

Work Plan No. A.01-01 GEC Services for New BART Police Headquarters

Scope:

1. Request for Qualification (RFQ)/ Request for Proposal (RFP) Development

1.1. Review the 2022 IBI Group Study

1.1.1. The team will review the IBI Group Study that references BART's needs upon receipt and incorporate recommendations into the RFQ/RFP package, as appropriate.

1.2. Meetings and Site Visits

1.2.1. The team will meet with appropriate BART stakeholders to determine and document their needs for inclusion within the RFQ/RFP Package. These discussions will be held over a series of programming meetings, as appropriate. Key Stakeholders will include BART Police, engineers, and others as required. Meetings will be a combination of virtual and in person.

1.2.2. The team will participate in several site visits. The initial set of site visits is expected to take place over a period of 5 days.

1.3. RFQ/RFP Documents

Our Team is prepared to provide a comprehensive package, including 10% drawings and Technical Provisions as follows:

- Architectural Scope
 - Prepare a preliminary programming questionnaire for stakeholders

- Survey the existing building and verify information on the as-builts
- Model the existing building and create floor plans
- Distribute preliminary floor plans to disciplines
- Develop 10% construction drawings and Technical Provisions
- Develop the Basis of Design
- Assist with incorporating the 3rd party structural requirements
- The following exclusions apply:
 - Structural engineering design is excluded from our proposal. We will attend and participate in Weekly Structural Meetings with BART and the Structural Contractor, coordinate with the structural design team, and insert the documents from the Structural design team into the Gannett Fleming generated package.
- Mechanical Scope: Includes Heating, Ventilation, and Air Conditioning System, Plumbing, and Fire Protection
 - Investigate the existing Heating, Ventilation, and Air Conditioning system, plumbing system, and fire protection system.
 - Provide Code analysis of the existing systems and provide options for upgrading to the current codes.
 - Study the Fire protection system, coordinate with Tom Maloney, and propose the upgrades.
 - Prepare Heating, Ventilation, and Air Conditioning system Load Calculation and plumbing calculations, propose new HVAC and plumbing systems, and coordinate with other disciplines.
 - Provide the Basis of Design.
 - Provide the conceptual design drawings for Heating, Ventilation, and Air Conditioning system, Plumbing, and Fire Protection.
 - Prepare the Technical Provisions for Heating, Ventilation, and Air Conditioning system, Plumbing and Fire Protection.
 - Address review comments from BART Stakeholders and local jurisdictions and revise the documents.
 - The following assumptions and exclusions apply:
 - Leadership in Energy and Environmental Design (LEED) certifications and scorecards are not included in the scope of work. The Design Builder will be responsible for this scope of work.
 - Assume that 2022 California Electrical Code, California Mechanical Code, California Plumbing Code, and California Fire Code should be met.
 - Assume that there are no upgrades to the existing building envelope.
 - Assume that natural gas is available for space heating and water heaters.
 - The design will assume that there will be a new Building Management System (BMS) designed, provided, and installed by the Design Builder. The BMS controls mechanical and electrical systems within the building.
 - Energy modeling is excluded from the package.
 - CalGreen Mandatory is included. No Tier 1 or Tier 2 is adopted.
 - Title 24 compliance forms are excluded from the package. The Design Builder will be responsible for the associated forms.
- Electrical Scope: Includes Electrical, Lighting, Fire Alarm, Telecommunications, CCTV, and Access Control

- Investigate the existing electrical system, communication system, electronic security system, and fire alarm system.
- Provide code analysis of the existing systems and provide options for upgrading to the current codes.
- Provide an Electrical study to review redundant and/or backup power options
- Prepare Electrical Load Calculation.
- Propose the new electrical, communication, electronic security, and fire alarm systems and coordinate with other disciplines.
- Provide the Basis of Design.
- Provide the conceptual design drawings for electrical, communication, electronic security, and fire alarm systems.
- Prepare the Technical Provisions for electrical, communication, electronic security, and fire alarm systems.
- Address review comments from BART Stakeholders and local jurisdictions, and revise the documents.
- The following assumptions and exclusions apply:
 - Leadership in Energy and Environmental Design (LEED) certifications and scorecards are not included in the scope of work. The Design Builder will be responsible for this scope of work.
 - Assume that 2022 California Electrical Code, California Mechanical Code, California Plumbing Code, and California Fire Code should be met.
 - CalGreen Mandatory is included. No Tier 1 or Tier 2 is adopted.
 - Title 24 compliance forms are excluded from the package. The Design Builder will be responsible for the associated forms.
- Security Scope
 - The security team will participate in a series of meetings and site visits with BART Police and other BART staff to more thoroughly decipher the key elements of their specific needs. Inquiries will be security centric and include facility functional layout requirements such as evidence storage, armory, holding cells, interrogation rooms, operations centers or other areas requiring additional security measures such as Internal Affairs.
 - We will be reviewing any completed security surveys, vulnerability assessments, crime data in conjunction with any risk tolerance positions that BART possesses. Research will include facility security standards, governmental requirements, and best practices.
 - We will develop a Security Basis of Design (BOD) for the site and facility. The design will take into consideration existing threats and vulnerabilities and current security measures. This security BOD will be the basis for design and evaluation of the Physical Protection System.
 - The team will prepare a Risk, Vulnerability, and Threat Assessment.
 - The team will participate in the input and review of the 10% design. As the project progresses, we will participate in review of various stages of design drawings and provide recommended revisions of the design to ensure physical security solutions work together to stop individuals from accessing restricted spaces.
 - During the design process we will collaborate with our engineers on the submitted security diagrams, drawings and cost estimates to ensure the overall design effectively applies the concepts, technical provisions and recommended revisions that reduce site vulnerability.

- The Basis of Design Report listed in 'Deliverables' will include security BOD requirements. The ultimate measure of design effectiveness will be based on applying potential threats and vulnerabilities determined by BART or based upon an agreed upon set of threats proposed by Gannett Fleming and accepted by BART.
- Systems Engineering Scope
 - A conceptual design will be provided based on additional discussions with BART Stakeholders.
 - Definitions of installation standards and interface protocols for railway overview screens and the railroad-specific voice radio communications systems, including user interfaces, Human Machine Interface (HMI) interface controls and the systems responsibilities for integration with other related systems will be provided.

1.4. Basis of Design Report (BOD) and Technical Provisions

Each discipline lead will contribute to the Basis of Design and Technical Provisions Report, relevant to their discipline. The report will be coordinated by our Project Engineer and Document Control Staff. Prior to preparing a draft report, an outline will be submitted for review. A draft report will then be submitted to BART for review. A final draft report will be provided once comments from BART stakeholders have been reviewed and incorporated.

1.5. Cost Estimate

M Lee Corporation (SBE/DBE) will provide cost estimating services for this project as follows:

- Provide one cost estimate of the Progressive Design Builder's costs to deliver the project (opinion of probable construction cost including design/engineering costs, construction costs and design-builder management) based on the 10% submittal package.
- Provide as-needed cost estimates to support design concepts to ensure the project stays within budget. An allowance for this level of effort is included.
- One draft estimate and one final estimate will be provided. The draft estimate exercise will begin once all relevant design documents are received.
- M Lee Corporation will attend one virtual review meeting and conference calls as needed.
- The cost estimates will be prepared using Excel and presented in (Portable Document Format (PDF) formation. The estimate format will be by Construction Specifications Institute (CSI) or Uniformat.
- The following exclusions apply:
 - Estimate of non-design builder costs, such as owner and Construction Management soft costs, etc.
 - Change Order estimates or review of Contractor's Change Order estimate during construction

The estimate will be reviewed by GF estimators prior to submission.

Prime: GANNETT FLEMING

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
M Lee	\$ 137,195	Y	Y
Jade	\$ 122,064	Y	Y

Total Work Plan Value: \$ 1,763,502