

**AMENDMENT No 1 TO AGREEMENT
FOR CONSULTATION AND OTHER SERVICES**

This Amendment is entered into this 17th day of March, 2015, by and between the City of Milpitas, a municipal corporation of the State of California (hereafter referred to as "CITY") and Biggs Cardosa Associates Inc., a California Corporation (hereafter referred to as "CONSULTANT").

RECITALS

WHEREAS, the parties entered into an agreement on September 4, 2014 for professional thirty percent (30%) design services for Lower Penitencia Creek Bridge in the amount of Nineteen Thousand Three Hundred Dollars (\$19,300.00) ("Agreement"), and

WHEREAS, the parties desire to amend the Agreement to allow CONSULTANT to provide final bridge design services including engineering, bidding, construction support, and special inspection services, for Project No. 2005 Lower Penitencia Creek Pedestrian Bridge.

NOW THEREFORE, in consideration of the mutual covenants and conditions herein contained, the parties agree to amend the Agreement as follows:

1. Section 1.1, entitled "Term of Services" of the Agreement is amended in its entirety to read as follows:

"Term of Services. The term of this Agreement shall begin on the date first noted above and shall end on March 18, 2016, the date of completion specified in Exhibit A and Exhibit A-1, and Consultant shall complete all the work described in Exhibit A and Exhibit A-1 prior to that date, unless the term of the Agreement is otherwise terminated or extended, as provided for in Section 8. The time provided to Consultant to complete the services required by this Agreement shall not affect the City's right to terminate the Agreement, as provided for in Section 8."

2. Section 2, entitled "Compensation" of the Agreement is amended in its entirety:

"COMPENSATION. City hereby agrees to pay Consultant an amount not to exceed One Hundred and Eighty-Four Thousand Five Hundred Dollars (\$184,500.00) based on time and materials for all services to be performed and reimbursable costs incurred under this Agreement. City shall pay Consultant for services rendered pursuant to this Agreement at the time and in the manner set forth herein. The payments specified below shall be the only payments from City to Consultant for services rendered pursuant to this Agreement. Consultant shall submit all invoices to City in the manner specified herein. Except as specifically authorized by City, Consultant shall not bill City for duplicate services performed by more than one person.

Consultant and City acknowledge and agree that compensation paid by City to Consultant under this Agreement is based upon Consultant's estimated costs of providing the services required hereunder, including salaries and benefits of employees and subcontractors of Consultant. Hourly rates for personnel performing services shall be as shown in Exhibit B. Consequently, the parties further agree that compensation hereunder is intended to include the costs of contributions to any pensions and/or annuities to which Consultant and its employees, agents, and subcontractors may be eligible. City therefore has no responsibility for such contributions beyond compensation required under this Agreement."

3. Exhibit A, entitled "Scope of Services" of the Agreement is amended to include the additional Scope of Services set forth in the attached Exhibit A-1, incorporated fully herein by reference.
4. Exhibit B, entitled "Compensation Schedule" of the Agreement is amended to include the additional compensation set forth in the attached Exhibit B-1, incorporated fully herein by reference.
5. The Consultant agrees to maintain and pay for all insurance policies as stated in Section 4, entitled "Insurance Requirements" of the Agreement dated **September 4, 2015**, between **Biggs Cardosa Associates, Inc.** and the City of Milpitas. The Consultant shall provide the City with renewal certificates of the current policies upon the expiration of the current policy.

5. All other provisions of the Agreement shall remain in full force and effect.

This Amendment is executed as of the date written on Page 1.

APPROVED BY:

CITY OF MILPITAS

CONSULTANT

Thomas C. Williams, City Manager

Biggs Cardoso Associates, Inc.

Steven Machida, Public Works Director/
City Engineer as to work specifics

APPROVED AS TO FORM:

Michael J. Ogaz, City Attorney

**EXHIBIT A-1
ADDITIONAL SCOPE OF SERVICES**

PROJECT DESCRIPTION

The City of Milpitas is working with private developers to construct housing along McCandless Drive. As part of this development the City is also working with the developers to improve portions of the trail along Lower Penitencia Creek, to the west of McCandless Drive. As part of these trail improvements, a pedestrian bridge will be provided at the junction of the East Penitencia Channel and Lower Penitencia Creek, connecting the multi-use trail on the north bank of the East Penitencia Channel to the Harmony Project on the south bank of the channel.

The Scope of Design Services provided below details the work required for the design and development of construction documents for the pedestrian bridge and trail approaches.

SCOPE OF DESIGN SERVICES

Biggs Cardosa Associates' approach for pedestrian bridge design work for the Lower Penitencia Creek Trail Improvements is as follows:

- Task 1: Project Management
 - Task 2: Preliminary Engineering
 - Task 3: Final Design
 - Task 4: Bidding Support Services
 - Task 5: Construction Support Services
 - Task 6: Special Inspection Services
- Assumptions and Exclusions

TASK 1: PROJECT MANAGEMENT

Project Management includes the supervision and scheduling of project staff, review of work prepared by staff and subconsultants, project coordination, client liaison and the monitoring of the schedule and the budget. Also included in this Task is attendance at meetings with the staff of the City of Milpitas to receive input and discuss and review the project during its critical design periods.

1.1 PROJECT ADMINISTRATION:

Supervise, coordinate, and monitor design for conformance with Caltrans standards and policies. Prepare monthly progress reports and invoices. Employ and monitor subconsultants. Coordinate Consultant's work with the City's work. Close and archive the project records at the end of the project.

1.2 PROJECT INITIATION:

Upon receipt of Notice to Proceed, a project kick-off meeting will be held to finalize the project scope, the project approach, the goals and the schedule. Items to be addressed include a review of the key issues associated with the project, a description and clarification of the approach required to respond to these issues, and the verification of the project milestone dates. Items included, but are not limited to, site layout, SCVWD concerns, storm water management, hydrology concerns, and bridge approach conforms. It is assumed that all pertinent City Departments will be present at the meeting, as well as SCVWD. Responses to

all critical questions that affect bridge layout and design will be required prior to beginning 65% Design.

1.3 DESIGN REVIEW AND COORDINATION MEETINGS:

To facilitate comprehensive input from the City during the critical design periods, the Consultant's Project Manager and selected Team Members will attend up to 2 coordination meetings with the City staff members.

1.4 DIRECT COSTS:

Direct costs such as plotting and reproduction work, other than that required for the Consultant's in house use, and delivery services and other expenses will be billed per the attached Charge Rate Schedule. The Direct costs budget for the project is indicated on the attached fee sheet.

Task 1 Deliverables: Attend Kickoff Meeting
Attend up to 2 Project Design and Coordination Meetings
Project Design Schedule
Project Administration and Design Team Management
Monthly Progress Reports

TASK 2: PRELIMINARY ENGINEERING

2.1 DATA COLLECTION AND SITE VISIT

Consultant will conduct a site visit and note field information relevant for bridge design.

2.2 SUPPLEMENTAL / TOPO SURVEY (RJA)

Consultant will provide supplemental ground survey and data reduction to augment and verify existing topography survey provided by City. Consultant will locate top of creek slopes, existing conforms, fence lines, existing landscape areas, at the District 2 and Harmony projects conforms, and from McCandless Drive to the proposed bridge location.

2.3 GEOTECHNICAL INVESTIGATION (Engeo)

The Consultant will provide a geotechnical exploration, soils analysis and foundation design recommendations for the proposed pedestrian bridge.

A. Geotechnical Exploration:

The Consultant will obtain Santa Clara Valley Water District (SCVWD) drilling and encroachment permits prior to performing our field exploration.

Two cone penetration test (CPT) probes will be advanced to depths of up to approximately 60 feet in locations near the north and south bridge abutments. The empirical data will be reviewed in the field and a direct push probe will be advanced adjacent to each CPT probe to collect soil samples at selected depths as needed. Soil samples will be taken for visual classification and laboratory testing. Resulting holes will be backfilled in accordance with Santa Clara Valley Water District (SCVWD) requirements.

Soil samples will be re-examined in the laboratory to verify field classifications and will be tested for moisture content, Plasticity Index, gradation, corrosion, and other physical properties as appropriate.

Based on the geological and geotechnical data gathered, a geotechnical exploration report will be prepared, to address the following:

- Suitability of the site for the proposed pedestrian bridge.
- Physical properties of the typical soils encountered.
- Assessment of geological/geotechnical hazards at the subject site, including compressible soils and liquefiable soils, as appropriate.
- Foundation recommendations for the bridge abutments.
- Caltrans ARS curves.
- L-pile input information and group effect considerations.
- Recommendations for wing wall design.

B. Design Consultation and Plan Review:

Consultation on foundation design and soils issues will be provided throughout the design process, as well as response to comments and questions. Grading and improvement plans, as well as foundation plans and calculations will be reviewed for conformance with the geotechnical design recommendations.

2.4 HYDRAULIC ANALYSIS (Schaaf & Wheeler)

The Consultant will evaluate the potential hydraulic impact that might be caused by the construction of the proposed pedestrian bridge over the East Penitencia Channel at its confluence with Lower Penitencia Creek. Generally the 100-year water surface profiles in and overflows from Lower Penitencia Creek and East Penitencia Channel will be evaluated to determine whether bridge construction (particularly the abutments) causes significant changes in either parameter. This work will include:

A. Coordination with SCVWD:

The evaluation will be coordinated with the design team and representatives from Santa Clara Valley Water District, which has jurisdiction over the potentially affected waterways. This coordination includes one meeting and one site visit.

B. Hydraulic Modeling Evaluation:

HEC-RAS and/or FLO-2D models completed under separate contract for the Silicon Valley Berryessa Extension will be used to evaluate the significance of changes in water surface elevations, average flow velocities, and channel overbanking caused by proposed bridge construction.

C. Existing Erosion Protection:

Recommendation design measures for the replacement and/or extension of existing sac-crete erosion protection within the channel near the bridge site.

D. Technical Memorandum

A technical memorandum documenting the findings will be provided.

2.5 ADJACENT PROPERTY OWNER COORDINATION (RJA)

Consultant will assist the City in coordination with the adjacent property owners. Scope includes up to two meetings with the adjacent owners (both owners present in the same meeting). Consultant will prepare two exhibits for each meeting showing 1) the permanent impacts and/or improvements needed to fit the proposed bridge at each of the respective property conforms and 2) the temporary construction impacts during construction (example, showing how equipment will access in or out of the site).

2.6 CONSTRUCTION STAGING AREA EXHIBIT (RJA)

Consultant will assist the City in determining a construction staging site and will develop a staging exhibit, based on the meetings and coordination discussed in the task above. It should be noted that successful completion of this task is highly dependent on City coordination and adjacent owner's cooperation.

Task 2 Deliverables:

Site Visit
Supplemental Topographic Survey
Updated Project Base Map
Geotechnical Investigation
Draft and Final Foundation Reports
Foundation Review Letter
Hydraulic Analysis
Hydraulics Evaluation Technical Memorandum
Coordination with Adjacent Property Owners, Attend up to 2 Meetings
Construction Staging Area Exhibit

TASK 3: FINAL DESIGN

3.1 CONSTRUCTION DOCUMENTS (BCA and RJA)

Based on the approved 35% Pedestrian Bridge Plans, completed in December 2014, the design team will prepare the Construction Documents package.

The scope and fee noted below for the Final Design are based on the assumption of a simple span structure approximately 65-feet long, with a 10-foot clear width prefabricated steel truss superstructure supported on concrete abutments and cast-in-drilled hole piles. It is also assumed that the bridge will not carry any utilities, and that no utility relocation will be needed for the project. The prefabricated steel truss will be constructed of painted or weathering steel and will have a concrete deck for ease of maintenance.

The Construction Documents package for the pedestrian bridge will include specifications and construction plans and will conform to City and AASHTO Standards. Final design calculations will be prepared for the bridge structure and will be submitted along with the plans and specifications, for City staff review. An opinion of probable construction cost for the bridge structure will also be provided.

A. Design Criteria for Bridge Design:

Final pedestrian/bicycle bridge design will be performed in accordance with the AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, as well as applicable AASHTO Bridge Design Specifications with California Amendments, and other Caltrans Design Manuals. Design will be based on the "Load and Resistance Factor Design" method with design live loads of 90 psf for pedestrians, and a 10,000 pound live load for a maintenance or safety vehicle. Seismic design will be performed in accordance with current Caltrans Seismic Design Criteria.

B. Approach Trail Design:

Design of the trail approaches to the bridge will be in accordance with City Standards, AASHTO and other applicable requirements, and Caltrans Standard Specifications. Final bridge profile, alignment, and grading plans will be developed, as well as new/existing trail conformance details, erosion control details, and details for replacement in-kind of existing structures and landscaping, as required.

C. Plan Sheets and Details:

The plan sheets will be prepared in AutoCAD. Plans will be prepared in English units and will be consistent with Caltrans Standard Plans. All plans will be signed by the civil engineer or structural engineer (registered in the State of California) in responsible charge of the design. Three submittals will be made during the preparation of the Construction Documents, when the documents are 65% complete, 95% complete and when the Final documents are complete. Each submittal will incorporate the review comments from the previous submittal by the design team, City staff and other reviewing agencies.

D. Technical Specifications (Special Provisions):

Technical Specifications (Special Provisions) for the specific items of bridge construction included in the Construction Documents will be edited to suit the project using Caltrans Standard Special Provisions 2010, and will reference the Caltrans Standard Specifications 2010. A performance specification for the manufacture of the prefabricated bridge structure will also be included. If needed, applicable City Standards will be incorporated into the document. It is assumed that the specifications for bridge construction will be provided in book format.

E. Opinion of Probable Construction Cost (Estimate):

An opinion of probable construction cost for the bridge will be provided at each final design submittal stage indicated below. Caltrans standard bid item numbers and descriptions will be used wherever possible. Estimates of unit costs will be based on current Caltrans construction cost data, as well as current bid data for similar projects if available.

F. Quality Assurance Review:

An internal quality assurance review of the bridge plans, specifications, and estimate will be conducted concurrently with review of the 65% design submittal by the City and other agencies. Because of this, the 65% design submittal is noted as “unchecked” and the 95% and Final design submittals as “checked”. The Consultant’s quality assurance program provides for independent checking of individual structural design tasks, as well as an independent review by experienced senior staff. The purpose of this review is to provide oversight to specific bridge design details by professionals who are not closely involved in the design, and to review the constructability, cost-effectiveness and completeness of design features relative to the normal standard of professional care

3.2 65% DESIGN SUBMITTAL (65% PS&E – UNCHECKED)

A. 65% Complete Plans:

Based on comments received from the preliminary design submittal, the pedestrian bridge design will be advanced to the point that all major design issues and solutions are represented in the plan documents. Minor details may be missing from the bridge plan set at this milestone, but all plan sheets will be included in this submittal package. BCA will work with the City to resolve any remaining conflicts between the comments of different reviewers.

B. 65% Complete Technical Specifications (Special Provisions):

A draft of the pedestrian/bicycle bridge technical specifications sections to be included for the final project specifications will be provided with the submittal. The technical specifications will reference City or Caltrans standard specifications sections for the various items of work.

C. 65% Opinion of Probable Construction Cost:

The Preliminary Opinion of Probable Bridge Construction Cost will be updated to reflect the refinements from the Preliminary Design to the Unchecked Design Submittal.

- D. **Response to Comments Memorandum:**
A memo with “response to comments” received from the Preliminary Design Submittal will be provided.
- E. **Building Department Permit Package:**
Consultant will assist the City with preparation of the Building Permit submittal package, to include plans, specifications, and structural calculations as needed.

3.3 95% DESIGN SUBMITTAL (95% PS&E – CHECKED)

- A. **Quality Assurance Review:**
As noted above, an internal quality assurance review of the bridge plans, specifications, and estimate will be conducted concurrently with review of the 65% Submittal by the City and other agencies. This quality assurance review includes independent checking of individual design calculations and details, as well as an independent review by experienced senior staff. The purpose of this review is to provide oversight to specific project details by professionals who are not closely involved in the design, and to review the constructability, cost-effectiveness and completeness of design features relative to the normal standard of professional care. ***This independent check will include a red, green and yellow check of the structural calculations and plans.***
- B. **95% Complete Plans:**
Checked Plans will be prepared and submitted to the City and other agencies for final review and comment. Agencies shall thoroughly review the details of the project. The Consultant will work with the City and other agencies to resolve any conflicts between the comments of different reviewers.
- C. **95% Complete Technical Specifications (Special Provisions):**
The technical specifications will be updated using City and Caltrans Standard Specifications.
- D. **95% Opinion of Probable Construction Cost:**
The 65% Opinion of Probable Bridge Construction Cost will be updated for use in the Bid Documents.
- E. **Response to Comments Memorandum:**
A memo with “response to comments” received from the 65% Design Submittal will be provided.

3.4 FINAL DESIGN SUBMITTAL (100%PS&E and BID SET)

- A. **100% Final Plans – Draft Bid Set Documents:**
After agency review of the 95% Design Submittal, the Consultant will prepare the Final Contract Documents and provide the City and other agencies the opportunity to review the completed Bid Set Documents and direct minor revisions.
- B. **Final Bid Set Documents:**
After City review of the draft Bid Set Documents, any minor final revisions will be incorporated, and Final Bid Set Drawings and Specifications (Special Provisions) prepared in accordance with the City’s instructions. Final bid documents will be submitted for signature.
- C. **Memorandum: Response to Comments:**
A memo with “response to comments” received from the 95% Design Submittal will be provided.

Task 3 Deliverables: 65% - 100% Civil and Structural Design
Quality Assurance Review of 65% Structural Plans and Specifications
Assistance with Preparation of Building Permit Submittal Package
65%, 95%, 100% and Bid Plan Sets in PDF Format
65%, 95%, and 100% Opinions of Probable Bridge Construction Costs
65%, 95%, 100% and Bid Specifications in Word Format
Response to 35%, 65% and 95% Comments Memos in Word Format
CD Archive of Project Electronic Files

TASK 4: BIDDING SUPPORT SERVICES (BCA and RJA)

At this time, it has not yet been determined whether the City will be putting out the project for public bidding, or whether one of the adjacent housing developers will be building the bridge and trail conforms. For the purposes of this proposal, it is assumed that the City will advertise the project for public bidding, and that the Consultant will incorporate the City's boilerplate specifications and bidding forms into the specifications document.

It is assumed that the City will advertise the project for bidding and distribute the plans to prospective bidders, and that the City will be designated to receive contractor inquiries. The Consultant will assist City as requested during the bidding. The work may include answering questions, providing consultation and interpretation of the pedestrian/bicycle bridge construction documents, and assisting the City in preparation of addenda to the PS&E during the advertisement period. Attendance at a pre-bid meeting will also be provided, if requested.

Task 4 Deliverables: Incorporate City Boilerplate Specifications into Specifications Document
Incorporate City Bid Forms into Specifications or Bid Book Document
Attend Pre-Bid Meeting
Assist City in Responding to Bidder Inquiries
Assist City in Preparation of up to 2 Addenda

TASK 5: CONSTRUCTION SUPPORT SERVICES (BCA and RJA)

The Consultant will perform the following the scope for pedestrian bridge construction support work:

- Attend preconstruction meeting.
- Review shop drawings and submittals.
- Review prefabricated bridge shop drawings and calculations.
- Answer clarification questions pertaining to the plans and special provisions, if needed.
- Attend periodic field visits, as required, to assist in the resolution of construction issues (four site visits assumed).
- Review contractor RFI's (Request for Information) and provide written response.
- Review construction inspection reports prepared by the Inspector.
- Prepare record bridge drawings for the City. The basis of the revisions shown on the record plans will be a red mark construction set of plans

provided by the project Resident Engineer. These construction red mark plans shall show all revisions that were made during construction.

Task 5 Deliverables: Attend Preconstruction Meeting
Review Shop Drawings and Submittals
Review Prefabricated Bridge Drawings and Calculations
Respond to Contractor RFI's and Answer Questions
Provide up to 4 Field Visits
Prepare Record Bridge Drawings

TASK 6: SPECIAL INSPECTION SERVICES (BCA and ENGeo)

Construction inspections will be conducted in general conformance with the guidelines outlined in the Caltrans Construction Records and Procedures Manual, and other relevant Caltrans construction and inspection manuals. The structural inspector will observe the construction work for conformance with the construction documents, and will perform required inspections as required by the applicable Caltrans guidelines.

The following is the anticipated scope of services that would require inspection on the pedestrian bridge structure, consistent with the Caltrans CRAP manual and relevant construction and inspection manuals. A detailed scope of work is provided below and a detailed breakdown of estimated inspection hours and costs is attached.

Required Inspections

Pile Construction

- Observation of all pile drilling and placement activities.

Reinforcing Steel

- Verify that mill certificates show reinforcing steel to be in compliance with project specifications.
- Provide periodic inspection of the placement of all reinforcing steel.

Concrete

- Review concrete prequalification for concrete designated by compressive strength of 3600 psi or greater. This is to include witness of trial batch and resultant concrete cylinder testing or review of certified test data.
- Provide continuous inspection during the placement of all concrete, including testing of slump and concrete temperature, and preparation of compressive test cylinders (minimum of three 6x12 cylinders for every concrete placement).
- Provide periodic inspection during the installation and removal of concrete formwork.
- Verify that deck concrete is cured per the project specifications.

Wall Backfill

- Provide continuous inspection and compaction testing during abutment wall backfilling operations.

Prefabricated Bridge

- Provide continuous inspection during the placement of grout for abutment anchor bolts.
- Provide continuous inspection during prefabricated bridge erection.

Steel Railing

- Provide periodic inspection during the installation of steel railing posts in the wingwalls.

Meetings

- Attend pre-construction meeting.
- Attend meetings onsite as needed.

Reports

- Prepare appropriate inspection reports.
- Perform final walk-through and generate punchlist items.

Duties and Responsibilities of the Structural Inspector

- The structural inspector will inspect the work assigned for conformance with the applicable design drawings and specifications.
- The structural inspector will furnish inspection reports to the City or the City's designated representative, and the structural engineer of record. All discrepancies will be brought to the immediate attention of the contractor for correction, then, if uncorrected, to the proper design authority and to the City's representative.
- The structural inspector shall submit a final signed report stating whether the work requiring bridge inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications.

Task 6 Deliverables: Attend Preconstruction Meeting
Structural and Geotechnical Inspections and Testing
Attend Meetings On-Site as Needed
Inspection Reports
Final Walk Through and Punchlist
Final Acceptance Report

ASSUMPTIONS AND EXCLUSIONS

Preliminary Engineering, Final Design, Bidding and Construction Support Services

- The project will be developed as one complete project without phasing or separate plan packages, and the work scoped herein will be undertaken in 2015 and 2016.
- All plans will be prepared in accordance with City/Caltrans (2010) drafting standards, format, and conventions.
- Special Provisions for bridge construction will be prepared based on Caltrans 2010 Standard Specifications and Special Provisions, and will be in book format.
- Review will be limited to one round for each design submittal, and comments on the plans, technical provisions, and opinion of estimated construction cost will be provided in the form of one consistent set of mark ups and/or written comments.
- Design or detailing of retaining walls or sound walls is not included.
- Electrical and mechanical engineering services are not included.
- Utility coordination and design services are not included.
- Traffic studies, reports and traffic signal design are excluded.
- Construction traffic control plans are excluded.

- It is assumed that the resolved boundaries work done previously for the trail and the two development properties will be sufficient for this project.
- Provision of title reports is excluded.
- Plats and legal descriptions for easements (temporary or permanent) are excluded. These may be provided as additional services if requested, once the owners and agencies agree on the terms and conditions. It is estimated that one permanent easement and potentially two temporary construction easements may be needed. Cost of preparation for plats and legal descriptions is estimated to be approximately \$1200 each.
- Development, processing or recording of any exhibits, plats or maps of any kind is excluded. These may be provided as additional services if requested.
- Right-of-way acquisition services are excluded.
- Services for obtaining environmental approval and permits are not included, nor are mitigation design services.
- Construction staking services are excluded.
- Post construction BMPS and SWCP are excluded. These may be provided as additional services if requested.
- NPDES preparation or processing, including NOI and SWPPP or any related items are excluded. These may be provided as additional services if requested.
- Field verification of mark ups for record drawings is excluded.
- Preparation of up to two addenda during bidding period services are included.
- Please see the detailed scope above for additional assumptions.

Special Inspection Services

- If the BCA team is not hired to perform structural inspections, structural observation services will be required to be performed by the Engineer of Record for certain critical elements of the bridge construction.
- No welding expected or accounted for in this proposal.
- No utilities or utility inspection expected or accounted for in this proposal.
- The bridge construction is expected to be completed by December 31, 2016.
- It is our understanding that the above project is subject to prevailing wages, and the attached charge rate schedule reflects this assumption.
- The fee provided for inspection services represents our best estimate of the costs involved. The inspection service costs are highly dependent on the construction schedule, the Contractor's operations, the Contractor's proficiency, and the Contractor's performance. For these reasons, we recommend that the City establish a contingency budget for structural inspection. This budget can then be utilized if more inspection effort is required.
- The Consultant shall have no responsibility for the means, methods, techniques, sequences or procedures selected by the Contractor, or for the Contractor's safety precautions and programs, nor failure by the Contractor to comply with any laws or regulations relating to the performance or furnishing of the work by the Contractor.
- The Consultant makes no guarantees for and shall have no authority or control over the Contractor's performance or failure to perform the work in accordance with the contract documents.

Please refer to the following pages for our hours and fee proposal for this project.

Exhibit " B - Amendment 1"

ESTIMATED HOURS AND COST FOR PEDESTRIAN BRIDGE DESIGN SERVICES: CITY OF MILPITAS DISTRICT 2 TRAIL IMPROVEMENTS AT LOWER PENITENCIA CREEK								
TASK	BIGGS CARDOSA ASSOCIATES - Prime Consultant						Total BCA Hours	Total Dollars
	Principal PM	Engineering Manager	Senior Engineer	Project Engineer	Senior CADD Drafters	Secretarial		
Rate	\$200.00	\$150.00	\$138.00	\$124.00	\$115.00	\$62.00		
TASK 1: PROJECT MANAGEMENT	13	29	88	24	0	0	154	\$22,863
Project Administration	4	8	40				52	\$7,760
Coordination and Design Meetings with Design Team		12	24	13			49	\$6,968
Kickoff Meeting and Design Review Meetings with City	9	9	24	12			64	\$8,443
TASK 2: PRELIMINARY ENGINEERING	8	9	28	4	0	0	49	\$7,869
Site Visits			4	4			8	\$1,848
Coordination with Civil Engineer for Field Survey and Profile			9				9	\$1,104
Coordination with Geotechnical Engineer for Foundation Requirements			9				9	\$1,104
Coordination with Hydrologist for Hydraulic Analysis			4				4	\$552
TASK 3: FINAL DESIGN	6	9	44	94	52	0	159	\$24,859
Preparation of 65% Design Calculations			4	30			34	\$4,538
Preparation of 65% Plans			4	24	40		68	\$8,848
Preparation of 65% Special Provisions and Estimate		1	3	4			13	\$1,755
QA/QC Review of 65% P&E		8	9				17	\$2,344
Preparation of 85% Design Calculations			4	16			20	\$2,536
Preparation of 85% Plans			4	9	12		25	\$2,900
Preparation of 85% Special Provisions and Estimate			4	2			6	\$800
Preparation of 100% and Bid Set Plans			4	4			8	\$1,048
Preparation of 100% and Bid Set Special Provisions and Estimate			4	4			8	\$1,048
TASK 4: BIDDING SUPPORT SERVICES	6	2	18	16	0	0	42	\$6,314
Bidding Support Services		2	4	16			18	\$2,378
Assembly of Complete Special Provisions Document and Bid Forms			12				12	\$1,626
TASK 5: CONSTRUCTION SUPPORT SERVICES	6	4	14	18	0	0	42	\$6,768
Construction Support Services			4	14			18	\$2,760
TOTAL HOURS AND COSTS								
Subtotal Hours	13	44	198	188	52	0	475	
TOTAL HOURS							475	
TOTAL CONSULTANT DESIGN FEE	\$3,250	\$6,826	\$26,208	\$23,328	\$5,874	\$0		\$64,486
A. Biggs Cardosa Associates								
Total BCA Design Costs								\$64,486
Project Escalation (5% per year) 1 year								\$3,224
A. SUBTOTAL BIGGS CARDOSA ASSOCIATES DESIGN								\$67,710
B. Structural Special Inspection (TASK 6)								
B. TOTAL CONSULTANT INSPECTION FEE								\$22,668
C. Subconsultants¹								
RAM								\$48,443
EMECO								\$26,872
SCHAUF & WHEELER								\$5,506
C. SUBTOTAL SUBCONSULTANTS								\$80,821
D. Direct Costs								
Plots and Reproduction								\$1,228
Delivery Services and Misc.								\$1,838
D. SUBTOTAL DIRECT COSTS								\$3,256
TOTALS								
A+B								\$96,378
C+D								\$84,122
TOTAL NOT TO EXCEED								\$184,500

1) Includes 30% to cover efforts required for the handling and processing by Biggs Cardosa Associates

BIGGS CARDOSA ASSOCIATES Lower Penitencia Pedestrian Bridge - STRUCTURAL INSPECTION SERVICES	Associate	Senior Engineer	Inspector III	Clerical	Total Hours	Total Budget	# Concrete Cylinders	# Masonry Prisms
	Billing Rate	\$180	\$134	\$131	\$82		Direct Costs	
Management & administration	16	6		12	34	\$4,668		
Abut 1 piles drilling		2	8		10	\$1,316		
Abut 1 piles rebar		1	6		7	\$920		
Abut 1 piles concrete pour		2	7		9	\$1,185	4	
Abut 2 piles drilling		2	8		10	\$1,316		
Abut 2 piles rebar		1	6		7	\$920		
Abut 2 piles concrete pour		2	7		9	\$1,185	4	
Abut 1 wall & wingwalls rebar		1	4		5	\$658		
Abut 1 wall & wingwalls concrete pour		2	6		8	\$1,054	4	
Abut 2 wall & wingwalls rebar		1	4		5	\$658		
Abut 2 wall & wingwalls concrete pour		2	6		8	\$1,054	4	
Abut 1 and Abut 2 anchor bolt grouting		1	2		3	\$396		
Prefabricated bridge erection observation		1	6		7	\$920		
Deck rebar		1	4		5	\$658		
Deck concrete pour		2	6		8	\$1,054	4	
Deck concrete cure observation		1	4		5	\$658		
Wingwall railing installation observation		2	6		8	\$1,054		
Develop acceptance punchlist (surface finishes)		3	4		7	\$926		
Final walk-through / Letter of Acceptance		3	6		9	\$1,188		
Total Hours	16	36	100	12	164		20	0
Subtotal	\$2,880	\$4,824	\$13,100	\$984		\$21,788		
DIRECT COSTS (cylinders @ \$40 each & prisms @ \$155 each) + 10% mark-up						\$880		
TOTAL BUDGET						\$22,668		

CHARGE RATE SCHEDULE

Principal	\$205 to 265.00/h
Associate	180.00
Construction Manager	185.00
Engineering Manager	155.00
Senior Structural Representative	160.00
Project Administrator	128.00
Senior Engineer	138.00
Structural Representative	136.00
Project Engineer	124.00
Assistant Structure Representative	114.00
Staff Engineer	112.00
Assistant Engineer	103.00
Junior Engineer	98.00
Senior Computer Drafter	113.00
Computer Drafter	98.00
Junior Computer Drafter	88.00
Secretarial Services	82.00
Subconsultants	Cost Plus 10%
Expenses	Cost Plus 15%
In-House CADD Plots	
Prints	\$0.30/ sq. ft.
Plots	\$1.50/ sq. ft.
Mylar Plots	\$3.00/ sq. ft.

Charge Rates Applicable October 1, 2014 Thru September 30, 2015