

865 The Alameda San Jose, CA 95126-3133 Telephone 408-296-5515 Facsimile 408-296-8114

June 11, 2018

City of Mountain View Department of Public Works 500 Castro Street Mountain View, CA 94041

Attention: Rey Rodriguez

Subject: City of Mountain View Bridge and Culvert Mitigation

Dear Lisa:

Biggs Cardosa Associates, Inc. (BCA) is pleased to submit the following proposal to provide structural engineering services on the subject project. The project will mitigate a selection of the existing bridge and culvert deficiencies as noted in the 2018 City-Wide Bridge and Culvert Structural Assessment Report by Biggs Cardosa Associates. In general the City proposes to mitigate the following Priority 2 deficiencies as summarized below:

Repair Handrail:

City No. 1: Miramonte Avenue/ Cuesta Drive Corrugated Metal Pipe Culvert

City No. 21: Pedestrian Bridge at Rengstorff House (South)

City No. 31: Mountain View Observation Deck

City No. 38: Pedestrian Undercrossing at Old Middlefield Way

Repair Spalled/Cracked Concrete:

City No. 2: Barbara Drive Concrete Box Culvert City No. 3: Marilyn Drive Concrete Box Culvert

Repair Spalled/Cracked Roadway AC Pavement:

City No. 7: Hackett Avenue Concrete Box Culvert

City No. 12: Rock Street Concrete Box Culvert

City No. 13: West Middlefield Road Concrete Box Culvert

City No. 14: Central Expressway/ Showers Drive Pedestrian Undercrossing

Repair Security Gates:

City No. 14: Central Expressway/ Showers Drive Pedestrian Undercrossing

Repair Bridge Timber Deck Planks:

City No. 16: Whisman Park Pedestrian Bridge

City No. 22: Pedestrian Bridge at Rengstorff House (North)

City No. 23: Pedestrian Bridge at Driving Range

City No. 24: Golf Cart Bridge at Driving Range

Repair Decorative Stone Finish at Pilaster:

City No. 18: Dana Street Pedestrian Bridge

Clean and Paint Pedestrian Bridge:

City No. 23: Pedestrian Bridge at Driving Range

Repair Timber Post:

City No. 31: Mountain View Observation Deck

The bridge and culvert mitigation work is anticipated to require approval from the Santa Clara Valley Water District where work is required within or affecting the creek channels.

Biggs Cardosa Associates, Inc. proposes to provide the following scope of services to prepare plans, and specifications for the bridge and culvert mitigation:

Task 0. PROJECT MANAGEMENT AND ADMINISTRATION

The CONSULTANT shall perform activities necessary to plan, direct, and coordinate the work of the project team and provide progress reporting. The project management and administration tasks will include Conceptual and Final Design and Construction Support phases of the project.

0.1 Administration

- Supervise, coordinate, and monitor design for conformance with the City of Mountain View (CITY) and other governing agency standards and policies.
- Prepare monthly progress reports and invoices.

0.2 Project Meetings

 Attend project review meetings with applicable CITY personnel at the initiation of each design phase of the project (total 2 meetings assumed)

Task 1. 65% PS&E SUBMITTAL

The 65% PS&E submittal tasks will include mitigation design, and preparation of 65% PS&E documents.

1.1 65% Plans, Specifications, & Estimates Submittal

- Conduct a site visit to the structures listed above to perform a survey of the present state of deterioration and damage for each structure to develop the required repair structural plans and details.
- Prepare structural calculations for the project (as applicable).
- Prepare unchecked project plans: Plans will be limited to 11x17 detail sheets including generic mitigation details, summary table of location and quantity of

mitigation, and photos showing primary mitigation locations for identification in the field. City will provide location drawings of repair sites.

- Prepare Draft Technical Specifications in accordance with 2015 edition of the Caltrans Standard Specifications, and Standard Special Provisions. City will prepare upfront "boiler plate" specifications and compile with technical specifications.
- Prepare Engineer's Estimate of probable construction costs.

Deliverables:

- Five (5) sets of 11x17 plans on bond
- Five (5) sets of Technical Specifications
- Five (5) sets of Engineer's Estimate of construction costs
- One (1) electronic set of deliverables noted above in PDF file format

Task 2. 100% PS&E SUBMITTAL

The 100% PS&E submittal tasks will include in-house quality control review, finalization of mitigation design, and preparation of 100% PS&E documents.

2.1 Independent Check

 Conduct in-house quality control reviews of 65% PS&E documents by an independent in-house design team concurrent with CITY, and other approving agency reviews.

2.2 100% PS&E Submittal

- Respond to comments from the CITY, other approving agencies, and the independent design checker. Agreed-upon revisions shall be made to the 65% PS&E submittal as applicable.
- Submit the 11x17 plans, specifications and estimates to the CITY for final approval.

Deliverables:

- Five (5) sets of 11x17 plans on bond
- Five (5) sets of Technical Specifications
- Five (5) sets of Engineer's Estimate of construction costs
- One (1) electronic set of deliverables noted above in PDF file format

Task 3. FINAL PS&E Submittal

The Final PS&E submittal tasks will include submittal of construction ready bid documents.

3.1 Final Construction Contract Document Submittal

• After receipt of final approval, submit final documents (project plans, specifications, estimates) to the CITY for use in administering the contract.



Deliverables:

- One (1) 11x17 set of original, signed and stamped, reproducible plans on bond
- One (1) photo-ready set of Technical Specifications
- One (1) photo-ready set of Engineer's Estimate of construction costs
- One (1) electronic set of deliverables noted above in PDF file format

Task 4. BIDDING PHASE SERVICES

Bidding phase services shall include assistance in the bidding, clarifying the contract documents and preparing addendums to the bid documents.

4.1 Preconstruction bidding

- Assist the CITY as requested during the bidding
- Provide consultation, interpretation and revisions of the construction documents as required by the CITY

Deliverables:

- One (1) set of written responses to CITY requests for clarification
- One (1) set of photo-ready construction document revisions as required by the CITY

Task 5. CONSTRUCTION SUPPORT SERVICES PHASE

The construction support services shall include administration, attending field meetings, reviewing contractor submittals, clarifying the contract documents, preparing change orders, and preparation of record drawings.

6.1 Pre-Construction Support Services

- Attend pre-construction meeting with CITY staff and Contractor.
- During the pre-construction meeting visit the structures to mark the damaged areas that will require repair.

6.2 During Construction Support Services

- Conduct periodic site visits (3 site visits assumed)
- Assist CITY by checking shop drawings, and reviewing materials submittals in accordance with the plans and specifications.
- Assist the CITY during construction by clarifying and interpreting contract documents in accordance with the project plans and specifications.
- Provide advice and technical support for construction change orders, or claims.

6.3 Post-Construction Support Services

 Prepare record drawings showing changes made during the construction period, based on one master set of redlined prints prepared by the Contractor or City Resident Engineer.



• Close and archive project records

Deliverables:

- One (1) set of written responses to CITY requests for clarification
- One (1) set of photo-ready construction document revisions as required by the CITY
- One (1) set of 11x17 original, signed and stamped, reproducible record drawings
- One (1) CD of record drawings(.dwg) in native and PDF file format

ADDITIONAL SERVICES

Although the CONSULTANT has tried to be comprehensive in developing this scope of work, there may be unforeseen issues, which will necessitate additional services beyond the scope of work described herein. Specific items described in the engineering services may require additional investigations, calculations, plans, or measures than what was scoped in this proposal. It is recommended that the CITY include some budget in the contract to account for unexpected additional services.

ASSUMPTIONS

- a) Project plans shall be prepared in accordance with Caltrans standard format and may reference applicable sheets from the 2015 Caltrans Standard plans.
- b) Project plans shall be prepared in AutoCAD Release 2017.
- c) Technical Specifications shall be prepared in accordance with Caltrans Standard Special Provision format and shall reference the 2015 Caltrans Standard Specifications. Consultant shall be responsible for Technical Specification. CITY shall be responsible for preparation of Boiler Plate Specifications including proposal documents.
- d) Project plans and Technical Specifications shall be prepared in Imperial (English) units of measure.
- e) The project specifications will include an appendix with photos of the damage documented for each structure included in the scope of the project.
- f) Project Plans will include the following sheets and information:
 - A Title Sheet. The title sheet will include a drawing list, list of structures included within the scope of the project, a location map, a legend, a set of abbreviations and a short project summary.
 - Sheets for each material, such as concrete, steel and timber, with a table summarizing the type of damage for each structure and referencing the appropriate repair detail required.
 - Sheets including repair details for each material type included in the project.
- g) All work within the limits of the existing creeks is assumed to be covered under existing maintenance permits. CITY will provide CEQA documentation as required.
- h) Permits and approvals are not included in the scope of services contained here-in.

- i) The Contractor as part of the project shall provide pre-construction exclusion of swallows, raptors and other migratory birds, as applicable. The Contractor Notice to Proceed shall be provided by the CITY prior to nesting season of the species anticipated to occur on site (if any).
- j) Construction is anticipated to occur within one spring/summer season.
- k) CITY shall perform Construction Management and Inspection Services. Biggs Cardosa Associates, Inc can provide these services on an as needed basis as Extra Work.
- 1) The 2013 and 2018 reports by BCA both recommend the construction of a new sidewalk above Structure #4 Mountain View Avenue Concrete Box Culvert. There is presently a construction project underway adjacent to Structure #4. BCA assumes the new sidewalk will be constructed as part of the on-going construction project adjacent to Structure #4.
- m) Repairs to Structures #25 Corrugated Metal Pipe Culverts at First Tee and #27 Pedestrian Bridge at Fifth Fairway are not included as part of this proposal. Due to the nature of the recommended mitigations, BCA assumes that Structures #25 and #27 will be part of a separate project.

Biggs Cardosa Associates, Inc. proposes to provide the Design Engineering scope of services outlined in this proposal as Task 0 through 3, on a per diem basis as follows:

- \$35,716 Direct Labor
- <u>\$ 784 Expenses</u>
- \$36,500 Task 0-3 Total

Biggs Cardosa Associates, Inc. proposes to provide the Construction Support scope of services outlined in this proposal as Task 4 and 5, on a per diem basis as follows:

- \$ 8,316 Direct Labor
- \$ 184 Expenses
- \$ 8,500 Task 4-5 Total

Should you have any questions, please give me a call.

Sincerely,

BIGGS CARLOSA ASSOCIATES, INC.

Anthony P. Notaro

Associate