CODE RELATING TO  
APPRENTICES ON PUBLIC WORKS  
CHAPTER 1 OF DIVISION 2  
APPRENTICES ON PUBLIC WORKS  
(NOTE: **BOLDFACE TYPE DENOTES KEY POINTS.**)

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1773.3. An awarding agency whose public works contract falls within the jurisdiction of Section 1777.5 shall, within five days of the award, send a copy of the award to the Division of Apprenticeship Standards. When specifically requested by a local joint apprenticeship committee, the division shall notify the local joint apprenticeship committee regarding all such awards applicable to the joint apprenticeship committee making the request. Within five days of a finding of any discrepancy regarding the ratio of apprentices to journeymen, pursuant to the certificated fixed number of apprentices to journeymen, the awarding agency shall notify the Division of Apprenticeship Standards. (Added by Stats. 1978, Ch. 1249)

1776. (a) Each contractor and subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work.
- (b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis:
- (1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.
  - (2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations.
  - (3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either body awarding the contract, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to

being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of the contractor.

- (c) Each contractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.
- (d) Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the contractor awarded the contract or performing the contract shall not be marked or obliterated.
- (e) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city and county, and shall, within five working days, provide a notice or a change of location and address.
- (f) In the event of noncompliance with the requirements of this section, the contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects the contractor must comply with the section. Should noncompliance will be evident after the 10-day period, the contractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty-five dollars (\$25) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.
- (g) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. These stipulations shall fix the responsibility for compliance with this section on the prime contractor.
- (h) The director shall adopt rules consistent with the California Public Records Act (Ch. 3.5 (commencing with Sec. 6250), of Div. 7, Title 1, Gov. C.) and the Information Practices Act of 1977, (Title 1.8 (commencing with Sec. 1798) Pt. 4, Div. 3, Civ. C.) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.

(Amended 1983 Ch. 681)

1777.5. Nothing in this chapter shall prevent the employment of properly registered apprentices upon public works. Every such apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he or she is employed, and shall be employed only at the work of the craft or trade to which he or she is registered.

Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards and written apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3, are eligible to be employed on public works. The employment and training for each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under which he or she is training.

When the contractor to whom the contract is awarded by the state or any political subdivision, or any subcontractor under him or her, in performing any of the work under the contract or subcontract, employs workers in any apprenticeable craft or trade, the contractor and subcontractor shall apply to the joint apprenticeship committee administering the apprenticeship standards of the craft or trade in the area of the site of the public work for a certificate approving the contractor or subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, approval as established by the joint apprenticeship committee or committees shall be subject to the approval of the Administrator of Apprenticeship.

The joint apprenticeship committee or committees, subsequent to approving the subject contractor or subcontractor, shall arrange for the dispatch of apprentices to the contractor or subcontractor in order to comply with this section. Every contractor and subcontractor shall submit contract award information to the applicable joint apprenticeship committee which shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices to be employed, and the approximate dates the apprentices will be employed. There shall be an affirmative duty upon the joint apprenticeship committee or committees administering the apprenticeship standards of the craft or trade in the area of the site of the public work to ensure equal employment and affirmative action in apprenticeship for women and minorities.

Contractors or subcontractors shall not be required to submit individual applications for approval to local joint apprenticeship committees provided they are already covered by the local apprenticeship standards. The ratio of work performed by apprentices to journeymen who shall be employed in the craft or trade on the public work may be the ratio stipulated in the apprenticeship standards under which the joint apprenticeship committee operates, but, except as otherwise provided in this section, in any case shall the ratio be less than one hour of apprentices work for every five hours of labor performed by a journeyman. However, the minimum ratio for the land surveyor classification shall not be less than one apprentice for each five journeymen.

Any ratio shall apply during any day or portion of a day when any journeyman, or the higher standard stipulated by the joint apprenticeship committee, is employed at the job site and shall be computed on the basis of the hours worked during the day by journeymen so employed, except for the land surveyor classification. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract. However, the contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the job site. Where an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Division of Apprenticeship Standards, upon application of a joint apprenticeship committee, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

The contractor or subcontractor, if he or she is covered by this section, upon the issuance of the approval certificate, or if he or she has been previously approved in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the apprenticeship standards. Upon proper showing by the contractor that he or she employs apprentices in the craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by a journeyman, or in the land surveyor classification, one apprentice for each five journeymen, the Division of Apprenticeship Standards may grant a certificate exempting the contractor from the 1-to-5 hourly ratio as set forth in this section. This section shall not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor, when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000) or 20 working days. Any work performed by a journeymen in excess of eight hours per day or 40 hours per week, shall not be used to calculate the hourly ratio required by this section.

"Apprenticeable craft or trade" as used in this section, means a craft or trade determined as an apprenticeable occupation in accordance with rules and regulations prescribed by the Apprenticeship Council. The joint apprenticeship committee shall have the discretion to grant a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting a contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

- (a) Unemployment for the previous three-month period in the area exceeds an average of 15 percent.
- (b) The number of apprentices in training in such area exceeds a ratio of 1 to 5.

- (c) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis, or on a local basis.
- (d) Assignment of an apprentice to any work performed under a public works contract would create a condition which would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyman.

When exemptions are granted to an organization which represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis the member contractors will not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already approved by the local apprenticeship standards.

A contractor to whom the contract is awarded, or any subcontractor under him or her, who, in performing any of the work under the contract, employees journeymen or apprentices in any apprenticeable craft or trade and who is not contributing to a fund or funds to administer and conduct the apprenticeship program in any craft or trade in the area of the site of the public work, to which fund or funds other contractors in the area of the site of the public work are contributing, shall contribute to the fund or funds in each craft or trade in which he or she employs journeymen or apprentices on the public work in the same amount or upon the same basis and in the same manner as the other contractors do, but where the trust fund administrators are able to accept the funds, contractors not signatory to the trust agreement shall pay a like amount to the California Apprenticeship Council. The contractor or subcontractor may add the amount of the contributions in computing his or her bid for the contract. The Division of Labor Standards Enforcement is authorized to enforce the payment of the contributions to the fund or funds as set forth in Section 227.

The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

All decisions of the joint apprenticeship committee under this section are subject to Section 3081.

(Amended by Stats. 1989, Ch. 1224)

1777.6. It shall be unlawful for an employer or a labor union to refuse to accept otherwise qualified employees as registered apprentices on any public works, on the ground of the race, religious creed, color, national origin, ancestry, sex, or age, excepted as provided in Section 3077, of such employee. (Amended by Stats. 1976, Ch. 1179)

- 1777.7. (a) In the event a contractor or subcontractor willfully fails to comply with Section 1777.5, the Director of Industrial Relations shall deny to the contractor or subcontractor, both individually and in the name of the business entity under which the contractor or subcontractor is doing business, the right to bid on, or to receive, any public works contract for a period of up to one year for the first violation and for a period of up to three years for the second and subsequent violations. Each period of debarment shall run from the date the determination of noncompliance by the Administrator of Apprenticeship becomes and order of the California Apprenticeship Council.
- (b) A contractor or subcontractor who violates Section 1777.5 shall forfeit as a civil penalty the sum of fifty dollars (\$50) for each calendar day of noncompliance. Notwithstanding Section 1727, upon receipt of a determination that a civil penalty has been imposed, the awarding body shall withhold the amount of the civil penalty from contract progress payments then due or to become due.
- (c) In lieu of the penalty provided for in subdivision (a) or (b), the director may for a first time violation and with the concurrence of the joint apprenticeship committee, order the contractor or subcontractor to provide apprentice employment equivalent to the work hours that would have been provided for apprentices during the period of non-compliance.
- (d) Any funds withheld by the awarding body pursuant to this section shall be deposited in the General Fund if the awarding body is a state entity, or in the equivalent fund of an awarding body if the awarding body is an entity other than the state.
- (e) The interpretation and enforcement of Section 1777.5 and this section shall be in accordance with the rules and procedures of the California Apprenticeship Council.

(Amended by Stats. 1989, Ch. 1224)

JG3-01.A

**BID PROPOSAL FORMS**

---

**PLEASE REMOVE AND**  
**COMPLETE**  
**THE FOLLOWING DOCUMENTS**  
**AND**  
**SUBMIT AS**  
**THE BID PROPOSAL**  
**PACKAGE**

## **BID PROPOSAL CHECKLIST**

***The following items are required to be submitted as part of the bid proposal. Failure to do so will result in the bid being declared not responsive.***

| <u>Included</u><br><u>Please (√)</u>  | <u>Pages</u> |
|---|--------------|
| <input type="checkbox"/> Bid Proposal Form  | 1 – 7        |
| <input type="checkbox"/> Bid Proposal Guarantee   | 1 only       |
| <input type="checkbox"/> Drug Free Work Place Certification                                 | 1 only       |
| <input type="checkbox"/> Minimum Qualifications Questionnaire                               | 1 - 6        |
| <input type="checkbox"/> E/SBE Subcontractor Form*  | 1 only       |
| <input type="checkbox"/> Non-Discrimination in Employee Benefits Ordinance<br>Certification | 1 - 9        |

- \*Documentation of subcontractor E/SBE certification is due by no later than close of business two (2) working days after bid opening. Subcontractor list is due with submission of bid. This information is due to Dept of Transportation, Attn: Jose R. Ledesma, 915 I Street, Room 2000, Sacramento CA 95814



Any vendor and/or consultant submitting an official bid or proposal to the City of Sacramento City Clerk's Office, shall select one of the following delivery options. To ensure responsive receipt of bids and/or proposals within established submission deadlines, address information must exactly match one of the below options.

The City of Sacramento is not responsible for the late receipt of bids and/or proposals where the proposer did not adhere to one of the available delivery options.

| Option | Service Provider and/or Service Types   | Address  |
|--------|---|--|
| 1.     | <b>United States Postal Service (USPS)</b><br>- Regular First Class<br>- Certified or Return Receipt<br>- Priority<br>- Express | Sacramento City Clerk's Office<br><i>P.O. Box 122391</i><br>Sacramento, CA 95812-2391                                |
| 2.     | <b>Expedited Services</b><br>- FedEx<br>- UPS<br>- DHL  | Sacramento City Clerk's Office<br><i>915 I Street, Ste. 122391</i><br>Sacramento, CA 95814-2604                      |
| 3.     | <b>Personal Delivery</b><br>- Hand Delivery<br>- Courier  | Sacramento City Clerk's Office<br><i>Historic City Hall</i><br><i>915 I Street, Ste. 116</i><br>Sacramento, CA 95814 |

# STUDEBAKER BROWN Electric

CITY OF SACRAMENTO  
 Department of Transportation  
 Engineering Services Division

Bid Proposal  
 Page 1 of 3

|  |  |
|--|--|
| <input type="checkbox"/> Properly Signed     | <input type="checkbox"/> Improperly Signed       |
| <input type="checkbox"/> Not Included        | <input type="checkbox"/> Not Required            |
| Type of Deposit                              |  |
| <input checked="" type="checkbox"/> Bid Bond | <input type="checkbox"/> Cashier/Certified Check |
| <input type="checkbox"/> Other               | Initial: <u>VE</u>                               |
| Bid Bond Security                            |  |

TO THE HONORABLE CITY COUNCIL  
 SACRAMENTO, CALIFORNIA:

In compliance with the Contract Documents, the undersigned hereby proposes to furnish all required labor, materials, supervision, transportation, equipment, services, taxes and incidentals required for:

**ALHAMBRA BOULEVARD AND STOCKTON BOULEVARD  
 TRAFFIC SIGNAL MODIFICATION PROJECT  
 (PN: S15074108)**

in the City and County of Sacramento, California.

The Work is to be done in strict conformity with the Contract Documents now on file in the Office of the City Clerk, for the following sum:

| Item No. | Item  | Estimated Quantity | Unit | Unit Price                       | Total               |
|----------|---|--------------------|------|----------------------------------|---------------------|
| 1        | Traffic Signal Modification                 | LS                 | 1    | \$ <u>          </u>             | \$ <u>140,000.-</u> |
| 2        | Fiber Optic Installation                    | LS                 | 1    | \$ <u>          </u>             | \$ <u>1800.-</u>    |
| 3        | Remove Signs                                | EA                 | 2    | \$ <u><del>90.00</del> 90.00</u> | \$ <u>180.00</u>    |
| 4        | Relocate Existing Signs                     | EA                 | 13   | \$ <u>146.-</u>                  | \$ <u>1898.-</u>    |
| 5        | Place Signs on Mastarms                     | EA                 | 5    | \$ <u>400.-</u>                  | \$ <u>2000.-</u>    |
| 6        | Remove Traffic Markings and Striping        | LS                 | 1    | \$ <u>          </u>             | \$ <u>400.-</u>     |
| 7        | 24" Thermoplastic Traffic Striping to Place | LF                 | 50   | \$ <u>18.-</u>                   | \$ <u>900.-</u>     |
| 8        | Thermoplastic Traffic Marking to Place      | SF                 | 157  | \$ <u>8.28</u>                   | \$ <u>1300.-</u>    |
| 9        | Place Pavement Markers                      | EA                 | 15   | \$ <u>30.-</u>                   | \$ <u>450.-</u>     |

CONTRACTOR NAME: STUDEBAKER BROWN ELECTRIC TOTAL \$ 148,928.00

If awarded the Agreement, the undersigned agrees to sign said Agreement and furnish the necessary surety bonds and insurance certificates within ten (10) days after receipt of the notice of award of Agreement, and to begin work within five (5) days after receipt of the Notice of Intent to Award by the City.

It is understood that this Bid Proposal is based upon completion of the Work within a period of **FORTY-FIVE (45) WORKING DAYS**, commencing on the date set forth in the written Notice to Proceed issued by the City

to the Contractor. The Contractor shall refer to Section 1.2 Completion Time of the Special Provisions for calculation of the completion date.

**A schedule of values (cost break-down) for lump-sum electrical items shall be included with the bid. Otherwise, the bid will be deemed non-responsive. See Electrical Provisions for requirements of the cost breakdown.**

In determining the amount bid by each bidder, the City shall disregard mathematical errors in addition, subtraction, multiplication, and division that appear obvious on the face of the Proposal. When such a mathematical error appears on the face of the Proposal, the City shall have the right to correct such error and to compute the total amount bid by said bidder on the basis of the corrected figure or figures.

When an item price is required to be set forth in the Proposal, and the total for the item set forth separately does not agree with a figure which is derived by multiplying the item price times the Engineer's estimate of the quantity of work to be performed for said item, the item price shall prevail over the sum set forth as the total for the item unless, in the sole discretion of the City, such a procedure would be inconsistent with the policy of the bidding procedure. The total paid for each such item of work shall be based upon the item price and not the total price. Should the Proposal contain only total price for the item and the item price is omitted, the City shall determine the item price by dividing the total price for the item by the Engineer's estimate of the estimated quantities of work to be performed as items of work.

If the Proposal contains neither the item price nor the total price for the item, then it shall be deemed incomplete and the Proposal shall be disregarded.

The undersigned has examined the location of the proposed Work, the local conditions at the place where the Work is to be done, is familiar with the Contract Documents and is familiar and expressly agrees to the liquidated damages provision of the Contract Documents.

The undersigned has checked carefully all of the foregoing figures and understands that the City of Sacramento will not be responsible for any errors or omissions on the part of the undersigned in making up this Bid Proposal.

Enclosed is Bid Proposal Guarantee, as required, consisting of a bidder's bond or other acceptable security for not less than ten percent (10%) of the amount Bid Proposal.

The undersigned agrees that all addenda received and acknowledged herein shall become a part of and be included in this Bid Proposal. This Bid Proposal includes the following addenda:

|        |       |      |       |
|--------|-------|------|-------|
| Add. # | _____ | DATE | _____ |
| Add. # | _____ | DATE | _____ |
| Add. # | _____ | DATE | _____ |

NOTE: State whether your concern is a corporation; a co-partnership, private individual, or individuals doing business under a firm name.

PARTNERSHIP

If the Bidder is a corporation, the Bid Proposal must be executed in the name of the corporation and must be signed by a duly authorized officer of the corporation.

If the Bidder is a partnership, the Bid Proposal must be executed in the name of the partnership and one of the partners must subscribe their signature thereto as the authorized representative of the partnership.

AMOUNT OF BID PROPOSAL GUARANTEE ENCLOSED:

(\$ 14,000.00 ) not less than ten percent (10%) of amount Bid Proposal

\_\_\_\_\_ CERTIFIED CHECK  
\_\_\_\_\_ CASHIER'S CHECK  
  x   \_\_\_\_\_ BID BOND  
\_\_\_\_\_ MONEY ORDER  
\_\_\_\_\_ OTHER SECURITY

CONTRACTOR:

By David Studebaker  
(Signature)

DAVID STUDEBAKER  
(Print or Type)

Title PARTNER  
Address 3835 BLUE HERON WAY  
GREENWOOD, CA 95635  
Telephone No. 530-333-3423  
Fax No. 530-820-9616  
Date 2/16/2011

Contractor's License No. 880405 Type C-10 & B-GENERAL  
Expiration Date 7/31/2012  
Tax I.D. Nos.- Fed. 26-1265712 State CALIFORNIA  
City of Sacramento Business Operation Tax Certificate No. 160731  
(City will not award contract if Certificate Number is missing.)

**DRUG-FREE WORKPLACE POLICY AND AFFIDAVIT**

**BID PROPOSAL MAY BE DECLARED NONRESPONSIVE IF THIS FORM (COMPLETED) IS NOT ATTACHED.**  
**Pursuant to City Council Resolution CC90-498 dated 6/26/90 the following is required.**

The undersigned contractor certifies that it and all subcontractors performing under this Agreement will provide a drug-free workplace by:

1. Publishing a "Drug-Free Workplace" statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Establishing a Drug-Free Awareness Program to inform employees about:
  - a. The dangers of drug abuse in the workplace.
  - b. The contractor's policy of maintaining a drug-free workplace.
  - c. Any available drug counseling, rehabilitation, and employee assistance program.
  - d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.
3. Notify employees that as a condition of employment under this Agreement, employees will be expected to:
  - a. Abide by the terms of the statement.
  - b. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace.
4. Making it a requirement that each employee to be engaged in the performance of the Agreement be given a copy on the "Drug-Free Workplace" statement.
5. Taking one of the following appropriate actions, within thirty (30) days of receiving notice from an employee or otherwise receiving such notice, that said employee has received a drug conviction for a violation occurring in the workplace:
  - a. Taking appropriate disciplinary action against such an employee, up to and including termination; or
  - b. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement or other appropriate agency.

\* I certify that no person employed by this company, corporation, or business has been convicted of any criminal drug statute violation on any job site or project where this company, corporation or business was performing was within three years of the date of my signature below.

**EXCEPTION:**

| Date | Violation Type | Place of Occurrence |
|------|----------------|---------------------|
|------|----------------|---------------------|

If additional space is required use back of this form.

**\* The above statement will also be incorporated as a part of each subcontract agreement for any and all subcontractors selected for performance on this project.**

**IN THE EVENT THIS COMPANY, CORPORATION, OR BUSINESS IS AWARDED THIS CONSTRUCTION AGREEMENT, AS A RESULT OF THIS BID; THE CONTRACTOR WITH HIS/HER SIGNATURE REPRESENTS TO THE CITY THAT THE INFORMATION DISCLOSED IN THIS DOCUMENT IS COMPLETE AND ACCURATE. IT IS UNDERSTOOD AND AGREED THAT FALSE CERTIFICATION IS SUBJECT TO IMMEDIATE TERMINATION BY THE CITY.**

The Representations Made Herein On This Document Are Made Under Penalty Of Perjury.

CONTRACTOR'S NAME: STUDEBAKER BROWN ELECTRIC

BY: [Signature] Partner Date: 2/16/2010

Signature

Title

**Effects of violations:** a. Suspension of payments under the Agreement. b. Suspension or termination of the Agreement. c. Suspension or debarment of the contractor from receiving any Agreement from the City of Sacramento for a period not to exceed five years.

CITY OF SACRAMENTO

**THIS FORM MUST BE SUBMITTED WITH THE SEALED BID PROPOSAL**

**CITY OF SACRAMENTO SUBCONTRACTOR and ESBE PARTICIPATION VERIFICATION**

To be eligible for award of this contract, the bidder shall list any business entity used to attain the 20% ESBE goal. Additionally, all other subcontractors who perform work, labor, or render service in an amount in excess of one-half of 1 percent of the total bid amount shall be listed. In the case of bids for the construction of streets and highways, including bridges, subcontractors whose subcontract value exceeds one-half (0.5) of one percent of the total bid or ten thousand dollars (\$10,000), whichever is greater, shall be listed. Estimated dollar values shall be provided for all work / services listed. The inclusion of false information or the omission of required information will render the bid non-responsive. **READ THE ABOVE REQUIREMENT CAREFULLY**

| Name of Prime Contractor: <u>STRUBBAKER BLOWN ELECTRIC</u> |   | Bid Amount: <u>148,928.00</u>  |  | Date: <u>2/16/2010</u> |
|--|---|--|--|------------------------|
| Business Entity or Subcontractor Name and Location         | Indicate EBE or SBE (subject to verification) | Items of Work and/or Description of Work or Service Subcontracted or Materials to be provided to complete contract | Estimated Dollar Value of Work / Services Provided |                        |
| <u>STRUBBAKER BLOWN ELECTRIC</u>                           | <u>SBE</u>                                    | <u>ELECTRICAL</u>  | <u>140,000.00</u>                                  |                        |
| <u>3835 BLUE HOLEWAY</u>                                   | <u>50345</u>                                  |  |  |                        |
| <u>GREENWOOD, CA 95635</u>                                 |   |  |  |                        |
| <u>SIERCA TRAFFIC MACHINES</u>                             | <u>SBE</u>                                    | <u>SIGNALS TRAFFIC</u>   | <u>8,928.00</u>                                    |                        |
| <u>3139 SWEETZER ROAD</u>                                  | <u>32204</u>                                  | <u>MACHINES</u>  |  |                        |
| <u>COOMBS, CA. 95650</u>                                   |   |  |  |                        |
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EBE AND SBE CERTIFICATION STATEMENTS ARE DUE BY THE CLOSE OF BUSINESS TWO DAYS AFTER BID OPENING

## MINIMUM QUALIFICATIONS QUESTIONNAIRE

Sacramento City Code Section 3.60.020 authorizes the Sacramento City Council to adopt standard minimum qualifications for bidders on competitively bid public works construction projects, and requires, among other provisions, that a bidder meet such minimum qualifications at the time of bid opening in order to bid. On July 31, 2007, the City Council adopted Resolution No. 2007-574 establishing these standard minimum qualifications. Pursuant to City Code section 3.60.020, a bidder failing to meet these minimum qualifications at the time of bid opening shall not be considered a responsible bidder for purposes of bidding on the subject project.

All bidders must demonstrate compliance with the minimum qualifications established by Resolution No. 2007-574 by completing all of the questions contained in this questionnaire. Bidder responses shall be limited to those operating business units, offices, branches and/or subsidiary divisions of the bidder that will be involved with the performance of any project work if awarded the contract. If a bidder answers "yes" to any single question, fails to submit a fully completed questionnaire, or submits false information, this will result in a determination that the minimum qualifications are not met, and the bidder shall not be considered a qualified bidder for purposes of bidding on this contract. If two or more entities submit a bid on a contract as a Joint Venture, each entity within the Joint Venture must separately meet these minimum qualifications for the Joint Venture to be considered a qualified bidder.

The City of Sacramento ("City") shall make its determination on the basis of the submitted questionnaire, as well as any relevant information that is obtained from others or as a result of investigation by the City. While it is the intent of this questionnaire to assist the City in determining whether bidders possess the minimum qualifications necessary to submit bids on the City's competitively bid public works construction contracts, the fact that a bidder submits a questionnaire demonstrating that it meets these minimum qualifications shall not in any way limit or affect the City's ability to: (1) review other information contained in the bid submitted by the bidder, and additional relevant information, and determine whether the contractor is a responsive and/or responsible bidder; or (2) establish pre-qualification requirements for a specific contract or contracts.

By submitting this questionnaire, the bidder consents to the disclosure of its questionnaire answers: (i) to third parties for purposes of verification and investigation; (ii) in connection with any protest, challenge or appeal of any action taken by the City; and (iii) as required by any law or regulation, including without limitation the California Public Records Act (Calif. Gov't Code sections 6250 et seq.). Each questionnaire must be signed under penalty of perjury in the manner designated at the end of the form, by an individual who has the legal authority to bind the bidder submitting the questionnaire. If any information provided by a bidder becomes inaccurate, the bidder shall immediately notify the City and provide updated accurate information in writing, under penalty of perjury.

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**FOR CITY CLERK USE ONLY**

RESOLUTION NO.: 2007-574

DATE ADOPTED: July 31, 2007

## QUESTIONNAIRE

**NOTICE:** For firms that maintain other operating business units, offices, branches and/or subsidiary divisions that will not be involved with the performance of any project work if the firm is awarded the contract, references hereafter to "your firm" shall mean only those operating business units, offices, branches and/or subsidiary divisions that will be involved with the performance of any project work.

All of the following questions regarding "your firm" refer to the firm (corporation, partnership or sole proprietor) submitting this questionnaire, as well as any firm(s) with which any of your firm's owners, officers, or partners are or have been associated as an owner, officer, partner or similar position within the last five years

The firm submitting this questionnaire shall not be considered a responsible bidder if the answer to any of these questions is "yes", or if the firm submits a questionnaire that is not fully completed or contains false information.

1. Classification & Expiration Date(s) of California Contractor's License Number(s) held by firm:

C-10 & B-GENERAL EXPIRES - 7/31/2012

2. Has a contractor's license held by your firm and/or any owner, officer or partner of your firm been revoked at anytime in the last five years?

Yes  No

3. Within the last five years, has a surety firm completed a contract on your firm's behalf, or paid for completion of a contract to which your firm was a party, because your firm was considered to be in default or was terminated for cause by the project owner?

Yes  No

4. At the time of submitting this minimum qualifications questionnaire, is your firm ineligible to bid on or be awarded a public works contract, or perform as a subcontractor on a public works contract, pursuant to either California Labor Code section 1777.1 (prevailing wage violations) or Labor Code section 1777.7 (apprenticeship violations)?

Yes  No

5. At any time during the last five years, has your firm, or any of its owners, officers or partners been convicted of a crime involving the awarding of a contract for a government construction project, or the bidding or performance of a government contract?

Yes  No

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FOR CITY CLERK USE ONLY

RESOLUTION NO.: 2007-574

DATE ADOPTED: July 31, 2007

6. Answer either subsection A or B, as applicable:

A. Your firm has completed three or more government construction contracts in Sacramento County within the last five years: Within those five years, has your firm been assessed liquidated damages on three or more government construction contracts in Sacramento County for failure to complete contract work on time?

**NOTE: If there is a pending administrative or court action challenging the assessment of liquidated damages on a government contract within the last five years, you need not include that contract in responding to this question.**

Yes

No

Not applicable

**OR**

B. Your firm has not completed at least three government construction contracts in Sacramento County within the last five years: Within the last three years, has your firm been assessed liquidated damages on three or more government construction contracts for failure to complete contract work on time?

**NOTE: If there is a pending administrative or court action challenging an assessment of liquidated damages on a government contract within the last three years, you need not include that contract in responding to this question.**

Yes

No

Not applicable

7. In the last three years has your firm been debarred from bidding on, or completing, any government agency or public works construction contract for any reason?

**NOTE: If there is a pending administrative or court action challenging a debarment, you need not include that debarment in responding to this question.**

Yes

No

8. Has CAL OSHA assessed a total of three or more penalties against your firm for any "serious" or "willful" violation occurring on construction projects performed in Sacramento County at any time within the last three years?

**NOTE: If there is a pending administrative or court action appealing a penalty assessment, you need not include that penalty assessment in responding to this question.**

Yes

No

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**FOR CITY CLERK USE ONLY**

RESOLUTION NO.: 2007-574

DATE ADOPTED: July 31, 2007

Minimum Qualifications Questionnaire  
Page 3 of 6

9. Answer either subsection A or B, as preferred:

A. In the last three years has your firm had a three year average Workers' Compensation experience modification rate exceeding 1.1?

Yes

No

**OR**

B. In the last three years has your firm had a three-year average incident rate for total lost workday cases exceeding 10?

**NOTE:** Incident rates represent the number of lost workday cases per 100 full-time workers and is to be calculated as:  $(N/EH) \times 200,000$ , where

**N** = number of lost workday cases (as defined by the U.S. Dept. of Labor, Bureau of Labor Statistics)  
**EH** = total hours worked by all employees during the calendar year  
**200,000** = base for 100 equivalent full-time working (working 40 hours per week, 50 weeks per year)

Yes

No

10. In the past three years, has the federal EPA, Region IX or a California Air Quality Management District or Regional Water Quality Control Board assessed penalties three or more times, either against your firm, or against the project owner for a violation resulting in whole or in part from any action or omission by your firm on a project on which your firm was a contractor in Sacramento County?

**NOTE:** If there is a pending administrative or court action appealing a penalty assessment, you need not include that penalty assessment in responding to this question.

Yes

No

---

**FOR CITY CLERK USE ONLY**

RESOLUTION NO.: 2007-574

DATE ADOPTED: July 31, 2007

Minimum Qualifications Questionnaire  
Page 4 of 6

11. In the past three years, has the federal EPA, Region IX or a California Air Quality Management District or Regional Water Quality Control Board assessed a single penalty of \$100,000 or more, either against your firm, or against the project owner for a violation resulting in whole or in part from any action or omission by your firm on a project on which your firm was the contractor in Sacramento County?

**NOTE:** If there is a pending administrative or court action appealing a penalty assessment, you need not include that penalty assessment in responding to this question.

Yes  No

12. In the past three years, have civil penalties been assessed against your firm pursuant to California Labor Code 1777.7 for violation of California public works apprenticeship requirements, three or more times?

**NOTE:** If there is a pending administrative or court action appealing a penalty assessment, you need not include that penalty assessment in responding to this question.

Yes  No

13. In the past three years, has a public agency in California withheld contract payments or assessed penalties against your firm for violation of public works prevailing wage requirements, three or more times?

**NOTE:** If there is a pending administrative or court action appealing a withholding or penalty assessment, you need not include that withholding or penalty assessment in responding to this question.

Yes  No

14. Has your firm been assessed penalties for violation of public works prevailing wage requirements in California, in an aggregate amount for the past three years of \$50,000 or more?

**NOTE:** If there is a pending administrative or court action appealing a penalty assessment, you need not include that penalty assessment in responding to this question.

Yes  No

---

FOR CITY CLERK USE ONLY

RESOLUTION NO.: 2007-574

DATE ADOPTED: July 31, 2007

**VERIFICATION AND SIGNATURE**

I, the undersigned, certify and declare that I have read all the foregoing answers to this Minimum Qualifications Questionnaire, and know their contents. The matters stated in these Questionnaire answers are true of my own knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Signed at GREENWOOD, CA, on 2/16/2011.  
(Location) (Date)

Signature: 

Print name: DAVID STUDEBAKER

Title: PARTNER

NOTE: If two or more entities submit a bid on a contract as a Joint Venture, each entity within the Joint Venture must submit a separate Minimum Qualifications Questionnaire.

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**FOR CITY CLERK USE ONLY**

RESOLUTION NO.: 2007-574

DATE ADOPTED: July 31, 2007

# NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS ORDINANCE

## INTRODUCTION

The Sacramento Non-Discrimination In Employee Benefits By City Contractors Ordinance (the "Ordinance"), codified as Sacramento City Code Chapter 3.54, prohibits City contractors from discriminating in the provision of employee benefits between employees with spouses and employees with domestic partners, and between the spouses and domestic partners of employees.

## APPLICATION

The provisions of the Ordinance apply to any contract or agreement (as defined below), between a Contractor and the City of Sacramento, in an amount exceeding \$25,000.00. The Ordinance applies to that portion of a contractor's operations that occur: (i) within the City of Sacramento; (ii) on real property outside the City of Sacramento if the property is owned by the City or if the City has a right to occupy the property; or (iii) at any location where a significant amount of work related to a City contract is being performed. The provisions apply only to those employee(s) actually working on the City contract and only for the actual amount of time the employee(s) spend working on such contract.

The Ordinance does not apply: to subcontractors or subcontracts of any Contractor or contractors; to transactions entered into pursuant to cooperative purchasing agreements approved by the Sacramento City Council; to legal contracts of other governmental jurisdictions or public agencies without separate competitive bidding by the City; where the requirements of the ordinance will violate or are inconsistent with the terms or conditions of a grant, subvention or agreement with a public agency or the instructions of an authorized representative of any such agency with respect to any such grant, subvention or agreement; to contracts for excavation or street construction; or to agreements for the use of City right-of-way where a contracting utility has the power of eminent domain.

## DEFINITIONS

As set forth in the Ordinance, the following definitions apply:

"Contract" means an agreement for public works or improvements to be performed, or for goods or services to be purchased or grants to be provided, at the expense of the City or to be paid out of moneys deposited in the treasury or out of the trust money under the control or collected by the City. "Contract" also means a written agreement for the exclusive use ("exclusive use" means the right to use or occupy real property to the exclusion of others, other than the right reserved by the fee owner) or occupancy of real property for a term exceeding 29 days in any calendar year, whether by singular or cumulative instrument, (i) for the operation or use by others of real property owned or controlled by the City for the operation of a business, social, or other establishment or organization, including leases, concessions, franchises and easements, or (ii) for the City's use of occupancy of real property owned by others, including leases, concessions, franchises and easements.

"Contract" shall not include: a revocable at-will use or encroachment permit for the use of or encroachment on City property regardless of the ultimate duration of such permit; excavation, street construction or street use permits; agreements for the use of City

## **NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS ORDINANCE**

right-of-way where a contracting utility has the power of eminent domain; or agreements governing the use of City property that constitute a public forum for activities that are primarily for the purpose of espousing or advocating causes or ideas and that are generally protected by the First Amendment to the United States Constitution or that are primarily recreational in nature.

“Contractor” means any person or persons, firm partnership or corporation, company , or combination thereof, that enters into a Contract with the City. “Contractor” does not include a public entity.

“Domestic Partner” means any person who has a currently registered domestic partnership with a governmental entity pursuant to state or local law authorizing the registration.

“Employee Benefits” means bereavement leave; disability, life, and other types of insurance; family medical leave; health benefits; membership or membership discounts; moving expenses; pension and retirement benefits; vacation; travel benefits; and any other benefit given to employees;. “Employee benefits” shall not include benefits to the extent that the application of the requirements of this chapter to such benefits may be preempted by federal or state.

### **CONTRACTOR'S OBLIGATION TO PROVIDE THE CITY WITH DOCUMENTATION AND INFORMATION**

Contractor shall provide the City with documentation and information verifying its compliance with the requirements of the Ordinance within ten (10) days of receipt of a request from the City. Contractors shall keep accurate payroll records, showing, for each City Contract, the employee's name, address, Social Security number, work classification, straight time pay rate, overtime pay rate, overtime hours worked, status and exemptions, and benefits for each day and pay period that the employee works on the City Contract. Each request for payroll records shall be accompanied by an affidavit to be completed and returned by the Contractor, as stated, attesting that the information contained in the payroll records is true and correct, and that the Contractor has complied with the requirements of the Ordinance. A violation of the Ordinance or noncompliance with the requirements of the Ordinance shall constitute a breach of contract.

### **EMPLOYER COMPLIANCE CERTIFICATE AND NOTICE REQUIREMENTS**

(a) All contractors seeking a Contract subject to the Ordinance shall submit a completed Declaration of Compliance Form (attachment “A”), signed by an authorized representative, with each proposal, bid or application. The Declaration of Compliance shall be made a part of the executed contract, and will be made available for public inspection and copying during regular business hours.

(b) The Contractor shall give each existing employee working directing on a City contract, and (at the time of hire), each new employee, a copy of the notification provided as attachment “B.”

(c) Contractor shall post, in a place visible to all employees, a copy of the notice provided as attachment “C.”

**NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS  
ORDINANCE**

**DECLARATION OF COMPLIANCE  
Equal Benefits Ordinance**

STUDEBAKER BROWN ELECTRIC  
Name of Contractor

3835 BLUE HENON WAY GREENWOOD, CA 95635  
Address

The above named contractor ("Contractor") hereby declares and agrees as follows:

1. I have read and understand the Non-Discrimination In Employee Benefits By City Contractors Ordinance ("Ordinance") provided to me by the City of Sacramento ("City") in connection with the City's request for proposals or other solicitations for the performance of services, or for the provision of commodities, under a City contract or agreement ("Contract").
2. As a condition of receiving the City Contract, I agree to fully comply with the requirements of the Ordinance, codified as Chapter 3. 54 of the Sacramento City Code.
3. If the face amount of this City Contract is less than \$25,000, as a condition of receiving this Contract, I agree to notify the City in writing if the aggregate value of the City Contract referenced herein, after changes, modifications, or similar actions, equals or exceeds \$25,000 in total value.
4. I understand, to the extent that such benefits are not preempted or prohibited by federal or state law, employee benefits covered by the Ordinance, are any of the following:
  - a. Bereavement Leave
  - b. Disability, life, and other types of insurance
  - c. Family medical leave
  - d. Health benefits
  - e. Membership or membership discounts
  - f. Moving expenses
  - g. Pension and retirement benefits
  - h. Vacation
  - i. Travel benefits
  - j. Any other benefit offered to employees

I agree that should I offer any of the above listed employee benefits, that I will offer those benefits, without discrimination between employees with spouses and employees with domestic partners, and without discrimination between the spouses and domestic partners of such employees.

5. I understand that I will not be considered to be discriminating in the provision or application of employee benefits under the following conditions or circumstances:

## NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS ORDINANCE

- a. In the event that the actual cost of providing a benefit to a domestic partner or spouse, exceeds the cost of providing the same benefit to a spouse or domestic partner of an employee, I will not be required to provide the benefit, nor shall it be deemed discriminatory, if I require the employee to pay the monetary difference in order to provide the benefit to the domestic partner or to the spouse.
- b. In the event I am unable to provide a certain benefit, despite taking reasonable measures to do so, if I provide the employee with a cash equivalent, I will not be deemed to be discriminating in the application of that benefit.
- c. If I provide employee benefits neither to employee's spouses nor to employee's domestic partners.
- d. If I provide employee benefits to employees on a basis unrelated to marital or domestic partner status.
- e. If I submit, to the Program Coordinator, written evidence of making reasonable efforts to end discrimination in employee benefits by implementing policies which are to be enacted before the first effective date after the first open enrollment process following the date the Contract is executed with the City.

I understand that any delay in the implementation of such policies may not exceed one (1) year from the date the Contract is executed with the City, and applies only to those employee benefits for which an open enrollment process is applicable.

- f. Until administrative steps can be taken to incorporate, in the infrastructure, nondiscrimination in employee benefits

The time allotted for these administrative steps will apply only to those employee benefits for which administrative steps are necessary and may not exceed three (3) months from the date the Contract is executed with the City.

- g. Until the expiration of a current collective bargaining agreement(s) where, in fact, employee benefits are governed by a collective bargaining agreement(s).
- h. I take all reasonable measures to end discrimination in employee benefits by either requesting the union(s) involved agree to reopen the agreement(s) in order for me to take whatever steps are necessary to end discrimination in employee benefits or by my ending discrimination in employee benefits without reopening the collective bargaining agreement(s).

## NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS ORDINANCE

- i. In the event I cannot end discrimination in employee benefits despite taking all reasonable measures to do so, I provide a cash equivalent to eligible employees for whom employee benefits (as listed previously), are not available.

Unless otherwise authorized in writing by the City Manager, I understand this cash equivalent must begin at the time the union(s) refuse to allow the collective bargaining agreement(s) to be reopened or no longer than three (3) months from the date the Contract is executed with the City.

6. I understand that failure to comply with the provisions of Section 5. (a) through 4. (i), above, will subject me to possible suspension and/or termination of this Contract for cause; repayment of any or all of the Contract amount disbursed by the City; debarment for future contracts until all penalties and restitution have been paid in full; deemed ineligible for future contracts for up to two (2) years; the imposition of a penalty, payable to the City, in the sum of \$50.00 for each employee, for each calendar day during which the employee was discriminated against in violation of the provisions of the Ordinance.
7. I understand and do hereby agree to provide each current employee and, within ten (10) days of hire, each new employee, of their rights under the Ordinance. I further agree to maintain a copy of each such letter provided, in an appropriate file for possible inspection by an authorized representative of the City. I also agree to prominently display a poster informing each employee of these rights.
8. I understand that I have the right to request an exemption to the benefit provisions of the Ordinance when such a request is submitted to the Procurement Services Division, in writing with sufficient justification for resolution, prior to contract award.

I further understand that the City may request a waiver or exemption to the provisions or requirements of the Ordinance, when only one contractor is available to enter into a contract or agreement to occupy and use City property on terms and conditions established by the City; when sole source conditions exist for goods, services, public project or improvements and related construction services; when there are no responsive bidders to the EBO requirements and the contract is for essential goods or services; when emergency conditions with public health and safety implications exist; or when the contract is for specialized legal services if in the best interest of the City.

9. In consideration of the foregoing, I shall defend, indemnify and hold harmless, the City, its officers and employees, against any claims, actions, damages, costs (including reasonable attorney fees), or other liabilities of any kind arising from any violation of the City's Equal Benefits Requirements or of the Ordinance by me.

**NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS  
ORDINANCE**

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am authorized to bind the Contractor to the provisions of this Declaration.

*David Studebaker*  
Signature of Authorized Representative

2/16/2011  
Date

DAVID STUDEBAKER  
Print Name

PARTNER  
Title

**NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS  
ORDINANCE**



**YOUR RIGHTS UNDER THE CITY OF SACRAMENTO'S  
NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS  
ORDINANCE**

On ..... (date), your employer (the "Employer") entered into a contract with the City of Sacramento (the "City") for ..... (contract details), and as a condition of that contract, agreed to abide by the requirements of the City's Non-Discrimination In Employee Benefits By City Contractors Ordinance (Sacramento City Code Section 3.54).

The Ordinance does not require the Employer to provide employee benefits. The Ordinance does require that if certain employee benefits are provided by the Employer, that those benefits be provided without discrimination between employees with spouses and employees with domestic partners, and without discrimination between the spouse or domestic partner of employees.

The Ordinance covers any employee working on the specific contract referenced above, but only for the period of time while those employees are actually working on this specific contract.

The included employee benefits are:

- Bereavement leave
- Disability, life and other types of insurance
- Family medical leave
- Health benefits
- Membership or membership discounts
- Moving expenses
- Pension and retirement benefits
- Vacation
- Travel benefits
- Any other benefits given to employees

(Employee Benefits does not include benefits that may be preempted by federal or state law.)

If you feel you have been discriminated or retaliated against by your employer in the terms and conditions of your application for employment, or in your employment, or in the application of these employee benefits, because of your status as an applicant or as an employee protected by the Ordinance, or because you reported a violation of the Ordinance, and after having exhausted all remedies with your employer,

## NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS ORDINANCE

### You May . . .

- Submit a written complaint to the City of Sacramento, Contract Services Unit, containing the details of the alleged violation. The address is:

City of Sacramento  
Contract Services Unit  
915 I St, 2<sup>nd</sup> Floor  
Sacramento, CA 95814-2714

- Bring an action in the appropriate division of the Superior Court of the State of California against the Employer and obtain the following remedies:
  - Reinstatement, injunctive relief, compensatory damages and punitive damages
  - Reasonable attorney's fees and costs

# NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS ORDINANCE



## YOUR RIGHTS UNDER THE CITY OF SACRAMENTO'S NON-DISCRIMINATION IN EMPLOYEE BENEFITS BY CITY CONTRACTORS ORDINANCE

If your employer provides employee benefits, they must be provided to those employees working on a City of Sacramento contract without discriminating between employees with spouses and employees with domestic partners.

The included employee benefits are:

- Bereavement leave
- Disability, life and other types of insurance
- Family medical leave
- Health benefits
- Membership or membership discounts
- Moving expenses
- Pension and retirement benefits
- Vacation
- Travel benefits
- Any other benefits given to employees

If you feel you have been discriminated against by your employer . . .

### You May . . .

- o Submit a written complaint to the City of Sacramento, Contract Services Unit, containing the details of the alleged violation. The address is:  
  
City of Sacramento  
Contract Services Unit  
915 I St, 2<sup>nd</sup> Floor  
Sacramento, CA 95814-2714
- o Bring an action in the appropriate division of the Superior Court of the State of California against the employer and obtain reinstatement, injunctive relief, compensatory damages, punitive damages and reasonable attorney's fees and costs.

### Discrimination and Retaliation Prohibited.

If you feel you have been discriminated or retaliated against by your employer in the terms and conditions of your application for employment, or in your employment, because of your status as an applicant or as an employee protected by the Ordinance, or because you reported a violation of this Ordinance . . .

### You May Also . . .

Submit a written complaint to the City of Sacramento, Contract Services Unit, at the same address, containing the details of the alleged violation.





January 2011



City of Sacramento  
Department of Transportation  
915 I Street, Room 2000  
Sacramento, CA 95814-2604  
(916) 808-8300

# Upcoming RFP & Construction Bid Opportunities

|   | Project Name   | Engineer's Estimate | Estimated Bid Advertisement Date |
|---|--|---------------------|----------------------------------|
| <b>Construction</b>   | Richards Boulevard and I-5 Improvement Project (F)                     | \$7,000,000         | 01/05/2011                       |
|   | Bridge Deck Maintenance (S & L)  | \$1,000,000         | 01/07/2011                       |
|   | Power Inn Road Streetscape (C)   | \$184,000           | 01/10/2011                       |
|   | Jessie Avenue Frontage Improvements (L)                                | \$600,000           | 01/12/2011                       |
|   | Track Relocation Project (L & F)                                       | \$44,000,000        | 01/25/2011                       |
|   | Norwood Bridge Replacement at Arcade (F)                               | \$6,520,000         | 02/23/2011                       |
|   | Robla Elementary Safe Route to School (F & L)                          | \$260,000           | 03/17/2011                       |
|   | Del Paso Boulevard Streetscape (F & L)                                 | \$2,904,000         | 04/11/2011                       |
|   | Cars on K Street (L)   | \$2,900,000         | 04/19/2011                       |
|   | McClellan Heights: Bell Avenue, North Street and Pinell Street (C & L) | \$1,203,000         | 04/19/2011                       |
| Fruitridge Road Improvements (C)  | \$998,000  | 04/21/2011          |                                  |
| L- Local Funding, F- Federal Funding, C- CDBG Funding<br>S- State Funding |  |                     |                                  |
| <b>RFP</b>  | Elkhorn Boulevard/ SR Interchange Improvements                         |                     | December 22, 2010                |
|   | Rio Linda Boulevard/ Magpie Creek Bridge Rehabilitation                |                     | January 2011                     |
|   | On-Call Transportation Specialty Services (RFQ)                        |                     | Spring 2011                      |
|   | La Mancha Way/ Elder Creek Bridge Replacement                          |                     | Summer 2011                      |

## **Green Contracting Survey (Voluntary)**

The City of Sacramento and the Sacramento Metropolitan Air Quality District (SMAQMD) are conducting a joint pilot project to help meet Federal Clean Air Standards for the Sacramento region.

Attached is a Green Contracting Fleet Inventory Form. Please complete the form, remove it from the bid package and return it to SMAQMD in the postage paid envelope provided with the bid package. Please do not return the Green Contracting Fleet Inventory Form to the City of Sacramento with the bid documents or otherwise.

A limited amount of funds and other financial incentives may be available to qualified contractors participating in this joint project to assist qualified contractors with upgrading and/or replacing equipment and/or trucks.

**Completing and returning the Green Contracting Fleet Inventory Form is strictly voluntary.**





**FOLLOWING FORMS TO BE FILLED OUT**

**AND SIGNED**

**ONLY**

**IF AWARDED CONTRACT**

AGREEMENT  
(Construction Contract Over \$25,000)

THIS AGREEMENT, dated for identification April 26, 2011, is made and entered into between the CITY OF SACRAMENTO, a municipal corporation ("City"), and Studebaker Brown Electric, 3835 Blue Heron Way, Greenwood, CA 95635 ("Contractor").

The City and Contractor hereby mutually agree as follows:

1. CONTRACT DOCUMENTS

The Contract Documents, sometimes also referred to as the "Contract," consist of the following items, which are hereby incorporated by reference as if set forth in full in this Agreement:

- The Notice to Contractors
- The Proposal Form submitted by the Contractor
- The Instructions to Bidders
- The Emerging and Small Business Enterprise (ESBE) Requirements
- The Requirements for the Non-Discrimination in Employee Benefits by City Contractors Ordinance and the Declaration of Compliance
- The City's Reference Guide for Construction Contracts
- The Addenda, if any
- This Agreement
- The Standard Specifications
- The Special Provisions
- The Plans and Technical Specifications
- The drawings and other data and all developments thereof prepared by City pursuant to the Contract
- Any modifications of any of the foregoing made or approved by City, including but not limited to duly authorized change orders.

Unless specifically noted otherwise, references to the "Standard Specifications" shall mean and refer to the Standard Specifications for Public Construction of the City of Sacramento approved by the Sacramento City Council on June 4, 2007 (Resolution No. 2007-350), and any subsequent amendments thereto approved by the Sacramento City Council or the Sacramento City Manager. Work called for in any one Contract Document and not mentioned in another is to be performed and executed as if mentioned in all Contract Documents. The table of contents, titles and headings contained in the Contract Documents are provided solely to facilitate reference to various provisions of the Contract Documents and in no way affect or limit the interpretation of the provisions to which they refer.

2. DEFINITIONS

Unless otherwise specifically provided herein, all words and phrases defined in the Standard Specifications shall have the same meaning and intent in this Agreement.

3. AGREEMENT CONTROLS

In the event of a conflict between any of the terms and conditions set forth in this Agreement and the terms and conditions set forth in other Contract Documents, the terms and conditions set forth

in this Agreement shall prevail, except that the provisions of any duly authorized change order shall prevail over any conflicting provisions of this Agreement.

4. SCOPE OF CONTRACT

Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor, material and transportation necessary to perform and complete in a good and workmanlike manner to the satisfaction of City, all the Work called for in the Contract Documents entitled:

**Alhambra Blvd and Stockton Blvd Traffic Signal Modification**

**(PN: S15074108)**

including the Work called for in the following alternative bid items described in the Proposal Form:

---

Contractor agrees to perform such Work in the manner designated in and in strict conformity with the Contract Documents.

5. CONTRACT AMOUNT AND PAYMENTS

City agrees to pay and Contractor agrees to accept, as complete payment for the above Work, in accordance with the schedule and procedures set forth in the Contract Documents and subject to deductions, withholdings and additions as specified in the Contract Documents, a total sum that shall not exceed the total bid amount set forth in Contractor's Proposal Form. In addition, subject to deductions, withholdings and additions as specified in the Contract Documents, payment for individual items of the Work shall be computed as follows:

(A) For items of the Work for which a lump sum price is specified in Contractor's Proposal Form, Contractor shall be paid the lump sum price(s) specified in Contractor's Proposal Form; and

(B) For items of the Work for which a unit price is specified in Contractor's Proposal Form, Contractor shall be paid the sum computed at such unit price, or computed at a different price if such different price is determined by City in accordance with the Standard Specifications, based on the actual amount of each such item performed and/or furnished and incorporated in the Work; provided that in no event shall the total sum for a unit price item exceed the total bid amount set forth for such item in the Contractor's Proposal Form, unless authorized by Change Order.

6. PROGRESS PAYMENTS

Subject to the terms and conditions of the Contract, City shall cause payments to be made upon demand of Contractor as follows:

(A) On or about the first of the month, the Engineer shall present to the Contractor a statement showing the amount of labor and materials incorporated in the Work through the twentieth (20) calendar day of the preceding month. After both Contractor and Engineer approve the statement in writing, and the City's labor compliance officer provides written approval, the City shall issue a certificate for ninety (90) percent of the amount it shall find to be due, subject

to any deductions or withholdings authorized or required under the Contract or any applicable Laws or Regulations.

(B) No inaccuracy or error in said monthly estimates shall operate to release Contractor from damages arising from such Work or from enforcement of each and every provision of the Contract Documents, and City shall have the right subsequently to correct any error made in any estimate for payment.

(C) Contractor shall not be paid for any defective or improper Work.

(D) The remaining ten (10) percent of the value of the Work performed under the Contract, if unencumbered and subject to any deductions or withholdings authorized or required under the Contract or any applicable Laws or Regulations, shall be due and payable beginning thirty-five (35) days after completion and final acceptance of the Work by City; provided that the City may determine, in its sole discretion, to release up to fifty (50) % of such retention, in whole or in part, at any time. Acceptance by Contractor of the final payment shall constitute a waiver of all claims against the City arising under the Contract Documents, except for disputed claims in stated amounts that the Contractor specifically reserves in writing, but only to the extent that the Contractor has complied with all procedures and requirements applicable to the presentation and processing of such claim(s) under the Contract Documents. Contractor shall be entitled to substitute securities for retention or to direct that payments of retention be made into escrow, as provided in Public Contract Code Section 22300, upon execution of the City's Escrow Agreement for Security Deposits in Lieu of Retention.

(E) The parties agree that, for purposes of the timely progress payment requirements specified in Public Contract Code Section 20104.50, the date that the City receives a statement jointly approved by the Contractor and the Engineer as provided above shall be deemed to constitute the date that City receives an undisputed and properly submitted payment request from the Contractor. Progress payments not made within 30 days after this date may be subject to payment of interest as provided in Section 20104.50.

#### 7. RETENTION OF SUMS CHARGED AGAINST CONTRACTOR

When, under the provisions of this Contract or any applicable Laws or Regulations, City is authorized or required to withhold, deduct or charge any sum of money against Contractor, City may deduct and retain the amount of such charge from the amount of the next succeeding progress estimate(s), or from any other moneys due or that may become due Contractor from City. If, on completion or termination of the Contract, sums due Contractor are insufficient to pay City's charges, City shall have the right to recover the balance from Contractor or its Sureties.

#### 8. COMMENCEMENT AND PROSECUTION OF WORK

Contractor shall commence the Work not later than fifteen (15) working days after the date of the written Notice to Proceed from City to Contractor and shall diligently prosecute the Work to final completion. The phrase "commence the Work" means to engage in a continuous program on-site including, but not limited to, site clearance, grading, dredging, land filling and the fabrications, erection, or installation of the Work. The Notice to Proceed shall be issued within fifteen (15) calendar days following execution of the Agreement by the City and the filing by Contractor of the required Bonds and proof of insurance, provided that the Engineer may delay issuance of the Notice to Proceed if the Engineer determines in the Engineer's sole discretion that conditions on

the site of the Work are unsuitable for commencement of the Work. After the Notice to Proceed is issued, the continuous prosecution of Work by Contractor shall be subject only to Excusable Delays as defined in this Agreement.

9. TIME OF COMPLETION

The entire Work shall be brought to completion in the manner provided for in the Contract Documents on or before **FORTY FIVE (45) working days** from the date of the Notice to Proceed (hereinafter called the "Completion Date") unless extensions of time are granted in accordance with the Contract Documents.

Failure to complete the entire Work by the Completion Date and in the manner provided for in the Contract Documents shall subject Contractor to liquidated damages as provided in this Agreement. Time is and shall be of the essence in the performance of the Contract and the Work.

10. PAYMENTS DO NOT IMPLY ACCEPTANCE OF WORK

The payment of any progress payment, or the acceptance thereof by Contractor, shall not constitute acceptance of the Work or any portion thereof and shall in no way reduce the liability of Contractor to replace unsatisfactory work or material, whether or not the unsatisfactory character of such work or material was apparent or detected at the time such payment was made.

11. ACCEPTANCE NOT RELEASE

Contractor shall correct immediately any defective or imperfect work or materials that may be discovered before final acceptance of the entire Work, whether or not such defect or imperfection was previously noticed or identified by the City. The inspection of the Work, or any part thereof, shall not relieve Contractor of any of its obligations to perform satisfactory work as herein specified.

Failure or neglect on the part of City or any of its officers, employees or authorized agents to discover, identify, condemn or reject defective or imperfect work or materials shall not be construed to imply an acceptance of such work or materials, if such defect or imperfection becomes evident at any time prior to final acceptance of the entire Work, nor shall such failure or neglect be construed as barring City from enforcing Contractor's warranty(ies) or otherwise recovering damages or such a sum of money as may be required to repair or rebuild the defective or imperfect work or materials whenever City may discover the same, subject only to any statutes of limitation that may apply to any such claim.

12. CITY'S RIGHT TO TAKE POSSESSION OF THE WORK IN WHOLE OR IN PART

The City shall have the right at any time to enter upon the Work and perform work not covered by this Contract, or to occupy and use a portion of the Work, prior to the date of the final acceptance of the Work as a whole, without in any way relieving Contractor of any obligations under this Contract.

13. NO WAIVER OF REMEDIES

Neither the inspection by City, its officers, employees or agents, nor any certificate or other approval for the payment of money, nor any payment for, nor acceptance of the whole or any part of the Work by City, nor any extensions of time, nor any position taken by City, its officers,

employees or its agents shall operate as a waiver of any provision of the Contract Documents nor of any power herein reserved to City or any right to damages herein provided, nor shall any waiver of any breach of this Agreement be held to be a waiver of any other or subsequent breach. All remedies provided in the Contract Documents shall be taken and construed as cumulative; in addition to each and every other remedy herein provided, the City shall have any and all equitable and legal remedies that it would in any case have.

#### 14. WARRANTY

Except as otherwise expressly provided in the Contract Documents, and excepting only items of routine maintenance, ordinary wear and tear and unusual abuse or neglect by City, Contractor warrants and guarantees all Work executed and all supplies, materials and devices of whatsoever nature incorporated in or attached to the Work, or otherwise provided as a part of the Work pursuant to the Contract, to be absolutely free of all defects of workmanship and materials for a period of one year after final acceptance of the entire Work by the City. Contractor shall repair or replace all work or material, together with any other work or material that may be displaced or damaged in so doing, that may prove defective in workmanship or material within this one year warranty period without expense or charge of any nature whatsoever to City.

In the event that Contractor shall fail to comply with the conditions of the foregoing warranty within ten (10) days after being notified of the defect in writing, City shall have the right, but shall not be obligated, to repair, or obtain the repair of, the defect and Contractor shall pay to City on demand all costs and expense of such repair. Notwithstanding anything herein to the contrary, in the event that any defect in workmanship or material covered by the foregoing warranty results in a condition that constitutes an immediate hazard to public health or safety, or any property interest, or any person, City shall have the right to immediately repair, or cause to be repaired, such defect, and Contractor shall pay to City on demand all costs and expense of such repair. The foregoing statement relating to hazards to health, safety or property shall be deemed to include both temporary and permanent repairs that may be required as determined in the sole discretion and judgment of City.

In addition to the above, the Contractor shall make a written assignment of all manufacturer's and other product warranties to the City, prior to completion and final acceptance of the Work by City.

The Contractor's Performance Bond shall secure the performance of the Contractor's obligations under this Section 14, and the Contractor and its Surety shall be jointly and severally liable for these obligations.

#### 15. LIQUIDATED DAMAGES IF WORK NOT COMPLETED ON TIME

(A) The actual fact of the occurrence of damages and the actual amount of the damages that City would suffer if the entire Work, and/or any specified portion thereof, were not completed within the time(s) specified herein are dependent upon many circumstances and conditions that could prevail in various combinations, and for this reason, it is impracticable and extremely difficult to fix the actual damages. Damages that City would suffer in the event of such delay include: loss of the use of the project; expenses of prolonged assignment to the project of an architectural and/or engineering staff; prolonged costs of administration, inspection, and supervision; increased operational expenses and/or impaired operation of other facilities

dependent upon completion of the project; and the loss and inconvenience suffered by the public within the City of Sacramento by reason of the delay in the completion of the project or portion thereof. Accordingly, the parties agree, and by execution of this Agreement, Contractor acknowledges that it understands and agrees, that the amount(s) set forth herein as liquidated damages reflect the parties' best efforts at the time of entering into the Contract to estimate the damages that may be incurred by City and the public due to the Contractor's delay in completion of the Work and/or any specified portion thereof, and shall be presumed to be the amount of damages sustained by the failure of Contractor to complete the entire Work and/or any specified portion thereof within the time(s) specified herein.

(B) Contractor shall pay liquidated damages to City for failure to complete the entire Work by the Completion Date (as extended in accordance with the Contract Documents, if applicable) in the amount of **NINE HUNDRED AND TEN DOLLARS (\$910.00)** for each calendar day after the Completion Date (as extended in accordance with the Contract Documents, if applicable), continuing to the time at which the entire Work is completed. Such amount is the actual cash value agreed upon by the City and Contractor as the loss to City and the public resulting from Contractor's default.

The parties agree, and by execution of this Agreement, Contractor acknowledges that it understands and agrees, that the foregoing provisions provide for the imposition of liquidated damages from the Completion Date (as extended in accordance with the Contract Documents, if applicable) until the date of completion of the entire Work as determined by the Engineer in accordance with Section 8-4 of the Standard Specifications, whether or not the Work or any portion thereof is claimed or determined to be substantially complete prior to such date of completion.

**THE FOLLOWING ADDITIONAL LIQUIDATED DAMAGES PROVISION(S) APPLY IF CHECKED:**

In addition to the liquidated damages specified above, Contractor shall pay additional liquidated damages to City for failure to complete the portion of the Work specified below by the milestone date specified below (as such milestone date may be extended in accordance with the Contract Documents, if applicable). The amount of such additional liquidated damages shall be either *[check one]*:

a lump sum amount of \_\_\_\_\_, OR

the daily amount of \_\_\_\_\_ for each calendar day after such milestone date (as extended in accordance with the Contract Documents, if applicable), continuing to the time at which such portion of the Work is completed.

Such amount is the actual cash value agreed upon by the City and Contractor as the additional loss to City and the public resulting from Contractor's default.

| <u>Portion of the Work</u> | <u>Milestone Date</u> |
|----------------------------|-----------------------|
| _____                      | _____                 |
| _____                      | _____                 |

**CONTRACTOR'S ACKNOWLEDGMENT** 

In addition to the potential damages described above, failure to complete the entire Work within the time(s) specified herein may expose the City to penalties or fines and/or may negatively affect the availability of project funding. In recognition of these potential damages, in addition to the liquidated damages specified above, Contractor shall pay additional liquidated damages to City in the lump sum amount of \_\_\_\_\_ if the entire Work is not completed by \_\_\_\_\_. Such amount is the actual cash value agreed upon by the City and Contractor as the additional loss to City and the public resulting from Contractor's default.

**CONTRACTOR'S ACKNOWLEDGMENT:** D.A.

(C) In the event Contractor shall become liable for liquidated damages, City, in addition to all other remedies provided by law, shall have the right to withhold any and all payments that otherwise would be or become due Contractor until the liability of Contractor under this section is finally determined. City shall have the right to use and apply such payments, in whole or in part, to reimburse City for all liquidated damages due or to become due to City. Any remaining balance of such payments shall be paid to Contractor only after discharge in full of all liability incurred by Contractor under this section or otherwise under any provision of the Contract Documents or any applicable Law or Regulation. If the sum so retained by City is not sufficient to discharge all such liabilities of Contractor, Contractor shall continue to remain liable to City until all such liabilities are satisfied in full. No failure by City to withhold any payment as specified above shall in any manner be construed to constitute a release of any such liabilities nor a waiver of the City's right to withhold payment for such liabilities.

16. INDEMNITY AND HOLD HARMLESS

(A) Contractor shall defend, hold harmless and indemnify the City, its officers, employees, and agents, and each and every one of them, from and against any and all actions, damages, costs, liabilities, claims, demands, losses, judgments, penalties, costs and expenses of every type and description, whether arising on or off the site of the Work, including, but not limited to, any fees and/or costs reasonably incurred by City's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "Liabilities"), including but not limited to Liabilities arising from personal injury or death, damage to personal, real or intellectual property or the environment, contractual or other economic damages, or regulatory penalties, arising out of or in any way connected with performance of or failure to perform the Work by the Contractor, any subcontractor or agent, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, whether or not (i) such Liabilities are caused in part by a party indemnified hereunder, or (ii) such Liabilities are litigated, settled or reduced to judgment; provided that the foregoing indemnity does not apply to liability for damages for death or bodily injury to persons, injury to property, or other loss, damage or expense to the extent arising from (i) the sole negligence or willful misconduct of, or defects in design furnished by, City, its agents, servants, or independent contractors who are directly responsible to City, or (ii) the active negligence of City.

(B) The existence or acceptance by City of any of the insurance policies or coverages described in this Agreement shall not affect or limit any of City's rights under this Section 16, nor shall the limits of such insurance limit the liability of Contractor hereunder. The provisions of this Section 16 shall survive any expiration or termination of the Contract.

17. CONTRACTOR SHALL ASSUME RISKS

Until the completion and final acceptance by City of all Work under this Contract, the Work shall be under Contractor's responsible care and charge, and Contractor, at no cost to City, shall rebuild, repair, restore and make good all injuries, damages, re-erectments, and repairs occasioned or rendered necessary by accidental causes of any nature, to all or any portions of the Work.

18. GENERAL LIABILITY OF CONTRACTOR

Except as otherwise herein expressly stipulated, Contractor shall perform all the Work and furnish all the labor, materials, tools, equipment, apparatus, facilities, transportation, power and light, and appliances, necessary or proper for performing and completing the Work herein required in the manner and within the time herein specified. The mention of any specific duty or liability of Contractor shall not be construed as a limitation or restriction of any general liability or duty of Contractor, and any reference to any specific duty or liability shall be construed to be solely for the purpose of explanation.

19. INSURANCE

During the entire term of this Contract and until completion and final acceptance of the Work as provided in the Contract Documents, Contractor shall maintain in full force and effect the insurance coverage described in this section.

Full compensation for all premiums that Contractor is required to pay for the insurance coverage described herein shall be included in the compensation specified for performance of the Work under the Contract. No additional compensation will be provided for Contractor's insurance premiums.

It is understood and agreed by the Contractor that its liability to the City shall not in any way be limited to or affected by the amount of insurance coverage required of or carried by the Contractor.

(A) Minimum Scope and Limits of Insurance Coverage

(1) Commercial General Liability Insurance, providing coverage at least as broad as ISO CGL Form 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than one million dollars (\$1,000,000) per occurrence. The policy shall provide contractual liability and products and completed operations coverage for the term of the policy.

(2) Automobile Liability Insurance providing coverage at least as broad as ISO Form CA 00 01 on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than one million dollars (\$1,000,000) per occurrence. The policy shall provide coverage for owned, non-owned and/or hired autos as appropriate to the operations of the Contractor.

(3) Workers' Compensation Insurance with statutory limits, and Employers' Liability Insurance with limits of not less than one million dollars (\$1,000,000). The Worker's Compensation policy shall include a waiver of subrogation.

(B) Additional Insured Coverage

(1) Commercial General Liability Insurance: The City, its officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds as respects general liability arising out of activities performed by or on behalf of Contractor, products and completed operations of Contractor, and premises owned, leased or used by Contractor. The general liability additional insured endorsement must be signed by an authorized representative of the insurance carrier.

If the policy includes a blanket additional insured endorsement or contractual additional insured coverage, the above signature requirement may be fulfilled by submitting that document with a signed declaration page referencing the blanket endorsement or policy form.

(2) Automobile Liability Insurance: The City, its officials, employees and volunteers shall be covered by policy terms or endorsement as additional insureds as respects auto liability.

(C) Other Insurance Provisions

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

(1) Contractor's insurance coverage shall be primary insurance as respects City, its officials, employees and volunteers. Any insurance or self-insurance maintained by City, its officials, employees or volunteers shall be in excess of Contractor's insurance and shall not contribute with it.

(2) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to City, its officials, employees or volunteers.

(3) Coverage shall state that 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.

(4) City will be provided with thirty (30) days written notice of cancellation or material change in the policy language or terms.

(D) Acceptability of Insurance

Insurance shall be placed with insurers with a Bests' rating of not less than A:V. Self-insured retentions, policy terms or other variations that do not comply with the requirements of this Section 19 must be declared to and approved by the City Risk Management Division in writing prior to execution of this Agreement.

(E) Verification of Coverage

(1) Contractor shall furnish City with certificates and required endorsements evidencing the insurance required. The certificates and endorsements shall be forwarded

to the City representative designated by City. Copies of policies shall be delivered to the City on demand. Certificates of insurance shall be signed by an authorized representative of the insurance carrier.

(2) The City may withdraw its offer of contract or cancel the Contract if the certificates of insurance and endorsements required have not been provided prior to execution of this Agreement. The City may withhold payments to Contractor and/or cancel the Contract if the insurance is canceled or Contractor otherwise ceases to be insured as required herein.

(F) Subcontractors

Contractor shall require and verify that all subcontractors maintain insurance coverage that meets the minimum scope and limits of insurance coverage specified in subsection A, above.

20. FAILURE TO MAINTAIN BONDS OR INSURANCE

If, at any time during the performance of this Contract, Contractor fails to maintain any item of the bonds and/or insurance required under the Contract in full force and effect, Contractor shall immediately suspend all work under the Contract and notify City in writing of such failure. After such notice is provided, or if City discovers such failure and notifies Contractor, the City thereafter may withhold all Contract payments due or that become due until notice is received by City that such bonds and/or insurance have been restored in full force and effect and that the premiums therefor have been paid for a period satisfactory to the Division of Risk Management. Contractor shall not resume work until notified by City to do so, and the City shall have no responsibility or liability for any costs incurred by Contractor as a result of such suspension of Work.

In addition to the foregoing, any failure to maintain any item of the required bonds and/or insurance at any time during the performance of this Contract will be sufficient cause for termination of the Contract by City.

The Contractor shall be solely responsible for, and shall defend, indemnify and hold harmless the City, its officers, employees and agents against and from, any and all damages, claims, losses, actions, costs or other expenses of any kind incurred by any party as a direct or indirect result of any suspension of Work or termination of the Contract under the provisions of this Section.

21. EXCUSABLE DELAYS

For the purpose of these Contract Documents, the term "Excusable Delay" shall mean, and is limited to, delay caused directly by: acts of God; acts of a public enemy; fires; inclement weather as determined by the Engineer; riots; insurrections; epidemics; quarantine restrictions; strikes; lockouts; sitdowns; acts of a governmental agency; priorities or privileges established for the manufacture, assemble, or allotment of materials necessary in the Work by order, decree or otherwise of the United States or by any department, bureau, commission, committee, agent, or administrator of any legally constituted public authority; changes in the Work ordered by City insofar as they necessarily require additional time in which to complete the Work; the prevention of Contractor from commencing or prosecuting the Work because of the acts of others, excepting Contractor's subcontractors or suppliers; or the prevention of Contractor from commencing or prosecuting the Work because of a Citywide failure of public utility service.

The term "Excusable Delay" shall specifically not include: (i) any delay that could have been avoided by the exercise of care, prudence, foresight and diligence on the part of Contractor; (ii) any delay in the prosecution of any part of the Work that does not constitute a Controlling Operation, whether or not such delay is unavoidable; (iii) any reasonable delay resulting from time required by City for review of any Contractor submittals and for the making of surveys, measurements and inspection; and, (iv) any delay arising from an interruption in the prosecution of the Work on account of reasonable interference by other Contractors employed by City that does not necessarily prevent the completion of the entire Work within the time specified. Excusable Delays, if any, shall operate only to extend the Completion Date (not in excess of the period of such delay as determined by City) and shall not under any circumstances increase the amount City is required to pay Contractor except as otherwise provided in these Contract Documents.

## 22. CONTRACTOR TO SERVE NOTICE OF DELAYS

Whenever Contractor foresees any delay in the prosecution of the Work, and in any event as soon as possible (not to exceed a period of ten (10) calendar days) after the initial occurrence of any delay that Contractor regards as or may later claim to be an Excusable Delay, the Contractor shall notify the Engineer in writing of such delay and its cause, in order that the Engineer: (i) may take immediate steps to prevent if possible the occurrence or continuance of the delay; or (ii) if this cannot be done, may determine whether the delay is to be considered excusable, how long it continues, and to what extent the prosecution and completion of the Work are delayed thereby. Said written notice shall constitute an application for an extension of time only if the notice requests such an extension and sets forth the Contractor's estimate of the additional time required together with a full description of the cause of the delay relied upon.

After the completion of any part or whole of the Work, the Engineer, in estimating the amount due Contractor, will assume that any and all delays that may have occurred in its prosecution and completion were not Excusable Delays, except for such delays for which the Contractor has provided timely written notice as required herein, and that the Engineer has found to be excusable. Contractor shall not be entitled to claim Excusable Delay for any delay for which the Contractor failed to provide such timely written notice.

## 23. EXTENSION OF TIME

If the Contractor complies with Section 22, above, and the Engineer finds a delay claimed by the Contractor to be an Excusable Delay, the Contractor shall be allowed an extension of time to complete the Work that is proportional to the period of Excusable Delay determined by the Engineer, subject to the approval by City of a change order granting such time extension. During a duly authorized extension for an Excusable Delay, City shall not charge liquidated damages against the Contractor for such delay.

If the City extends the time to complete the Work as provided herein, such extension shall in no way release any warranty or guarantee given by Contractor pursuant to the provisions of the Contract Documents, nor shall such extension of time relieve or release the sureties of the Bonds provided pursuant to the Contract Documents. By executing such Bonds, the Sureties shall be deemed to have expressly agreed to any such extension of time. The granting of any extension of time as provided herein shall in no way operate as a waiver on the part of City of its rights under this Contract, excepting only extension of the Completion Date for such period of Excusable Delay as may be determined by the Engineer and approved by a duly authorized change order.

24. NO PAYMENT FOR DELAYS

No damages or compensation of any kind shall be paid to Contractor or any subcontractor because of delays in the progress of the Work whether or not such delays qualify for extension of time under this Agreement; except that this provision shall not preclude the recovery of damages for a delay caused by the City that is unreasonable under the circumstances and that is not within the contemplation of the parties, provided that the Contractor timely submits all such written notice(s) and fully complies with such other procedures as may be specified in the Contract Documents or any Laws or Regulations for Contractor to claim damages for such delay.

25. CHANGES IN THE WORK

Changes in the Work authorized or directed in accordance with the Contract Documents and extensions of time of completion made necessary by reason thereof shall not in any way release any warranty or guarantee given by Contractor pursuant to the provisions of the Contract Documents, nor shall such changes in the Work relieve or release the Sureties on Bonds provided pursuant to the Contract Documents. By executing such Bonds, the Sureties shall be deemed to have expressly agreed to any such change in Work and to any extension of time made by reason thereof.

26. TERMINATION AFTER COMPLETION DATE

In addition to any other rights City may have, if any services or work required under the Contract (including but not limited to punch list items) are not completed as of the Completion Date (as adjusted by any extensions of time for Excusable Delays granted pursuant to the Contract Documents), City may terminate the Contract at any time after the Completion Date ( as adjusted by any extensions of time for Excusable Delays granted pursuant to the Contract Documents), by providing a written notice to Contractor specifying the date of termination. Such notice also may specify conditions or requirements that Contractor must meet to avoid termination of the Contract on such date. If Contractor fails to fulfill all such conditions and requirements by such termination date, or, if no such conditions or requirements are specified, Contractor shall cease rendering services and performing work on such termination date, and shall not be entitled to receive any compensation for services rendered or work performed after such termination date. In the event of such termination, Contractor shall remain liable to City for liquidated damages incurred for any period of time prior to the termination date.

In addition to any other charges, withholdings or deductions authorized under the Contract or any Laws or Regulations, if City terminates the Contract pursuant to this section, City may withhold and deduct from any payment and/or retention funds otherwise due Contractor any sum necessary to pay the City's cost of completing or correcting, or contracting for the completion or correction of, any services or work under the Contract that are not completed to the satisfaction of the City or that otherwise are deficient or require correction as of such termination date, including but not limited to incomplete punch list items. Such costs shall include all of the City's direct and indirect costs incurred to complete or correct such services or work, including the City's administrative and overhead costs. If the amount of payment(s) and/or retention funds otherwise due the Contractor are insufficient to pay such costs, City shall have the right to recover the balance of such costs from the Contractor and/or its Surety(ies).

27. TERMINATION FOR CONVENIENCE

Upon written notice to the Contractor, the City may at any time, without cause and without prejudice to any other right or remedy of the City, elect to terminate the Contract for the convenience of City. In such case, the Contractor shall be paid (without duplication of any items, and after deduction and/or withholding of any amounts authorized to be deducted or withheld by the Contract Documents or any Laws or Regulations):

- (A) For Work executed in accordance with the Contract Documents prior to the effective date of termination and determined to be acceptable by the Engineer, including fair and reasonable sums for overhead and profit on such Work;
- (B) For reasonable claims, costs, losses, and damages incurred in settlement of terminated contracts with subcontractors, suppliers, and others; and
- (C) For reasonable expenses directly attributable to termination.

Contractor shall not be paid for any loss of anticipated profits or revenue for any Work not performed prior to termination, nor for any economic loss arising out of or resulting from such termination, except for the payments listed in this section. Contractor's warranty under Section 14 of this Agreement shall apply, and Contractor shall remain responsible for all obligations related to such warranty, with respect to all portions of the Work performed prior to the effective date of the termination for convenience pursuant to this section. The City shall be entitled to have any or all remaining Work performed by other contractors or by any other means at any time after the effective date of a termination for convenience pursuant to this section.

28. TERMINATION FOR BREACH OF CONTRACT

If Contractor abandons the Work under this Contract, or if the Contract or any portion of the Contract is sublet or assigned without the consent of the City, or if the Engineer determines in the Engineer's sole discretion that the conditions of the Contract in respect to the rate of progress of the Work are not being fulfilled or any part thereof is unnecessarily delayed, or if Contractor violates or breaches, or fails to execute in good faith, any of the terms or conditions of the Contract, or if Contractor refuses or fails to supply enough properly skilled labor or materials or refuses or fails to make prompt payment to subcontractors for material or labor, or if Contractor disregards any Laws or Regulations or proper instruction or orders of the Engineer, then, notwithstanding any provision to the contrary herein, the City may give Contractor and its Sureties written notification to immediately correct the situation or the Contract shall be terminated.

In the event that such notice is given, and, in the event such situation is not corrected, or arrangements for correction satisfactory to the City are not made, within ten (10) calendar days from the date of such notice or within such other period of time as may be specified by the City in the notice, the Contract shall upon the expiration of said period cease and terminate. In the event of any such termination, City may take over the Work and prosecute the Work to completion, or otherwise, and the Contractor and its Sureties shall be liable to City for any cost occasioned City thereby, as hereinafter set forth.

In the event City completes the Work, or causes the Work to be completed, no payment of any kind shall be made to Contractor until the Work is complete. The cost of completing the Work,

including but not limited to, extra costs of project administration and management incurred by City, both direct or indirect, shall be deducted from any sum then due, or that becomes due, to Contractor from City. If sums due to Contractor from City are less than the cost of completing the Work, Contractor and its Sureties shall pay City a sum equal to this difference on demand. In the event City completes the Work, and there is a sum remaining due to Contractor after City deducts the costs of completing the Work, then City shall pay such sum to Contractor. The Contractor and Contractor's Sureties shall be jointly and severally liable for all obligations imposed on Contractor hereunder.

No act by City before the Work is finally accepted, including, but not limited to, exercise of other rights under the Contract, actions at law or in equity, extensions of time, payments, assessments of liquidated damages, occupation or acceptance of any part of the Work, waiver of any prior breach of the Contract or failure to take action pursuant to this section upon the happening of any prior default or breach of Contractor, shall be construed to be a waiver or estoppel of the City's right to act pursuant to this Section upon any subsequent event, occurrence or failure by Contractor to fulfill the terms and conditions of the Contract. The rights of City to terminate the Contract pursuant to this Section and pursuant to Sections 26 and 27 are cumulative and are in addition to all other rights of City pursuant to the Contract and at law or in equity.

29. CONTRACTOR BANKRUPT

If Contractor should commence any bankruptcy proceeding, or if Contractor is adjudged a bankrupt, or if Contractor makes any assignment for the benefit of creditors, or if a receiver is appointed on account of Contractor's insolvency, then the City may, without prejudice to any other right or remedy, terminate the Contract and complete the work by giving notice as provided in Section 28 above.

30. SURETIES' OBLIGATIONS UPON TERMINATION

If the City terminates the Contract pursuant to Section 28 or Section 29 above:

(A) The Surety under Contractor's performance bond shall be fully responsible for all of the Contractor's remaining obligations of performance under the Contract as if the Surety were a party to the Contract, including without limitation Contractor's obligations, as provided in the Contract Documents, to complete and provide a one-year warranty of the entire Work, pay liquidated damages and indemnify, defend and hold harmless City, up to the full amount of the performance bond.

(B) The Surety under Contractor's payment bond shall be fully responsible for the performance of all of the Contractor's remaining payment obligations for work, services, equipment or materials performed or provided in connection with the Work or any portion thereof, up to the full amount of the payment bond.

31. ACCOUNTING RECORDS OF CONTRACTOR

During performance of the Contract and for a period of three (3) years after completing the entire Work, Contractor shall maintain all accounting and financial records related to the Contract and performance of the Work in accordance with generally accepted accounting practices, and shall keep and make such records available for inspection and audit by representatives of the City upon reasonable written notice.

32. USE TAX REQUIREMENTS

- (A) Use Tax Direct Payment Permit For all leases and purchases of materials, equipment, supplies, or other tangible personal property used to perform the Contract and shipped from outside California, the Contractor and any subcontractors leasing or purchasing such materials, equipment, supplies or other tangible personal property shall obtain a Use Tax Direct Payment Permit from the California State Board of Equalization ("SBE") in accordance with the applicable SBE criteria and requirements.
- (B) Sellers Permit For any construction contract and any construction subcontract in the amount of \$5,000,000 or more, Contractor and the subcontractor(s) shall obtain sellers permits from the SBE and shall register the jobsite as the place of business for the purpose of allocating local sales and use tax to the City. Contractor and its subcontractors shall remit the self-accrued use tax to the SBE, and shall provide a copy of each remittance to the City.
- (C) The above provisions shall apply in all instances unless prohibited by the funding source for the Contract.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement on the date set for opposite their names.

**CONTRACTOR**

Under penalty of perjury, I certify that the taxpayer identification number and all other information provided here are correct.

DATE 4/1/2011

BY *David Stuebner*  
DAVID STUEBNER  
Print Name  
PARTNER  
Title

BY \_\_\_\_\_

Print Name \_\_\_\_\_

Title \_\_\_\_\_

26-1265712  
Federal ID#

State ID#  
160731

City of Sacramento Business Operation Tax Certificate No. (City will not award contract until Certificate Number is obtained)

Type of Business Entity (*check one*):

- Individual/Sole Proprietor
- Partnership
- Corporation
- Limited Liability Company
- Other (*please specify:* \_\_\_\_\_)

**CITY OF SACRAMENTO**  
a municipal corporation

DATE \_\_\_\_\_

BY \_\_\_\_\_

For: \_\_\_\_\_  
City Manager

Original Approved As To Form:  
*[Signature]*  
City Attorney

Attest:  
\_\_\_\_\_  
City Clerk

**CITY OF SACRAMENTO**  
**PERFORMANCE BOND**  
Department of Transportation  
Page 1 of 1

Bond No.: 20-SUR-210738  
Premium: 3979.00

**WHEREAS**, the City of Sacramento, State of California, hereinafter called City, has conditionally awarded to Studebaker Brown Electric, 3835 Blue Heron Way, Greenwood Way, Greenwood, CA 95635.

as principal, hereinafter called Contractor, a contract for construction of:  
**Alhambra Blvd and Stockton Blvd Traffic Signal Modification**

(PN: S15074108)

which contract is by reference incorporated herein and made a part hereof as if the Surety named below were a party to the contract, and is hereinafter referred to as the Contract; and

**WHEREAS**, under the terms of the Contract, Contractor is required to furnish a bond for the faithful performance of the Contract.

**NOW, THEREFORE**, we the Contractor and (*here insert full name and address of Surety*):

American Safety Casualty Insurance Company  
a corporation duly authorized and admitted to transact business and issue surety bonds in the State of California, hereinafter called Surety, are held and firmly bound unto the City, as obligee, in the sum of:  
ONE HUNDRED FORTY EIGHT THOUSAND NINE HUNDRED TWENTY SEVEN DOLLARS AND NINETY SIX CENTS (\$148,927.96), for the payment of which sum well and truly to be made, we the Contractor and Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally. The condition of this obligation is such that, if the Contractor, Contractor's heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and fully perform all covenants, conditions and agreements required to be kept and performed by Contractor in the Contract and any changes, additions or alterations made thereto, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meanings, and shall indemnify and save harmless the City, its officers, employees and agents, as therein provided, then the Surety's obligations under the Contract and this bond shall be null and void; otherwise they shall be and remain in full force and effect. This obligation shall remain in full force and effect through the end of the Contract warranty period, which will expire one year after the completion of work date specified in the Notice of Completion filed for the above-named project.

As part of the obligations secured hereby and in addition to the sum specified above, there shall be included all costs, expenses and fees, including attorney's fees, reasonably incurred by City in successfully enforcing such obligations, all to be taxed as costs and included in any judgment rendered.

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

**IN WITNESS WHEREOF**, this instrument has been duly executed by authorized representatives of the Contractor and Surety. SIGNED AND SEALED on April 6th, 2011.

STUDEBAKER BROWN ELECTRICAL CONTRACTING

(Contractor) (Seal)  
By David Studebaker  
Title Partner

ORIGINAL APPROVED AS TO FORM  
[Signature]  
City Attorney

American Safety Casualty Insurance Company

(Surety) (Seal)  
By Gregg Franks  
Title Attorney-in-Fact

Agent Name and Address  
Sierra Surety PO Box 2303, Rocklin, CA 95677  
Agent Phone # 916-415-0574  
Surety Phone # 819-400-4100  
California License # 0F41707



NUMBER  
20-SUR-210738

# POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that American Safety Casualty Insurance Company has made, constituted and appointed, and by these presents does make, constitute and appoints

**Gregg Franks**

its true and lawful attorney-in-fact, for it and its name, place, and stead to execute on behalf of the said Company, as surety, bonds, undertaking and contracts of suretyship to be given to

### ALL OBLIGEEES

provided that a bond or undertaking or contract of suretyship executed under this authority shall exceed in amount the sum of  
One Hundred Forty Eight Thousand Nine Hundred Twenty Seven Dollars and Ninety Six Cents (\$148,928.00)

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company of the 6<sup>th</sup> day of August, 2009.

**RESOLVED**, that the President in conjunction with the Secretary or any Assistant Secretary may appoint attorneys-in-fact or agents with authority as defined or limited in the instrument evidencing the appointment in each case, for and on behalf of the Company, to execute and deliver and affix the seal of the Company to bonds, undertakings, recognizances, and suretyship obligations of all kinds; and said officers may remove any such attorney-in-fact or agent and revoke any power of attorney previously granted to such persons.

**RESOLVED FURTHER**, that any bond, undertaking, recognizance, or suretyship obligation shall be valid and binding upon the company when:  
(i) when signed by the President or any Vice-President and attested and sealed (if a seal is required) by any Secretary or Assistant Secretary or (ii) when signed by the President or any Vice-President or Secretary or Assistant Secretary, and counter-signed and sealed (if a seal is required) by a duly authorized attorney-in-fact or agent; or (iii) when duly executed and sealed (if a seal is required) by one or more attorney-in-fact or agents pursuant to and within the limits of the authority evidenced by the power of attorney issued by the Company to such person or persons.

**RESOLVED FURTHER**, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company; and such signature and seal when so used shall have the same force and effects as though manually affixed.

**IN WITNESS WHEREOF**, American Safety Casualty Insurance Company has caused its official seal to be hereunto affixed, and these presents to be signed by its President and attested by its Secretary this 6<sup>th</sup> day of August, 2009

Attest:  
  
Ambuj Jain



Joseph D. Scolio, Jr.

STATE OF GEORGIA )  
COUNTY OF COBB )

On this 6<sup>th</sup> day of August, 2009, before me personally came Joseph D. Scolio, Jr., to me known, who, being by me duly sworn, did depose and say that he is the President of American Safety Casualty Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that he signed his name thereto by like order.

JAMI BAILEY  
Notary Public, Hall Co., GA  
My Commission Expires Aug. 13, 2012

Jami Bailey, Notary Public

I, the undersigned, Secretary of American Safety Casualty Insurance Company, an Oklahoma corporation, DO HEREBY CERTIFY, that the foregoing and attached Power of Attorney remains in full force and has not been revoked; and furthermore that the Resolution of the Board of Directors, set forth in the said Power of Attorney, is now in force.

Signed and sealed in the City of Atlanta, in the State of Georgia

Dated this 5<sup>th</sup> day of March 2011



Ambuj Jain

ORIGINALS OF THIS POWER OF ATTORNEY ARE PRINTED WITH RED NUMERICAL NUMBERS  
DUPLICATES SHALL HAVE THE SAME FORCE AND EFFECT AS AN ORIGINAL ONLY WHEN ISSUED IN CONJUNCTION WITH THE ORIGINAL

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

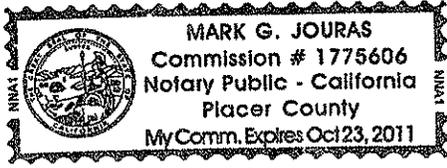
State of California

County of Placer

On April 5 2011 before me, Mark G. Jouras Notary Public  
Date Here Insert Name and Title of the Officer

personally appeared Craig Franks  
Name(s) of Signer(s)

who 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.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature [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: Bond

Document Date: April 5, 2011 Number of Pages: 1

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

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: Craig Franks

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

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



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

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

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



**CITY OF SACRAMENTO**  
**PAYMENT BOND**  
Department of Transportation  
Page 1 of 1

Bond No.: 20-SUR-210738  
Premium: 3979.00

WHEREAS, the City of Sacramento, in the State of California, hereinafter called City, has conditionally awarded to: Studebaker Brown Electric, 3835 Blue Heron Way, Greenwood Way, Greenwood, CA 95635

hereinafter called Contractor, a contract for construction of:

**Alhambra Blvd and Stockton Blvd Traffic Signal Modification**  
**(PN: S15074108)**

which contract is by reference incorporated herein and made a part hereof, and is hereinafter referred to as the Contract; and

WHEREAS, under the terms of the Contract, Contractor is required to furnish a good and sufficient payment bond to secure the claims to which reference is made in Title 15(commencing with Section 3082) of Part 4 of Division 3 of the California Civil Code.

NOW, THEREFORE, we the Contractor and (here insert full name and address of Surety):

American Safety Casualty Insurance Company a corporation duly authorized and admitted to transact business and issue surety bonds in the State of California, hereinafter called Surety, are held and firmly bound unto the City, and unto all subcontractors, laborers, material men and other persons employed in the performance of the Contract and referred to in the aforesaid Civil Code in the sum of ONE HUNDRED FORTY EIGHT THOUSAND NINE HUNDRED TWENTY SEVEN DOLLARS AND NINETY SIX CENTS (\$148,927.96), on the condition that if Contractor shall fail to pay for any materials or equipment furnished or used in performance of the Contract, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Contractor and all subcontractors with respect to such work or labor, then the Surety shall pay the same in an amount not exceeding the sum specified above. If suit is brought upon this bond, Surety shall pay, in addition to the above sum, all costs, expenses and fees, including attorney's fees, reasonably incurred by any party in successfully enforcing the obligation secured hereby, all to be taxed as costs and included in any judgment rendered. Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect, and shall bind Contractor, Surety, their heirs, executors, administrators, successors and assigns, jointly and severally.

It is hereby stipulated and agreed that this bond shall inure to the benefit of all persons, companies, corporations, political subdivisions and State agencies entitled to file claim under Title 15 (commencing with Section 3082) of Part 4 of Division 3 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond. The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or to the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by authorized representatives of the Contractor and Surety. SIGNED AND SEALED on April 5th, 2011.

STUDEBAKER BROWN ELECTRICAL CONTRACTING

(Contractor) (Seal)

By David Studebaker  
Title Partner

ORIGINAL APPROVED AS TO FORM:

Gregg Franks  
City Attorney

American Safety Casualty Insurance Company

(Surety) (Seal)

By Gregg Franks  
Title Attorney-in-Fact

Agent Name and Address

Sierra Surety PO Box 2303, Rocklin, CA 95677

Agent Phone # 916-418-0674

Surety Phone # 818-400-4100

California License # 0F41707



**POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS, that American Safety Casualty Insurance Company has made, constituted and appointed, and by these presents does make, constitute and appoints

**Gregg Franks**

its true and lawful attorney-in-fact, for it and its name, place, and stead to execute on behalf of the said Company, as surety, bonds, undertaking and contracts of suretyship to be given to

**ALL OBLIGEEES**

provided that n bond or undertaking or contract of suretyship executed under this authority shall exceed in amount the sum of  
One Hundred Forty Eight Thousand Nine Hundred Twenty Seven Dollars and Ninety Six Cents (\$148,928.00)

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company of the 6<sup>th</sup> day of August, 2009.

**RESOLVED**, that the President in conjunction with the Secretary or any Assistant Secretary may appoint attorneys-in-fact or agents with authority as defined or limited in the instrument evidencing the appointment in each case, for and on behalf of the Company, to execute and deliver and affix the seal of the Company to bands, undertakings, recognizances, and suretyship obligations of all kinds; and said officers may remove any such attorney-in-fact or agent and revoke any power of attorney previously granted to such persons.

**RESOLVED FURTHER**, that any bond, undertaking, recognizance, or suretyship obligation shall be valid and binding upon the company when:  
(i) when signed by the President or any Vice-President and attested and sealed (if a seal is required) by any Secretary or Assistant Secretary or (ii) when signed by the President or any Vice-President or Secretary or Assistant Secretary, and counter-signed and sealed (if a seal is required) by a duly authorized attorney-in-fact or agent; or (iii) when duly executed and sealed (if a seal is required) by one or more attorney-in-fact or agents pursuant to and within the limits of the authority evidenced by the power of attorney issued by the Company to such person or persons.

**RESOLVED FURTHER**, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effects as though manually affixed.

IN WITNESS WHEREOF, American Safety Casualty Insurance Company has caused its official seal to be hereunto affixed, and these presents to be signed by its President and attested by its Secretary this 6<sup>th</sup> day of August, 2009

Ambuj Jain



Joseph D. Scolo, Jr.

STATE OF GEORGIA )  
COUNTY OF COBB )

On this 6<sup>th</sup> day of August, 2009, before me personally came Joseph D. Scolo, Jr., to me known, who, being by me duly sworn, did depose and say that he is the President of American Safety Casualty Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that he signed his name thereto by like order.

JAMI BAILEY  
Notary Public, Hall Co., GA  
My Commission Expires Aug. 13, 2012

Jami Bailey, Notary Public

I, the undersigned, Secretary of American Safety Casualty Insurance Company, an Oklahoma corporation, DO HEREBY CERTIFY, that the foregoing and attached Power of Attorney remains in full force and has not been revoked; and furthermore that the Resolution of the Board of Directors, set forth in the said Power of Attorney, is now in force.

Signed and sealed in the City of Atlanta, in the State of Georgia

Dated this 5<sup>th</sup> day of March 2011



Ambuj Jain

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# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Placer

On April 5 2011 before me, Mark G. Jouras Notary Public  
Date Here Insert Name and Title of the Officer

personally appeared Craig Franks  
Name(s) of Signer(s)

who 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.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature [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: Bond

Document Date: April 5, 2011 Number of Pages: 1

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

### Capacity(ies) Claimed by Signer(s)

Signer's Name: Craig Franks

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

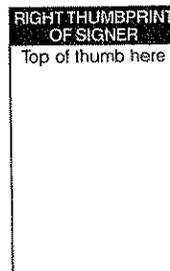
Signer Is Representing: \_\_\_\_\_



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

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

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



## Company Profile

# AMERICAN SAFETY CASUALTY INSURANCE COMPANY

100 GALLERIA PKWY, S.E., SUITE 700  
ATLANTA, GA 30339  
800-388-3647

### Former Names for Company

|                  |                         |                                   |
|------------------|-------------------------|-----------------------------------|
| <b>Old Name:</b> | TIC INDEMNITY COMPANY   | <b>Effective Date:</b> 05-23-1995 |
| <b>Old Name:</b> | TICOR INDEMNITY COMPANY | <b>Effective Date:</b> 01-14-1992 |

### Agent for Service of Process

TERRENCE S. WAITROVICH, 523 WEST SIXTH STREET SUITE 544 LOS ANGELES, CA 90014  
Unable to Locate the Agent for Service of Process?

---

### Reference Information

|                                |                     |
|--------------------------------|---------------------|
| NAIC #:                        | 39969               |
| NAIC Group #:                  | 1346                |
| California Company ID #:       | 2860-5              |
| Date authorized in California: | January 12, 1983    |
| License Status:                | UNLIMITED-NORMAL    |
| Company Type:                  | Property & Casualty |
| State of Domicile:             | OKLAHOMA            |

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### Lines of Insurance Authorized to Transact

The company is authorized to transact business within these lines of insurance. For an explanation of any of these terms, please refer to the glossary.

AUTOMOBILE  
BOILER AND MACHINERY  
BURGLARY  
FIRE  
LIABILITY  
MARINE  
SURETY  
WORKERS' COMPENSATION

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## Company Complaint Information

[Company Enforcement Action Documents](#)

[Company Performance & Comparison Data](#)

[Composite Complaint Studies](#)

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## Want More?

[Help Me Find a Company Representative in My Area](#)

[Financial Rating Organizations](#)

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Last Revised - June 26, 2009 05:53 PM  
Copyright © California Department of Insurance

**WORKER'S COMPENSATION CERTIFICATION**

In accordance with Article 5 (commencing at Section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the below certificate must be signed and filed with the awarding body prior to performing any work under this contract. Labor Code Section 3700, inter alia, states the following:

"Every employer shall secure the payment of compensation in one or more of the following ways:

- "(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.
- "(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.

To be signed by authorized corporate officer or partner or individual submitting the Proposal. If Bidder is: (example)

1. An individual using a firm name, sign: "John Doe, an individual doing business as Blank Company."
2. An individual doing business under his own name, Sign: your name only.
3. A co-partnership, sign: "John Doe and Richard Doe, co-partners doing business as Blank Company, by, John Doe, co-partner.
4. A corporation, sign: "Blank Company, by John Doe, Secretary." (or other title)

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

DATE: 4/1/2011

Contractor SPADEBRIER & BROWN ELECTRIC

By   
Signature

## Construction and Demolition (C&D) Debris Recycling Requirements

As a condition of receiving this Contract, Contractor agrees to fully comply with the requirements specified herein for all demolition projects, as well as projects with a valuation of \$250,000 or more:

1. **Definitions.** For purposes of this section, the following terms, words and phrases shall have the following meanings:

“Certified C&D sorting facility” means a facility that receives C&D debris and/or processes C&D debris into its component material types for reuse, recycling, and disposal of residuals and possesses a valid certificate as a C&D sorting facility from the Sacramento Regional County Solid Waste Authority.

“Construction and demolition debris” or “C&D debris” means used or commonly discarded materials resulting from construction, repair, remodel or demolition operations on any pavement, house, building, or other structure, or from landscaping that are not hazardous as defined in California Health and Safety Code section 25100 et seq. Such materials include, but are not limited to, concrete, asphalt, wood, metal, brick, dirt, sand, rock, gravel, plaster, glass, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, masonry, plastic pipe, trees, and other vegetative matter resulting from land clearing and landscaping.

“Divert” or “diversion” means to use materials for any purpose other than disposal in a landfill or transformation facility. Methods to divert materials include on-site reuse of the materials, delivery of materials from the project site to a certified C&D sorting facility or a recycling facility, or other methods as approved in regulations promulgated by the City Department of Utilities.

“Franchised waste hauler” means a person who possesses a valid commercial solid waste collection franchise issued by the Sacramento Regional County Solid Waste Authority.

“Mixed C&D debris” means loads that include commingled recyclable and non-recyclable C&D debris generated at a project site.

“Recyclable C&D debris” means C&D debris required to be diverted from landfills as specified in the Waste Management Plan and returned to the economic mainstream in the form of raw material for new, reused or reconstituted products that meet the quality standards necessary to be used in the marketplace.

“Recycling facility” means a facility or operation that receives, processes, and transfers source-separated recyclable materials.

“Source-separated C&D debris” means recyclable C&D debris that is separately sorted and containerized at the site of generation by individual material type and segregated from mixed C&D debris prior to collection and transporting.

“Waste log” means a record detailing the management of C&D debris generated by the covered project, including the date and weight/volume of material by type that was salvaged, reused, recycled or disposed.

2. **Waste Management Plan.** A completed WMP (see **Attachment 1**) must be submitted to and approved by the City prior to commencing any work on the project. The WMP must specify the types of C&D debris that will be generated from the project; the manner in which C&D debris will be managed and/or stored on the project site; the manner in which recyclable C&D debris generated from the project will be recycled or reuse; the person who will haul, collect or transport the recyclable C&D debris from the project site; and the certified C&D sorting facility or recycling facility where recyclable C&D debris will be delivered. The WMP must be approved by the City prior to commencing any work on the project.

3. Contractor shall be solely responsible for diverting the recyclable C&D materials specified on the WMP. Mixed C&D debris shall be delivered to a SWA-certified C&D sorting facility only. Only the permit holder, the person who generates the waste, a franchised waste hauler, or the City of Sacramento can transport or haul mixed C&D debris. Source-separated C&D debris may be delivered by any person to any recycling facility that accepts such materials. (See **Attachment 2** for list of C&D Debris Haulers and Facilities).

4. During the course of the project, Contractor shall maintain a waste log (see **Attachment 3**), and keep all weight tickets or weight receipts, for all C&D debris hauled away from the project. At a minimum, the waste log shall specify the C&D debris generated by the project; the manner in which C&D debris was recycled or re-used; and the facility where the C&D debris was delivered.

5. Within 30 days after submitting the project completion report, Contractor shall submit to the City a completed waste log, along with copies of supporting weight tickets. Contractor shall maintain and keep accurate and complete records of all bills, weight receipts or weight tickets that were issued for the collection, transport or disposal of C&D debris for a period of one-year after submittal of the waste log. The records shall be made available for inspection, examination and audit by the City during the one-year retention period to validate the information provided in the WMP and in the waste log. If the City determines noncompliance by the Contractor after an audit has been conducted, Contractor shall reimburse the City for all costs incurred in performing the audit.

6. Failure by Contractor to comply with any provisions specified herein will subject Contractor to possible suspension and/or termination of this Contract for cause; repayment of any or all of the Contract amount disbursed by the City; imposition of a penalty, payable to the City (\$50-\$250 for first offense, \$251-\$500 for second offense, and \$501-\$1500 for subsequent offenses); and/or submission of a performance security deposit fee when submitting a permit application to the City for a project within one year of imposition of the penalty.

For questions or to obtain more information about the Recycling Requirements for C&D debris, contact the City of Sacramento, Solid Waste Services Division, 2812 Meadowview Road, Building 1, Sacramento, CA 95832, or telephone (916) 808-4833, or email [C&D@cityofsacramento.org](mailto:C&D@cityofsacramento.org)

# C&D Debris Waste Management Plan

C&D Debris Waste Management Plan  
City of Sacramento Solid Waste Services  
2812 Meadowview Road, Building 1  
Sacramento, CA 95832  
Phone: (916) 808-4839 / Fax: (916) 808-4999  
C&D@cityofsacramento.org

This Waste Management Plan (WMP) must be submitted and approved before work can begin. Only one WMP is required for each public construction project. The administration fee and, if applicable, a security deposit must be submitted with this form to be approved. Administration fee is 0.04% of project bid amount (min \$40, max \$800); security deposit is 1% of bid amount (max \$10,000). The accompanying Waste Log must be submitted within 30 days of the project completion report, or a penalty may be imposed.

**A. Building Project Information:**

Project Bid Amount: \$ \_\_\_\_\_

Job Address: \_\_\_\_\_

Contractor: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

**B. Briefly describe the project:**

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**C. Materials Required to be Recycled.** 50% of all debris must be recycled if generated during the course of your project. You can either **source-separate** them, which may be hauled by anyone, or mix them in one container and send the **mixed C&D debris** load to a **Certified Mixed C&D Sorting Facility**. Mixed C&D loads can only be hauled by a franchised hauler or self-hauled. Please see Section F. Definitions, on the next page, for more information.

**D. Material Management.**

1. How will C&D debris will be stored on the project site: \_\_\_\_\_ Mixed C&D \_\_\_\_\_ Source-Separated
2. Company to haul away debris: \_\_\_\_\_
3. Facilities to receive debris: \_\_\_\_\_

# C&D Debris Waste Management Plan

C&D Debris Waste Management Plan  
City of Sacramento Solid Waste Services  
2812 Meadowview Road, Building 1  
Sacramento, CA 95832  
Phone: (916) 808-4839 / Fax: (916) 808-4999  
C&D@cityofsacramento.org

## E. Definitions.

Please read and understand these terms. Call Solid Waste at (916) 808-4833 if these terms are not clear to you. More information is also available online at <http://www.cityofsacramento.org/utilities/>.

1. **Self-haul or self-hauling:** This is when the general contractor or a subcontractor who is doing work on the project hauls their own waste materials for recycling or disposal. Note that a jobsite cleanup crew is not doing other work on the project and is not self-hauling. Jobsite cleanup crews need to be franchised in order to haul mixed C&D debris away.
2. **Franchised hauler:** Check the Department of Utilities (DOU) website for a list of these haulers. Only these companies and the City of Sacramento can collect and haul mixed C&D debris generated within the City for a fee.
3. **Source separation:** This means keeping wood, metal, cardboard, or other recyclables in separate containers, and sending the materials to an authorized recycler. A list of authorized recyclers can be found on the DOU web site. Source-separated materials may be hauled by anyone.
4. **Mixed C&D debris:** This means putting all recyclable debris into one container. Mixed materials must be sent to a certified mixed C&D sorting facility. Mixed materials may be either self-hauled or hauled by a franchised hauler. If your job site is crowded, this option saves the most space.
5. **Certified Mixed C&D Sorting Facility:** See the DOU web site for a list. These facilities have been certified by the Sacramento Regional Solid Waste Authority (SWA) to extract recyclable materials from mixed C&D debris.

## F. Terms and Conditions

- Your approved Waste Management Plan and Waste Log must be kept on the job site for the duration of the project.
- City of Sacramento Solid Waste Services staff may enter the jobsite to inspect waste collection areas.
- **ALL Clean Wood Waste** (unpainted, untreated lumber, plywood and OSB), **Inert Materials** (concrete, asphalt paving, brick, block, and dirt), **Wooden Pallets**, **Scrap Metal**, and **Corrugated Cardboard** must be recycled.
- Only SWA-Certified Mixed C&D Sorting Facilities may be used to recycle these materials if mixed with other materials.
- Only the City of Sacramento, SWA-Franchised Haulers, or self-haulers (as defined above) may collect and transport mixed C&D material from the jobsite.
- C&D Debris may not be burned or dumped illegally.
- Your Waste Log must be completed and submitted, with supporting weight tickets, within 30 days of submitting your project completion report. All waste hauling and disposal or recycling activity must be entered on the Waste Log, including information from any subcontractors who self-hauled their own debris off-site.
- You must keep all receipts or weight-tickets from your project for a period of one year from the submittal of your waste log.
- Failure to comply with these terms and conditions may result in a fine and payment of a security deposit on future projects.

# C&D Debris Haulers & Facilities

C&D Debris Waste Management Plan  
City of Sacramento Solid Waste Services  
2812 Meadowview Road, Building 1  
Sacramento, CA 95832  
Phone: (916) 808-4833 / Fax: (916) 808-4999  
C&D@cityofsacramento.org

## Certified Mixed C&D Facilities

|  |                |
|--|----------------|
| Allied Waste / Elder Creek Transfer and Recovery | (916) 387-8425 |
| L&D Landfill                                     | (916) 737-8640 |
| Waste Management / K&M Recycle America           | (916) 452-0142 |

## Franchised Haulers

|                                     |                |                                     |                |
|-------------------------------------|----------------|-------------------------------------|----------------|
| ACES Waste Services, Inc.           | (866) 488-8837 | Elk Grove Waste Management, LLC     | (916) 689-4052 |
| Allied Waste Services               | (916) 631-0600 | Mini Drops, Inc.                    | (916) 686-8785 |
| All Waste Systems, Inc.             | (916) 456-1555 | Norcal Waste Services of Sacramento | (916) 381-5300 |
| Atlas Disposal Industries, LLC      | (916) 455-2800 | North West Recyclers                | (916) 686-8575 |
| California Waste Recovery Systems   | (916) 441-1985 | Waste Management of Sacramento      | (916) 387-1400 |
| Central Valley Waste Services, Inc. | (209) 369-8274 | Waste Removal & Recycling           | (916) 453-1400 |
| City of Sacramento Solid Waste      | (916) 808-4839 | Western Strategic Materials, Inc.   | (916) 388-1076 |

| Recyclers*                          |                | Recovery Stations & Landfills           |                |
|-------------------------------------|----------------|---|----------------|
| Bell Marine                         | (916) 442-9089 | Elder Creek Recovery & Transfer Station | (916) 387-8425 |
| C & C Paper Recycling               | (916) 920-2673 | Kiefer Landfill                         | (916) 875-5555 |
| EBI Aggregates                      | (916) 372-7580 | L & D Landfill                          | (916) 383-9420 |
| International Paper                 | (916) 371-4634 | North Area Recovery Station             | (916) 875-5555 |
| Modern Waste Solutions              | (916) 447-6800 | Sacramento Recycling & Transfer Station | (916) 379-0500 |
| PRIDE Industries, Inc.              | (916) 640-1300 | Waste Management Recycle America        | (916) 452-0142 |
| Recycling Industries, Inc.          | (916) 452-3961 |   |                |
| Sacramento Local Conservation Corps | (916) 386-8394 |   |                |
| Smurfit-Stone Container Corporation | (916) 381-3340 |   |                |
| Southside Art Center                | (916) 387-8080 |   |                |
| Spencer Building Maintenance, Inc.  | (916) 922-1900 |   |                |

More updated information can be found online at:

<http://www.cityofsacramento.org/utilities/>

\* Please note that any facility may receive source-separated recyclable materials as long as it is authorized to do so by the State of California. This is not meant to be a complete list.



## **Monthly Pay Request Application and Schedule of Values Processing**

1. The Contractor must have Microsoft Excel Version 7 to prepare Pay Request Application and Schedule of Values.
2. The City will provide the Contractor with an electronic version of the Schedule of Values with bid items and Contractor prices and Pay Request Application at or immediately after the preconstruction meeting.
3. On a monthly basis, the Contractor shall submit an electronic copy of the Pay Request Application and Schedule of Values to City Inspector for review.
4. Upon approval by City Inspector, the Contractor shall print out hard copies of the Pay Request Application and Schedule of Values, sign and submit to City Inspector for processing.



(electronic submission with wet signature required)

DEPARTMENT OF TRANSPORTATION

ENGINEERING SERVICES DIVISION  
 915 I Street, Room 2000  
 Sacramento, CA 95814

# PAY REQUEST APPLICATION

(All information to be entered on Schedule of Values page.)

|                             |   |                      |       |
|-----------------------------|---|----------------------|-------|
| PROJECT NAME:               | Alhambra Blvd and Stockton Blvd Traffic Signal Modification |                      |       |
| CONTRACTOR: (per agreement) | _____   |                      |       |
| REMITTANCE ADDRESS:         | _____   |                      |       |
| PHONE NUMBER: ( )           | _____   |                      |       |
| PURCHASE ORDER NO.:         | _____   | CITY PROJECT NUMBER: | _____ |
| INVOICE NO.:                | \$15074108  | PERIOD ENDING DATE:  | _____ |

|                                 |       |
|---------------------------------|-------|
| ORIGINAL CONTRACT AMOUNT:       | _____ |
| CHANGE ORDER NO. 1              | _____ |
| CHANGE ORDER NO. 2              | _____ |
| CHANGE ORDER NO. 3              | _____ |
| CHANGE ORDER NO. 4              | _____ |
| CHANGE ORDER NO. 5              | _____ |
| CHANGE ORDER NO. 6              | _____ |
| CHANGE ORDER NO. 7              | _____ |
| CHANGE ORDER NO. 8              | _____ |
| CHANGE ORDER NO. 9              | _____ |
| TOTAL CHANGE ORDERS:            | _____ |
| CONTRACT AMOUNT TO DATE:        | _____ |
| TOTAL WORK COMPLETED TO DATE:   | _____ |
| RETENTION WITHHELD:             | _____ |
| LESS PREVIOUS PAYMENTS:         | _____ |
| AMOUNT DUE THIS INVOICE:        | _____ |
| TOTAL COMPLETED LESS RETENTION: | _____ |

List all ESBE/UDBE subcontractors employed on this project during this period ending date and indicate amounts paid. Please also include ESBE/UDBE materials suppliers and trucking firms. Attach proof of payments made. The Pay Request Application will be considered incomplete unless this information is provided along with all other required documentation to support the request for payment. Attach additional sheets if necessary.

Circle UDBE for FEDERALLY funded projects. Select ESBE for locally funded projects.

Total amount pledged:

| ESBE / UDBE | Sub-Contractor | Previously Paid | Current Pay Request Total | Percent Attained | Date Paid |
|-------------|----------------|-----------------|---------------------------|------------------|-----------|
|             |                |                 |                           |                  |           |
|             |                |                 |                           |                  |           |
|             |                |                 |                           |                  |           |
|             |                |                 |                           |                  |           |
|             |                |                 |                           |                  |           |



(electronic submission with wet signature required)

DEPARTMENT OF TRANSPORTATION

ENGINEERING SERVICES DIVISION

915 I Street, Room 2000  
Sacramento, CA 95814

# PAY REQUEST APPLICATION

(All information to be entered on Schedule of Values page.)

\*\*\*Labor compliance (payrolls, etc.) is current and submitted for this Pay Request\*\*\*

**Approved**

By (Prime Contractor)

\_\_\_\_\_  
PRINT AND SIGN

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

Submit To:

Department of Transportation  
915 "I" Street, Room 2000  
Sacramento, CA 95814

Attn: CONSTRUCTION INSPECTOR

**Approved**

By (Resident Const. Inspector)

\_\_\_\_\_  
PRINT AND SIGN

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

**Certified by Project Manager**

By (Project Manager)

\_\_\_\_\_  
PRINT AND SIGN

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

**Approved**

By (Labor Compliance)

\_\_\_\_\_  
PRINT AND SIGN

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

In accordance with Public Contract Code Sec. 20104.50 the City shall pay the Contractor interest on any progress payment which is made by City more than 30 days after City receives an undisputed and properly submitted written payment request. Said interest shall be equal to the rate set forth in CCP Sec.685.010(a), and shall begin to accrue upon the expiration of said 30 day period. Any written request for a progress payment which City determines to be disputed, improper or not suitable for payment for any reason shall be returned to Contractor within 7 days after receipt by City, along with a written statement of the reason or reasons why such request is disputed, improper or not suitable for payment.

|  |
|--|
|  |
|  |
|  |

Contractor Entered Data  
Construction Inspector's Name.  
PM certifies that all information is correct.







| Item No  | Item Description | Original Contract Quantity | Unit | Unit Price | Original Contract Amount | Previously Paid                    |        | This Estimate                       |        | Total Work Completed       |        | Balance of Contract                  |                                    |
|--|------------------|----------------------------|------|------------|--------------------------|------------------------------------|--------|-------------------------------------|--------|----------------------------|--------|--------------------------------------|------------------------------------|
|  |                  |                            |      |            |                          | Quantity                           | Amount | Quantity                            | Amount | Quantity                   | Amount | Quantity                             | Amount                             |
| CCC#1  |                  |                            |      |            | \$0.00                   |                                    | \$0.00 |                                     | \$0.00 |                            |        |                                      |                                    |
| CCC#2  |                  |                            |      |            | \$0.00                   |                                    | \$0.00 |                                     | \$0.00 |                            |        |                                      |                                    |
| CCC#3  |                  |                            |      |            | \$0.00                   |                                    | \$0.00 |                                     | \$0.00 |                            |        |                                      |                                    |
| CCC#4  |                  |                            |      |            | \$0.00                   |                                    | \$0.00 |                                     | \$0.00 |                            |        |                                      |                                    |
| CCC#5  |                  |                            |      |            | \$0.00                   |                                    | \$0.00 |                                     | \$0.00 |                            |        |                                      |                                    |
| CCC#6  |                  |                            |      |            | \$0.00                   |                                    | \$0.00 |                                     | \$0.00 |                            |        |                                      |                                    |
| CCC#7  |                  |                            |      |            | \$0.00                   |                                    | \$0.00 |                                     | \$0.00 |                            |        |                                      |                                    |
| CCC#8  |                  |                            |      |            | \$0.00                   |                                    | \$0.00 |                                     | \$0.00 |                            |        |                                      |                                    |
| CCC#9  |                  |                            |      |            | \$0.00                   |                                    | \$0.00 |                                     | \$0.00 |                            |        |                                      | \$0.00                             |
| <b>Original Contract Total:</b>  |                  |                            |      |            | \$0.00                   |                                    | \$0.00 |                                     | \$0.00 |                            |        |                                      |                                    |
| <b>Sum of all Change Orders</b>  |                  |                            |      |            | \$0.00                   |                                    |        |                                     |        |                            |        |                                      |                                    |
| <b>CCO Adjusted Contract Amount (Original + Change Orders)</b>   |                  |                            |      |            | \$0.00                   |                                    |        |                                     |        |                            |        |                                      |                                    |
| Partial Retention Release<br>(Prior approval is needed before proceeding with partial retention release) |                  |                            |      |            |                          |                                    |        |                                     |        |                            |        |                                      |                                    |
|  |                  |                            |      |            |                          | Previous Total                     |        | This Estimate (current work)        |        | Total Work to Date         |        | Balancing Total of Adjusted Contract | \$0.00                             |
|  |                  |                            |      |            |                          | Previous Retention Withheld (10%)  |        | This Retention (current work) (10%) |        | Retention to Date (10%)    |        |                                      |                                    |
|  |                  |                            |      |            |                          | Previous Partial Retention Release |        | Current Retention Release           |        | Retention Released to Date |        |                                      |                                    |
|  |                  |                            |      |            |                          | Previously Paid                    |        | This Payment                        |        | Total Paid to Date         |        |                                      | Supervisor Approval (Print & Sign) |

Contractor Entered Data  
 PM Entered Data  
 Inspector Entered Data (additional description optional)

If Applicable - Attach The Current C.C.O. Exhibit "A" To The Pay Request Application and S.O.V.

**GUARANTEE**

We hereby guarantee the Alhambra Blvd and Stockton Blvd Traffic Signal Modification (PN: S15074108) to the City of Sacramento for one (1) year in accordance with the guarantee required in the specifications. We agree to repair or replace any or all such work, together with all or any other work which may be displaced in so doing, that may be proven defective in workmanship or material within the one-year period from the date of acceptance without any expense whatsoever to the City, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of our failure to comply with the above-mentioned conditions within five (5) days time after being notified in writing, we collectively or separately, do hereby authorize the City to proceed to have the defects repaired and made good at our expense and will pay the costs and damages, including but not limited to any related attorney fees and City staff and administrative expenses, therefor immediately upon demand.

Dated: 4/1/2011

Signed: 

DAVID SPIDEBAUER  
Printed Name

Company **STUDEBAKER BROWN ELECTRIC**  
**3835 BLUE HERON WAY**  
Address **GREENWOOD, CA 95635**



# CERTIFICATE OF LIABILITY INSURANCE

OP ID: SE

DATE (MM/DD/YYYY)

04/04/11

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

|   |  |   |  |  |
|---|--|---|--|--|
| PRODUCER<br><b>Leland Insurance Agency, Inc.</b><br>License #0E67731<br>910 Florin Rd., Ste. 108<br>Sacramento, CA 95831-3573<br>Bill (William) Skinner-0670221 |  | 916-428-1309<br><br>916-428-1403  | CONTACT NAME:<br>PHONE (A/C, No., Ext):<br>E-MAIL ADDRESS:<br>PRODUCER CUSTOMER ID #: <b>STUDE-1</b> | FAX (A/C, No.):<br><br>INSURER(S) AFFORDING COVERAGE<br>NAIC # |
| INSURED<br><b>Studebaker Brown Electrical Co</b><br>3835 Blue Heron Way<br>Greenwood, CA 95635  |  | INSURER A: <b>James River Insurance Company</b> 12203<br>INSURER B:<br>INSURER C:<br>INSURER D:<br>INSURER E:<br>INSURER F: |  |  |

**COVERAGES**

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE  | ADDL SUBR INSR | WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS                                    |              |
|----------|--|----------------|-----|---------------|-------------------------|-------------------------|---|--------------|
| A        | GENERAL LIABILITY  | X              |     | 000311612     | 04/17/10                | 04/17/11                | EACH OCCURRENCE                           | \$ 1,000,000 |
|          | <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY   |                |     |               |                         |                         | DAMAGE TO RENTED PREMISES (Ea occurrence) | \$ 50,000    |
|          | CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  |                |     |               |                         |                         | MED EXP (Any one person)                  | \$ excluded  |
|          | GEN'L AGGREGATE LIMIT APPLIES PER:   |                |     |               |                         |                         | PERSONAL & ADV INJURY                     | \$ 1,000,000 |
|          | <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC |                |     |               |                         |                         | GENERAL AGGREGATE                         | \$ 2,000,000 |
|          | AUTOMOBILE LIABILITY   |                |     |               |                         |                         | PRODUCTS - COMP/OP AGG                    | \$ 2,000,000 |
|          | ANY AUTO   |                |     |               |                         |                         |   | \$           |
|          | ALL OWNED AUTOS  |                |     |               |                         |                         | COMBINED SINGLE LIMIT (Ea accident)       | \$           |
|          | SCHEDULED AUTOS  |                |     |               |                         |                         | BODILY INJURY (Per person)                | \$           |
|          | HIRED AUTOS  |                |     |               |                         |                         | BODILY INJURY (Per accident)              | \$           |
|          | NON-OWNED AUTOS  |                |     |               |                         |                         | PROPERTY DAMAGE (Per accident)            | \$           |
|          | UMBRELLA LIAB  |                |     |               |                         |                         |   | \$           |
|          | EXCESS LIAB  |                |     |               |                         |                         | EACH OCCURRENCE                           | \$           |
|          | DEDUCTIBLE   |                |     |               |                         |                         | AGGREGATE                                 | \$           |
|          | RETENTION \$   |                |     |               |                         |                         |   | \$           |
|          | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY  |                |     |               |                         |                         | WC STATUTORY LIMITS                       | OTHER        |
|          | ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)                              |                |     |               |                         |                         | E.L. EACH ACCIDENT                        | \$           |
|          | If yes, describe under DESCRIPTION OF OPERATIONS below.  |                |     |               |                         |                         | E.L. DISEASE - EA EMPLOYEE                | \$           |
|          |  |                |     |               |                         |                         | E.L. DISEASE - POLICY LIMIT               | \$           |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

JOB: Alhambra Blvd & Stockton Blvd Traffic Signal Modification Project (PN: S15074108) Certificate Holer is named as Additional Insured per Form #CG2010(07-04) and Waiver of Subrogation is included per Form #AP5004US(11-06) also attached/\*10 day notice of cancellation applies to non payment of premium\*

**CERTIFICATE HOLDER****CANCELLATION**

CITY OF S

City of Sacramento/Dept. of Transportation/Engineering Serv Div/attn: Angela Edwards  
 915 I Street, Room 2000  
 Sacramento, CA 95814

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2009 ACORD CORPORATION. All rights reserved.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

| Name Of Additional Insured Person(s) Or Organization(s):   | Location(s) Of Covered Operations |
|--|-----------------------------------|
| Blanket where required by written contract   |                                   |
| Information required to complete this Schedule, if not shown above, will be shown in the Declarations. |                                   |

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

**B.** With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.



**IMPORTANT**

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

**DISCLAIMER**

The Certificate of Insurance on the reverse side of this form does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

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**PRIMARY INSURANCE ENDORSEMENT**

**Policy No. BA8761353**

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THIS ENDORSEMENT CHANGES THE POLICY, PLEASE READ IT CAREFULLY.

This endorsement modifies the following policy coverage forms:

**COMMERCIAL GENERAL LIABILITY COVERAGE FORM  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE FORM**

Endorsement No. 2

Endorsement Effective: **4/01/2011** (At 12:01 A.M. Standard Time)

Named Insured:

**Studebaker Brown Electric**

The insurance provided by this policy for the benefit of the Additional Insured shown in the Schedule shall be primary insurance as specifically described in:

**COMMERCIAL GENERAL LIABILITY COVERAGE FORM CG 0001**

**Section IV Commercial General Liability Conditions,**

**4. Other Insurance**

**a. Primary Insurance**

**SCHEDULE**

Name of Person or Organization:

**City of Sacramento, its officials, employees and volunteers**

POLICY NUMBER: BA8761353

COMMERCIAL AUTO

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED – DESIGNATED PERSON OR ORGANIZATION**

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM  
GARAGE COVERAGE FORM  
MOTOR CARRIER COVERAGE FORM  
TRUCKERS COVERAGE FORM

With respects to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

**SCHEDULE**

Name of Person or Organization:

City of Sacramento, its officials, employees and volunteers

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

The WHO IS AN INSURED provision under LIABILITY COVERAGE is changed to include as an "insured" the person or organization shown in the Schedule, but only with respects to liability arising out of:

1. Your operations or services performed for that person or organization at the location shown in the Schedule; or
2. The ownership, maintenance or use of the covered "autos" described in the Schedule.

A person's or organization's status as an additional insured under this endorsement ends when:

1. Your operations or services performed for that person or organization are completed; or
2. That person's or organization's interest in the described "auto" ends.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **WAIVER OF SUBROGATION AS REQUIRED BY CONTRACT**

This endorsement modifies insurance provided under the following:

ALL COVERAGE PARTS

The Company agrees to waive any right of recovery against any person or organization, as required by written contract, because of payments we make for injury or damage which is limited to liability directly caused by "your work" which is imputed to such person or organization.

**ALL OTHER TERMS AND CONDITIONS OF THE POLICY REMAIN UNCHANGED.**

## Request for Taxpayer Identification Number and Certification

Give form to the  
 requester. Do not  
 send to the IRS.

|  |   |  |
|--|---|--|
| Print or type<br>See Specific<br>Instructions on page 2. | Name (as shown on your income tax return)<br><b>STUDEBAKER BROWN ELECTRIC</b>   |  |
|  | Business name, if different from above  |  |
|  | Check appropriate box: <input type="checkbox"/> Individual/Sole proprietor <input type="checkbox"/> Corporation <input checked="" type="checkbox"/> Partnership<br><input type="checkbox"/> Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶ ..... <input type="checkbox"/> Exempt payee<br><input type="checkbox"/> Other (see instructions) ▶ |  |
|  | Address (number, street, and apt. or suite no.)<br><b>3835 BLUE HAVEN WAY</b><br>City, state, and ZIP code<br><b>GREENWOOD CA 95635</b><br>List account number(s) here (optional)   |  |

### Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

**Note.** If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

|   |
|---|
| Social security number                              |
| or  |
| Employer identification number<br><b>26 1265712</b> |

### Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- I am a U.S. citizen or other U.S. person (defined below).

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

|                  |                          |                       |
|------------------|--------------------------|-----------------------|
| <b>Sign Here</b> | Signature of U.S. person | Date <b>4/11/2011</b> |
|------------------|--------------------------|-----------------------|

### General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

#### Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

**Note.** If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

# Withholding Exemption Certificate

2011

(This form can only be used to certify exemption from nonresident withholding under California Revenue and Taxation Code (R&TC) Section 18662. Do not use this form for exemption from wage withholding.)

590

File this form with your withholding agent. (Please type or print)

Withholding agent's name

CITY OF SACRAMENTO

Payee's name

STUDEBAKER BROWN ELECTRIC

Payee's  SSN or ITIN  
 SOS file no.  CA corp. no.  FEIN

26-1265712

Address (number and street, PO Box, or PMB no.)

3835 BLUE HERON WAY

Apt. no./ Ste. no.

City

GREENWOOD

State ZIP Code

CA 95635

Read the following carefully and check the box that applies to the payee.

I certify that for the reasons checked below, the payee named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual.

**Individuals — Certification of Residency:**

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Who is a Resident, for the definition of a resident.

**Corporations:**

The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return and withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information F, What is a Permanent Place of Business, for the definition of permanent place of business.

**Partnerships or limited liability companies (LLC):**

The above-named partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return and will withhold on foreign and domestic nonresident partners or members when required. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

**Tax-Exempt Entities:**

The above-named entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 \_\_\_\_\_ (insert letter) or Internal Revenue Code Section 501(c) \_\_\_\_\_ (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

**Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:**

The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

**California Trusts:**

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly notify the withholding agent.

**Estates — Certification of Residency of Deceased Person:**

I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.

**Nonmilitary Spouse of a Military Servicemember:**

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

**CERTIFICATE:** Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) DAVID STUDEBAKER PARTNER

Daytime telephone no. 530-823-8560

Payee's signature [Signature]

Date 4/9/2011

# **SPECIAL PROVISIONS**

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**TRAFFIC SIGNAL MODIFICATION PROJECT**  
**(PN: S15074108)**

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**SPECIAL PROVISIONS  
FOR  
ALHAMBRA BOULEVARD AND STOCKTON BOULEVARD  
TRAFFIC SIGNAL MODIFICATION PROJECT  
(PN: S15074108)**

**1. GENERAL REQUIREMENTS**

**1.1 SCOPE AND LOCATION OF WORK**

The electrical work to be performed under these Special Provisions includes furnishing and installing all necessary equipment and material to install a new traffic signal as indicated on the Plan sheets and these Special Provisions. Also, included in the work shall be fiber optic and signing and striping installation.

**1.2 COMPLETION TIME**

The time limit for the completion of all items of work is Forty-Five (45) working days, commencing on the date set forth in the written Notice to Proceed issued by the City to the Contractor. Non working days will be assigned for the pole acquisition time period. The Contractor shall pay a sum in the amount of NINE HUNDRED TEN DOLLARS (\$910.00) as liquidated damages, and not as a penalty, for each calendar day delay after the expiration of Forty-Five (45) working days.

The Engineer will furnish the Contractor a weekly statement showing the number of working days charged to the contract for the preceding week and the number of working days charged to date. The Contractor will be allowed fifteen (15) calendar days in which to file a written protest setting forth in what respect the Contractor disagrees with the working day statement, otherwise the working day statement of the Engineer shall be deemed to have been accepted by the Contractor as correct.

**1.3 TIME OF AWARD**

Section 3-2, "Time of Award," of the Standard Specifications is hereby amended for this project. Time of Award for this contract shall be made within Sixty (60) calendar days after opening of the proposals to the lowest responsible bidder.

**1.4 SPECIFICATIONS**

The work to be performed under this contract shall be done in accordance with the latest Special Provisions, June 2007, contained herein. In these Special Provisions, reference is made to the latest City of Sacramento Standard Specifications. The general requirements of this contract shall be governed by Sections 1 through 8 of the Standard Specifications. The Special Provisions shall govern first, followed by the Standard Specifications. Other Standards specified in these Special Provisions govern only the applicable technical Specifications.

## **1.5 PROVIDING BONDS AND SURETY**

The Contractor shall provide signed agreement and surety bonds within ten (10) calendar days after receipt of notice to award by the City and prior to award by the City Council. The Contractor shall be reimbursed for all surety bond costs should the City Council not award a contract.

## **1.6 PRE-BID INTERPRETATION OF CONTRACT DOCUMENTS**

No oral representations or interpretation will be made to any bidder as to the meaning of the contract documents. Requests for interpretation shall be made in writing and delivered to the City at least seven (7) calendar days before the time announced for opening the proposals. Interpretation, where necessary, will be made by the City in the form of an addendum to the contract documents and, when issued, will be sent as promptly as is practicable to all parties to whom the bid documents have been issued. All such addenda shall become part of the contract. Requests for information regarding this procedure or other similar information, shall be directed to **Kaleb Haile** of the Department of Transportation, Engineering Services Division, 915 I Street, Room 2000, Sacramento, CA 95814, (916) 808-7020, FAX (916) 808-7903 or [khaile@cityofsacramento.org](mailto:khaile@cityofsacramento.org).

It shall also be the bidder's responsibility to call to the attention of the Engineer any missing pages or drawings in the contract documents including the addenda. These items shall be brought to the attention of the Engineer immediately but at least two (2) weeks prior to the bid opening date.

## **1.7 CERTIFICATE OF COMPLIANCE**

The Contractor shall provide the Engineer with a manufacturer's "Certificate of Compliance" at the Engineer's request within two weeks. The Certificate of Compliance shall clearly show that the material, equipment and/or work is in compliance with the tests and specifications set forth in these contract documents.

## **1.8 FINAL PAY QUANTITY**

Final pay quantity is designated on the sealed bid proposal sheet with a "(F)". Final pay quantity shall conform to Section 9-1.015 "Final Pay Items" of the State Standard Specifications, except that the final pay quantity designation shall be made on the sealed bid proposal rather than the Plans.

## **1.9 EQUIPMENT TO BE SUPPLIED**

All equipment, material and supplies called for in the specifications shall be new and currently manufactured items, unless otherwise specified. All equipment shall be complete and in operation to the satisfaction of the Engineer at the time of acceptance of the work.

All incidental parts which are not shown on the Plans or specified herein and which are necessary to complete the project shall be furnished and installed as though such parts were shown on the Plans or specified herein.

## **1.10 HANDLING AND REMOVAL OF HAZARDOUS OR CONTAMINATED MATERIALS**

In the event hazardous or contaminated materials are encountered at the site for which separate handling or removal provisions have not been made in these Special Provisions, the Contractor shall stop work on that item, contact the Engineer and schedule his operations to work elsewhere on the site if possible. The City will be responsible for handling and removal of hazardous material or may request that the Contractor shall be available, through contract change order, to provide additional services as needed for the completion of the work. Additional services may consist of retaining a subcontractor who possesses a California license for hazardous substance removal and remedial actions.

Hazardous or contaminated materials may only be removed and disposed of from the project site in accordance with the following provisions:

1. All work is to be completed in accordance with the following regulations and requirements:
  - a. Chapter 6.5, Division 20, California Health and Safety Code.
  - b. California Administration Code, Title 22, relating to Handling, Storage, and Treatment of Hazardous Materials. 29 Code of Federal Regulation 1910.120 relating to Hazardous Waste Operation Safety Training.
  - c. City of Sacramento Building Code and the current edition of the Uniform Building Code.
2. Coordination shall be made with the County of Sacramento Environmental Management Department, Hazardous Materials Division, and the necessary applications shall be filed.
3. All hazardous materials shall be disposed of at an approved disposal site and shall only be hauled by a current California registered hazardous waste hauler using correct manifesting procedures and vehicles displaying a current Certificate of Compliance. The Contractor shall identify by name and address the site where toxic substances shall be disposed of. NO payment for removal and disposal services shall be made without a valid certificate from the approved disposal site that the material was delivered.

None of the aforementioned provisions shall be construed to relieve the Contractor from the Contractor's responsibility for the health and safety of all persons (including employees) and from the protection of property during the performance of the work. This requirement shall be applied continuously and not be limited to normal working hours.

## **1.11 COORDINATION**

The Contractor shall coordinate his activities in a manner that will provide the least interference with the City's operations, other contractors and utility companies working in the area, and agencies exercising jurisdiction over the project area or portions thereof.

1. At a minimum the Contractor shall coordinate his operations with the following:

- City Traffic Signal and Street Lighting Maintenance Shop  
Contractor shall notify Norm Colby, via the Resident Engineer, a minimum of five (5) working days before any electrical work begins at 808-6635.
- City Fire Alarm  
Contractor shall notify Doug Crawford, at 798-0673 or 277-6133, a minimum of five (5) working days prior to beginning work at each location.
- Underground Service Alert  
Contractor shall contact Underground Service Alert (USA) at 1-800-227-2600, a minimum of three (3) working days prior to any excavation.
- Sacramento Municipal Utility District (SMUD)  
Contractor shall contact Michelle Zuniga, SMUD, at (916) 732-5726, at least 2 months before service hook-up is required, before service disconnect is required, before pole quadrants for risers need to be marked, before any poles need to be stood by SMUD, or before any overhead line heights need to be measured.
- Pacific Bell  
Contractor shall contact Astrid Willard at (916) 453-6136 forty-eight hours (48) before service hook-up is required, before service disconnect is required, before pole quadrants for risers need to be marked, before any poles need to be stood by Pacific Bell, or before any overhead line heights need to be measured.
- Pacific Gas and Electric (PG&E)  
Contractor shall contact David Allen, Senior Field Engineer Technician for PG&E, at (916) 386-5277, and Larry Schlaht at (916) 386-5371 at least 7 calendar days before start of construction.

2. A minimum of seven (7) calendar days prior to commencing work, the Contractor shall coordinate operations with the following City Divisions:

- City Waste Removal Division, Superintendent of Collection or Refuse Collection General Supervisor (808-4952).
- Street Division, Street Cleaning Section General Supervisor (808-6333).
- A minimum of three (3) working days prior to commencing work, the Contractor shall also be responsible for coordinating all works with the following City Divisions:
- City Public Media and Communications Specialist, Linda Tucker (808-7523).
- The Police and Fire Department Communication Center (808-5034).

- The City Traffic Signs and Markings Shop (808-6363).
- Tree Services Division, Parks Superintendent (808-6345)
- Department of Utilities (808-5371)
- Streets Division (808-6336)
- City Traffic Engineering Services (808-5307).

The Contractor shall be responsible for any garden refuse piles, which are inadvertently placed in the street between the time of City pickup and the Contractor's work. The cost for removing garden refuse piles shall be included in the unit prices bid for the various items of the proposal.

The cost of coordination shall be included in the unit prices bid for the various items of the proposal and no additional compensation will be allowed therefor.

### **1.12 PROJECT SCHEDULING**

The Contractor shall submit to the Engineer a practicable progress schedule and a schedule of values at the pre-construction meeting and within 5 days of the Engineer's written request at any other time. The Contractor shall furnish the schedules on a form of his choice. The progress schedule shall show the order in which the Contractor proposes to carry out the work, the dates on which he will start the features of the work and the contemplated dates for completion of the work. The schedule of values is submitted for use in determining progress payments. The progress schedules submitted shall be consistent in all respects with the time and order of work requirements of the contract.

The Contractor shall submit, review and update a project schedule in accordance with Section 7-2 of the Standard Specifications. Subsequent to the time that submittal of a progress schedule and a schedule of values is required in accordance with these specifications, no progress payments will be made prior to the submittal of an acceptable project schedule.

### **1.13 PROTECTION OF EXISTING IMPROVEMENTS**

The location, alignment, and depth of existing underground utilities as shown on the Plans are taken from public records and no responsibility is assumed for their accuracy.

The Contractor's attention is directed to the provisions of Chapter 3.1 "PROTECTION OF PUBLIC UTILITIES IN PUBLIC CONTRACTS" of the California Government Code concerning protecting existing overhead and underground utilities. In particular, Section 4216 and Section 4217.

Existing improvements, utilities and adjacent property shall be protected from damage resulting from the Contractor's operations. All trees, shrubbery, grass, fences, mail boxes, walls and other improvements including existing pavements, sidewalks, street improvements, sprinkler systems

and underground utilities and other improvements not to be removed under this contract shall be protected from damage by the Contractor throughout the construction period.

All painted or other disfiguring markings on the pavement, sidewalk or gutters shall be removed by the Contractor before acceptance of the work.

The Contractor will insure that utility services to customers in the project are maintained.

The Contractor is responsible for the protection of and for damage to existing overhead and underground utility lines and services encountered during the course of construction. The Contractor shall notify the respective utility owner prior to any interruption of service.

The Contractor is expected to "pothole" existing underground utilities a minimum of ten (10) working days in advance at any location where an existing utility may be in conflict with the proposed work.

The cost of relocating existing overhead or underground utilities not specified on Plans to be relocated, but which the Contractor elects to relocate or cut and reconnect for his/her own convenience, shall be borne by the Contractor.

No compensation will be paid to the Contractor for the maintenance and protection of existing utilities and facilities. The cost of such work shall be included in whatever bid item the Contractor deems appropriate.

#### **1.14 TRAFFIC HANDLING, PUBLIC SAFETY AND CONVENIENCE**

The contractor's attention is directed to Sections 6 and 7 of the Standard Specifications.

The contractor shall adhere to guidelines as stated in Section 12.20.030 of Title 12 of the Sacramento City Code pertaining to Traffic Control Plan – Requirements, and shall conform to the current edition of the California MUTCD. Particular attention is directed to Chapter 6D – Pedestrian and Worker Safety and Chapter 6F – Temporary Traffic Control Zone Devices, Section 6F.68 – Detectable Edging for Pedestrians.

Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately by the Contractor at his expense.

Construction operations shall be conducted in such a manner as to cause as little inconvenience as to abutting property owners.

Driveway access shall remain open at all times unless approved by the Engineer. If a property has more than one driveway, then the Contractor shall contact the property owner to coordinate a schedule for driveway closures.

Roadway excavation and the construction of embankments shall be conducted in such a manner as to provide a reasonably smooth and even surface satisfactory for use by public traffic at all

times. Skid resistance steel plates or other approved methods shall be used to cover all open excavations in the roadways and sidewalks at all times during construction

Water or dust palliative shall be applied as required or as directed by the Engineer for the alleviation and prevention of dust nuisance. This requirement shall apply for the full duration of the contract and is not limited to working days.

The contractor shall ensure the utility services to customers in the project are maintained.

Sufficient traffic control devices, including signs and flaggers, shall be utilized to route traffic and minimize impacts on the general public.

The contractor shall submit to the Engineer for review and approval a plan showing traffic control measures for vehicles, pedestrians and bicycles affected by the construction work.

For emergency purposes, the responsible person in charge of the work must be reachable by phone 24 hours a day during the progress of the work. A 24-hour phone number shall be indicated on the permit application.

Skid resistant steel plates or other approved methods shall be used to cover all open excavations in the roadways and sidewalks at all times during construction.

The plans shall be developed with the following requirements:

1. Working hours shall be between 7:00 AM and 5:00 PM Monday through Friday, unless otherwise approved by the Engineer.
2. Weekend work from 8:30 am to 5:30 pm may be approved by the Engineer.
3. The Contractor shall submit for approval, a written request to perform weekend work a minimum of two (2) weeks prior to the weekend dates. If weekend work is approved, the cost of inspection shall be borne by the City.
4. The road can be closed to thru traffic through out the duration of the project.
5. A detour plan must be submitted and approved before closing the project.
6. The Contractor shall furnish, install temporary stripes and maintain temporary construction warning signs, lighting, flaggers, barricades, striping and other devices necessary to safeguard the general public and the work, and to provide for the safe and proper routing of all vehicular and of pedestrian traffic within and through the limits of the projects during the construction. The requirement shall apply continuously and shall not be limited to normal working hours.
7. The Contractor shall maintain existing electrical facilities and traffic and public safety in accordance with Section 34 of the Standard Specifications and these Special Provisions.

8. Residential driveways may only be closed after giving property owners 24 hour notice in advance of the closure. Driveways may only be closed during normal work periods and while the contractor is actively pursuing work which requires the driveway to be closed, except when forms are in place, or while concrete is being cured.
9. Commercial driveways shall remain open at all times. The Contractor shall schedule the commercial driveways to be poured in two phases unless more than one driveway is available to the property. The Contractor shall coordinate the driveway closure with property owners' 5 calendar days in advance.
10. All work within public streets and/or roadway right-of-way shall be done in an expeditious manner so as to cause as little inconvenience to the traveling public as possible. Skid-resistant steel plates or other approved methods shall be used to cover all open excavations in the roadway during non-working hours.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all work involved in public safety and convenience shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed.

#### **1.15 USE OF SLIP-FORM MACHINES FOR CONCRETE CONSTRUCTION**

The Contractor may use concrete slip form machines to construct concrete curbs, gutters and sidewalks. The Contractor must maintain proposed lines and grades as shown on the plans. For curbs constructed on existing pavements, the contractor must construct the curb to eliminate any uneven lines and top of curb grade elevations. If in the sole discretion of the Engineer, these lines and grades are not maintained, the Contractor shall remove and replace the concrete at his/her costs.

#### **1.16 TRAFFIC CONTROL AND HANDLING FOR CONSTRUCTION STAKING**

The Contractor is responsible for providing traffic control and handling for the City survey crew for all Contractor staking requests that require stakes within the vehicle travel lanes. The cost to provide traffic control and handling for construction staking in the vehicle travel lanes shall be included in the bid items the Contractor deems appropriate.

#### **1.17 PUBLIC NOTIFICATION**

The Contractor shall notify residents and businesses within the project limits in writing five (5) working days in advance of beginning work. The notice shall be approved by the Engineer and shall describe the work to be performed, the anticipated duration of construction and the name and telephone number of the Contractor's representative that can be reached 24 hours a day, 7 days a week.

The Contractor shall be responsible for issuing a second notice to property owners five (5) working days in advance of commencing any work on private property. The Contractor shall include in the public notification flyers/postcards detailed procedures explaining precautions the

homeowner can take to help prevent plugged utility service fixture problems. The Contractor shall submit to the Engineer for review and approval public notification flyers/postcards before they are issued to the public.

Full compensation for this item shall be included in the prices paid for various contract items of work and no additional compensation will be allowed.

### **1.18 EQUIPMENT LIST AND DRAWINGS SUBMITTALS**

Equipment list and drawings shall be in accordance with Section 34-3 of the Standard Specifications and these Special Provisions.

Unless otherwise permitted in writing by the Engineer, the Contractor shall, within twenty (20) days following notification of award of the contract submit to the Engineer for approval a listing of equipment and material which he/she proposes to furnish and install. The list shall be complete as to name of manufacturer, size and catalog number of unit, and shall be supplemented by other data, including detailed scale drawings and wiring drawings. A minimum of five (5) copies of the above data shall be submitted to the Engineer for review and approval.

The Contractor shall submit to the Engineer a statement from each vendor supplying electrical equipment, including but not limited to, signal heads, standards, electroliers, luminaries, service pedestal and all other electrical equipment indicating that the orders for the materials required for this contract have been received and accepted by said vendor. The confirmed date of delivery to the contractor shall be indicated on the statement.

All substitutions are subject to the approval of the Engineer.

### **1.19 PROOF OF COMPLIANCE WITH CONTRACT**

In order that the Engineer may determine whether the Contractor has complied with the requirements of the contract documents not readily determinable through inspection and tests of plant, equipment, work, or materials, the Contractor shall at any time when requested, at the Contractor's expense, submit to the Engineer properly authenticated documents or other satisfactory proofs as to his compliance with such requirements.

### **1.20 BACKFILLING OF VOIDS**

All voids resulting from the removal of trees, pipes, maintenance holes, ditch boxes, or other buried structures or objects shown on the Plans or called in these Special Provisions to be removed, shall be backfilled per the provisions of Section 26 (Trench Backfill) of the Standard Specifications. In the event job excavated native material is unsuitable for backfill as determined by the Engineer, the Contractor shall furnish the required suitable backfill material.

The Cost to backfill voids as specified in the Special Provisions shall be included in the price bid for the respective items to remove trees, pipe, maintenance holes, ditch boxes, or other buried structures or objects, and no additional compensation shall be allowed.

## **1.21 PAVEMENT CUTTING AND RESTORATION**

Pavement cutting and restoration shall conform to the provisions of Sections 13-4 of the Standard Specifications and these Special Provisions.

No pavement cutting shall precede pavement excavation by more than seven (7) calendar days unless approved by the Engineer. Prior to excavation in paved areas, pavement will be broken within the limits of expected excavation so as to prevent lifting of the pavement during excavation. Prior to restoration, the pavement shall be sawed or scored with an abrasive type pavement cutter (maximum blade width 1/4"). The proper tools and equipment shall be used so that the pavement will be cut to a neat and straight line six inches (6") beyond the limits of actual excavation.

Where pavement cutting takes place more than five (5) calendar days before trench excavation, the Contractor shall fill the pavement cuts with asphaltic patching mix and maintain a smooth riding surface until trenching begins.

Where the limits of excavation are located within twelve (12") of the edge of existing pavement or lip of the curb and/or gutter, the existing pavement within this twelve inches (12") shall also be removed.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for all work involved in this item shall be considered as included in the unit price bid for roadway excavation and removing and replacing asphaltic concrete pavement.

## **1.22 PROTECTION OF TREES**

During construction the Contractor shall protect existing trees. All work near the trees shall be coordinated by the Contractor with the City Arborist, Duane Goosen, phone number 808-4996. The Contractor shall comply with direction as given by the City Arborist and the following City requirements regarding tree protection:

No storage of materials or parking of vehicles may occur within the drip lines of the trees, except on paved streets.

If, during construction, tree roots two inches (2") in diameter or greater are encountered, work shall stop immediately and the City Arborist shall be contacted for a root inspection, and roots shall not be cut without arborist approval. Roots approved by the arborist to be pruned during the course of project construction shall be cleanly cut. If extensive root pruning is proposed an arborist inspection will determine if tree removal is necessary.

If construction activities will affect any of the limbs of the trees, a certified arborist (certified by International Society of Arboriculture, Western Chapter) shall be consulted prior to the cutting or removal of any limb. Limbs approved by the arborist to be pruned during the course of project construction shall be cleanly cut.

The Contractor shall be responsible for damages to trees. Trees damaged by the Contractor during construction activities shall be assessed by the City Arborist using the International Society of Arborists (ISA) appraisal guide or UFS standard diameter and area indexing. The Contractor's responsibility for damaged trees will be determined by the Arborist.

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

### **1.23 TREE TRIMMING**

Trees identified by the Engineer to be trimmed shall be trimmed in accordance with the following specifications and as directed by the Engineer or project Arborist in conjunction with the City Arborist:

General Conditions - This work is to be performed by a Tree Service Contractor, licensed and bonded to do business in the City of Sacramento. The work to be done will consist not only of this trimming and removal of branches and limbs but also disposal of material trimmed from these trees. Disposal of material will not be allowed at the City Dump.

Contractor shall be aware of and shall comply with all ordinances governing and related to tree trimming work. Contractor shall furnish all labor, materials and equipment as required in performing the work described herein in strict accordance with these specifications and subject to the terms and conditions of this contract.

Description of Work - The work shall be done primarily from truck mounted aerial platforms except where trees are inaccessible to trucks. All hand and power tools in the performance of this work shall be subject to inspection and approval of the Manager of the Urban Forest Services division or his designated representative who shall serve as the inspector for the City.

In general, the standard tree trimming equipment shall be used and shall be maintained in a satisfactory condition at all times. All tools shall be clean, sharp, in proper working order and shall be checked for safety before each job.

Inspection/Permit - The Contractor shall notify the Engineer prior to 8:00 a.m. on each day Contractor will be trimming trees.

The Contractor shall notify, 3 working days prior to tree trimming, the City Arborist, Duane Goosen, (916) 808-4996 and obtain, for this project, a permit for tree trimming within the City.

Special Conditions - All licenses, insurance, etc., necessary to assume the legal responsibility for said work shall be acquired by the Contractor to cover the liabilities which might be caused by said work.

All workmen shall comply with State Compensation Safety Rules and must wear safety equipment at all times while on the job. Adequate warning devices, barricades, guards, cones, etc., shall be placed and necessary precautions shall be taken by the Contractor to provide

protection for the workers, pedestrians and vehicular traffic in the area. Work shall be scheduled and conducted in a cooperative manner in order to give the least possible interference with or annoyance to others. It shall be the responsibility of the Contractor to work out any cooperative work schedules as necessary.

All tree work requiring climbing of trees shall be suspended during inclement weather. No trimmings or debris shall be left overnight on any of the work sites. Upon completion of a specific area, the site shall be left in a clean and orderly condition. It shall be the responsibility of the Contractor to repair any damages to adjacent property including shrubs, trees or other growth as well as structures along the route.

To prevent the spread of Dutch elm disease, tree trimming tools shall be sprayed with Lysol before any tree trimming and after each tree has been trimmed.

Personnel - All work shall be done by qualified and trained persons. They shall be familiar with tree climbing and trimming work in general and trained to work in trees of any size. A qualified foreman shall be provided to oversee and direct the work of each crew.

Correct Cuts - All work shall be done in a professional and workmanlike manner. All cuts shall be made in accordance with the following sections in these Special Provisions, and as directed by the Engineer. Trees shall be trimmed at locations where there are tree conflicts and as directed by the Engineer or project Arborist in conjunction with the City Arborist.

Tree trimming shall include the removal of any limbs or brush from limbs in order to achieve a clear space of at least six foot (6') radial distance from each luminaire. The results of the tree trimming shall produce an unobstructed cone of light that will illuminate a semicircle on the street at street level. The semicircle shall have a radius of forty feet (40') minimum on the street from the electrolier base. The unobstructed cone of light shall also illuminate an area at sidewalk level on the house side of the electrolier. This illuminated area shall extend fifteen feet (15') minimum from the base of the electrolier.

Twigs, small limbs and sucker growth shall be removed with hand pruners, pole pruners or a fine toothed saw. All portions of a tree removed in the pruning operations, whether small or large in diameter, shall be made just outside the branch bark ridge, parallel to and immediately adjacent to the tree limb from which the part is removed.

Any dead wood and broken limbs encountered in the pruning operations shall be removed. Dead wood shall be defined as any portion of the tree having no living foliage, no live buds or no apparent life in the cambium layer. Final cuts on dead limbs shall not cut into the branch bark ridge or branch collar of the parent limb. Dead limbs larger than three-fourths of one inch (3/4") in diameter shall be removed by sawing. Broken limbs shall be removed except where branches have split and one portion of the branch can be saved by pruning to reduce lateral end weight.

Shrubs shall be pruned as directed by the Engineer and shall conform to current ISA specifications.

The cost of such work shall be included in whatever bid item the Contractor deems appropriate.

#### **1.24 DEDUCT ITEMS/ELIMINATION OF WORK**

The City reserves the right to deduct bid items included in the Sealed Proposal submitted by the Contractor without any compensation allowed therefore.

Additionally, the City reserves the right to eliminate work. The quantities of work eliminated shall be determined and agreed between the Contractor and Engineer. The Contractor's unit price bid shall be used in determining the total amount of work eliminated. The Contractor shall not be entitled to any compensation for elimination of the work. The contract days shall not change as a result of any deductions and elimination of work.

#### **1.25 STOP WORK IF CULTURAL RESOURCES ARE DISCOVERED**

If artifacts or stone, bone, or shell are uncovered during construction activities, the Contractor shall stop work within 100 feet of the find and notify the City, who will consult with a qualified archaeologist for an on-the-spot evaluation. Additional mitigation of the archaeological site will be the responsibility of the City. If bone is found and it appears to be human, the City will notify the Sacramento County coroner and the Native American Heritage Commission (916/322-7791).

#### **1.26 HEALTH AND SAFETY**

The Contractor is warned that existing sewers and appurtenances have been exposed to sewage and industrial wastes. These facilities shall therefore be considered contaminated with disease-causing organisms. Personnel in contact with contaminated facilities, debris, wastewater, or similar items shall be advised by the Contractor of the necessary precautions that must be taken to avoid becoming diseased. It is the Contractor's responsibility to urge his personnel to observe a strict regime of proper hygienic precautions, including any inoculations recommended by the local public health officer.

Because of the danger of solvents, gasoline, and other hazardous material in the existing sewers, these areas shall be considered hazardous to open flame, sparks, or unventilated occupancy. The Contractor shall be aware of these dangers and shall take the necessary measures to assure his personnel observe proper safety precautions when working in these areas.

The Contractor shall not allow any wastewater to discharge from sewage collection systems onto adjacent lands of waters. In case of accidental discharge, the Contractor shall be responsible for containment, immediate cleanup and disposal at his own expense to the full satisfaction of the Engineer. Where containment is not possible, adequate disinfection shall be provided by the Contractor at his expense as directed by the Engineer or agency with jurisdiction. If, in the opinion of the Engineer, the Contractor fails to adequately follow the above guidelines, he will make arrangements to have the work done by others, and have the cost charged to the Contractor.

### **1.27 PERMITS AND STAGING AREA**

If the Contractor decides he/she needs additional working easement areas, work sites or material sites to facilitate his operation, it shall be his sole responsibility to locate, negotiate, obtain and pay for such additional working easements, work sites and material sites.

The Contractor shall submit to the Engineer written authorization from the property owner of private property being used for the storage of equipment or materials. A copy of any written agreements entered into between the Contractor and the property owner concerning encroachment onto private property shall be provided to the Engineer prior to beginning any work on the property.

All areas lying outside of the street right-of-way which are affected by the work shall be restored to the same, or better condition existing prior to the commencement of the work, to the satisfaction of the Engineer.

The cost of necessary permits, all restoration, including but not limited to landscaping improvements, shall be included in the various items of work the Contractor deems appropriate, and no separate or additional compensation shall be made.

## 2. ITEMS OF THE PROPOSAL

### ELECTRICAL COST BREAK-DOWN

**A Schedule of Values (cost break-down) for lump sum electrical items must be included with the bid. Otherwise, the bid will be deemed non-responsive.**

The sum of the amounts for the units of work listed in the cost break-down for electrical work shall be equal to the contact lump sum price bid for the work. The unit price is the material and installed cost with overhead, profit, and labor.

The Contractor shall determine the quantities to complete the work shown on the plans. The quantities and values shall be included in the cost break-down submitted with the bid package. The Contractor shall be responsible for the accuracy of the quantities and values. No adjustment in compensation will be made in the contract lump sum prices paid for the various electrical work items due to any differences between the quantities shown in the cost break-down furnished by the Contractor and the quantities required to complete the work as shown on the plans and as specified in these special provisions. At the Engineer's discretion, the approved cost break-down may be used to determine partial payments during the progress of the work and as the basis of calculating the adjustment in compensation for the items of electrical work due to changes ordered by the Engineer. When an ordered change increases or decreases the quantities of an approved cost break-down, the adjustment in compensation may be determined, at the Engineer's discretion, in the same manner specified for increases and decreases in the quantity of a contract item of work in accordance with Section 4-1.03B, "Increased or Decreased Quantities", of Caltrans Standard Specification. The cost break-down submitted by the responsive qualified low bid Contractor shall be approved by the Engineer before any partial payment for the items of electrical work shall be made based on the cost break-down. The cost break-down shall include, but is not limited to: type of equipment, estimated quantity, and unit price (\$/LF or each). See below for sample items. Some items from the list may not apply to the project, and other items may need to be included. Contractor shall submit break-down in a spreadsheet format.

*Conduit* – list each size (2", 3", etc.), installation method, quantity (LF), unit price (\$/LF).

*Conductor* – list each size (#6, #8, etc.), quantity (LF), and unit price (\$/LF).

*Pull Box* – list type (#5, #6, etc), quantity, and unit price (\$/EA).

*Electrical Service* – type (metered), quantity, and unit price (\$/EA).

*Traffic Signal and Streetlight Standards with Foundation* – list each standard (such as 1-B, pedestrian pushbutton post, etc), quantity, and unit price (\$/EA).

*Luminaires* – type (200 watt fixture, etc.), quantity, unit price (\$/EA).

*Traffic Signal and Pedestrian Displays* – quantity and unit price (\$/EA).

*Pedestrian Push Button* – quantity and unit price (\$/EA).

*Detector Loop* – type (5'x5', 6'x6', etc), quantity and unit price (\$/EA).

*Detector Lead-In Cable* – quantity and unit price (\$/LF).

*Detector Handhole* – quantity and unit price (\$/EA).

*Emergency Vehicle Detector System* – quantity and (\$/EA).

*2070L Traffic Signal Controller and 332 Cabinet* – quantity and unit price (\$/EA).

*Fiber Optic Cable* – quantity and unit price (\$/LF).

### **ITEM NO. 1 - TRAFFIC SIGNAL MODIFICATION**

The work to be performed for this item, in general, includes furnishing and installing all necessary equipment and materials for the traffic signal installation as indicated on the Plan sheets and these Specifications.

Included in the work shall be furnishing and installing: 332 traffic signal cabinet assembly and 2070L traffic signal controller, surge suppressor power strip, network switch, power supply for network switch, rack mount kit for switch and power supply, Cat 5E patch cord cable, Fourth Dimension (D4) software and license, video detection camera/system, conduits, conductors, emergency vehicle detector system, detector loops, detector handholes, detector lead-in cables, pull-boxes, luminaires, traffic signal displays, pedestrian signals, pedestrian pushbuttons, mounting brackets, foundations, metered service pedestal, traffic signal standards, and all appurtenances shown on the Plans and called for in these Special Provisions to ensure a complete installation. The contractor is responsible for programming and configuring the video detection equipment, emergency vehicle detector system, and loop detection.

Also included in the work shall be the installation of City furnished equipment: traffic signal standards and mastarms as specified in the Plans and these Special Provisions. Contractor shall be responsible for all necessary hardware to stand and install all City furnished equipment. Contractor shall also install the city furnished CCTV camera/mounting bracket on the traffic signal standard per the manufacturer directions and install all associated equipment in the traffic signal cabinet.

**A Schedule of Values (cost break-down) for lump sum electrical items must be included with the bid. Otherwise, the bid will be deemed non-responsive.**

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, for doing all work involved with this line item as shown on the Plans, as specified in these Special Provisions and as directed by the Engineer.

## **ITEM NO. 2 - FIBER OPTIC INSTALLATION**

The work to be performed for this item, in general, includes furnishing and installing all necessary equipment and materials for the interconnect installation as indicated on the Plans and these Special Provisions.

Included in the work shall be furnishing and installing fiber optic cabling. Fiber cable count and requirements are included in the Plans and these Special Provisions.

Payment shall be at the lump sum price bid and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, for doing all work involved with this line item as shown on the Plans, as specified in these Special Provisions and as directed by the Engineer.

## **ITEM NO. 3 - REMOVE SIGNS**

Existing signs shall be removed and salvaged as shown on the Plans and as directed by the Engineer.

All mounting hardware shall be removed and salvaged.

Payment shall be at the unit price bid per each and shall include full compensation for furnishing all labor, material, tools, equipment and incidentals, and for doing all work involved in removing signs as shown on the Plans, as specified in these Special Provisions and as directed by the Engineer.

## **ITEM NO. 4 - RELOCATE EXISTING SIGNS**

Existing signs shall be relocated as shown on the Plans, as directed by the Engineer and as shown in Standard Specifications.

The Contractor shall notify the Engineer two (2) working days prior to the relocation of the signs. The Contractor shall review the proposed sign location with the Engineer. The Engineer may make adjustments to the proposed sign location in the field.

Contractor shall provide new hardware to hang sign on traffic signal. Install new 3/4 inch stainless steel banded strap and appropriate hardware both top and bottom of each sign.

Payment shall be at the unit price bid per each and shall include full compensation for furnishing all labor, material, tools, equipment and incidentals, and for doing all work involved in relocating existing signs as shown on the Plans, as specified in these Special Provisions and as directed by the Engineer.

## **ITEM NO. 5 - PLACE SIGNS ON MASTARMS**

New signs on mast arms shall be installed at the locations shown on the Plans or where designated by the Engineer and in conformance with the provisions in Section 56-2, "Roadside Signs," of the State Standard Specifications and these Special Provisions.

Place a 3/4 inch stainless steel banded strap and appropriate hardware both top and bottom of each sign.

Sign panels shall be not less than 0.080 inches thick aluminum panels. Sign facings shall be manufactured at high intensity grade (encapsulated lens type with heat activated adhesive or pressure sensitive) reflective sheeting except that sheeting for street name signs, R1, R2 and W series signs shall be 3M VIP Diamond Grade or approved equal. Signs shall meet the standards set forth in the California Department of Transportation Traffic Manual. A 3-inch by 1 1/2-inch "City of Sacramento" logo box with 1/2-inch white, red or black letters shall be centered and printed on the lower border of each sign blank prior to application of the reflective sheeting. As an alternative, the "City of Sacramento" logo with 1/2" letters may be placed in the border area.

Each sign shall have the date of manufacture and a location number stenciled on the back side. Location information shall consist of each sign having an individual number which will be recorded on a clean set of Plans during the sign installation. This procedure will be in accordance with the "Record Drawings" section of these Special Provisions.

The Contractor shall use the sign sizes as shown in the State of California, Department of Transportation Traffic Manual, unless specified otherwise on the drawings.

Contractor shall provide new hardware to hang sign on traffic signal. Install new 3/4 inch stainless steel banded strap and appropriate hardware both top and bottom of each sign.

Payment shall be at the unit price bid per each and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in placing signs on mastarms as shown on the plans and as specified in these Special Provisions and as directed by the Engineer.

#### **ITEM NO. 6 - REMOVE TRAFFIC MARKINGS AND STRIPING**

Contractor shall remove existing markings and striping within the project limit as shown on the Plans or as required to place new striping and to complete the striping in place. Thermoplastic and painted preformed traffic markings shall be removed to the fullest extent possible from the pavement by grinding. Material left on the pavement as a result of removing traffic markings shall be removed as the work progresses. Accumulations of material, which might interfere with drainage or constitute a hazard to traffic, Shall not be permitted.

The cost of removing raised pavement markers shall be included in this item.

Until permanent striping is placed, temporary markers will be in place and included in this item.

Payment shall be at the lump sum for removal of markings and striping within the project limit and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals required to perform all as shown on the Plans, as specified in these Special Provisions and as directed by the Engineer.

**ITEM NO. 7 - 24" THERMOPLASTIC TRAFFIC STRIPING TO PLACE**

See item 8.

**ITEM NO. 8 - THERMOPLASTIC TRAFFIC MARKING TO PLACE**

Thermoplastic traffic stripes and markings and arrows shall be placed as shown on the Plans, in accordance with these Special Provisions, as directed by the Engineer, and in conformance with Sections 84-1 and 84-2 of the State Standard Specifications. All pavement markings and traffic stripes shall be in conformance with the State Standard Plans (latest edition).

Unless covered elsewhere, this item shall cover removal of existing striping necessary to construct the improvements. Removal of pavement shall be by grinding or other method approved by the Engineer.

Material

Thermoplastic shall be Alkyd type for extrusion application and shall produce an adherent reflectorized strip capable of resisting deformation by traffic.

The thermoplastic material shall be 100 percent solids. The binder shall consist of synthetic alkyd resins and shall be homogeneously incorporated with all the necessary prime pigments, fillers, and glass beads to produce a traffic coating to meet the requirements as specified herein.

Characteristics of Finished Thermoplastic:

|  | White     | Yellow    |
|--|-----------|-----------|
| Glass Beads, AASHTO M-247, Type I, percent by weight, min.<br>(Cal. Test Method 423)                 | 30        | 30        |
| Titanium Dioxide (TiO <sub>2</sub> ), percent by weight, min.<br>(AASHTO T250-77)                    | 10        |           |
| Lead Chromate, Medium Heat Stability, percent by weight, min.  |           | 2.5       |
| Specific Gravity, max.<br>(Cal. Test Method 423)   | 2.15      | 2.15      |
| Binder, percent by weight, min.<br>(Cal. Test Method 423)  | 18        | 18        |
| Ring & Ball Softening Point, °F (ASTM E28)   | 200 – 240 | 200 – 240 |
| Tests on Material after 4 hours heat with stirring at 425° + 2°F, which includes 1 hour for meltdown |           |           |

|   | White    | Yellow   |
|---|----------|----------|
| and temperature stabilization:  |          |          |
| Bond Strength to Concrete, 0.125-inch thick film drawdown at 425°F test at 75°F + 2°F, psi, min (Cal. Test Method 423)                  | 180      | 180      |
| Brookfield Thermosel Viscosity, Spindle SC4-27, 20 RPM at 425°F, Poise (Cal. Test Method 423)   | 30 – 45  | 30 – 45  |
| Impact Resistance, Falling Ball Method, 0.125-inch thick film drawdown at 425°F on concrete. Test at 75°F + 2°F inch-lbs., (ASTM D2794) | 10       | 10       |
| Daylight Luminous Reflectance, min. (ASTM E97)  | 75       | 40       |
| Yellowness Index, max., (ASTM E313)   | .15      |          |
| Hardness, Shore A-2 Durometer with 2 kilogram weight at 115°F (Cal. Test 423)   | 60 – 80  | 60 – 80  |
| Low Temperature Stress Cracking, Resistance at 25°F (AASHTO)  | No Crack | No Crack |
| Color Match, Federal Std. No. 595a, Color No. 33538   |          | Passes   |

### Application

The thermoplastic material shall be applied by extrusion methods in a single uniform layer.

Stencils shall be used when applying thermoplastic material for pavement markings. Stencils may be new or used, if in good condition. If stencils are bent or damaged, they shall be replaced at the request of the Engineer.

The pavement surface to which thermoplastic material is applied shall be completely coated by the material and the voids of the pavement surface shall be filled.

Unless otherwise specified in the Special Provisions, the thermoplastic material for traffic stripes shall be applied at a minimum thickness of 0.075-inch. Thermoplastic Material for pavement markings shall be applied at a minimum thickness of 0.125-inch. Glass beads shall be applied immediately to the surface of the molten thermoplastic material, at a rate of not less than 8 lbs. per 100 sq. ft. The amount of glass beads applied shall be measured by stabbing the glass beads tank with a calibrated rod.

The Contractor shall apply all traffic stripes and markings on new asphalt surface in accordance with the manufacturer's recommendations and these Special Provisions. All traffic stripes and markings shall be applied within five (5) calendar days of the placement of the pavement surface course. If the Contractor fails to have all striping and markings applied as required by these Special Provisions, the Contractor shall pay liquidated damages of \$500 per calendar day until all work is completed.

#### Tolerances and Appearance

The completed traffic stripes and markings shall have clean and well-defined edges without deformations, and shall be free of tears or other disfigurements. Improperly placed, defective, or disfigured traffic stripes and markings shall be immediately removed from the pavement surface by methods approved by the Engineer. All such removal work shall be at the Contractor's expense.

Completed traffic stripes shall be uniform, shall be straight on tangent alignment, and shall be on a true arc on curved alignment. On tangent alignment, when a 100' string line is stretched taught and placed directly on the outer edge of the completed traffic stripe, the distance between the string and the edge of the traffic stripe shall not exceed three-fourths of one inch (3/4") when measured anywhere along any 100' interval of the tangent alignment. On curved alignment, the outer edge of the traffic stripe shall not deviate more than three-fourths of one inch (3/4") from the true arc. The lengths of the gaps and individual stripes that form broken traffic stripes shall not deviate more than 2" from the lengths required to produce a uniformly repeating, broken-stripe pattern.

#### Measurement

Traffic stripes shall be measured by the lineal foot of thermoplastic material placed. No payment will be made for gaps in broken traffic stripes. Double center stripes shall be paid as two (2) four-inch (4") stripes. Triple four crosswalks shall be paid as two (2) four feet (4') stripes. Pavement markings shall be measured by the square foot of thermoplastic material placed.

The quantities of "Thermoplastic Traffic Stripes and Pavement Markings" may be adjusted, deleted, or omitted as directed by the Engineer to meet the existing requirements. No adjustment to the unit price bid will be made because of a change in quantity from the Engineer's estimate.

Payment shall be at the unit price bid per lineal foot for thermoplastic traffic stripes and shall include full compensation for furnishing all labor, material, tools, equipment and incidentals, and for doing all work involved in placing thermoplastic traffic stripes (24") as specified in these Special Provisions and as directed by the Engineer.

Payment shall be at the unit price bid per the square foot for markings, and shall include full compensation for furnishing all labor, material, tools, equipment and incidentals, and for doing

all work involved in placing thermoplastic traffic markings as specified in these Special Provisions and as directed by the Engineer.

**ITEM NO. 9 - PLACE PAVEMENT MARKERS**

Pavement markers shall conform to Section 85, "Pavement Markers," of the State Standard Specifications and these Special Provisions. Non-reflective pavement markers shall be Type AY. Raised reflective pavement markers shall be in accordance with section 15 and 85 of the State Standard Specifications. Certificate of compliance shall be furnished for pavement markers to certify the pavement markers comply with the Specifications contained herein.

Payment shall be at the unit price bid per each and shall include full compensation for furnishing all labor, material, tools, equipment and incidentals, and for doing all work involved in placing the pavement markers as shown on the Plans, as specified in these Special Provisions and as directed by the Engineer.

### **3. ELECTRICAL PROVISIONS WHICH APPLY TO ALL ELECTRICAL ITEMS**

#### **3.1 BALLAST (MAST ARM LUMINAIRE)**

Each luminaire shall be furnished with an integral ballast prewired to a terminal board. The ballast shall be 120-volt, magnetic regulator type with  $\pm 10\%$  input voltage range. Windings shall be copper and the primary winding shall be electrically isolated from the secondary.

Prior to City acceptance of a fixture for installation, the Contractor shall submit to the Engineer for approval, information on the fixture and its ballast as per Section 34-3 of the Standard Specifications. Information on the ballast shall include but not be limited to the following:

Regulation - Furnish ballast electrical data and lamp operating volt-watt graph for nominal  $+10\%$  and  $-10\%$  of rated line voltage for the rated life of the lamp to verify ballast performance and compliance with lamp specifications.

For nominal and through rated lamp life, the lamp wattage spread shall not exceed  $18\%$  for  $\pm 10\%$  line voltage variation.

Power Factor - Furnish test data to indicate that the power factor of the lamp-ballast system shall not drop below  $90\%$  throughout lamp life, for nominal to end of rated lamp life for  $\pm 10\%$  line voltage variation.

Capacitor Variance - Ballast design shall be such that the normal manufacturing tolerance for capacitor of  $\pm 6\%$  will not cause more than  $\pm 8\%$  variation in regulation throughout rated lamp life for  $\pm 10\%$  line voltage variation.

Lamp Failure - The ballast including the lamp starting circuitry function shall be capable of protecting itself against lamp failure modes. The ballast shall be capable of operation with an open or short circuit condition for extended periods of up to six (6) months without significant loss of ballast life, based average life of 100,000 hours.

#### **3.2 CITY FURNISHED EQUIPMENT**

The Contractor shall pick-up all City furnished equipment at the City Corporation Yard. The City has two corporation yards: Corporate Center South, 5730 24<sup>th</sup> Street, Building 11, Sacramento, California and the Corporate Center North, 918 Del Paso Road, Sacramento, California, and deliver these items to the job site. *Contractor is responsible to provide machinery and manpower to unload and load all city furnished equipment.* Loading, unloading, pick-up, and delivery of these items will be considered included in the price bid for various items and no additional compensation will be allowed therefor.

The Contractor shall schedule the equipment pick-up with the City Inspector. Equipment pick-up shall be done in the presence of the City Inspector or his designated representative.

The Contractor shall be responsible for all damages that occur in connection with the care and protection of all materials and equipment until the completion and final acceptance of the work by the City.

The Contractor's responsibility for City supplied equipment shall be in accordance with Section 6-1.02, "State-Furnished Materials," of the State Standard Specifications.

Traffic Signal Standards - The City of Sacramento will provide the traffic signal standards as specified in the Plan sheets. The City will provide one set of anchor bolts with the City supplied equipment. The Contractor shall provide and construct the foundations for the traffic signal standards in accordance with the State Standard Plans, these Special Provisions, the Plans and as designated by the Engineer. The Contractor shall install all City furnished equipment on the foundations and make all wire connections as directed by the Engineer. City forces will program all controllers and conflict monitors. The Contractor shall notify the Traffic Signal Maintenance Shop, (916) 433-6314, ten (10) working days prior to the date of installation of the traffic signal standards.

CCTV Camera and associated equipment – The City of Sacramento will provide the CCTV camera and associated equipment. The Contractor shall install the camera on the traffic signal standard and associated equipment in the traffic signal cabinet.

### **3.3 COMMUNICATION EQUIPMENT**

The following communication equipment shall be provided, installed and configured per the Plans and Special Provisions.

#### **A. Surge Suppressor Power Strip**

Surge Suppressors shall meet the following requirements:

- 120 VAC
- 60 Hz
- All metal housing
- Isolated filter banks
- 2350 joule/97,000 amps rating
- 6 outlets
- 6 foot cord

Surge Suppressors shall be manufactured by Tripp-Lite Power Protection, Model ISOBAR6ULTRA or approved equal.

Surge Suppressors are to be installed in Type 332 cabinet. For the Type 332 cabinet, the Surge Suppressor shall be mounted on 2" aluminum stock on the back side of the cabinet near the top using the existing 19" rack. The Surge Suppressor must be plugged into the equipment receptacle on the back of the power assembly of the 332 cabinet. See Plans for further details.

## **B. Network Switch (Fiber Infrastructure)**

Network Switch shall meet the following requirements:

- Industrial grade
- DIN rail mountable
- Ethernet connectivity
- Operate under 14 degrees Fahrenheit to 140 degrees Fahrenheit, and under vibration and shock
- Uses copper and fiber uplink options
- Twelve (12) 10/100 ports
- Two (2) 100 BASE-LX (single mode fiber) uplinks
- Enhanced Image (EI) software
- 5-year warranty

Network Switch shall be manufactured by Cisco, Model 2955S-12 or approved equal.

Network switches shall be installed in Type 332 cabinets.

For Type 332 cabinet, network switch shall be mounted on a DIN Rail Adapter for use on an EIA 19" rack in a 332 cabinet. DIN Rail Adapter shall be by Cisco, Model STK-RACKMNT-2955 or approved equal.

The Contractor is responsible for making all connections per manufacturer recommendations. See Plans for further details.

### Functional Test

Network Switch shall be installed and wired per the manufacturer's recommendation, the Plans and these Special Provisions. The Network Switch power indicator light shall both be green for both A and B power sources.

## **C. Power Supply for Network Switch**

Power Supply for Network Switch shall meet the following requirements:

- Compatible with Cisco Catalyst Series 2955 Series industrial grade switch
- DIN rail mountable
- Input: 100-120 VAC or 200-240 VAC, manually selected AC, 50-60 Hz
- Operate under 14 degrees Fahrenheit to 140 degrees Fahrenheit, and under vibration and shock
- Output: 24 VDC, 2.5 amps.
- 5-year warranty

Power Supply for Network Switch shall be manufactured by Cisco, Model PWR-2955-AC or approved equal.

Power Supply for Network Switch shall be installed in Type 332 cabinets.

For Type 332 cabinet, power supply for network switch shall be mounted on a DIN Rail Adapter for use on a 19" rack in a 332 cabinet. DIN Rail Adapter shall be by Cisco, Model STK-RACKMNT-2955 or approved equal.

The Contractor is responsible for making all connections and shall be made per manufacturer's recommendations to insure that the switch is powered. See Plans for further details.

#### Functional Test

Power Supply for Network Switch shall be installed and wired per the manufacturer's recommendation, the Plans and these Special Provisions. The Power Supply for Network Switch power indicator light shall be green.

### **3.4 CONDUIT MATERIAL**

Conduit to be installed underground shall be Schedule 40 polyvinyl chloride (PVC) or Schedule 40 polyethylene conduit as described herein unless otherwise indicated or specified. PVC conduit shall comply with the specifications in Section 34-10 of the City Standard Specifications. High-density polyethylene conduit shall comply with the following specifications:

Conduit shall be fabricated from polyethylene shall be in conformance with applicable ASTM and NEMA standards and Article 347 of the National Electrical Code. Non-black polyethylene conduit shall contain not less than 2500 parts per million (ppm) of a hindered amain ultraviolet light stabilizer. Ultraviolet stabilization additive for black polyethylene conduit shall consist of a carbon black loading of  $2.5\% \pm 0.5\%$  by weight.

Conduit shall be manufactured from high-density polyethylene resin designated as Type III, Category 5, Class C, Grade P34 material in accordance with ASTM D1248.

### **3.5 CONDUIT INSTALLATION**

Conduit installation shall be in accordance with Section 34-9, 34-10 of the Standard Specifications and as modified by these Special Provisions. "Jet-rodding" is not permitted.

Conduits terminating in pull boxes, standards, pedestals and cabinets shall rise vertically and shall not slope in any direction. Conduits terminating in standards, pedestals, and cabinets shall terminate one and one-half inches (1½") above finished grade. Conduits shown on the Plans to be adjacent and parallel to each other shall be installed in the same trench or drill hole unless otherwise specified or directed by the Engineer. Under the sidewalk, conduit shall be laid to a depth of not less than eighteen inches (18") below the sidewalk grade.

Conduits shall be installed by trenching or directional drilling method.

All applicable requirements in these Special Provisions to locate, and to protect existing utilities, utility laterals, obstructions, and other facilities in the area shall be conformed to and no

additional compensation will be allowed therefor. Contractor is responsible for any damage and the repair of any existing facilities damaged by his/her trenching or drilling operations. Contractor is responsible for any potholing necessary and cost for potholing shall also be included in price paid for applicable items of work and no additional compensation will be allowed therefor. All trenching or drilling work shall be contained within the City right-of-way. If utilities or other obstacles are encountered at the specified conduit depth, any additional drilling required to avoid the obstacle shall be made at the Contractor's expense and no additional compensation will be allowed therefor. Location of trenching and drill holes shall take into consideration minimal impact to the street pavement while still meeting the requirements of these Special Provisions.

#### A. Trenching Method

Installation of conduit by trenching shall be in conformance with the Plans and these Special Provisions. See plan sheets for trench details. Trenches shall be backfilled or covered at the end of each work day. All conduit installed by trenching shall be anchored every 15 feet to the bottom of the trench, with an approved method, so as to prevent the conduit from floating when the concrete is backfilled into the trench.

1. Trenches in reconstructed roadways shall be backfilled with slurry portland cement per cubic yard and fine type aggregate as defined in the Standard Specifications Section 10-5. A red oxide in the amount of 5 lbs. per cubic yard shall be mixed uniformly throughout the slurry cement. See plan sheets for amount of sack slurry and depth of conduit(s).
2. Trenches in existing roadways shall use the "T-Trench" method. The portion over the trench shall be paved with asphalt concrete, Type A with  $\frac{3}{4}$ " aggregate (coarse); except on residential streets where the base course shall be Type A,  $\frac{3}{4}$ " aggregate (coarse) and surface coarse shall be Type B,  $\frac{1}{2}$ " aggregate, (medium), per Section 22 of the City Standard Specifications, unless otherwise directed by the Engineer. See plan sheets for width and thickness of asphalt concrete over trench. Trenches shall be backfilled with slurry portland cement per cubic yard and fine type aggregate as defined in the Standard Specifications Section 10-5. A red oxide in the amount of 5 lbs. per cubic yard shall be mixed uniformly throughout the slurry cement. See plan sheets for amount of sack slurry.

#### B. Directional Drilling Method

Installation of conduit by directional drilling shall be in conformance with the Plans and these Special Provisions.

Conduits shall be installed such that the top of the conduit(s) are not less than eighteen inches (18") below the finished grade in sidewalk areas and not less than thirty inches (30") in all other areas except as otherwise specified or directed by the Engineer.

Prior to the start of directional drilling, the Contractor shall submit a plan which identifies

location and size of proposed drill holes, describes process for identifying/locating existing utility services and other underground utilities or obstructions, identifies a proposed "drilling corridor" to avoid conflicts with existing utilities, services and other facilities. This plan shall be submitted to the Engineer a minimum of ten (10) working days prior to the start of work. The Contractor will not be allowed to directional drill until an approved plan is on file with the Engineer

Directional drilling shall be performed by the technique of creating and directing a bore hole along a predetermined path to a specified targeted location where indicated on the plans to install conduits. The technique shall involve the use of mechanical and hydraulic equipment to change the boring course and shall use instrumentation to monitor the location and orientation of the boring head assembly along the predetermined course. Drilling shall be accomplished with fluid-assisted mechanical cutting. Unless otherwise approved, boring fluids shall be a mixture of bentonite and water or polymers and additives. Bentonite sealants and water will be used to lubricate the drilling head. It is mandatory that minimum pressures and flow rates be used during drilling operations so as not to fracture the subgrade material around and/or above the bore. Uncontrolled jetting (where the primary purpose is to use fluid force to erode soil for creation of the final bore hold diameter) is prohibited. The drilling system shall utilize small-diameter fluid jets to fracture, and mechanical cutters to cut and excavate the soil as the head advances forward.

All drilling shall be located a minimum of three feet (3') from the center of all existing maintenance holes. Drilling that run parallel to any sanitary sewer or storm drainage lines shall maintain a minimum clearance of three feet (3') measured from the centerline of the sewer or drainage line to the adjacent side of the drill hole. Drilling that crosses any sewer or drainage line shall cross at 90 degrees to the line or at a minimum of 45 degrees if a 90 degree crossing is not possible.

### **3.6 CONDUCTORS**

Conductors shall be in accordance with Section 34-12 of the Standard Specifications, except for the following:

1. If the existing ground wire (green 1#10 THW) is used as a pullwire, a new ground wire shall be pulled with the new conductors or cables.
2. Unless otherwise noted, insulation Types THHN and THWN are not approved for installation.
3. The electrolier leads from base to lamp socket shall be No. 12 THW solid wire with 45 mils insulation suitable for 600-volt service for historic decorative, post top and mast arm electroliers.

### **3.7 DETECTOR CONDUCTOR LOOP**

- A. Loop Conductors

Each loop conductor shall be continuous, unspliced, Type RHW-USE neoprene-jacketed or Type USE crosslinked polyethylene insulated No. 12 stranded copper wire. Conductor insulation thickness shall be 40 mils minimum.

B. Loop Conductor Installation

Detector loop installation shall conform to these Special Provisions and the State Standard Plans, Sheet ES-5A.

Unless otherwise specified, each loop shall be three (3) turns of conductors for each detector loop. Unless otherwise shown or noted on the Plans, each new detector loop shall be 6' x 6' and centered in the travel lane.

Slots cut in the pavement shall be blown out with compressed air and dried and inspected for any sharp objects or corners which shall be removed prior to installation of loop conductors.

The loop conductors shall be installed in the slots using a 5/16" to 1/4" wooden paddle. As it is installed, the wire shall be kept under slight tension and shall be kept in the slots with suitable cardboard wedges. The cardboard wedges shall not be removed until the loop sealant operation requires removal.

Loop conductors shall be installed without splices and shall terminate in the Nearest pull box. The detector loops shall be joined in the nearest pull box in combination of series and parallel so that optimum sensitivity is obtained at the sensor unit. 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. Each detector loop shall be identified and tagged by loop number, start (S), and finish (F). For example: Phase 4D1-1S & Phase 4D1-1F; Phase 4D1-2S & Phase 4D1-2F.

All loop conductors for each direction of travel for the same phase of a traffic signal system in the same pull box, shall be spliced to a cable which shall be run from the pull box adjacent to the loop detector to a sensor unit mounted in the controller cabinet. Splices to the cable shall be made in pull boxes only. All splices to the lead in cable and between loops and the lead in cable shall be soldered as specified in State Specifications in Section 86-2.09C, "Connectors and Terminals". Open flame soldering will not be permitted.

Each detector loop circuit shall be tested for continuity, circuit resistance, and insulation resistance at the controller location. The loop circuit resistance shall not exceed 0.50 ohms plus 0.35 ohms per 100 feet of lead-in cable. The insulation resistance shall be performed between each circuit conductor and ground. The megged insulation resistance shall not be less than 200 megohms. The Contractor shall replace any detector loop that fails this requirement at the Contractor's expense.

1. Depth of Loops and Conductors in the Traveled Way

All conductors and conductor loops installed in the traveled way shall be installed so that the top of the conductor is a minimum of one-inch (1") below the surface grade of the street.

2. Inductive Loop Sealant

Only the following methods may be used for inductive loop sealant:

Asphaltic Emulsion and Sand Method

- 1) Immediately after the loop wires have been installed, the slot shall be filled with an anionic asphaltic emulsion conforming to the State Standard Specifications for Rapid Setting No. 1 (RSI).
- 2) Dry 20 mesh sandblasting sand shall then be poured in and around the slot. A suitable and approved tool shall then be used to work the asphaltic emulsion up through the dry sand.
- 3) The slot will then be inspected for any dry spots in the sandfill. Any dry sand spots will then be wetted with more asphaltic emulsion.
- 4) More dry sandblasting sand shall then be added to the slot and the asphalt emulsion will again be worked up through the sand until a uniform mix of asphaltic emulsion and sand with no voids completely fills the slot to the level of the surrounding road surface.
- 5) A final thin layer of sand will then be added to surrounding surface to absorb the excess asphaltic emulsion.
- 6) The traveled way may be opened to vehicular traffic immediately after installation of the asphaltic emulsion and sand loop sealant.

Hot-Melt Rubberized Asphalt Sealant Method

Hot-melt rubberized asphalt sealant shall conform to, and be installed in accordance with State Specifications Section 86-5.01A(5) and as directed by the Engineer.

Sackrit Method

After conductors are installed in the slots cut in the pavement, paint binder shall be applied to all vertical surfaces of slots in accordance with the provisions in Section 94, "Asphaltic Emulsions", of the State Standard Specifications. The slots shall then be filled with asphaltic concrete sealant.

Asphaltic concrete sealant shall be a mixture of sand and liquid asphalt. The percentage of sand in the asphaltic concrete sealant shall conform to the following:

| <u>Screen Size</u> | <u>Percentage Passing</u> |
|--------------------|---------------------------|
| #4                 | 100%                      |
| #8                 | 91%                       |
| #16                | 63%                       |
| #30                | 39%                       |
| #50                | 24%                       |
| #100               | 10%                       |
| #200               | 7%                        |

The sand shall be uniformly mixed with six percent (6%) SC800 liquid asphalt conforming to Section 93 of the State Standard Specifications.

Temperature of sealant material during installation shall be above 70 degrees F. Air temperature during installation shall be above 50 degrees F. Sealant placed in the slots shall be compacted by use of an eight-inch (8") diameter 1/8" thick steel hand roller or other tools approved by the Engineer. Compacted sealant shall be flush with the pavement surface. Excess sealant remaining after rolling shall be reused. Traffic may be released immediately over compacted material.

C. Abandonment of Loop Conductor

Each detector loop shall be saw-cut in a minimum of two places.

**3.8 DETECTOR HANDHOLES**

Where shown on the Plans, detector loops shall be sawcut into detector handholes. Detector handholes shall be Type B and shall be installed as shown in Traffic Signals/Street Lighting Standard Details in the Plans sheets, unless otherwise noted or directed by the Engineer. No splicing will be allowed in the detector handholes. For detector handholes to be removed, holes or depressions resulting from the removed handhole shall be filled, compacted, brought to grade, and filled to match surrounding materials.

**3.9 DETECTOR LEAD-IN CABLE**

Detector lead-in cable shall be "Canoga" Type 30003, or approved equal. Detector lead-in cable shall conform to the following Special Provisions:

Lead-in cable shall consist of four (4) No. 18 A.W.G. stranded copper conductors insulated with nine (9) mils minimum of polypropylene, color coded, parallel laid, twisted together with four to six turns per foot. An amorphous interior moisture penetration barrier shall be provided to prevent hosing, siphoning, or capillary absorption of water along cable interstices. The outer jacket shall be thirty (30) mils minimum in thickness, high density polyethylene conforming to ASTM Designation: D-1248, 65T for Dielectric Material, Type I, Class C, Grade 5, J3. The diameter of the cable shall be approximately .25 inch.

Aluminum-polyester shielding shall be applied around the conductors.

The detector lead-in cable shall be continuous from the pull box adjacent to the conductor loops to the controller unless otherwise shown on the Plans.

Splicing of detector lead-in cables to loop conductors and splicing of detector cables when called for on the Plans shall be as follows:

1. Splices shall be made in pull boxes only. All splices to lead in cable shall be soldered.
2. The ends of the splice shall then be inserted into an approved insulated spring type connector of the correct size.
3. The splice shall then be insulated by "Method B" of the State Standard Plans Sheet ES-13, or as directed by the Engineer.
4. When detector cables and detector loops are initially installed, precautions shall be taken to insure the cables and loops remain water tight prior to splicing. If splicing is not to be done immediately after installation, the ends of the conductors and cables shall be dipped in electrical insulating liquid which shall render them water tight. The insulating liquid shall be fast drying, resistant to oils, acids, alkalis and corrosive atmospheric conditions and shall be compatible with the insulations used in the conductors and cables.

All conductors and cables shall be installed and splices shall be made in a dry environment.

### **3.10 EMERGENCY VEHICLE DETECTOR SYSTEM**

The Contractor shall provide and fully install 3M OPTICOM Series 700 optical detector system which includes, but not limited to the following:

Optical Detector Model 721 – single channel, two direction  
Phase Selector Model 754  
Card Rack Model 760  
Detector Cable Model 138  
Auxiliary Harness 757

*Prior to construction, the Contractor shall deliver the 3M OPTICOM equipment to the city of Sacramento Corporation Yard for programming. Programming will take up to 30 calendar days. After the city has programmed the OPTICOM equipment, the contractor shall pick-up, install, and terminate the Opticom system for a fully functional, operational system. The contractor shall demonstrate to the satisfaction of the City Engineer that the Opticom system is fully functional. Demonstration and testing shall occur only during the approved hours as assigned by the Engineer.*

### 3.11 FIBER OPTIC

#### A. Fiber Optic Cable Requirements

Fiber optic cable shall be Corning Altos All-Dielectric Gel-Free or approved equal. The Contractor shall use the following cable types as listed below or approved equal.

| Description | Part Number     | Manufacturer |
|-------------|-----------------|--------------|
| 12 Strand   | 012EU4-T4101D20 | Corning      |
| 24 Strand   | 024EU4-T4101D20 | Corning      |
| 48 Strand   | 048EU4-T4101D20 | Corning      |
| 96 Strand   | 096EU4-T4101D20 | Corning      |

#### B. Fiber Optic Cable Installation

1. Contractor shall install all fiber optic cable per manufacturer's recommendations and the City's Plans and Special Provisions.
2. All splice work will be performed by the City, or City Approved Contractor. All patch panels and splice materials will be provided by the City or City Approved Contractor.
3. The Contractor shall test all fiber optic cable spans after installation (Bare Fiber Testing). Testing results must be provided to the City Inspector. The City shall review test results and accept or reject the cable within 5 working days. If accepted by the City, and the Contractor shall submit a request to the City to perform splice work. If rejected, the Contractor shall replace the cable and retest.
4. The Contractor shall maintain a record of all sheath footage markings for each cable span. Hard and soft copy of all records shall be provided to the City with test results along with the program to review the soft copy of the test results.
5. Existing fiber optic cable must be protected from damage. The Contractor shall contact the City Inspector twenty four (24) hours prior to working near any existing city fiber optic cabling.
6. During installation the tensile force shall not exceed 600 lbs. The Contractor shall use a break away swivel, or a slip-clutch capstan, set for less than 600 lbs. pulling tensile strength.
7. Fiber marking tags shall be installed on fiber optic cable in every pull box. The tags shall be non-adhesive, Hellermann-tyton 4" fiber optic marker, part number CMFO4 or approved equal.
8. The Contractor shall install Arnco Bull Line Part #WP12LC (with trace wire) or approved equal with the fiber optic cable.

### **C. Fiber Optic Cable Testing (Bare Fiber Testing):**

All testing shall be performed according to the Telecommunications Industry Association (TIA) Technical Service Bulletin TSB-140, "Additional Guidelines for Field – Testing Length, Loss and Polarity of Optical Fiber Cabling Systems."

1. The Contractor may test the fiber optic cable prior to installation, but must test fiber optic cable after installation.
2. The Contractor shall test all fibers in the cable.
3. A continuity test using a power meter shall be used for 12 strand cables less than 200 feet. Power reading shall be provided with test results.
4. The Contractor shall use both a power meter test for continuity and an optical time domain reflectometer (OTDR) to test all other cable spans greater than 12 strands and longer than 200 feet. Proof of Calibration of all fiber optic test equipment may be requested by the inspector at any time, and must be provided along with the test results.
5. The fiber cable shall meet or exceed ANSI/EIA/TIA – 568B.3 and the latest BICSI TDMM Standards.
6. Test Results shall include the following:
  - a. Total fiber length
  - b. Individual fiber traces for complete fiber length
  - c. Losses of all anomalies
  - d. Wavelength tested and measurement directions
  - e. Manufacturer, model number and serial number of test equipment
  - f. Name, signature and company technician/engineer
  - g. Test Equipment Calibration Certificate for all fiber test equipment
  - h. Test Date
7. The Contractor shall provide the test results to the City Inspector. If fiber cable fails to meet cable testing standards and are not approved by the City, the Contractor shall remove the failed fiber optic cable and replace with new fiber optic cable at no additional cost to the City. New fiber optic cable shall be tested according to cable testing requirements in these Special Provisions.

### **3.12 HIGH PRESSURE SODIUM VAPOR LAMPS**

Each luminaire shall be equipped with a clear high pressure sodium vapor lamp. The lamp base shall be a mogul screw base. Lamps shall conform to the appropriate ANSI Specifications for the luminaire voltage and wattage specified on the plans.

The Contractor shall test each lamp to be used prior to installation. All lamps used shall conform to the following initial lamp voltage characteristics:

| Lamp Wattage<br>(Watts) | Rated Voltage<br><u>Design Center (Nominal volts)</u> | Voltage Range<br><u>Initial</u> |
|-------------------------|---|---------------------------------|
| 100                     | 55  | 45-62                           |
| 200                     | 100   | 90-115                          |

The lamp voltage measurement may be made using a standard ballast or the fixture ballast or the fixture ballast intended for use with the lamp.

The measurement shall be made with an A.C. volt meter having an accuracy of one-tenth of one percent of full scale. All lamps that do not fall within the range specified shall not be installed on this contract. Contractor shall allow the lamps to reach a steady state condition after twenty (20) minutes before measurement is made.

The Contractor shall, as part of the guarantee, replace with the Contractors forces at the Contractors expense any and all lamps that fail within a one year period following final job acceptance. If the Contractor fails to respond within forty-eight (48) hours after notification, the City will reserve the right to replace the lamp and the contractor agrees to pay the City the sum of \$50.00 for each lamp replaced in this manner.

### 3.13 INSPECTION

Inspection shall be in accordance with Section 34-22 of the Standard Specifications and these Specifications.

### 3.14 LIGHTING STANDARDS

Lighting standards shall be in accordance with Section 34-18 of the Standard Specifications, except for the following:

Lighting standards shall be round tapered steel pole fabricated from cold rolled steel with dimensions and construction detail as shown on the Plans. Wall thickness of the lighting standards shall be No. 11 or heavier, U.S. standard gage steel having a minimum yield strength of 48,000 pounds per square inch. The standards shall be hot dipped galvanized after fabrication.

On the bottom of the post top standard a 4" x 6-1/2" reinforced handhole with frame and cover shall be provided.

### 3.15 MAST ARM MOUNTED LUMINAIRES

All new luminaires to be installed shall be inspected by the Engineer prior to installation.

Mast arm mounted high pressure sodium luminaires to be furnished and installed shall have an integral ballast having a  $\pm 10\%$  regulation as specified under the heading "Ballasts" in these Specifications. Luminaires shall be 200-watt high pressure sodium vapor lamps unless otherwise specified.

Luminaires shall be designed to produce asymmetric distributions conforming to Illuminating Engineering Society light pattern Type III unless otherwise specified. The units shall be suitable for two-inch (2") slipfitter end mounting.

Luminaires shall be medium semi-cutoff type with tempered glass refractors.

Luminaires shall be supplied without photo cell receptacles unless otherwise called for on the Plans. If the luminaire housing is provided with a hole for the receptacle and the receptacle is not specified, the hole shall be closed in a weatherproof manner by using one of the following methods:

1. A stainless steel or aluminum plate at least one-half inch (1/2") thick pressed into the larger hole of the boss and securely fastened with RTV (room temperature vulcanizing) silicone sealant.
2. A stainless steel or aluminum plate at least one-eighth inch (1/8") thick and gasket held by two stainless steel machine screws which are fastened into a base nut plate.

All luminaires supplied with photo cell receptacles that will not be used shall be required to completely bypass the receptacle and a shorting plug shall be securely installed in the receptacle.

### **3.16 METERED ELECTRICAL SERVICE**

The new service pedestal shall be supplied and installed as shown on the Plans and shall conform to the serving utility requirements.

The service pedestal shall be fabricated in accordance with the dimensions shown on the service pedestal detail drawing in the traffic signals / street lighting standard details in the plan sheets. The overall dimensions of the enclosure shall be 63" high x 12" wide x 7.25" deep.

The service pedestal shall be fabricated from 14 gauge Type 304D stainless steel and as described under the following paragraph in the Caltrans Standard Specifications section 86-3.07A, "Cabinets fabricated from stainless steel shall conform to the following:".

The mounting brackets shall be 10 gauge Type 304D stainless steel. All welds shall be of highest quality and ground smooth and finished so that grind marks are not visible.

The enclosure shall be rain tight and dust tight. All welds shall be ground smooth and finished so that grind marks are not visible. A hinged dead front plate with cutouts for the handles of the breakers and the switch shall be provided in addition to a hinged outside door equipped with a draw latch suitable for padlocking. Galvanized anchor bolts shall be inside or outside the service pedestal as shown on the Plans.

A hinged dead front plate with cutouts for the handles of the breakers and the switch shall be provided. A hinged outside door equipped with a heavy duty draw latch and two (2) heavy duty hasps suitable for padlocking shall be provided for the service section. The dead front panel on the service enclosure shall have a continuous stainless steel piano hinge.

The enclosure shall have no screws, nuts, or bolts on the exterior, except utility sealing screws. All screws, nuts, bolts, and washers shall be stainless steel. All hinges and hinge pins shall be stainless steel.

No surface of the pedestal shall be deflected inward or outward more than 1/16" measured from the intended plane of the surface.

The service pedestal shall consist of a separate metering section and a service section. The meter section shall have a removable cover-top, side, and front sections welded together so that it is rain tight and padlockable.

Service enclosures shall be factory wired and conform to NEMA Standards. All control wiring shall be stranded copper, No. 14 AWG THHN/THWN rated for 600 Volts. All control wiring shall be marked with permanent clip sleeve wire markers. Felt, pencil, or stick back markers will not be acceptable. A copy of the wiring diagram for the service pedestal shall be enclosed in plastic and mounted on the inside of the service section.

All circuit breakers, contactors, and wire shall be listed by UL or ETL. The pedestal shall conform to the NEMA 3-R standard.

The terminal lugs or strips shall be copper or alloyed aluminum. All terminals shall be compatible with either aluminum or copper conductors.

The service pedestal shall have provisions for the installation of up to a total of 16 single-pole circuit breakers, including brass links and mounting hardware. All copper wiring used for main bussing shall be No. 2 AWG THHN/THWN and rated for 125 amperes. Branch circuit panel shall use loop wiring rated for 105 amperes with THHN/THWN insulation.

Nameplates of a reasonable size identifying the control unit therein shall be installed on the dead front panel. Nameplates shall be black laminated with a white plastic center. All nameplates shall be fastened by screws.

The entire service pedestal shall be constructed with the highest quality workmanship and shall meet all applicable codes. Complete submittal drawings on all substitutions shall be submitted to the Engineer in accordance with Section 34-3 of the Standard Specifications. If the proposed substitute is rejected or if the submittal is not made within the specified time, the specified equipment shall be furnished.

The Contractor shall protect and lock the service pedestal during construction. After construction, the Contractor shall provide for each pedestal a master lock which will accept a Type 2214 key.

Street light "ON" and "OFF" control will be by photo-electric cell. All conduits and wires shall be furnished and installed by the Contractor.

The metered electrical service will be served from the serving utility as shown on the Plans. Service shall be wired for 120/240 volts, three-wire and single phase as shown on the Plans.

Mounted in each metered service pedestal shall be the following equipment:

1. Two two-pole, 120-volt alternating current main breakers with 100-ampere trip and an rating of 10,000 ampere AIC at 120/240 volts. Each main breaker shall have internal common trip. Each pole shall have individual on-off control and handle tie for common operation. Breaker shall be Cutler-Hammer Quicklag C or approved equal.
2. One single-pole, 120-volt alternating current branch circuit breaker for control circuit with 15-ampere trip and a rating of 10,000-ampere AIC at 120/240 volts. Breaker shall be Cutler-Hammer Quicklag C or approved equal.
3. One single-pole, 120-volt alternating current branch circuit breaker for irrigation control with 15-ampere trip and a rating of 10,000-ampere AIC at 120/240 volts. Breaker shall be Cutler-Hammer Quicklag C or approved equal.
4. Two single-pole, 120-volt alternating current branch circuit breakers for traffic signals each with 60-ampere trip and a rating of 10,000 amperes AIC at 120/240 volts. Breakers shall be Cutler-Hammer Quicklag C or approved equal.
5. Six single-pole, 120-volt alternating current branch circuit breakers for street lighting each with 40-ampere trip and a rating of 10,000 amperes AIC at 120/240 volts. Breakers shall be Cutler-Hammer Quicklag C or approved equal.
6. Two 3-pole, normally open, 60-ampere mercury displacement relays. Coil voltage shall be 120 VAC, 60 cycle. Mercury displacement relays shall be Dayton Electric Manufacturing Co., Model Number 3X753E, or approved equal.
7. One oil tight "Hand-Off-Auto" selector switch.
8. One solid copper neutral bus.
9. Incoming terminals (landing lugs).
10. Solid neutral terminal strip.
11. Terminal strips for conductors within the cabinet.

### **3.17 PULL BOXES**

Shall be in accordance with Section 34-11 of the Standard Specifications, except for the following:

- a. All new pull boxes shall be set in place prior to pouring any new sidewalk.
- b. Existing pull boxes damaged by the installation of new conduits shall be removed and replaced at the Contractor's expense as directed by the Engineer.
- c. All pull boxes shall be placed in sidewalk areas unless otherwise specified on the plans or directed by the Engineer, and shall not be placed in driveways, in vehicular traveled lanes, or in any part of the new sidewalk handicap ramp areas. Unless otherwise specified, pull boxes shall be placed a minimum of 5 feet from existing driveways.
- d. Contractor shall cut, remove and replace the concrete to the nearest joint when installing new pull boxes.
- e. New pull boxes shall have a minimum of 6" of new concrete around all sides in sidewalks.
- f. For pull boxes to be removed, holes or depressions resulting from the removed pull box shall be filled, compacted, brought to grade, and filled to match surrounding materials.
- g. Pull boxes shall be placed as shown according to the details shown on the Plans and according to these Special Provisions.

### **3.18 TRAFFIC SIGNAL CONTROLLER 2070L**

The Contractor shall provide and deliver Model 2070L controller, with the modules, spares and external wiring adapters, if necessary, defined herein. The Contractor shall supply operating system software, device drivers and descriptors, initialization software, and the validation suite as required herein. Traffic controller firmware is included. The Contractor shall deliver 2070L controllers in accordance with Section 1.1, Scope and Location of Work.

#### **A. General Compliance Requirements**

The Contractor shall furnish products listed on the current State of California Qualified Products List (QPL) for Traffic Signal Control Equipment. The State of California QPL for Traffic Signal Control Equipment may be found at the following link: <http://www.dot.ca.gov/hq/traffops/electsys/QPL/index.htm>

The 2070 controllers shall comply with the Transportation Electrical Equipment Specifications (TEES), dated August 16, 2002 plus Errata 1 dated October 27, 2003 and Errata 2 dated June 08, 2004 published by the California Department of Transportation (Caltrans) along with all current errata. The City reserves the right of final interpretation of the Transportation Electrical Equipment Specification (TEES). The Caltrans TEES and current errata for 2070 controllers may be found at the following link: <http://www.dot.ca.gov/hq/traffops/electsys/TEES.htm>

The Contractor shall furnish 2070 controllers loaded with Fourth Dimension Traffic D4 software.

Features or enhancements, such as OS or hardware improvements, made to the controller during the time of the contract shall be made available to the City at no additional cost. All accompanying engineering data and diagrams shall also be made available to the City at no additional cost.

## **B. Components**

The contractor shall supply fully assembled 2070L controller that is in full compliance with TEES. The contractor shall provide evidence that controller units, with a make and model identical to those being provided, have been tested and approved in accordance with TEES, by CALTRANS.

The Contractor shall supply 2070L controllers with the following components:

- Unit Chassis
- 2070-1B Single Board Processor
- 2070-2A Field I/O Module for 170 style cabinet
- 2070-3B 8x40 Front Panel Display
- 2070-4A 10.0 Amp Power Supply Module
- The module must be marked appropriately as a 4A.
- Back cover plates
- Data key

Model 2070-1B CPU Module shall be a single board resident in Slot A5 consisting of connectors C13S and C14S, Datakey and CPU Module Software.

2070-2A Field I/O Module for 332 style cabinet shall provide an I/O interface with the Type 332 family of cabinets using the C1S connector and shall include C1S, C11S, and C12S connector.

Model 2070-2B Module for NEMA style cabinet shall provide an I/O interface to the 2070-8 NEMA interface for NEMA TS1 family cabinets and shall have a C12S connector

Model 2070-3B Front Panel Assembly (FPA) shall consist of a Metal Panel with latch assembly and two TSD #1 hinge attaching devices, Assembly PCB, FPA Controller, two Keyboards, AUX Switch, Display B, External Serial Port Connector, CPU Activity LED Indicator, and FP Harness Interface.

Model 2070-4A Power Supply Module shall be independent, self-contained Module, vented, and cooled by convection only. The Module shall slide into the unit's power supply compartment from the back of the chassis and be attached to the Back-plane Mounting Surface by its four TSD #3 Devices.

Model 2070-7B Asynchronous Serial Communications Module, Dual EIA-485 shall conform to EIA-485 specifications for twisted pair with a 15 pin "D" connector. The data rate shall be 0-614400 baud. Port is optical isolation.

Model 2070-8 NEMA Interface Module Chassis shall be made of 0.06 inches (1.524 mm) minimum aluminum sheet and treated with clear chromate. The Module shall consist of the Module Chassis, Module Power Supply, FCU Controller, Parallel Input/Output Ports, Serial Communications Circuits and Module Connectors.

Model 2070L Back Cover shall be made of 0.06 inches (1.524 mm) minimum aluminum sheet and treated with clear chromate. All external screws, except where called out, shall be counter sunk and shall be Phillips flat head stainless steel. The matching nuts shall be permanently captive on the mating surfaces.

Datakey shall be a minimum of 2 megabits in size and be capable of storing Fourth Dimension Traffic D4 database.

The “D” plug on the 2070-8 module shall be equipped with a male, nonmetallic, 63-pin, AMP 205842-1 connector, to be compatible with the City’s existing “D” harness. Provisions may be made for an adapter/pigtail cable. The Contractor shall ensure the controller is compatible with the City’s existing “D” as shown in the connector assignments below. An adapter harness shall be constructed and provided as necessary. Documentation of the pin outs and a wiring diagram shall be supplied to assist the City in making the needed connections.

| TYCO ELECTRONICS / AMP 205843-1 Male               |     |                            | AMPHENOL INDUSTRIAL MS3126F24-61S Female |     |
|--|-----|----------------------------|--|-----|
| Standard City P-cabinet D-connector pin assignment |     |                            | Mapped 2070N D-connector pin assignments |     |
| PIN  | I/O | FUNCTION                   | PIN                                      | I/O |
| 1  | O   | EMERG. PR. 4 OUT           | AA                                       | O   |
| 2  | I   | LOW PRIORITY 2 (PREEMPT 8) | A  | I   |
| 3  | I   | RESERVED                   | B  | I   |
| 4  | I   | RAILROAD 2 (PREEMPT 6)     | C  | I   |
| 5  | I   | RESERVED                   | D  | I   |
| 6  | I   | CABINET DOOR OPEN          | E  | I   |
| 7  | I   | DIAL 6                     | F  | I   |
| 8  | O   | SPECIAL FUNCTION 2 OUT     | BB                                       | O   |
| 9  | I   | SPLIT 3                    | G  | I   |
| 10   | I   | RESERVED                   | H  | I   |
| 11   | O   | FLASH OUT                  | CC                                       | O   |
| 12   | I   | RESERVED                   | J  | I   |
| 13   | I   | SYSTEM DET. 8              | K  | I   |
| 14   | I   | DIAL 5                     | L  | I   |
| 15   | O   | SPECIAL FUNCTION 3 OUT     | DD                                       | O   |
| 16   | I   | SPLIT 2                    | M  | I   |
| 17   | I   | SYSTEM DET. 1 (SEQ. #1)    | N  | I   |
| 18   | I   | SYSTEM DET. 4 (SEQ. #4)    | P  | I   |
| 19   | I   | SYSTEM ENABLE              | R  | I   |
| 20   | I   | DIMMING ENABLE             | S  | I   |
| 21   | I   | CLOCK UPDATE               | T  | I   |
| 22   | O   | EMERG. PR. 2 OUT           | EE                                       | O   |
| 23   | O   | RAILROAD PR. OUT           | FF                                       | O   |
| 24   | I   | RESERVED                   | U  | I   |

|    |     |                                 |    |     |
|----|-----|---------------------------------|----|-----|
| 25 | I   | DIAL 2 (SPECIAL FUNCTION 2)     | V  | I   |
| 26 | I   | FREE/COORD (SPECIAL FUNCTION 1) | W  | I   |
| 27 | I   | RESERVED                        | X  | I   |
| 28 | O   | SPECIAL FUNCTION 1 OUT          | GG | O   |
| 29 | I   | RESERVED                        | Y  | I   |
| 30 | I   | SYSTEM DET. 5                   | Z  | I   |
| 31 | I   | SYSTEM DET. 3 (SEQ. #3)         | a  | I   |
| 32 | O   | EMERG. PR. 1 OUT                | HH | O   |
| 33 | I   | LOW PRIORITY 1 (PREEMPT 7)      | b  | I   |
| 34 | O   | EMERG. PR. 3 OUT                | JJ | O   |
| 35 | I   | DIAL 3 (SPECIAL FUNCTION 3)     | c  | I   |
| 36 | I   | RESERVED                        | d  | I   |
| 37 | I   | FLASH STATUS                    | e  | I   |
| 38 | I   | OFFSET 5 (ADD BIT 4)            | f  | I   |
| 39 | I   | SYSTEM DET. 6                   | g  | I   |
| 40 | I   | SYSTEM DET. 7                   | h  | I   |
| 41 | I   | LOW PRIORITY 4 (PREEMPT 10)     | i  | I   |
| 42 | I   | LOW PRIORITY 3 (PREEMPT 9)      | j  | I   |
| 43 | I   | RESERVED                        | k  | I   |
| 44 | I   | RESERVED                        | m  | I   |
| 45 | I   | RESERVED                        | n  | I   |
| 46 | I   | RESERVED                        | p  | I   |
| 47 | I   | SYSTEM DET. 2 (SEQ. #2)         | q  | I   |
| 48 | --- | LOGIC GND.                      | PP | --- |
| 49 | I   | EMERG. 1 (PREEMPT 1)            | r  | I   |
| 50 | I   | EMERG. 2 (PREEMPT 2)            | s  | I   |
| 51 | --- | RESERVED                        | KK | --- |
| 52 | O   | RESERVED                        | LL | O   |
| 53 | --- | LOGIC GND.                      | PP | --- |
| 54 | --- | LOGIC GND.                      | PP | --- |
| 55 | I   | EMERG. 3 (PREEMPT 3)            | t  | I   |
| 56 | I   | EMERG. 4 (PREEMPT 4)            | u  | I   |
| 57 | I   | RAILROAD 1 (PREEMPT 5)          | v  | I   |
| 58 | I   | CONFLICT STATUS                 | w  | I   |
| 59 | --- | RESERVED                        | MM | --- |
| 60 | I   | FLASH COMMAND                   | x  | I   |
| 61 | I   | RESERVED                        | y  | I   |
| 62 | O   | RESERVED                        | z  | O   |
| 63 |     | CHASSIS GND.                    |    |     |

### A. Traffic Signal Controller Software

The Contractor shall install Fourth Dimension (D4) Traffic Signal Controller software on each controller assembly. The most current version of D4 Traffic Signal controller software, at the time of controller delivery, shall be fully configured in the 2070L controller.

The Contractor shall provide a D4 license to the City for each controller assembly. The license shall include technical support and user manual of this software.

The contact for the traffic signal controller software is as follows:

Fourth Dimension Traffic

Tod Eidson, President  
255 King St. #609  
San Francisco, CA 94107  
Phone: 415-516-4051  
Fax: 415-495-9010  
Email: [tod@4dtraffic.com](mailto:tod@4dtraffic.com)

General Controller Software Features

1. 16 phases
  - a. Three maximum times per phase with dynamic max operation
  - b. Minimum, maximum, soft recall modes
  - c. Early and delayed "Walk" timing
  - d. Conditional service during free and coordination with conditional service minimum green time
  - e. Manual control operation with selectable call, omit, and protected pedestrian clearance phases
  - f. Per phase preempt timing
2. 4 rings (Single intersection or two independent intersections)
3. 16 timed overlaps
  - a. Vehicle and pedestrian movement for each overlap
  - b. Actuated pedestrian movements
  - c. Early and delayed "Walk" timing
  - d. Pedestrian overlap rest-in-walk across multiple phases
  - e. Per overlap preempt timing
4. 8 transit phases
  - a. Two and three section signal head controls for light rail vehicles
  - b. Advanced warning sign control per transit phase
  - c. Recall or actuated operation
  - d. Normal or priority service

Detector Features

1. 64 vehicle detectors
  - a. Programmable call and extend phases
  - b. Extend and delay timing
  - c. Stop bar disconnect mode with carryover (extend) timer

- d. Detector cross-switching
  - e. No presence and max fail detector diagnostics (disabled by TOD)
2. 16 queue detectors
    - a. Detects traffic backups
    - b. Capable of selecting alternate coordination patterns, selecting alternate maximum green times, or calling a preempt
    - c. Advanced green to clear vehicle movements prior to transit vehicle arrival
  3. 16 pedestrian detectors
    - a. Programmable calls for pedestrian and vehicle phases
    - b. Pedestrian cascade mode (sequential calling of two pedestrian movements)
  4. 8 transit detectors
    - a. Programmable calls for transit and vehicle phases
    - b. Extend and delay timing
    - c. Travel time delay
    - d. Alternate travel times by TOD
    - e. Adaptive arrival time adjustment
  5. 32 remote transit detectors
    - a. Calls received by transit detectors at other intersections (on peer-to-peer Ethernet network)
    - b. Travel time delay
    - c. Alternate travel times by TOD
    - d. Adaptive arrival time adjustment

#### Coordination Features

1. 32 coordination patterns
  - a. Cycle time and three offsets per pattern
  - b. Flexible per phase split expansion and shrinking during transition
  - c. Fixed or floating force-offs (per phase)
  - d. Automatic permissive calculations
2. Single-band or multi-band permissive modes with permissive limit timer
3. Three pedestrian permissive modes
  - a. Programmable recalls and omits active during each pattern
  - b. Actuated coordinated phases can gap-out early and distribute unused time to movements with greater demand
  - c. Selectable reservice phases (a.k.a. "fully actuated coordination")
4. Multiple interconnect modes
  - a. Time based scheduler

- b. Central system command (over twisted pair or Ethernet connection)
  - c. 120 volt interconnect cable
5. Master controller mode
- a. Controller can operate as a twisted pair, Ethernet, or 120 volt cable master in the absence of a central management system

#### Preemption Features

- 1. 10 prioritized preempts
  - a. Two track clearance states, dwell state, and exit state per preempt
  - b. Permit or allow any phase and overlap individually for each preempt state
  - c. Presence preempt input with optional fail-safe interlock input
  - d. "Check-in / Check-out" preempt detection option with check-out override timer
- 2. 4 soft preempts
  - a. "Step-by-step" preempt (special preempt sequence)
  - b. 8 states per soft preempt sequence (timed or actuated)
  - c. Each state allows programmable calls, omits, holds, and force-offs for each phase and overlap

#### Transit Priority Features

- a. Programmable transit priority options for each transit phase
- b. Operates based on estimated arrival times using local intersection detection and remote ("peer-to-peer") detection from upstream intersections
- c. Separate options for free or coordinated operation
- d. Extend only (no phase abbreviation) or Early/Extend operation
- e. Minimum phase green times
- f. Maximum extend limit
- g. Optional vehicle/pedestrian phase omits
- h. Ability to switch to alternate sequence to better serve early arriving transit vehicle
- i. Adaptive arrival times to automatically compensate for fluctuating station dwell times

#### Status / Diagnostic Features

- 1. Detailed controller status displays through the 2070 LCD display
  - a. Phase, ring, and overlap status
  - b. Transit phase/priority status
  - c. Coordination status
  - d. Preemption status
  - e. Vehicle and pedestrian detector status
  - f. Cabinet / Field I/O status
  - g. System communication status

2. 6000 controller event log
  - a. Multiple classes of events can be individually enabled for logging
  - b. Retrieved and reset from central connection (serial or Ethernet)
3. 62.5 day detector VOS log
  - a. Log VOS for 16 system detectors each 15 minutes
4. 600 MMU event log
  - a. Detailed MMU events, including reason for failure and state of field outputs

#### Cabinet Support

1. NEMA TS1, TS2-Type 1 and Type 2, Caltrans 332/336, and ITS cabinet support
2. All controller input and output functions can be mapped to any physical cabinet input and output
3. "Peer-to-Peer" interconnect over Ethernet (select outputs or inputs from the source intersection to activate a function at the local intersection)
4. Cabinet logic channels to accomplish custom controller I/O operation

#### Protocol Support

1. Communications over serial port, twisted pair, or Ethernet (fiber-optics)
2. Caltrans AB3418E with extended messages for extended status and D4 specific functionality
3. Future NTCIP compliance

#### **D. Testing**

The Contractor shall comply with electrical, environmental and testing requirements defined in the TEES. The Contractor shall comply with all testing, quality control and reporting procedures specified in the TEES.

#### **F. Manuals**

All equipment (base controller assemblies and all modules) and software provided under this specification shall be provided with product/operational manuals, which document the operation and maintenance of the equipment in compliance with TEES. The Contractor shall furnish two (2) printed and one (1) electronic copy of operating manual, technical data sheets, product cut sheets, and any associated documentation with delivery of the controller. Manuals shall be printed on 8.5" x 11" inch paper. Schematics, layouts, parts lists and plan details may be on 11" x 17" inch sheets, but the sheets must be neatly folded to 8.5" x 11" inch size. The manuals shall be bound in durable covers, and shall not suffer degradation when subjected to normal cabinet temperature testing.

## **G. Warranty**

The 2070L controller equipment and components/modules shall have a full warranty for manufacturer defects and workmanship, including parts and labor for a minimum of five (5) years from the date of acceptance. Identification of manufacturer defects shall be as determined by the City. The Contractor shall submit three (3) copies of all warranty certificates with the first controller shipment per Section 1.1, Scope and Location of work.

The Contractor shall bear all expenses for the return and repair of 2070L controller equipment and components or field repair of installed equipment deemed necessary for adjustments during the warranty period.

### **3.19 TRAFFIC SIGNAL CABINET – TYPE 332**

The traffic signal cabinet 332 assembly shall contain all necessary components to operate an 8-phase traffic signal.

The 332 assembly shall conform to the requirements of “Transportation Electrical Equipment Specifications” (TEES) and “Traffic Signal Control Equipment Specifications” (TSCES). The cabinet construction shall conform to Section 86-3.04 Controller Cabinets of the California Department of Transportation Standard Specifications. Controller cabinet and controller shall be on California Department of Transportation approved list.

#### **A. General Equipment**

- a. The cabinet shall be completely equipped, wired and have the following, but not limited to:
  1. (1) Conflict Monitor 2010ECLip
  2. (12) Load switches 200
  3. (4) Flash Transfer Relays
  4. (1) Power Supply Model 206
  5. (2) Flasher Units 204
  6. (1) Power Distribution Assembly (PDA) #2
  7. (8) Inductive Loop Detector Cards Model 222
  8. (3) DC Isolator Model 242
- b. Two (2) copies of circuit diagrams and operation manual for each major component of control cabinet equipment shall be provided for each cabinet delivered.
- c. One (1) set of galvanized anchor bolts shall be included with each cabinet.
- d. All identification shall be by means of black and white labeling, painted or self-adhesive labels.

## **B. Delivery and Acceptance**

The cabinets shall be delivered to the City of Sacramento, with controller, communication, Emergency vehicle pre-emption interface, and all items required for the operation of the intersection installed.

The cabinet shall be tested for complete operation and inspected for conformance to these Special Provisions at the City Traffic Signal Shop. The Contractor shall have an authorized service engineer from the cabinet manufacturer available at the City's Corporate Center South within one (1) working day after notification to correct all minor malfunctions or make minor modifications to meet these specifications. If major adjustments, modifications or repairs to the cabinet are required to meet these specifications, the Contractor shall be required to repair or modify the cabinet at no additional cost to the City. The contractor shall be responsible for all shipping charges for any cabinet(s) that are returned for major repairs or modifications. The Contractor shall also be required to repair or replace any equipment that fails to function properly during testing and inspection. The City shall have fifteen (15) calendar dates from date of receipt to test and inspect the cabinets.

## **C. Guarantee**

The Contractor guarantees the cabinet, materials and devices of whatsoever nature incorporated in, or attached to the cabinets, to be free of all defects of workmanship and materials for a period of one (1) year after final acceptance of shipment of controller cabinet by the City of Sacramento. The Contractor shall repair or replace any or all equipment or material, together with all or any other equipment or material which may be displaced or damaged in so doing, that may prove defective in workmanship or material within said one (1) year guarantee period without expense or charge or any nature whatsoever to the City.

In the event that the Contractor should fail to comply with the conditions of the foregoing guarantee within (10) days time, after being notified of the defect in writing, the City shall have the right, but shall not be obligated to repair, or obtain the repair of the defect and the Contractor shall pay to the City on demand all reasonable costs and expense of such repair. In the event that any defect in workmanship or material covered by the foregoing guarantee results in a condition which constitutes an immediate hazard to the health or safety, or any property interest, or any person, the City shall have the right to immediately repair, or cause to be repaired, such defect, and the Contractor shall pay to the City on demand all reasonable costs and expense of such repair. The foregoing statement relating to hazards to health, safety or property shall be deemed to include either temporary or permanent repairs, which may be required as determined in the sole discretion and judgment of the City.

## **3.20 TRAFFIC SIGNALS AND FITTINGS**

### **A. Vehicle Signals**

Each mast arm mounted signal head shall be all 12" diameter sections.

Vehicle signal housings shall be either die cast or permanent mold cast aluminum conforming to ANSI Standard D-10.1. Vehicle signal faces shall conform to Section 86-4.01, "Vehicle Signal Faces", of the State Standard Specifications.

Metal backplates shall be provided for all vehicle signal heads furnished. Backplates shall be louvered, not solid.

Traffic signals shall utilize tunnel visors.

All traffic signal lamps shall be accessible from the front of the traffic signal head and shall be directly accessible for removal and replacement by the opening of the hinged front lens section and hood. Backplates for MAS mounted vehicle signal heads shall have approved filler plates to prevent light from showing through at the elevated plumbizers.

B. Light Emitting Diode (LED) Signal Modules

ALL SIGNAL HEAD DISPLAYS SHALL BE LED MODULES.

LEDs shall have full ball appearance. Dialite 443 Series or approved equal.

Maximum power consumption requirements for LED signal modules shall be as follows:

| Description  | 25°C   | 74°C   |
|--------------|--------|--------|
| 12" Circular | 25.0 W | 30.0 W |
| 8" Circular  | 15.0 W | 18.0 W |
| 12" Arrow    | 15.0 W | 18.0 W |

All LED modules shall meet California Department of Transportation (CalTrans) and Institute of Traffic Engineer (ITE) minimum requirements. CalTrans specifications shall take precedence and supercede all ITE requirements if there are requirement conflicts.

C. Pedestrian Signals

1. Pedestrian Signals for Crosswalk Distances less than 60 feet

Pedestrian signals shall conform to Section 86-4.05, "Pedestrian Signal Faces", of the State Standard Specifications. The WALK and STOP "hand" pedestrian signal indicator shall be of LED type. Each pedestrian signal shall be provided with an egg crate visor.

2. Pedestrian Signals for Crosswalk Distances greater than or equal to 60 feet

The following specification requirements apply to the combination Raised Hand/Walking Person figure and Countdown timer only. All specifications stated in Sections 1 through 10 apply unless specifically superceded in this section.

Pedestrian signal face modules shall be designed to mount behind or replace the existing faceplate of Type A Pedestrian housings as specified by the requirements of the ITE Standards, "Pedestrian Traffic Control Signal Indications", and the MUTCD. The pedestrian signal shall have an operating range of 90VAC to 130VAC. The pedestrian signal shall be fused and provide transient suppression for protection of line and load. The pedestrian signal shall have a high power factor. The pedestrian signal shall have < 20% harmonic distortion.

The design of the modules shall require a specific mounting orientation. Each module shall provide an average luminous intensity of at least 3,750 candela/m<sup>2</sup> for Upraised hand and 5,300 candela/m<sup>2</sup> for the Walking person symbol throughout the useful life over the operating temperature range.

The uniformity ratio of an illuminated symbol shall not exceed 4 to 1 between the highest luminance area and the lowest luminance area in the module.

The color output of the module shall conform to the requirements of the ITE: "Pedestrian Traffic Control Signal Indications" and the MUTCD. The measured chromaticity coordinates of the modules shall conform to the chromaticity requirements of section 5.3.2.1 and Figure C of the VTCSH standard.

The Hand Man symbols shall conform to all applicable ITE and CalTrans requirements. Raised Hand shall be Portland orange. Walking figure shall be lunar white. The module shall not require special tools for installation. The module shall fit securely into existing pedestrian signal section housings built to the PTCSH specifications without modification to the housing.

The pedestrian signal face shall be no less than 16" high.

The modules shall be a self-contained device, not requiring on-site assembly for installation into an existing Type "A" housing. The pedestrian signal shall be capable of displaying the LED "Raised Hand" legend. The numeral portion shall consist of two (2) seven segment digits, constructed of a minimum of 2 rows of LED's, simultaneously. The pedestrian signal shall use overlays to diffuse the LED's and provide uniform light dispersion while keeping the symbols clear and distinct. The signal shall be configurable, such that the countdown timer can start at the beginning or the end of the "Walk" portion of the pedestrian phase. Initially, the Contractor shall set the signal such that the Countdown timer starts at the beginning of the flashing "Don't Walk/Raised Hand" portion of the phase and ends at the beginning of the solid "Don't Walk/Raised Hand" portion of the phase.

Modules shall have filled hand/man.

#### D. Mounting Hardware

All slipfitters and terminal compartments shall be cast bronze. Clam shell mounting assemblies shall not be used.

F. Pedestrian Pushbuttons

The pedestrian pushbuttons shall conform to Section 86-5.02, "Pedestrian Pushbuttons", of the State Specifications and these Specifications. Pedestrian pushbuttons shall be Type B and meet all American Disability Act (ADA) requirements. The diameter of the actuator shall be 2-inch minimum.

The pedestrian pushbuttons shall be magnetic switch type pushbuttons in heavy cast aluminum or highly durable corrosion-proof housings. The buttons shall be a high visibility yellow. The instruction sign shall be a minimum 20 gauge enameled steel, 5" x 7-3/4" and shall display the appropriate sign for international symbol signals. The mounting height of the pedestrian push button shall be as specified in the latest CalTrans Specifications.

G. Traffic Signal Standards

All mounting hardware to be furnished by the Contractor shall be galvanized.

**3.21 VIDEO DETECTION**

In general video detection system shall be used to provide real time detection of vehicles, bicycles and motorcycles entering the camera's field of view with an accuracy a 95% or more, when compared to conventional inductive loops. The video detection system will only be used to provide detection at the intersection stop bar. The system shall be able to interface with a NEMA TS1, TS2 type1, TS2 type-2, 332 controller cabinet assemblies and/or associated logic levels inputs/outputs.

Communication to the video detection system shall be Ethernet and use standard TCP/IP protocols. The communications shall allow the detection system to be fully programmed and monitored remotely from the Traffic Operation Center (TOC) and programmed locally at the intersection.

Programming and monitoring of the video detection system shall be done through vendor provided software and built-in Web-browser interface and will allow the viewing and configuration of all video detection system features. All software must be able to operate on Windows XP and Windows 7 platforms. The programming window (image used to draw detection zones) shall have a resolution of 640X480 or greater. All software windows shall be able to be maximized to match the computer display.

The video detection system shall be able to stream MPEG-4 video over the network to view locally, at the Traffic Operation Center (TOC) and over the internet. The video shall be viewable via the vendor provided video player or any standard digital video player such as QuickTime, at rates varying from 5 fps to 30 fps up to 5 megabits per second. The video detection system shall also provide an analog output with NTSC format to view locally using an analog monitor. Detector actuation shall be visible in both the analog and MPEG-4 video outputs.

Cameras and/or associated hardware or firmware must provide image stabilization. Cameras must be color and provide a minimum of 470 lines of resolution. Cameras must have variable focal length (zoom control) that can be configured from the traffic controller cabinet. Video detection camera and associated hardware shall be able to operate from- 34° to + 165° Celsius. All interfaces between the camera and the video detection system shall be opto-isolated.

The video detection system shall provide remote system diagnostics with the ability to check detector outputs, and loss of video sync. The video detection system shall be able to drop a false vehicle call if no movement is detected in the video where a detection zone is programmed and when phase assigned to that zone is green. The system shall also be able to interface to existing Green, Yellow and Red phase colors in all cabinet types, and the phase color shall be displayable on the video image. Cameras and/or interface hardware shall be able to detect the absence of video and/or have the ability to detect vehicles. If an absence of video is detected, the interface hardware shall input a user assignable recall on the phase. If the video detection camera cannot detect vehicles due to fog, smoke, and other environmental factors, the user shall have the ability to min recall, max recall, or apply a fixed time to a given phase.

### Video Detection data collection

The video detection system shall be able to provide the following:

1. Store count data for a minimum of Five days
2. 24-hour count with a variable time sampling rate.
3. Speed data for free flowing segments
4. Occupancy for free flowing segments
5. Vehicle Classify based on length

### Video Detection System Hardware

Equipment shall be an Econolite Autoscope Rackvision Terra with Autoscope Image Sensors (AIS) Camera or City Traffic Engineer approved equivalent.

The following equipment outline is for one approach. For intersection with multiple approaches, additional equipment is required:

RackVision and AIS cameras with NEMA TS2 connections to controller.

|         | Qty | Hardware  |
|---------|-----|---|
| Per Leg | 1   | Autoscope RackVision Terra MVP                                    |
|         | 1   | Cat5e network patch cable RJ45 Male to RJ45 Male Cat5 Length 3    |
|         | 1   | Autoscope Image Sensors (AIS) Camera                              |
|         | 1   | Mounting brackets (model AMBKTM15S)                               |
|         | 1   | AIS cable to length distance from Camera to Hand Hole Cover       |
|         | FT  | Coaxial Cable Belden 9290 RG6 or approved equal.                  |
|         | FT  | Camera Power Belden 601203 multi-conductor meeting IMAS Spec 19-1 |

| Per Intersection | 1 | AIP4 interface panel  |
|------------------|---|---|
|                  | 1 | SDLC cable (model ACBLP0E05 P/N) for TS2 connection to the controller |
|                  | 1 | NTSC Monitor with BNC interfaces for signal cabinet                   |
|                  |   | Three (3) years System warrantee from of date of acceptance           |

RackVision and AIS cameras with NEMA TS1 and logic level connection to controller.

|                  | Qty | Hardware  |
|------------------|-----|---|
| Per Leg          | 1   | Autoscope RackVision Terra MVP                                    |
|                  | 1   | MVP Wiring Harness (model 33457G57) for logic inputs/outputs      |
|                  | 1   | Autoscope Image Sensors (AIS) Camera                              |
|                  | 1   | Mounting brackets (model AMBKT15S)                                |
|                  | 1   | AIS cable to length distance from Camera to Hand Hole Cover       |
|                  | FT  | Coaxial Cable Belden 9290 RG6 or approved equal.                  |
|                  | FT  | Camera Power Belden 601203 multi-conductor meeting IMAS Spec 19-1 |
|                  |     |   |
| Per Intersection | 1   | AIP4 interface panel  |
|                  | 1   | NTSC Monitor with BNC interfaces for signal cabinet               |
|                  |     | Three (3) years System warrantee from of date of acceptance       |

### Installation

Camera shall be placed to minimize occlusions of left turn lanes. Occlusions can be minimized by installing the camera on the mastarm, in line with the lane striping between the left turn lane and the through lanes. Cameras installed on signal mastarm shall use Econolite 28" extended camera mount. At intersection where the left and through movements go together as standard operation and left are not intended to turn separately the camera can be mounted on a luminaire arm with standard camera mounting bracket.

Camera shall be aimed so that the area of detection is in the top half of the video image. Typically the stopbar should be in the center of the screen, and at least four (4) cars shall be visible behind the stopbar, in the top half of the video image. No horizon shall be allowed in the video image.

Video detection system installed in traffic signal cabinets with network switches installed or scheduled to be installed shall use NEMA TS2 connections to controller. Contractor shall connect SDLC (model ACBLP0E05 P/N or approved equal) to connect MVP terra card and the traffic signal controller. Contractor shall work with the Econolite Representative and the City of

Sacramento Traffic Signal Maintenance Shop to insure that all channels are programmed and detection calls are being inputted into the controller.

Video detection system installed in traffic signal cabinets without network switches installed shall use NEMA TS1 and logic level connections to controller. Contractor shall wire in MVP Wiring Harness (model 33457G57 or approved equal) into traffic signal controller cabinet. Contractor shall work with the Econolite Representative and the City of Sacramento Traffic Signal Maintenance Shop to insure that all channels are programmed and detection calls are being inputted into the controller.

All penetration through signal poles or mastarms shall use Hayco Liquid \Tight Cordgrips or approved equal.

### **Cable Splicing**

All video detection cable splicing shall be done in the hand hole cover of the traffic signal standard shaft. Video cable located in the handhole shall be spliced with one-piece compression connectors for coax cable: Use Type F Thomas & Betts Snap N-Seal or approved equal. Cable ends shall be connected by using Thomas & Betts precision F81 connector or approved equal. Connection shall be heat shrunk after signal is turned-on. Tubing shall extend two inches past the end of connectors. Contractor shall use manufacturer approved installation tools.

All BNC connectors shall be Thomas & Betts Snap-N-Seal one-piece compression connectors for coax cable or approved equal. Contractor shall use manufacturer approved installation tools.

### **Software and Programming**

An Econolite Representative shall be onsite for the installation and configuration of the Video Detection System at no additional cost to the City. The system shall be programmed to provide stopbar detection. All channels shall be configured per the City's detector programming sheet and the Contractor and Econolite Representative shall work with City of Sacramento Traffic Signal Maintenance Shop to insure the detection calls are being inputted into the controller.

### **Technical Support & Warranty**

1. All hardware associated with the video detection system shall be warranted for a minimum of three years.
2. The vendor shall provide all firmware and software upgrades to the City of Sacramento free of charge during the warranty period of the product.
3. Technical support shall be free of charge during the warranty period of the product.
4. Vendor shall provide 24/7 technical support.
5. Vendor shall provide training in the operation, setup, and maintenance of the video detection system, at no additional cost to the city.

### 3.22 WIRING

Wiring shall be in accordance with Section 34-13 of the Standard Specifications, except for the following:

- a. After taping, all splices shall be painted with an approved electrical coating that will resist oil, acids, alkalies, and adverse environmental conditions.
- b. Pull ropes used to pull conductors in conduit shall be a minimum of three-eighths inch (3/8") in diameter.