

Revised
Attachment A
Scope of Services

- A.1. The work to be performed by the Consultant under this Agreement includes engineering services, scheduled maintenance and unscheduled repair and emergency services of traffic signals, highway lighting, and other lighted traffic facilities at various locations throughout Fresno County for the Department of Public Works and Planning (Department).
- A.2. The services that may be furnished by the Consultant under this Agreement are for all or a portion of the services the Consultant is allowed to provide within the applicable professional discipline limits, as defined in California State License Law, for various Projects on an as needed basis.
- A.3. The Consultant agrees to provide the services that are necessary for each Project when expressly authorized by a Department authorized designee.
- A.4. Assist the Department, at the Director's express, written authorization, with any claim resolution process involving the Consultant and the Department as specified hereunder, including serving as a witness in connection with any public hearings or legal proceeding, and also including dispute resolutions required by law or hereunder. The parties recognize that this clause is provided as a means of expediting resolution of claims among the Consultant and the Department. However, it is understood the Consultant is not an intended third-party beneficiary of this clause. Compensation for these services shall be computed and invoiced at the same hourly rates listed in the Agreement, including travel costs that are being paid for the Consultant's personnel services under this Agreement. Any assistance provided by the Consultant as described in this Section A.4 shall be subject to the provisions of Article 3 in the agreement.
- A.5. Not used.
- A.6. Not used.
- A.7. DEPARTMENT TO PROVIDE:
 - 1) The Department will provide to the Consultant the names and phone numbers of the Manager of the Department's Road Maintenance and Operations Division, and/or the designees, as well as a call-out list of other authorized Department staff. The Manager of the Road Maintenance and Operations Division, and/or the designees shall be available to the Consultant during normal work hours for consultation, clarification of task assignments, etc. After hours, authorized Department staff, on the call-out list, may be contacted in emergency situations.
 - 2) The Department will provide the Consultant access to all facilities covered by this RFP while performing services under this agreement.
 - 3) The Department will issue keys to the Consultant for applicable signal and lighting equipment (i.e. lock-jaw pull box lids, signal cabinets, or other electrical control boxes) covered by this RFP while performing services under this agreement. Department may request the return of these keys by Consultant at any time.
 - 4) The Department will organize, attend, and participate in meetings with the Consultant and other agencies, as required.

- 5) The Department will provide existing timing card and controller types at each of the existing traffic control signals.
- 6) The Department may provide traffic data/information as requested by the Consultant for use for this contract. Any request shall be done 4 weeks in advanced to provide Department staff time to set up the proper equipment. The Department may decline the request for data/information, and if this is the case, then the Department will request the Consultant obtain the data/information.

A.8. INVOICING:

Consultant's invoice to Department shall include the following:

- Contract Agreement Number provided by the Department (e.g. A-24-000).
- 'Attention To' Department designee for receiving invoices.
- Name of caller who requested repair or service.
- TSSL ID Number found in the list Attachment C, Traffic Signals and Lighting.
- Location intersection/description.
- Location Type of Facility.
- Date received call.
- Date responded to call.
- Date(s) performed repair or service.
- Description of repair or service.

A.9. KEY FOR LOCK-JAW PULL BOX LID, OR SIGNAL CABINET, OR OTHER ELECTRICAL CONTROL BOX:

Keys are available to the Consultant at the Department Road Maintenance & Operations office:

Address: 2220 Tulare St, 10th Floor, Fresno, CA 93721.

Hours: Monday through Friday, 8:00 AM to 5:00 PM (closed for lunch from 12:00 PM to 1:00 PM).

A.10. THE LIST ATTACHMENT C, TRAFFIC SIGNALS AND LIGHTING:

Consultant must provide service to traffic signals and lighting facilities in the list, Attachment C.

A.11. ADDITIONS TO THE LIST ATTACHMENT C, TRAFFIC SIGNALS AND LIGHTING:

Consultant must provide service to additional traffic signals and lighting locations as the Department may add to the list, Attachment C. The Director of the Department is authorized to make additions to this list. The Consultant may request a copy of this list at any time.

A.12. DELETIONS TO THE LIST ATTACHMENT C, TRAFFIC SIGNALS AND LIGHTING:

Consultant must cease service to deleted traffic signals and lighting locations as the Department may delete from the list, Attachment C. The Director of the Department is authorized to make deletions to this list. The Consultant may request a copy of this list at any time.

A.13. TRAFFIC SIGNAL TIMING – PROGRAMMING AND TESTING:

Consultant shall assist Department with:

- 1) Preparation of new traffic signals, including programming the timing into the controller and testing the controller. Timing card to be provided by other.
- 2) Updating of existing traffic signals, including reprogramming the timing into the controller and testing the controller. Timing card to be provided by other.
- 3) Verifying/testing of existing traffic signals, as listed under Scheduled Maintenance Service. Existing timing card to be provided.

A.14. Not Used.

A.15. Unscheduled Maintenance Call-Out Service for Existing Traffic Signals and Lighting (in Attachment C):

- 1) Emergency call-out.
 - i. Consultant required to provide immediate service.
- 2) Non-Emergency call-out.
 - i. Consultant not required to provide immediate service.

Consultant to assist with Department in determining the level-of-emergency, of a call-out.

Consultant shall provide to the Department a valid up-to-date phone number and email address for receiving calls 24 hours per day, 7 days per week, 365 days per year. Phone number shall be able to receive voice messaging, if a person is not able to answer. Consultant shall respond within 1 hour of receiving call, either by verbal response to Department designee, or by email response to Department designee. Calls may originate from Department designee, or California Highway Patrol (CHP), or Fresno County Sheriff, or other law enforcement officer, or any City agency.

A.16. Scheduled Preventative Maintenance Inspection (PMI) Service for Existing Traffic Signals (in Attachment C, where PMI = "Yes"):

- 1) Type 1 – Annual Operational Inspection (General Traffic Signal Checklist, see below).
- 2) Type 2 – Bi-Annual Operational Inspection (Conflict Monitor Unit Checklist, see below).

A.17. GENERAL SERVICES FOR TRAFFIC SIGNALS, INCLUDE BUT NOT LIMITED TO:

- 1) Scheduled Preventative Maintenance Inspections (PMI's):
- 2) Emergency 24-Hour Response.
- 3) Trouble Shooting, Equipment Testing, and Corresponding Repairs.
- 4) Review of Plans & Submittals.
- 5) Camera Installation/Maintenance.
- 6) Video Detection Installation/Maintenance.
- 7) Audible Pedestrian System Installation/Maintenance.
- 8) Emergency Vehicle Preemption Installations/Programming/Maintenance.
- 9) Railroad Preemption Installations/Programming/Maintenance.

- 10) Bus Rapid Transit Installation/Programming/Maintenance.
- 11) Underground Service Alert (USA) locate:
 - a. Department Design project existing signal modification.
 - b. Permit project.
 - c. Development Services project.
 - d. Repair call outs.
 - e. Maintenance calls.
- 12) Traffic Signal Construction Inspection.
- 13) Street Light Construction Inspection.
- 14) ITS Construction Inspection.
- 15) New Signal Activation.
- 16) Special Event Modifications.
- 17) 332 Cabinet Testing.
- 18) Flash Requests:
 - a. Construction project.
 - b. Power outage with temporary Stop signs.
- 19) Inspection of special projects (e.g. Sheriff camera project).

A.18. Type 1 – Annual Operational Inspection (General Traffic Signal Checklist).

Cabinet:

- 1) Replace filter (s).
- 2) Lubricate locks and hinges as needed.
- 3) Check fan and thermostat operation.
- 4) Check conduit sealant.
- 5) Check gaskets and seals, repair or lubricate as needed.
- 6) Remove graffiti, tape residue, signs, etc.
- 7) Spot painted as needed.
- 8) Inspect wiring and terminations for burnt terminals and/or damaged insulation.
- 9) Test GFCI receptacle prior to use.
- 10) Vacuum or blow out accumulated dirt / debris.

Controller:

- 1) Observe indicators for proper operation.
- 2) Verify that cards or modules are properly sealed.
- 3) Verify that connectors are secure.

- 4) Verify operation/timing per timing sheet.

Conflict Monitor:

- 1) Verify operation with watchdog trip.
- 2) Reset monitor.
- 3) Observe indicators for proper operation.
- 4) Inspect ribbon cable on "Plus" monitors for damage.
- 5) Verify that the program card is properly sealed.
- 6) Verify that connectors are secure.

Switch Packs:

- 1) Observe indicators for proper operation.
- 2) Verify that switches are properly sealed.

Flashers:

- 1) Observe indicators for proper operation.
- 2) Verify that switches are properly seated.
- 3) Check flash operation; Cabinet, Police & CMU.

Relays:

- 1) Check for burnt or overheated contacts.
- 2) Verify that relays are properly seated.

Clocks:

- 1) Check for correct time / Day-of-week (DOW) settings.
- 2) Manually verify output switch operation.

Preemption:

- 1) Simulate actuation, verify proper operation.

Coordination:

- 1) Observe that current plan is per TOD.
- 2) Check for correct time / DOW setting.

Signal Heads:

- 1) Inspect alignment and visibility.
- 2) Check for broken lenses.
- 3) Check for burned out lamps / LED's.
- 4) Check for missing / damaged visors and backplates.

Poles and Mastarms:

- 1) Check for missing / damaged hand hole covers.
- 2) Check anchor bolt hardware for tightness.
- 3) Check condition of grout.

- 4) Check plumb of pole.
- 5) Check for damage, dents, etc.
- 6) If painted, spot prime / paint as needed.
- 7) Remove graffiti, tape residue, signs, etc.

Pedestrian Push Buttons:

- 1) Check all buttons for proper operation.
- 2) Check signs for legibility.
- 3) Verify proper field operation.

Detector Loops:

- 1) Inspect roadway along loop perimeter for exposed wire / conduit, pot holes, missing sealant, etc.

Detector Amplifiers:

- 1) Verify that vehicles are being detected.
- 2) Verify appropriate call is registered in controller.

Pull Boxes:

- 1) Check boxes and lids for breakage.
- 2) Remove accumulated dirt and water.
- 3) Treat for insects, if needed.
- 4) Check for condition of grout.
- 5) Check for missing delineator posts.
- 6) Check duct seal.

Electrical Service:

- 1) Check lock for serviceability.
- 2) If pedestal, check meter window for clarity, spray with silicone.
- 3) Remove graffiti, tape residue, signs, etc.
- 4) Check duct seal.
- 5) Turn on and check safety lights for burned out lamps / LED's.
- 6) If pole mounted:
 - a. Inspect conduit for damage.
 - b. Check ground connection for tightness.

A.19. Type 2 – Bi-Annual Operational Inspection (Conflict Monitor Unit Checklist).

Testing as per CalTrans Model 210 Conflict Monitor Certification Report:

- 1) Perform Diagnostic Test.
- 2) System Timing Tests.
- 3) Voltage Tests.

- 4) Permissive Tests.
- 5) Watchdog Tests.
- 6) Logic GND Tests.

A.20. GENERAL REPAIR ITEMS FOR STREET LIGHTING AND OTHER LIGHTED FACILITIES, INCLUDE BUT NOT LIMITED TO:

- 1) Fixtures.
- 2) Lamps.
- 3) Visors.
- 4) Poles.
- 5) Wiring / Conductors / Conduit.
- 6) Fuses.
- 7) Batteries.
- 8) Solar panels.
- 9) Electrical control box components.

A.21. Stock of spare parts and inventory:

Consultant must stock spare parts and keep an inventory list, as determined necessary and approved by Department. Consultant to store spare parts in a safe appropriate location, and to always provide Department with access to spare parts. Consultant to be liable for spare parts stolen or damaged. Consultant may invoice Department for spare parts stocked. Consultant shall prepare an inventory list with minimum recommended spare parts and submit this list to Department for approval. Parts may include but not limited to:

- 1) Signal Cabinet.
- 2) Signal Indicator (red, yellow, green).
- 3) Signal/Lighting Pole standard (10-ft, etc).
- 4) Signal mast arm.
- 5) Signal Controller.
- 6) Signal vehicle head.
- 7) Signal pedestrian head.
- 8) Battery for Railroad pre-emption signal battery backup.
- 9) Blank out.
- 10) Signal Ahead flashing beacon.
- 11) Safety lights.