

Work Plan A.04-01 Biddability/Constructability Review, Project Controls and Reporting Project #: 03FB001 Berkeley Hills Tunnel Emergency Ventilation System Renewal

Scope:

The Scope of services will include provision of design/construction engineering expertise to perform the following services at the request of BART.

1. Constructability/Biddability and Cost Estimate reviews of contract design at the 65%, 95%, 100%, and IFB design, including but not limited to the following tasks:
 - a) Become familiar with all drawings (*Assumed <20*), specifications, and other contract documents to evaluate whether all details of the scope can be built per plans and specifications; that the contract documents will facilitate the receipt of reliable, responsive bids; and minimize post-bid contract changes. (*MR-40, ER-40, SR-40, PM-2*)
 - b) Attend a meeting with the design team to discuss and understand the project details, including scope, work location(s), and known constraints. At this stage, provide review of available developed design at a depth commensurate with the level of detail provided. (*MR-4, ER-4, SR-4, PM-1*)
 - c) Field visits and inspections as requested to understand existing conditions and potential construction/design issues. (*N/A*)
 - d) Assess the possibility of differing site conditions and whether any additional field investigation/survey/potholing is recommended to better identify potential construction conflicts. Suggest alternatives for possible routing, equipment locations, footing modifications and excavations to avoid or limit the possibility of conflicts in areas where excessive hidden obstacles or other differing site conditions can be anticipated. (*MR-4, ER-4, SR-4, PM-2*)
 - e) Review site access restrictions, space requirements for equipment and construction activities (*N/A*)
 - f) Ensure contract documents include mitigations for any impacts of the work including but not limited to access restrictions to ensure potential construction impacts are resolved before beginning construction

(*MR-4, ER-4, SR-4, PM-1*)
 - g) Ensure the scope of work is clear and consistent across all contract documents to eliminate any ambiguities and maximize the biddability of the contract. (*MR-48, ER-48, SR-48, PM-4 for three submittals*)
 - h) Evaluate the construction schedule assumptions for reasonableness, recommending modifications as appropriate based on potential deficiencies identified. (*MR-2, ER-2, SR-2, PM-8*)
 - i) Review proposed hours of work, staging areas (day shift, night shift), and required District support. (*MR-6, PM-2*)
 - j) Other technical support or other services as required. (*264 Hr*)
2. Cost estimate peer reviews of contract design at the 100%, and IFB design including but not limited to the following tasks:
 - a) Assess schedule and estimate for assumptions. (*E-8*)
 - b) Review estimate mark-ups and suggest adjustments for current bid market. (*E-8*)
 - c) Review estimate for pricing that is excessively high or low. (*E-8*)
 - d) Identify any scope missing from the estimates. (*MR-4, ER-4, SR-4, E-8, PM-2*)
 - e) Review Bid Schedules. (*E-32*)
3. Site visit(s) as needed at BHT (Berkeley Hills Tunnel) (*N/A*)

Task Management - (PM-48, AA-40)

Prime: PARSONS

Subconsultants: None.

Total Work Plan Value: \$ 243,598