

**Work Plan No. B.13-01 Construction Management Support - Resident Engineer on Track Interlocking Replacements**

**Scope:**

Justin Roger's hours are solely allocated to A85 and Douglas Lee will have a certain amount of hours on A85 for transitioning into the RE role and the remainder on the K-Line work. Specific Duties of the A85 Interlocking (15CQ015) Resident Engineer shall include the following work:

- A. Establish construction methods, schedules, and planning materials for construction of interlocking replacements.
- B. Host and record weekly planning/construction review meetings.
- C. Monitor work activities to ensure compliance with established policies and in accordance with project plans and specifications.
- D. Prepare daily, monthly, and final completion reports as needed.
- E. Discuss and coordinate engineering design or construction project activities with design engineering staff and other affected engineering personnel.
- F. Maintain awareness of progress on assigned engineering design or construction projects to ensure compliance with project schedule and budget.
- G. Create Special Inspection Schedules and provide assistance in the interpretation of plans and resolution of problems during construction.
- H. Review construction design plans to evaluate potential construction problems.
- I. Utilize a variety of engineering programs and applications including CAD.
- J. Attend and participate in project team meetings.
- K. Conduct field inspections.
- L. Other tasks as directed by the District.
- M. A85 Interlocking Renewal – Support duct bank construction sequencing and installation, ramp construction, SSWP submittals, crane procurement, special trackwork installations, field inspections and progress updates.

Specific Duties of the K-Line Interlocking Renewal (15CQ008) Resident Engineer shall include the following work:

- A. Provide leadership to discuss and coordinate engineering design or construction project activities with the Designer of Record (DOR), design engineering staff, and affected engineering personnel and other BART staff to develop the plans, specifications and cost estimates, including a "bottom-up" project cost estimate.
- B. With support from BART Procurement and Legal, develop and implement Industry Outreach (Request for Information) for the work.
- C. Review construction design plans to evaluate potential construction problems.
- D. Review the development and basis of the calculations for indirect costs.
- E. Review the Bid Schedule in detail, and if time allows, perform an independent review and verification of the construction estimate. Confirm the Bid Schedule is compatible with Payment and Measurement section of the specifications.
- F. Work with DOR and BART staff to develop design and construction schedules that include detailed stage construction plans. Consult with Transportation Planning,

System Safety and System Access to identify appropriate construction work windows that avoid impact to revenue service. Maintain awareness of progress on assigned engineering design and procurement schedules and/or construction project schedules. Confirm anticipated construction schedule is practical and achievable and will ensure on-time delivery within approved budget.

- G. Identify capital and maintenance projects whose activities conflict with construction site limits and schedule timeframe limits and timeframe and develop a plan to de-conflict; incorporate project constraints into the specifications as necessary.
- H. Work with DOR, BART and third-party as necessary to develop a construction staging area.
- I. Establish construction methods and planning materials for construction of interlocking replacements.
- J. Utilize various engineering computer programs and applications including CAD as appropriate.
- K. Coordinate design review by stakeholders at pre-defined stages of design development and encourage timely receipt of comments. Track review comments and disposition of responses on Comment Resolution Forms. Mediate resolution of disagreements; escalating issues as necessary.
- L. Develop and update weekly deliverables and activities lists.
- M. Host and record weekly planning/construction review meetings.
- N. Monitor work activities to ensure compliance with established policies and in accordance with project plans and specifications.
- O. Prepare daily, monthly, and final completion reports as needed.
- P. Create Special Inspection Schedules and assist in the interpretation of plans and resolution of problems during construction.
- Q. Attend and participate in project team meetings.
- R. Conduct field inspections.
- S. Administer contracts, track deliverables, and maintain project documentation including submittals, RFIs, and any contract changes.
- T. Other tasks as directed by the District.

**Prime: TRC Engineers, Inc.**

Subconsultant	Amount
RailPros, Inc.	\$ 305,358
Rail Surveyors and Engineers, Inc.	\$ 403,026
Montez	--

**Total Work Plan Value: \$ 737,882**