

Work Plan No. A.01-01 – 6M8169A01-01 – BART Design Services During Construction for Train Control Modernization Program

2. SCOPE OF SERVICES

The work is associated with the following two sets of tasks:

- 1) Hitachi Pre-NTP work that will occur from July 27th through August 31st
- 2) Hitachi initial work activities that will occur starting on September 1st through November 30th. DSDC work activities were identified based on the Hitachi Schedule titled "CBTC All Activities NTP = 8-31-20.pdf".

The Pre-NTP Work is as follows:

- 1) Vehicle Fitment
 - a. Continued discussions with Bombardier and Hitachi regarding the integration of CBTC on the Bombardier Fleet of the Future vehicles
 - b. Support Hitachi vehicle integration workshops
 - c. Support weekly meetings with RS&S and Bombardier on Vehicle Interface
 - d. Support the development and review of change Notice to Hitachi to require them to subcontract vehicle work to Bombardier
 - e. Coordinate with other projects and BART departments
- 2) ATS/ICS Integration
 - a. Support Computer Systems Engineering (CSE) in the development of ICS documentation that can be exchanged with Hitachi
 - b. Participate to ATS/ICS Integration workshops
 - c. Review documentation from Hitachi
- 3) Other Work Items:
 - a. Support Yard Interface Discussions with BART/Hitachi and support development and review of Change Notice
 - b. Attend regular meetings with VTA Phase 2 Team as needed
 - c. Work with Hitachi to develop the Collaborative Work Plan
 - d. Analyze interfacing projects and interface matrix
 - e. Participate to transition/orientation sessions with new team members
 - f. Attend 60-day forecast sessions with Hitachi

Post-NTP Work once Hitachi is mobilized: September 2020 to November 2020

- 1) Participate in design workshops with Hitachi and Bombardier
- 2) Review early CDRLS (ATS, vehicle, wayside, legacy signaling, plans and process documents)
- 3) Support to CSE on ATS/ICS deliverables
- 4) Interface with VTA Phase 2 Team
- 5) Develop Yard Interface change notice
- 6) Startup, attend and chair Working Groups as-needed
- 7) Support DOORs working environment and Systems Engineering framework
- 8) Review of Project Management deliverables including Schedules, Management Plans, QA Plans
- 9) Work with Hitachi on development of Collaborative Work Plan
- 10) Support/Lead interface management for design interfaces
- 11) Execute transition/orientation sessions with new team members

Prime: Systra

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
Hatch	\$ 526,558	Y	Y
Lea Elliott	\$ 66,579	N	N
Auriga	\$ 115,933	Y	Y
Virginkar	\$ 112,822	Y	Y
Turner	\$ 60,171	N	N
Unico	\$ 47,054	Y	Y
KKCS	\$ 50,000	N	N

Total Work Plan Value: \$ 1,678,011