

Work Plan No. A.13-01 – Electrical Engineer Support

Scope:

2.0 SERVICES TO BE PERFORMED BY CONSULTANT AND WORK BREAKDOWN STRUCTURE:

The Scope of Services requires an Electrical Design Engineer (“Engineer”) experienced in Power Systems Design, including Uninterruptible Power Supplies (UPS), Lighting and Lighting Controls. The Engineer must be able to perform Electrical Engineering/Lighting calculations, perform Electrical Design work for all aspects of power distribution system, including backup power system, raceway systems, and feeder design. The Engineer will be responsible to review and provide comments on the lighting and lighting controls design drawings and specifications.

Specific duties and responsibilities include but are not limited to:

1. Perform field surveys as needed to support technical design.
2. Review Single-Line Diagrams, Equipment layout, Conduit Routing for multi-level building and demolition plan, grounding and bonding, and complete technical design drawings.
3. Review and understand Electrical Design for all aspects of power distribution system, including backup power systems, switchboard design, lighting, lighting controls, raceway systems, and feeder design.
4. Meet with BART stakeholders to address design comments.
5. Meet with Contractor and BART Maintenance to provide construction support as needed.
6. Work with Maintenance team and/or other departments to understand the scope of work and provide engineering support (including estimates, conceptual design, constructability issues, planning, real estate, sustainability, and customer access).
7. Provide engineering support and design verification.
8. Perform other work as assigned by the District.
9. Coordinate with BART stakeholders such as:
 - a. Power Electrical
 - b. BART internal (Mechanical, Electrical, Plumbing, Heating, Cooling, Civil, Structural, and Sustainability, etc.)
 - c. Maintenance and other stakeholders as needed
 - d. Bart Construction Management
10. Create lighting photometric plans and perform lighting level calculations.

Prime: TY Lin + TSE JV

Subconsultant: None

Total Work Plan Value: \$ 15,544