

**BART Agreement Number: 6M8182**

**Approval Date: 06/21/22**

**Revised Date: 12/29/23**

**Work Plan No. A.03-02 - CBTC Enabling Works Project Field Engineer, Inspector and Inventory Specialist**

**Scope:**

The Scope of services in this workplan include 3 positions:

**Field Engineer:**

The scope of work for this position on this Work Plan includes:

1. Administer and monitor the construction contract until final project closeout;
2. Request, Produce and Review submittals for compliance with contract book;
3. Provide Construction Quality Assurance Services (Inspection, Materials Acceptance and Management)
4. Prepare RFI's and coordinate responses;
5. Prepare cost estimates due to field issues;
6. Prepare technical documentations for Change Notices and Change Orders.
7. Negotiate and review contract change orders;
8. Review and approve contractor work schedules, Site Specific Work Plans (SSWPs), submittals, etc.;
9. Manage and provide technical support to field issues;
10. Conduct construction progress meetings;
11. Witness factory and field testing;
12. Project reporting/scheduling;
13. Project Communication/Record Keeping and Meeting Coordination;
14. Coordinate the work with affected BART's parties and other third parties;
15. Schedule and attend meetings as required;
16. Provide contract personnel with contractors and security badges;
17. Other tasks as directed

**Inspection:**

The scope of work for this position on this Work Plan includes:

1. Usual and customary CM Inspection in support of completion and close out of Contract No. 49GH-130 utilizing the guidelines as established in the latest edition of the BART Resident Engineer's Manual.

2. Be knowledgeable in means and methods and support inhouse construction in proactive inspection.
3. Coordination with the District's various departments occupying or responsible for the affected facilities.
4. Assist RE providing details from inspection reports for all contract close-out activities in accordance with the contract General Conditions; Contract Specifications Section 01 77 00, Closeout Procedures; the BART Resident Engineer's Manual 2020 Edition (RE Manual); and the RE Manual PF-36 procedures, including Exhibit 8: Checklist of Audit Items Required for Contracts Before Closing, and Exhibit 9: Contract Close-Out Check List.
5. Quality Assurance before, during and at close out.
6. Coordination with BART department (Train Control Engineering, Electrical Engineering, Train Control Maintenance, Electrical Maintenance, Track and Structures, and Operations) as required.
7. Coordination with third parties (City, PG&E, UPRR, etc.), if needed.
8. Administering and facilitating the preparation and review/approval process of the Contractor's required Site-Specific Work Plans (SSWPs).
9. Assist with Administering and facilitating the preparation and review/ approval process of the Track Allocation Requests.
10. Utilizing and updating the Project Management Software database system with Inspection Reports, Non Conformance Reports, Testing reports per BART Resident Engineer's Manual 2020 Edition (RE Manual).
11. Assist with developing Integrated Schedule for project that includes construction inspection activities.

**Inventory Specialist/Office Engineer:**

The scope of work for this position on this Work Plan includes:

1. Warehouse Material Tracking
  - a. Provide support in database management and data entry.
  - b. Provide process and procedure support ensuring all documentation is prepared and completed correctly for all incoming and outgoing materials from HME Warehouse, Whipple Road Warehouses and Whipple Yard Locations
  - c. Provide preparation support for incoming and outgoing materials into the HME Warehouse, Whipple Road Warehouses and Whipple Yard
  - d. Completion and management of material request and laydown forms.
  - e. Provide support in material tracking, labelling and identification.
2. Procurement Support
  - a. Preparation and submission of purchase requisition packages as required for Measure RR Bond Projects
  - b. Maximo support for material requests.
3. Material delivery and collection
  - a. Delivery of material to job site as required.
  - b. Collection of material from job site and / or vendor as required.
4. Material delivery and collection
  - a. Delivery of material to job site as required.
  - b. Collection of material from job site and / or vendor as required.
5. Job site material preparation
  - a. Job site material preparation as required.
6. Transition of Capital Inventory into Maximo
  - a. Load items and balances into Maximo
  - b. Identify process for use of Maximo

- c. Identify any training required
- d. Support as required to BART Warehouse Expeditor / Manager
- e. Provide innovation and solutions to improve processes and procedures for RR construction material management activities.
- f. Support warehouse audits and prepare documentation and reports as required.

### **Office Engineer**

Performs a variety of office engineering duties during the design, oversight, and administration for the projects through Design, Construction and Contract Close out. The Office Engineer will assist in all engineering functions of the Contracts. The Office Engineer shall have a minimum of five (5) years' experience on BART projects. The roles and responsibilities are as follows:

1. Contract Documents. Assist with Contract Development and will maintain an organized and updated set of Contract Documents and Contract Drawings.
2. RFIs and Submittals. The Office Engineer will maintain and update the RFI and Submittal logs in Jacobs DMS or new Project Management Software. The Office Engineer will assist the District Engineer in responding to RFIs and Submittals as requested by the District Engineer.
3. Construction Progress Meetings. The Office Engineer will assist the District in preparing for weekly meetings and will take the minutes of the meetings. Minutes will be prepared no later than the day following the meeting.
4. Payment. The Office Engineer will maintain the schedule regarding the payment. The Office Engineer will also coordinate with the field inspectors in reviewing the monthly pay requests submitted by the Contractor. Quantities installed, percent completed, and the completion Status of Construction Activities will be reviewed with the Inspectors.
5. Change Notices/Change Orders. The Office Engineer will assist the District Engineer as necessary as well as coordinate with the schedule and the estimator for preparation of the Change Order related documents needed to develop field and administrative Change Notices and Change Orders. The Office Engineer will process all Change documents and facilitate the change process amongst all parties.
6. Contract Filing System. The Office Engineer will verify on a weekly basis that documents are appropriately indexed and filed in accordance with the Contract filing system.
7. Insurance. The Office Engineer will maintain a log of the Contractor's insurance certificates in coordination with BART's Insurance Department Requirements.
8. Prepares engineering designs, specifications, costs and quantity estimates for engineering construction projects; prepares and/or reviews the adequacy and accuracy of computations.
9. Assists in the establishment of schedules and methods for providing engineering project oversight services; responsible for the verification of quantities of materials and adherence to specifications; may recommend resources to be allocated.
10. Monitors work activities to ensure compliance with established policies and procedures; evaluates proposed changes to approved plans and specifications.
11. Prepares a variety of reports and correspondence on project matters including Inspector's Daily Reports, monthly and final completion reports, contract modifications negotiations, field and design engineering changes, and correspondence with the contractor on fulfillment of requirements.

12. Provides assistance to Group Manager and Project Managers in the interpretation of plans and resolution of problems during execution of contract.
13. Maintains awareness of progress on assigned engineering design or construction projects to ensure compliance with designated time and cost schedules.
14. Discusses and coordinates engineering design or construction project activities with design engineering staff and other affected engineering personnel in One Team approach.

**Prime: Ghirardelli**

| <b>Subconsultant</b> | <b>Amount</b> | <b>DBE (Y/N)</b> | <b>SBE (Y/N)</b> |
|----------------------|---------------|------------------|------------------|
| Auriga Corp.         | \$ 486,039    | Y                | Y                |

**Total Work Plan Value: \$ 1,162,420**