

BART Agreement Number: 6M8168

Approval Date: 05/06/24

Work Plan No. A.05-01 6M8168 Parsons DSDC for 14 Months May 01, 2024 to June 30, 2025

Scope:

The Scope of Services for Work plan A.04-01 follows the BART/Parsons Agreement # 6M8168 requirements identified in Section 1.3 - Work Plans and Attachment A Scope of Services This Scope of Services includes the participation in working group meetings, both internal and with Hitachi, review of contract deliverables, management of CBTC interfacing projects, development of studies and reports, rollout of Operational Readiness training and integration activities with BART Computer Systems Engineering (CSE) Team. The Work Breakdown Structure for these specific work activities are as follows:

04000 Project Management/Implementation

- 1) Ensure that the project team is properly staffed, developing job requisitions, interviewing candidates
- 2) Participate in regular Management meetings with Hitachi and BART
- 3) Participate in Executive Meetings and Reporting to PMOC and FTA
- 4) Review of subconsultant agreements, invoices, payments, etc.
- 5) Produce monthly status/progress reports, SBE reports
- 6) Participate in Executive and Stakeholder presentations
- 7) Review Hitachi Schedules and Payment Applications
- 8) Develop and review of Change Notices

04100 Engineering Services & Design Reviews

- 1) Review of System level Final Design Deliverables and Alstom Final Design deliverables for vehicle integration from Alstom
- 2) Review of Preliminary Design Deliverables from Alstom for vehicle integration
- 3) Complete reviews of Gap Memos and associated updates to design deliverables
- 4) Participate in internal and joint working group meetings with Hitachi and BART
- 5) Develop strategy & decision documents as it relates to modifications to Hitachi's core product
- 6) Participate in reviews of CDRLs and chair/attend disposition meetings with stakeholders
- 7) Work with interfacing projects to coordinate CBTC activities with other projects
- 8) Provide Strategic Advice to Senior Management
- 9) Develop materials for Agency preparedness and rollout CBTC training
- 10) Oversee CBTC system implementation, specifically Automatic Train Supervision, Automatic Train Protection, Automatic Train Operation, Secondary Train Detection (Axle Counter system), and Data Communication System

- 11) Perform Special Studies, Calculations and Reports
- 12) Support Risk Management and Mitigation efforts
- 13) Review Migration Phase 0, 1, 2 design deliverables
- 14) Support development of Change Notice to Vehicle Supplier for Vehicle Integration work
- 15) Support systems integration during design phase for Vehicle Integration work
- 16) Review ATS Agile software releases and corresponding documentation
- 17) Review of Operations and Training Manuals

04200 Systems Engineering

- 1) Management of BART's requirements database through the DOORS Database and incorporating changes into requirements database
- 2) Review of Hitachi DOORS database for conformance to contract for final design and test activities
- 3) Review Hitachi engineering processes and Plans
- 4) Support the team with reviews of compliance against contract requirements
- 5) Manage verification and validation of CBTC product to requirements

04300 CSE Support

- 1) Work with CSE Team to understand ICS interface to ATS
- 2) Review CSE interface documentation
- 3) Facilitate discussions between Hitachi and BART
- 4) Modifications to BART's Integrated Computer System
- 5) Development of CSE Data Warehouse

04400 Safety Certification

- 1) Independent Safety Assessor reviews of Hitachi product

04500 Deployment

- 1) Provide oversight of the implementation, installation and verification/validation activities
- 2) Participate in Deployment and Testing meetings
- 3) Review of Test Plans, and Test Procedures
- 4) Participate in Hayward Test Track installation and test activities

Prime: Parsons Transportation Group (TCMP)

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
System Rail	\$ 833,748	N	Y
Acumen	\$ 512,785	Y	Y
ADS	\$ 197,520	Y	Y
Countervail	\$ 13,354	Y	Y
DS Consultancy Group	\$ 1,401,378	Y	Y
Lea+Elliot	\$ 857,021	N	N
NRC	\$ 597,342	N	N
TSE	\$ 482,178	N	N

Total Work Plan Value: \$ 8,234,853