BART Agreement Number: 6M8168 Approval Date: 08/27/2020

# Work Plan No. A.01-01 – BART Design Services During Construction for Train Control Modernization Program Project No. – 49GH000

#### Scope:

### 2. SCOPE OF SERVICES

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

- 1) Pre-NTP work that will occur from July 27th through August 31st
- 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
  - Continued discussions with Bombardier and Hitachi regarding the integration of CBTC on the Bombardier Fleet of the Future vehicles
  - b. Chair Hitachi vehicle integration workshops
  - c. Chair weekly meetings with RS&S and Bombardier on Vehicle Interface
  - Develop structure of Change Notice to Hitachi to require them to subcontract vehicle work to Bombardier
  - e. Coordinate radio frequency with T2G project and M&E staff

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- 2) ATS/ICS Integration
  - Support Computer Systems Engineering (CSE) in the development of ICS documentation that can be exchanged with Hitachi
  - Chair Hitachi ATS/ICS Integration workshops
  - c. Review documentation from Hitachi

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- 3) Other Work Items:
  - a. Continue Yard Interface Discussions with BART/Hitachi and begin Change Notice
  - 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. Execute transition/orientation sessions with new team members
  - Attend 60-day forecast sessions with Hitachi

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

- Participate in design workshops with Hitachi and Bombardier
- Review early CDRLS (ATS, vehicle, plans and process documents)
- Continue support to CSE on ICS deliverables
- 4) Interface with VTA Phase 2 Team
- 5) Develop Yard Interface change notice
- Startup Working Groups
- 7) Establish DOORs working environment
- 8) Review of Project Management deliverables including Schedules, Management Plans, QA Plans
- 9) Work with Hitachi on development of Collaborative Work Plan
- Continue interface management for design interfaces
- 11) Execute transition/orientation sessions with new team members

**Prime: Parsons** 

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
Acumen	\$22,446	Υ	Υ
ADS	\$25,858	Υ	Υ
Armand	\$136,903	Υ	Y
Battelle	\$42,591	N	N
Countervail	\$37,558	Y	Υ
Lea & Elliott	\$73,440	N	N
London Underground	\$16,000	N	N
Network Rail Consulting	\$173,579	N	N
Transit Systems Engineering, Inc.	\$102,147	N	N

**Total Work Plan Value**: \$ 1,948,997