

**AGREEMENT BETWEEN
CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY
AND
ECONOLITE SYSTEMS, INC.
FOR
SMART CORRIDOR FIELD DEVICE MAINTENANCE AND REPAIR SERVICES**

This Agreement entered this ____ of _____, 2022, by and between the CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY, a joint powers agency whose members include the County of San Mateo and the twenty incorporated cities and towns within San Mateo County, hereinafter called “C/CAG,” and Econolite Systems, Inc. hereinafter called “Contractor.”

WHEREAS, C/CAG, is the Congestion Management Agency for San Mateo County; and

WHEREAS, the San Mateo County Smart Corridor Project (Project) is an Intelligent Transportation System (ITS) project providing countywide traffic management system infrastructure enabling local agencies and the California Department of Transportation (Caltrans) to proactively manage daily traffic and non-recurring local traffic impacts due to major incidents on the freeway; and

WHEREAS, C/CAG is responsible for maintaining Project-specific ITS infrastructure and communication network deployed within the cities’ right-of-way and intends to outsource maintenance services to support various Project components; and

WHEREAS, C/CAG is prepared to award funding for maintenance and repair services of the Smart Corridor System infrastructure including closed circuit television (CCTV) cameras, trailblazer signs (TBS), and vehicle detection system (VDS); and

WHEREAS, the total amount available to Contractor under this Agreement is not to exceed \$1,500,000 over four years; and

WHEREAS, C/CAG has determined that Contractor has the requisite qualifications to perform this work.

NOW, THEREFORE, IT IS HEREBY AGREED by the parties as follows:

1. **Services to be provided by Contractor.** In consideration of the payments hereinafter set forth, Contractor shall provide services consistent with Exhibit B and agreed to perform under Attachment A, attached hereto (the “Services”).
2. **Payments.** In consideration of the services rendered with all terms, conditions, and specifications set forth herein, in Exhibit A and Exhibit B, and in any subsequent task orders executed under the governance of this agreement, C/CAG shall reimburse C/CAG

has determined that Contractor has the requisite qualifications to perform this work. on a time and materials basis. The aggregate total amount of payment by C/CAG to Contractor for services shall not exceed one million five hundred thousand dollars (\$1,500,000) for Services provided during the Contract Term set forth below. It is understood and agreed that there is no guarantee, either expressed or implied that this dollar amount will be authorized under this contract through task orders. Payments shall be made to Contractor monthly based on an invoice submitted by Contractor that has been reviewed and approved by the project sponsor and identifies expenditures and describes services performed. C/CAG shall have the right to receive, upon request, documentation substantiating charges billed to C/CAG.

3. **Contract Materials.** At the end of this Agreement, or in the event of termination, all finished or unfinished documents, data, studies, maps, photographs, reports, and other written materials (collectively referred to as “contract materials”) prepared by Contractor under this Agreement shall become the property of C/CAG and shall be promptly delivered to C/CAG. Upon termination, Contractor may make and retain a copy of such contract materials if permitted by law.
4. **Relationship of the Parties.** It is understood that Contractor is an Independent Contractor and this Agreement is not intended to, and shall not be construed to, create the relationship of agent, servant, employee, partnership, joint venture or association, or any other relationship whatsoever other than that of Independent Contractor.
5. **Non-Assignability.** Contractor shall not assign this Agreement or any portion thereof to a third party, or subcontract with a third party, without the prior written consent of the C/CAG Executive Director. Any such assignment or subcontract without the C/CAG Executive Director’s prior written consent shall give C/CAG the right to automatically and immediately terminate this Agreement without penalty or advance notice.
6. **Contract Term/Termination.** This Agreement shall be in effect as of October 1, 2022 and shall terminate on September 30, 2026; provided, however, the C/CAG Chairperson may terminate this Agreement at any time for any reason by providing 30 days’ notice to Contractor. Termination will be effective on the date specified in the notice. In the event of termination under this paragraph, Contractor shall be paid for all services provided to the date of termination, subject to availability of funding. Such payment shall be that prorated portion of the full payment determined by comparing the work completed to the work required by the Agreement.
7. **Hold Harmless/Indemnity.**
 - a. *General.* Contractor shall indemnify and save harmless C/CAG and its officers, agents, employees, and servants from all claims, suits, or actions of every name, kind, and description resulting from this Agreement, the performance of any work or services required of Contractor under this Agreement, or payments made pursuant to this Agreement brought for, or on account of, any of the following: (A) injuries to or death of any person, including Contractor or its employees/officers/agents; (B) damage to any property of any kind whatsoever

and to whomsoever belonging; (C) any sanctions, penalties, or claims of damages resulting from Contractor's failure to comply, if applicable, with the requirements set forth in the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and all Federal regulations promulgated thereunder, as amended; or (D) any other loss or cost, including but not limited to that caused by the concurrent active or passive negligence of C/CAG and/or its officers, agents, employees, or servants. However, Contractor's duty to indemnify and save harmless under this Section shall not apply to injuries or damage for which C/CAG has been found in a court of competent jurisdiction to be solely liable by reason of its own negligence or willful misconduct. The duty of Contractor to indemnify and save harmless as set forth by this Section shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

The duty to indemnify and save harmless as set forth herein shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

- b. *Intellectual Property.* Contractor hereby certifies that it owns, controls, and/or licenses and retains all right, title, and/or interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and/or other technology relating to any part of the services it provides under this Agreement and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as "IP Rights") except as otherwise noted by this Agreement.

Contractor warrants that the services it provides under this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Contractor shall defend, indemnify, and hold harmless C/CAG from and against all liabilities, costs, damages, losses, and expenses (including reasonable attorney fees) arising out of or related to any claim by a third party that the services provided under this Agreement infringe or violate any third-party's IP Rights provided any such right is enforceable in the United States. Contractor's duty to defend, indemnify, and hold harmless under this Section applies only provided that: (a) C/CAG notifies Contractor promptly in writing of any notice of any such third-party claim; (b) C/CAG cooperates with Contractor, at Contractor's expense, in all reasonable respects in connection with the investigation and defense of any such third-party claim; (c) Contractor retains sole control of the defense of any action on any such claim and all negotiations for its settlement or compromise (provided Contractor shall not have the right to settle any criminal action, suit, or proceeding without C/CAG's prior written consent, not to be unreasonably withheld, and provided further that any settlement permitted under this Section shall not impose any financial or other obligation on C/CAG, impair any right of C/CAG, or contain any stipulation, admission, or acknowledgement of wrongdoing on the part of C/CAG without C/CAG's prior written consent, not to be unreasonably withheld); and (d) should services under this Agreement become, or in Contractor's opinion be likely to become, the

subject of such a claim, or in the event such a third party claim or threatened claim causes C/CAG's reasonable use of the services under this Agreement to be seriously endangered or disrupted, Contractor shall, at Contractor's option and expense, either: (i) procure for C/CAG the right to continue using the services without infringement or (ii) replace or modify the services so that they become non-infringing but remain functionally equivalent.

Notwithstanding anything in this Section to the contrary, Contractor will have no obligation or liability to C/CAG under this Section to the extent any otherwise covered claim is based upon: (a) any aspects of the services under this Agreement which have been modified by or for C/CAG (other than modification performed by, or at the direction of, Contractor) in such a way as to cause the alleged infringement at issue; and/or (b) any aspects of the services under this Agreement which have been used by C/CAG in a manner prohibited by this Agreement.

The duty of Contractor to indemnify and save harmless as set forth by this Section shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

8. **Insurance.**

- a. *General Requirements.* Contractor or its subcontractors performing the services on behalf of Contractor shall not commence work under this Agreement until all insurance required under this section has been obtained. Contractor shall use diligence to obtain such insurance. Contractor shall furnish C/CAG with Certificates of Insurance evidencing the required coverage and there shall be a specific contractual liability endorsement extending Contractor's coverage to include the contractual liability assumed by Contractor pursuant to this Agreement. These Certificates shall specify or be endorsed to provide that thirty (30) days' notice must be given, in writing, to C/CAG of any pending change in the limits of liability or of non-renewal, cancellation, or modification of the policy.
- b. *Workers' Compensation and Employer Liability Insurance.* Contractor shall have in effect, during the entire life of this Agreement, Workers' Compensation and Employer Liability Insurance providing full statutory coverage. In signing this Agreement, Contractor certifies, as required by Section 1861 of the California Labor Code, that (a) it is aware of the provisions of Section 3700 of the California Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code, and (b) it will comply with such provisions before commencing the performance of work under this Agreement.
- c. *Liability Insurance.* Contractor shall take out and maintain during the life of this Agreement such Bodily Injury Liability and Property Damage Liability Insurance as shall protect Contractor, its employees, officers and agents while performing

work covered by this Agreement from any and all claims for damages for bodily injury, including accidental death, as well as any and all claims for property damage that may arise from Contractor's operations under this Agreement, whether such operations be by Contractor or by any sub-contractor or by anyone directly or indirectly employed by either of them. Such insurance shall be combined single limit bodily injury and property damage for each occurrence and shall be not less than \$1,000,000 unless another amount is specified below and shows approval by C/CAG Staff.

- d. *Umbrella Insurance.* Contractor shall include Umbrella Insurance in the amount of \$10,000,000 providing excess limits over Employer's Liability, Motor Vehicle Liability, and General Liability Insurance. Such umbrella coverage shall be following form to underlying coverage including all endorsements and additional insured requirements.
- e. *Property Insurance.* Property Insurance covering Contractor's own business personal property and equipment to be used in performance of this Agreement, materials or property to be purchased and/or installed on behalf of C/CAG (if any), and builders risk for property in the course of construction (if applicable). Coverage shall be written on a "Special Form" policy that includes theft, but excludes earthquake, with limits at least equal to the replacement cost of the property. Such policy shall contain a Waiver of Subrogation in favor of C/CAG.
- f. *Insurance Limits; Insured Entities; Breach.* Required insurance shall include:

	Required Amount	Approval by C/CAG Staff if under \$ 1,000,000
1. Comprehensive General Liability	\$ 1,000,000	_____
2. Workers' Compensation	\$ Statutory	_____
3. Professional Liability	\$1,000,000	_____
4. Motor Vehicle Liability	\$1,000,000	_____

C/CAG and its officers, agents, employees and servants shall be named as additional insured on any such policies of insurance, which shall also contain a provision that the insurance afforded thereby to C/CAG, its officers, agents, employees, and servants shall be primary insurance to the full limits of liability of the policy, and that if C/CAG, or its officers, agents, employees, and servants have other insurance against a loss covered by such a policy, such other insurance shall be excess insurance only.

In the event of the breach of any provision of this section, or in the event any notice is received which indicates any required insurance coverage will be diminished or canceled, the C/CAG Chairperson, at his/her option, may, notwithstanding any other provision of this Agreement to the contrary,

immediately declare a material breach of this Agreement and suspend all further work and payment pursuant to this Agreement.

9. **Compliance with All Laws.** Contractor shall at all times comply with all applicable federal, state, San Mateo County, and municipal laws, ordinances, and regulations, including without limitation those regarding services to disabled persons, including any requirements of Section 504 of the Rehabilitation Act of 1973. In the event of a conflict between the terms of this Agreement and any applicable State, Federal, San Mateo County, or municipal law or regulation, the requirements of the applicable law or regulation will take precedence over the requirements set forth in this Agreement. Contractor will timely and accurately complete, sign, and submit all necessary documentation of compliance.
10. **Non-discrimination.** Contractor and any subcontractors performing the services on behalf of Contractor shall not discriminate or permit discrimination against any person or group of persons on the basis of race, color, religion, national origin or ancestry, age, sex, sexual orientation, marital status, pregnancy, childbirth or related conditions, medical condition, mental or physical disability or veteran's status, or in any manner prohibited by federal, state or local laws.
11. **Substitutions.** If particular persons or classifications are identified in Exhibit A as working on this Agreement, Contractor will not assign others to work in their place without the prior written consent of the C/CAG Executive Director. Any substitution shall be with a person or classification of commensurate experience and knowledge unless otherwise authorized by the C/CAG Executive Director.
12. **Sole Property of C/CAG.** Work products of Contractor which are delivered under this Agreement or which are developed, produced and paid for under this Agreement, shall be and become the property of C/CAG. Contractor shall not be liable for C/CAG's use, modification or re-use of products without Contractor's participation or for purpose other than those specifically intended pursuant to this Agreement.
13. **Record Retention; Right to Monitor and Audit.**
 - a. Contractor shall maintain all required records relating to services provided under this Agreement for three (3) years after C/CAG makes final payment and all other pending matters are closed, and Contractor shall be subject to the examination and/or audit by C/CAG, a Federal grantor agency, and the State of California.
 - b. Contractor shall comply with all program and fiscal reporting requirements set forth by applicable Federal, State, and local agencies and as required by C/CAG.
 - c. Contractor agrees upon reasonable notice to provide to C/CAG, to any Federal or State department having monitoring or review authority, to C/CAG's authorized representative, and/or to any of their respective audit agencies access to and the right to examine all records and documents necessary to determine compliance with relevant Federal, State, and local statutes, rules, and regulations, to determine

compliance with this Agreement, and to evaluate the quality, appropriateness, and timeliness of services performed.

14. **Permits/Licenses.** If any license, permit, or approval is required to perform the work or services required by this Agreement, Contractor bears the responsibility to obtain said license, permit, or approval from the relevant agency at Contractor's own expense prior to commencement of said work/services. Failure to do so will result in forfeit of any right to compensation under this Agreement.
15. **Merger Clause; Amendments.** This Agreement, including Exhibits A and B attached hereto and incorporated herein by reference, constitutes the sole agreement of the parties hereto regarding the matters covered in this Agreement, and correctly states the rights, duties and obligations of each party as of the document's date. Any prior agreement, promises, negotiations or representations between the parties not expressly stated in this Agreement are not binding. All subsequent amendments shall be in writing and signed by the C/CAG Chair. In the event of a conflict between the terms, conditions or specifications set forth herein and those in Exhibit A or B attached hereto, the terms, conditions or specifications set forth herein shall prevail.
16. **Governing Law.** This Agreement shall be governed by the laws of the State of California, without regard to its choice of law rules, and any suit or action initiated by either party shall be brought in the County of San Mateo, California.
17. **Notices.** All notices hereby required under this agreement shall be in writing and delivered in person or sent by certified mail, postage prepaid and addressed as follows:

City/County Association of Governments of San Mateo County
555 County Center, 5th Floor
Redwood City, CA 94063
Attention: Audrey Shiramizu

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

Econolite Systems, Inc.
4120 Business Center Drive
Fremont, CA 94538
Attention: Benjamin Conway

IN WITNESS WHEREOF, the parties hereto have affixed their hands on the day and year first above written.

Econolite Systems, Inc.

By _____
Benjamin Conway
Econolite Project Manager

Date

City/County Association of Governments of San Mateo County (C/CAG)

By _____
Davina Hurt
C/CAG Chair

Date

By _____
Melissa Andrikopoulos
C/CAG Legal Counsel

Date

DRAFT

Exhibit A

Project Budget

Table 1: Project Budget

Task	Cost
Task 1 - Project Management	\$4,216.85
Task 2 - Corrective Maintenance	\$1,249,845.51
Task 3 - Preventative Maintenance (<i>see Table 2</i>)	\$245,937.64
Task 4 - To Be Assigned	TBA
Total	\$1,500,000.00

Table 2: Breakdown of the Preventative Maintenance Cost

Device	Maint. Freq.	Device Qty	# of Maint. Visits/Year	Maint. Cost for each Device/visit	Yearly Cost/Device	Monthly Cost/Device	Performed by
Trailblazer Signs	Annual	47	1	\$329.97	\$15,508.59	\$1,292.38	Electrician
CCTV	Annual	110	1	\$329.97	\$36,296.70	\$3,024.73	Electrician
Vehicle Detection	Annual	22	1	\$439.96	\$9,679.12	\$806.59	Electrician
Total Routine Maintenance Cost for All Devices					\$61,484.41		
Number of Contract Years					4		
Total Cost for All Contract Years					\$245,937.64		

EXHIBIT B SCOPE OF WORK

C/CAG Expectations

Econolite Systems, Inc. (ESI) will provide ongoing maintenance of the Smart Corridor ITS field devices and network. Maintenance services include routine and corrective services/repairs necessary to maintain equipment operability, and replacing and restoring non-operable equipment and devices for the ITS network and infrastructure located within the cities' right-of-way. ESI shall furnish all labor, travel, materials, supplies, parts, equipment, warning signs and other safety devices, and all other things necessary or proper for, or incidental to, such maintenance.

ESI and their subcontractors shall have and maintain, uninterrupted, all necessary licenses and certifications throughout the term of the Contract including the base period and any exercised optional periods. Certain work issued by task order may require additional license or certification. If an additional license or certification is needed for Task Order work, it will be identified in the Task Order. For work on task orders with a scope not covered by subcontractors listed in its proposal, Prime contractor may bring on additional subcontractors with appropriate licenses.

Tasks and Activities

ESI shall provide project management throughout the life cycle of the project, including leading the tasks listed below and providing all project management activities to support each of the tasks.

Task 1: Project Management

1.1 Development of Project Management Plan (PMP)

Within thirty (30) days of the contract execution, ESI shall prepare a Project Management Plan (PMP) and deliver to C/CAG. All comments must be addressed to the satisfaction of the C/CAG Project Manager prior to completion of the document and the payment of the relevant invoice item. ESI will make updates to the PMP, as deemed necessary by the C/CAG Project Manager. The PMP will include, at a minimum, the following components:

- 1.1.1 **Project Management and Contract Administration:** ESI shall provide reporting procedures to C/CAG Project Manager to ensure approval of proposed work, services and products. This will also include a final scope of work, approved work breakdown structure and schedule, final contract pricing, project management responsibilities for ESI and C/CAG project managers, etc. Additionally, the contract administration component shall document requirements for approvals, scope modifications including task orders and optional work, invoicing, acceptance of work, etc.

1.1.2 **Staffing Plan and Training:** ESI will designate and appropriate staff throughout the life of the contract. The PMP must include staffing levels, an organizational chart depicting responsibilities and project roles, availability and project reporting structure. ESI will ensure that any employee replacement meets or exceeds the qualifications set forth in the plan. We will also provide a regular ongoing training program to maintain the appropriate level of staff knowledge, skills, and abilities to complete the tasks in the Scope of Work. The required knowledge to maintain this equipment will be distributed among staff so that at least two persons will have the ability to maintain any devices.

At a minimum, maintenance staff shall be trained in the following areas:

- Corrective maintenance procedures (troubleshooting, diagnostics, repair and testing)
- Spare parts, parts lists, spare equipment provisioning and relocation to warehouse
- Use of maintenance documentation
- Maintenance facilities including equipment and use of maintenance tools
- Preventive maintenance schedules
- Response times and repair times
- Maintenance forms and maintenance reports

1.1.3 **Inventory Control Procedures:** The procedures will define how ESI plans to track, at a minimum, information about each supplier, parts and component usage of different devices, and consumables. This plan shall document the processes and systems utilized in management of project inventory, including spares provided by the State and materials purchased by ESI for the project. The plan shall also address receiving, asset tagging, tracking, security, approvals, and documentation.

1.1.4 **Maintenance Plan:** ESI will develop a comprehensive routine maintenance plan that includes scheduling tasks and will produce a three-month look ahead, the list of scheduled maintenance inspections or repairs it shall perform. The Maintenance Plan shall also address, but shall not be limited to, the following topics:

- Maintenance (Routine and Corrective)
- Routine maintenance checklists and documentation
- Asset tracking and data inventory
- Communication (Reports, Status Meetings, Tracking of outstanding issues)
- USA 811 Calls Procedures
- Lane Closure Procedures*
- Traffic Safety*
- Pedestrian Safety**
- Any changes to the Scope of Work, shall be added, along with its appropriate maintenance activities.

* Traffic control plan shall conform to the requirements set forth in the current California Manual on Uniform Traffic Control Devices (MUTCD), prepared under the supervision of and endorsed by licensed traffic engineer or civil engineer registered in the State of California as required by all local and state jurisdictions.

** Pedestrian Safety shall comply with local city jurisdictions.

- 1.1.5 **Risk Management Plan**: ESI will develop a process for foreseeing potential project risks, estimating their impacts, and defining steps to respond to issues. ESI will prepare a project issues tracking matrix/database using a web-based issue tracking tool that documents key project developments, current issues and action items, and their status. The tracking matrix will be maintained so that C/CAG always has electronic access and read-write capabilities to the most current version. ESI will coordinate timely updates of the matrix by all project team members.
- 1.1.6 **Asset Management Database**: ESI will establish or provide access to a database of spare equipment and their statuses for major assets (e.g. CCTV cameras). ESI should continue identifying all spare equipment on vehicles and in warehouses, making swapped equipment easy to track and identify. If an asset database is not previously available, once the database is set up, C/CAG should have access to view the asset information in real-time. The database does not need to be set up when the PMP is submitted, but the PMP should detail the process to establishing the database.
- 1.1.7 **Safety Procedures**: ESI will describe the process, rules, and regulations that their staff shall follow. This may include but is not limited to:
- Safety training to all employee staff in compliance with the current California Division of Occupational Safety and Health (Cal/OSHA), Chapter 8 of the Caltrans Safety Manual, and the Caltrans Code of Safety Operating Practices
 - Listing responsibilities for damages
 - Signs, lights, flags, and other warning and safety devices and their use shall conform to the requirements set forth in the current California Manual on Uniform Traffic Control Devices (MUTCD), published by Caltrans.
 - Signs or other protective devices furnished and erected by ESI at its expense, as above provided, shall not obscure the visibility of, nor conflict in intent, meaning and function of either existing signs, lights and traffic control devices or any construction area signs and traffic control devices. Signs furnished and erected by ESI at its expense shall be approved by C/CAG as to size, wording and location.
- 1.1.8 **Project Coordination**: ESI will describe the approach to coordination with project stakeholders. This may include, but is not limited to:
- Cooperating to the fullest extent with other contractors, existing and/or previous maintenance providers and system integrators, third-party service providers, city stakeholders, Caltrans, and C/CAG to ensure that services do not conflict with or cause any interruption in capability, service, or safety issues to the traveling public, customers, C/CAG, or existing operations.
 - Cooperating with external parties, as directed by C/CAG, to support any activity related to maintenance.
 - Providing the appropriate number of knowledgeable, well-trained dedicated staff, proper management, and effective coordination with C/CAG and partner agencies, timely response to reported problems, and proactive testing with adequate documentation of

service requests and work orders.

- Furnishing all labor, travel, materials, supplies, parts, equipment, warning signs and other safety devices, and all other things necessary or proper for, or incidental to, such maintenance. ESI and its Subcontractors shall have and maintain, uninterrupted, all necessary licenses and certifications throughout the term of the Contract including the base period and any exercised optional periods.
- Ensuring that the C/CAG Project Manager and/or approved C/CAG representative shall be copied on or apprised of all communications with third parties regarding the project.
- All written communication with C/CAG or other parties shall be via e-mail (or duplicated in email). Documents attached to e-mail shall use Microsoft Office products such as Word, Excel or Power Point. Schedules may be readable using Microsoft Project or as a PDF. ESI will coordinate with partner agencies regarding ongoing construction projects which may impact the project.
- Immediately notifying and cooperating with C/CAG regarding any complaints or issues that come to ESI's attention during the project.

1.1.9 **Quality Management Plan:** ESI will develop a comprehensive, well-defined, written set of procedures and activities aimed at delivering products and services that meet or exceed C/CAG's expectations. The plan should ensure the establishment of a specific set of processes that ensure compliance, accuracy, and quality of service, and to allow C/CAG to fulfill its responsibilities of exercising due diligence in overseeing all areas of the project. The plan should address, but is not limited to:

- Procedures for preparing, verifying, and checking all products/services against the key performance indicators/performance criteria;
- Documenting project quality control records and processes including:
 - inspection and test results;
 - problem reports and corrective actions; and
 - change request documentation
- Identifying a Quality Manager (QM) who shall be responsible for quality oversight and control and the detailed review process for all aspects of the project. The QM shall ensure the methods and procedures contained in the plan are implemented and followed by ESI staff;
- A monitoring plan to ensure that performance criteria and are achieved. ESI will furnish electronic access to reports produced from the results of the monitoring in a format acceptable to C/CAG;
- Procedures to ensure all work is performed according to the Plan;
- Procedures to control the handling, storage, shipping, cleaning, and preservation of materials and equipment;
- Procedures to ensure that deviations and conditions adverse to quality are promptly identified, corrected, have root causes determined, and have further corrective actions taken to prevent repetition;
- Measures to ensure the receipt and issuance of documents meet quality control
- Procedures that will be implemented to ensure all software, hardware, configuration files, and project documentation is tracked, documented, and managed in accordance with

- industry best practices;
- Quality control of purchased materials;
- Procedures for software code releases for software changes;

1.2 Key Performance Indicators (KPIs)

ESI will prepare and submit a list of key performance indicators (KPIs) that describes the detailed process by which measurement and reporting of each KPI is conducted. ESI will coordinate with C/CAG to finalize the KPIs and prescribe a process for tracking and monitoring performance. KPIs will include repair response times for labor and per device type, and hours required for repair.

1.3 Meetings and Project Status Reporting

ESI will schedule and provide agendas, meeting materials, and notes for bi-weekly meetings with C/CAG staff, who will provide overall project direction. This includes a project kick-off meeting and may include C/CAG Committees and Board Meetings. For all items such as decisions and action items, the notes shall identify the responsible parties for that item. Internal meetings between ESI team members are excluded from this requirement. From Notice to Proceed through contract end, ESI will meet bi-weekly with C/CAG via telephone/video conferencing (or in person as-needed).

Within the first thirty days after NTP, ESI will submit monthly progress reports and invoices for work completed during the prior month. The monthly progress reports shall include the following:

- Progress for the prior month for all project activities, submittals, and deliverables;
- Progress report reporting period and percentage complete;
- Summary of completed and/or in progress work items including the location/intersection, work description, hours/quantity, rate, and labor costs;
- Equipment purchases (when applicable), location or ticket number related to the purchase.

1.4 Permits

ESI will be responsible for obtaining all rights of entry, encroachment permits and other licenses or permits required by partner agencies to perform the work hereunder at the cost of ESI. All costs associated with permits are ESI's responsibility.

1.5 Third Party Contracts and Warranties

Agreements between C/CAG, partner agencies, and original equipment suppliers and others may exist to maintain equipment. Additionally, various pieces of equipment may be under manufacturer's warranty. C/CAG and partner agencies will notify ESI of any existing warranties at time of contract execution.

ESI will utilize these resources and warranties in support of all maintenance activities and shall

notify C/CAG and partner agencies of any agreement renewal requirements. In conducting work, ESI will not violate the terms of existing warranties. If ESI voids an existing warranty under the course of their work, ESI will reimburse C/CAG for all costs associated with reinstating the warranty.

1.6 Public Convenience

ESI will refer to current Caltrans Standard Specifications Section 7-1.03, PUBLIC CONVENIENCE, for provisions relating to ESI's responsibilities for the convenience of the public. It is ESI's responsibility to provide for the safety of traffic and the convenience of public when working under this contract.

ESI will conduct the operations as to offer the least possible obstruction and inconvenience to the public and shall undertake work no greater in length or amount than can be performed properly with due regard to the rights of the public. All public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible. All movements of laborers and equipment on or across lanes open to public traffic shall be performed in a manner that will not endanger the safety of public traffic.

When leaving a work area and entering a roadway carrying public traffic, ESI's equipment, whether empty or loaded, shall in all cases yield to public traffic.

No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic. At the end of each day's work and at other times when operations are suspended for any reason, ESI shall remove all equipment and other obstructions from that portion of the roadway leaving it open for use by public traffic.

Any tools, equipment, supplies, or facilities, which ESI uses to perform the work, shall be removed from State and City right of way at the end of each day except as approved by C/CAG or its designee. No tools, equipment, supplies or facilities shall be installed or placed where they will interfere with the free and safe passage of public traffic.

Should ESI appear to be neglectful or negligent in furnishing warning devices and taking protective measures as provided, C/CAG or its designee may direct attention to the existence of a hazard, and the necessary warning devices shall be immediately furnished and installed by ESI, and protective measures shall be taken by ESI at its expense. Should C/CAG or its designee point out the inadequacy of warning devices and protective measures, such action on the part of C/CAG or its designee shall not relieve ESI from its responsibility for public safety or abrogate the obligation to furnish and pay for these devices and measures.

1.7 Traffic Management and Lane Closures

Traffic control and lane closures will be performed by ESI's Subcontractor, **Statewide Safety Systems, Inc., a licensed CA contractor (C-31 Lic. No. 975518, DIR No. 100001109)**. ESI and Statewide will comply with current CA-MUTCD, Caltrans Standard Specifications and Caltrans Standard Plans. Lane closures will be pre-determined as part of the Scope of Work and

detailed in the Final PMP. Personal vehicles belonging to ESI's Technicians, or our subcontractor personnel, will not be parked on the traveled way or shoulders, including any section closed to public traffic. Whenever vehicles or equipment are parked on the shoulder within 1.8 m (6 ft.) of a traffic lane, the shoulder area will be closed by Statewide with fluorescent traffic cones or portable delineators in conformance with Caltrans Standard Specifications and Caltrans Standard Plans. Whenever work is to be performed by ESI or Statewide on the freeway traveled way (except the work of installing, maintaining, and removing traffic control devices) is within 1.8 m (6 ft.) of the adjacent traffic lane, the adjacent traffic lane will be closed. ESI will notify the respective public agency for any work that requires lane closures within seven calendar days prior to commencing work and will close the lane(s)/shoulder(s) within the approved restriction time window.

1.8 Maintenance Vehicle Identification

All ESI vehicles performing maintenance work shall display ESI's logo decals on both sides of the vehicle.

Task 1 Deliverables:

1. Draft Project Management Plan
2. Final Project Management Plan
3. Key Performance Indicators
4. Project Kick-off Meeting
5. Ongoing Project Meetings and Status Reports
6. Materials for C/CAG Committees and Board meetings
7. Monthly Invoices with progress reports

Task 2: Corrective Maintenance

ESI will provide corrective maintenance which will consist of all unscheduled actions necessary to diagnose and repair malfunctions and failures of ITS devices, due to wire theft/vandalism, knockdowns, communication outage, power outage, etc. ESI Technicians will be reachable 24-hours a day, seven days a week, including holidays, via our 24/7/365 dispatch service. All corrective maintenance is preceded by establishing an office, ordering spare parts and tools, and creating an inventory database as noted in Task 1.

ESI understands that C/CAG uses a shared excel spreadsheet to manage open tickets for the existing system which documents outages and notes responsible parties. ESI will manage, check, and update this excel tool frequently to ensure tickets are addressed.

All work performed by ESI, including all inspections and repairs, shall be performed to the higher of Caltrans or industry standards. Inspections of ESI staff work before, during or after repairs shall be photo documented by ESI and may be performed by C/CAG, public agency leads, or its designees for any work completed for this project. ESI must notify C/CAG, public agency leads, or its designees whenever a corrective maintenance work order has been completed so that it may be inspected if C/CAG, partner agencies, or their designees choose to do so. If C/CAG, public agency leads, or their designees determine any repair was not satisfactorily

completed, ESI must rework the repair until it passes this inspection. ESI will keep all of the equipment in this scope of responsibility operational and will produce a list of corrective maintenance repairs performed the month prior on a monthly basis.

At C/CAG Project Manager or its designee's discretion, C/CAG may accomplish any major repair outside of this procurement, under separate contract.

2.1 Corrective Maintenance Priorities and Response

ESI will provide corrective maintenance services to repair or restore equipment to normal operating conditions when anticipated problems occur. These services will be performed according to the hours and response times designated for corrective maintenance tasks, upon notification of request, and are detailed as follows:

1. Safety Hazards and Knockdowns: Upon notification of request, ESI shall respond immediately to safety hazards which constitute circumstances that, if not corrected, could result in an incident causing severe or permanently disabling injury or death.
2. Other instances:
 - a) Upon notification of the request, ESI will acknowledge receipt of Service Request within four (4) hours and be on-site within twenty-four (24) hours from notification, unless directed by C/CAG or its designee to a different reporting time.
 - b) If upon initial assessment by ESI that repair can be made within two hours, ESI shall proceed with the Service and submit the Service Request to C/CAG Project Manager or its designee for closure. However, if the work appears to be beyond the two-hour limit, ESI will provide an Assessment and Cost Estimate (Estimate) within twenty-four (24) hours of arrival at the site and submit it to the C/CAG Project Manager or its designee for approval.
 - c) Upon the approval of the assessment and cost estimate, ESI will commence work within twenty-four (24) hours in accordance with the estimate. As soon as ESI realizes that the repair cannot be completed within the time stipulated, ESI shall notify and get directions from C/CAG Project Manager or its designee. Should additional parts be needed or additional time granted to complete the repairs, the Service Request will be amended by C/CAG Project Manager or its designee to reflect these changes and work will continue in accordance with the amended Service Request. If the estimate is not approved by C/CAG Project Manager or its designee, ESI shall modify the Estimate and resubmit such within twenty-four (24) hours for approval.
 - d) Billable hours will commence only upon ESI arriving at the Designated Work Reporting location or alternate Working Reporting location as directed by C/CAG Project Manager or its designee. ESI will obtain prior written approval from C/CAG Project Manager or its designee on the expenditure of overtime hours.

The table below specifies the priority which shall be given to each type of device and the corresponding repair time requirements.

Device Priority and Response Time Parameters

Device Type	Priority	Acknowledgement Time	Response Time	Repair Time
Trailblazer Sign	1	4 hours	On site: Within 24 hours	5 days
CCTV	2	4 hours	On site: Within 24 hours	7 days
Vehicle Detection	3	4 hours	On site: Within 24 hours	20 days

Acknowledgement Time – This shall be the elapsed time between notification of a Service Request (whether by telephone, email, or trouble ticket management tool) from the C/CAG Project Manager or its designee to ESI or ESI dispatcher and ESI’s acknowledgement of the request (whether by telephone or email). Acknowledgments of receipt of Service Requests and site visits shall be documented by ESI in a maintenance system or by other means approved by the C/CAG Project Manager.

Response Time – This shall be the elapsed time between notification of a Service Request (whether by telephone, email, or trouble ticket management tool) from the C/CAG Project Manager, or its Designee to ESI or ESI dispatcher and the time ESI’s technician arrives at the site of the work, excluding weekend and holidays. If the problem is of a type that can be resolved remotely, response time shall be measured as the time from notification until the technician logs into the relevant system, at which time the technician shall notify the designated Agency contact.

Repair Time – This shall be the time required to restore a function to an operational state following the response to a Service Request. Priority 1 and Priority 2 repairs shall be performed on an expedited basis. ESI will ensure that technicians are furnished with sufficient tools and spare parts and equipment, or such spare parts and equipment shall be conveniently positioned so repairs are expedited.

ESI will immediately notify the C/CAG Project Manager or its designee if any required response or repair time cannot be met, the reason why, and the anticipated time of response and/or repair. This notification shall not in and of itself relieve ESI of their obligations to meet the required response and repair times.

Inclusive Costs

The hourly rate for each classification defined in Attachment B shall include labor, all vehicles, tool/test equipment and incidentals as well as all other overhead costs needed to perform the corrective maintenance tasks.

ESI will be reimbursed for the actual cost of materials/supplies purchased to be consumed or installed at the work site in performance of the agreement (including applicable sales tax) without additional allowance for markup. ESI costs associated with the purchase and installation of materials/supplies are considered as a component of ESI’s hourly rate for services that include wages, overhead, general and administrative expenses and profit. Cost of materials/supplies are

to be substantiated by a copy of the appropriately signed original invoice verifying the actual cost and delivery of the material/supplies to the C/CAG Project Manager or its designee.

Billable time does not include any time before the designated report time. Billable time does not include travel time from ESI's yard to job site or return. Billable time does not include ESI administration time which is considered into ESI's hourly rate in the bid.

All traffic control related costs such as furnishing and installing work area traffic control devices and flagging shall be included in a per hour traffic control cost. Closure hours will be calculated for payment to the nearest tenth of an hour. Traffic control time starts when the first advanced warning sign is in place and stops when the last advanced warning sign is removed from the right of way.

2.2 Failure Reporting and Emergency Communications

Problems with equipment listed under this scope of work may be reported by C/CAG Project Manager or its designee. Reported problems are recorded as "Service Requests" and may indicate a known malfunction or a suspected malfunction. ESI will report the issue and initiate a Service Request by phone or email. ESI will distribute to C/CAG Project Manager or its designee, a procedure for initiating a Service Request via the various methods.

ESI will establish a telephone service available 24-hours a day, 7 days a week, 365 days a year for purposes of placing service calls to technicians. This phone line shall be answered by a dispatcher rather than an electronic answering device. The dispatcher shall ensure that calls are placed with all necessary relevant information such as date and time of problem, location of problem, contact person, description of problem, etc.

For maintenance calls to which ESI is responding, trained personnel shall arrive at the premises and respond to the issue within the time period stipulated in the preceding Section. ESI will establish a protocol and provide a contact list for the escalation of issues by C/CAG Project Manager or its designee in the event of an unforeseen emergency and/or failure to respond by ESI. It will be the responsibility of ESI to keep this protocol and contact list updated (and distributed) at all times.

Task 2 Deliverables:

1. Ongoing use of trouble ticket management tool
2. List of corrective maintenance repairs (monthly)
3. Ongoing corrective maintenance repair assessments and cost estimates

Task 3: Preventative Maintenance

ESI will perform routine preventative maintenance tasks to keep each device operational. ESI will report to the C/CAG Project Manager or its designee any unusual findings made while performing routine maintenance or make recommendations for corrections to the devices that frequently require routine maintenance.

C/CAG Project Manager may also task ESI to collect and enter device data including, but not limited to all parts and components within the device, quantity of a component per device, age and life expectancy.

Scheduled routine maintenance shall consist of, but not be limited to, activities described in Chapters K: Electrical in Caltrans' Maintenance Manual, including Section K.07.1, and all actions necessary to prevent device failures and extend its useful life. The Caltrans Maintenance Manual can be found at: <http://www.dot.ca.gov/hq/maint/manual/maintman.htm>.

ESI will provide routine maintenance of the ITS equipment (e.g. trailblazer signs, closed circuit television cameras (CCTVs), vehicle detection equipment) including:

- Annual Cleaning, Calibration, Inspection and Troubleshooting Services
- Coordinate with partner agencies to verify remote testing
- Check and confirm cabinet ID and communication information labeling

In addition to the above Routine Maintenance tasks, ESI will be responsible for the following tasks:

1. **Minor repairs:** ESI will perform minor repairs, repair work with repair time of less than an hour, to return a device to a fully functional condition. Minor repairs include any activity intended to correct the effects of minor material deterioration by restoring the damaged component. Cost of labor and equipment used for the minor repair is included in the routine maintenance task and ESI will be reimbursed only for the cost of materials/parts (including applicable sales tax) based on agreed unit prices without additional markup. ESI will have spare parts available during the routine maintenance field visits.
2. **Device and infrastructure upgrades/installations:** ESI may perform certain upgrades (e.g., newer model), if approved by C/CAG Project Manager or its designee, to meet the performance goals. This type of upgrade shall be performed at ESI's cost.
3. **811 Safe Digging:** ESI must coordinate with California 811 to ensure that any digging and installation done by ESI is marked/painted. ESI must also coordinate with 811 to ensure any digging done by ESI does not impact or hit existing utilities or infrastructure. Further, ESI will respond to 811 requests submitted by other contractors or third parties. ESI shall mark/paint existing Smart Corridor infrastructure when needed.

ESI will develop a comprehensive preventive maintenance plan and schedule for C/CAG Project Manager review and approval. ESI will produce every six (6) months, the list of scheduled maintenance inspections or repairs they shall perform. The maintenance cost for each device per visit shall remain the same should additional devices get added to the project. The device quantity is subject to change, depending on active construction projects in the corridor and other factors.

3.1 Asset Management Database

ESI will order, stock, keep a sufficient supply of parts and materials, tools or other equipment as may be necessary to make replacements and repairs to each device. A list of typical parts needed for the contract can be found below:

- Edge switches
- Fiber patch panels
- Display boards
- LED pixels
- LCD display cleaning cloth
- Central control unit
- Circuit board power supplies
- UPS battery

As outlined in the PMP in Task 1, ESI will establish a database of spare equipment and their statuses for major assets. ESI will establish a procedure for managing spare parts and equipment in a secure manner. ESI will also develop a database to capture information on spare parts and provide access to C/CAG Project Manager and its designee. This database shall be updated monthly. ESI may use an existing inventory management database or system as long as it contains all key information described below.

- A complete inventory of all equipment and controller firmware
- Equipment/software description
- Manufacturer's serial/model number
- Expected Mean Time Between Failures (MTBF)
- Date of retirement if applicable
- Location of equipment/software
- Configuration control process used for software either developed or modified by ESI
- Software license information, license number, expiration dates and usage restrictions
- Warranty information
- Warranty expiration date
- Vendor contact information, and
- Reporting capabilities.

Additionally, ESI will keep records of inventories, determine reorder points, maintain supplier information, and conduct parts acquisition and distribution. ESI will establish a secure facility to store spare parts and equipment. ESI will manage spare parts and equipment on a "first in, first out" basis to maximize the availability of manufacturer's warranties that commence on delivery. ESI will test the initial functionality of all spare parts and equipment and shall return all defective spare parts and equipment to their respective manufacturers for replacement.

C/CAG shall own the spare parts and ESI will keep a sufficient inventory of spare parts to allow for the replacement of failed components, and components which in its judgment need

replacement. Components that have been repaired, as opposed to replaced, more than three times shall be replaced at the option of C/CAG Project Manager or its designee. Devices that have been repeatedly vandalized may be replaced with static signs at the option of C/CAG Project Manager or its designee.

Spare parts shall be interchangeable with their corresponding part, and equal in quality to original equipment parts. ESI will be responsible for the purchase, delivery, comprehensive testing and maintenance of all spare parts. ESI will be reimbursed, at cost, for all spare parts including delivery costs and shall submit these costs to C/CAG Project Manager or its designee as part of the monthly invoice after the spare parts have been received and successfully tested by ESI. ESI will plan for replenishing inventory. Should expedited delivery of spare parts be required, ESI will get prior approval for delivery charges from the C/CAG Project Manager or its designee. ESI will obtain the best competitive price for all spare parts and provide verification of this effort upon request of C/CAG Project Manager or its designee.

teamEpro Maintenance Management System

Maintenance Records

ESI utilizes teamEpro as their Asset Management Module and system for tracking and keeping records of service calls. The system maintains records, in real time, of all City assets and service calls, including work performed upon the signal equipment listing dates, hour of day, and description of work performed. All proposed forms will be submitted by ESI to the City for its approval prior to use

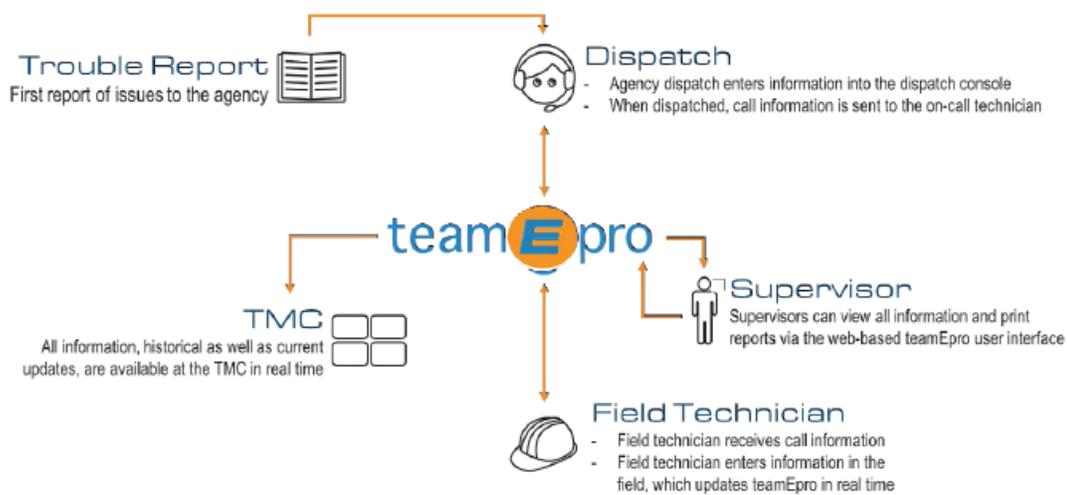
Asset Management Module

Using teamEpro, major asset data will be confirmed and then the database of major asset at each location will be maintained. ESI has already established the database of equipment in the field by creating an inventory of all locations for major assets, bar coding the items, then building the initial database.

Preventative Maintenance (PM)

teamEpro provides scheduling for both preventative maintenance activities as well as on-call personnel. Preventative maintenance checks can be scheduled for each device group by month. The scheduler takes the guesswork out of what needs to be completed at each location by providing the field technician with user-defined checklists based on the month and type of location. The on-call scheduler allows supervisors to assign technicians to be on-call by area, date, and time-of-day. The dispatch console automatically defaults to the technician on call via information provided in the on-call scheduler but allows the dispatcher to assign the call to another technician (see Figure 1).

Figure 1 – teamEpro Flow Chart



teamEpro provides alarms to notify the technician assigned to a call and or his/her supervisor when a user-defined response time has not been met. This reminder allows the supervisor to make decisions based on current information as to whether an additional technician should be dispatched or if staying with the current assignments is the best course of action. teamEpro monitors calls and sends notifications to the technician assigned to the current call, as well as the technician's supervisor, when a call comes in for a location that has had a previous call within a user defined timeframe. This multiple call alert provides information about the previous calls to the location to aid in troubleshooting.

Monthly Activities Report

ESI will make available a computerized monthly activity report by the 15th working day of each month for the previous month worked. The report will provide the following information in both a printout and as an Excel spreadsheet or in other file types (e.g., PDF, JPG, CSV, and XMLS):

- Time the service calls were received, time arrived at the intersection, the response time, the number of hours spent for each repair, and a specific listing of intersections with three calls in one month.
- A complete record of all work that was performed on the City traffic signal equipment during the time period covered on the report including the make, model, and serial number of any major components, or other equipment that was newly installed at each intersection.
- Time and date the PM work was performed.

While teamEpro collects the data from the field, ESI's Report Services portal will allow City's selected managers access to the information. With this web-based site, the City can sort, review, and print any needed information. The reports allow the collected information to be sorted properly to meet specific needs. The reports can be sorted by employee, location, date, or work type.

PM Checklist

Utilizing the electronic PM checklist designed for the City, each site listed in the RFP will be visited. All items listed will be completed and checked following the City's procedural requirements. If any safety issues are found, immediate action will be taken to correct the situation, and the City's representative notified. ESI will maintain all maintenance records in each controller cabinet showing the date and time checked. Utilizing ESI's web-based system, teamEpro, all maintenance services from the field will be displayed as it occurs electronically. teamEpro is customizable to the items the City has designated in the RFP, allowing the information to be available as it happens rather than the printed PM checklist that is submitted following each inspection. The City's representative has the convenience of accessing the permanent documents at any time of the day. In addition, ESI will also provide a copy of the City approved checklist at each intersection. The PM checklist form will be filled out during each maintenance inspection and/or repairs being made in the controller cabinet or the signal equipment at the intersection.

At the end or termination of this contract, ESI will present to C/CAG Project Manager or its designee a listing of the actual inventory and transport the spare parts to a location designated by C/CAG Project Manager or its designee. Transportation costs related to transferring spare parts are included as part of the contract costs.

3.2 Materials/Supplies/Workmanship

ESI will provide C/CAG Project Manager or its designee the type/information of vehicles, tool/test equipment and safety equipment intended to be used. ESI may not begin work unless C/CAG Project Manager or its designee is satisfied that ESI employees are fully equipped to perform the tasks assigned.

All material and workmanship shall comply with current CA-MUTCD, Caltrans Standard Specifications, and Caltrans Standard Plans.

All work is subject to monitoring and inspection by C/CAG Project Manager, partner agencies lead, or its designee. ESI shall perform, at no additional cost, all necessary repairs, replacements, and/or corrections needed to restore work or materials found by the partner agencies to vary materially from the plans and/or specifications or to be defective due to poor workmanship.

3.3 Quality Control

ESI will provide Quality Control review of the work performed by its technicians and Subcontractors to ensure the quality of the work is acceptable. The standard for all work in which ESI is responsible for under this contract will be the higher of Caltrans or industry standards.

Task 3 Deliverables:

1. Comprehensive preventative maintenance plan and maintenance schedule
2. List of scheduled maintenance inspections or repairs (every 6 months)
3. Asset Management Database
4. Materials/Equipment Submittals
5. Equipment replacement/procurement

Task 4: Other Tasks To Be Assigned

During the entire contract period, ESI will perform tasks related to trailblazer signs, electronic message signs, other ITS devices, or standard roadway (non-electronic) signs that are outside the scope of maintenance services provided under the contract (currently not funded as part of the budget). Work within this category shall be negotiated separately between ESI and C/CAG Project Manager using agreed upon resource rates.

When requested by C/CAG Project Manager or its designee, ESI will prepare a proposal to perform the requested task. This proposal shall include scope, approach, schedule and cost. C/CAG Project Manager or its designee, at its discretion, may negotiate with and assign the task to ESI. In that event, the agreed upon scope, payment and schedule shall be included in a task order signed by both parties.

Certain work issued by task order may require additional license or certification. If an additional license or certification is needed for Task Order work, it will be identified in the Task Order. For work on task orders with a scope not covered by Subcontractors listed in its proposal, ESI may bring on additional Subcontractors with appropriate licenses.

Listed below are examples of the types of projects C/CAG envisions for task orders:

- Reinstallation/relocations of ITS devices
- New device installation
- Maintenance of other electronic message signs or ITS devices as needed
- Maintenance of standard roadway (non-electronic) signs
- Prepare a performance report once the program has been implemented

Task 4 Deliverables:

To be assigned.