

**Amendment to Standard City of San José Consultant Agreement**  
(Capital Projects)

- First**  
 **Second**  
 **Third**

Consultant's Name: BKF Engineers

(CPMS Contract No. N/A)  
(Standard Agreement AC No. 660319)

This Amendment is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2018. The City and Consultant amend the above-referenced agreement as set forth herein.

- 
1. Capitalized words in this Amendment have the same meaning as in the Agreement.
  2. The provisions of this Agreement and any previous amendments not modified by this Amendment remain in full force and effect.
  3. The provisions of this Amendment are effective upon execution of the Amendment by both parties.
- 
4.  **Agreement Term:** Subsection 2 is amended to extend the expiration date from June 30, 2018 to December 31, 2023.
  5.  **Maximum Total Compensation:** Subsection 10.1 is amended to  Increase  Decrease the Maximum Total Compensation from \$991,367 to \$3,671,936.
  6.  **Agreement Section(s):**  
Section(s) is/are amended to read as set forth in Attachment A of the Amendment.
  7.  **Scope of Basic Services – Exhibit A:** The  original  First Revised  Second Revised Exhibit A is amended to read as set forth in the attached  First  Second  Third Revised Exhibit A, which is incorporated by reference into this Amendment.
  8.  **Compensation – Exhibit B:** The  original  First Revised  Second Revised Exhibit B is amended to read as set forth in the attached  First  Second  Third Revised Exhibit B, which is incorporated by reference into this Amendment.
  9.  **Schedule of Performance – Exhibit C:** The  original  First Revised  Second Revised Exhibit C is amended to read as set forth in the attached  First  Second  Third Revised Exhibit C, which is incorporated by reference into this Amendment.
-

CPMS Contract No.: N/A  
Standard Agreement AC No. 660319  
Consultant Name: BKF Engineers

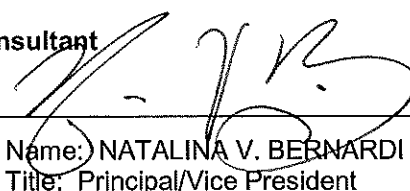
This Amendment is executed by the authorized representatives of the City and Consultant as follows:

**City of San José**

By \_\_\_\_\_

Name: TONI J. TABER  
Title: City Clerk  
Date

**Consultant**

By  \_\_\_\_\_ 6/1/18

Name: NATALINA V. BERNARDI  
Title: Principal/Vice President  
Date

**Approval as to Form (City Attorney):**

**Form Approved by the Office of the City Attorney.**

(Maximum Total Compensation, as amended, is \$100,000 or less, and the provisions of the form are not altered.)

**Approved as to Form:**

\_\_\_\_\_  
JON CALEGARI Date

Deputy City Attorney

**First**

**Second**

**Third**

## **Revised Exhibit A: Scope of Basic Services**

(Capital Project)

This revised Exhibit A is an attachment to the  First  Second  Third amendment to Agreement.

The Consultant shall provide all services and deliverables required by this Revised Exhibit A to the satisfaction of the Director.

---

**General Description of Project for which Consultant will Provide Services:** The Project proposes to extend Charcot Avenue over I-880 from Paragon Drive on the west side of I-880 to the intersection of Silkwood Lane and Old Oakland Road on the east side of I-880 in order to provide east-west vehicular capacity, safe bicycle/pedestrian access.

Consultant shall provide engineering reports, document preparation and bid and construction support necessary for the Plans, Specifications and Estimate (PS&E) and Bidding and Construction phases of project development in accordance with Caltrans Project Development Procedures Manual (PDPM).

More specifically, the Consultant shall provide the following services:

### **1A. Project Management**

Consultant shall manage the Project and Consultant Team including providing the resources to complete the job, monitoring the Project budget and schedule, conducting Project Team Meetings and implementing a QA/QC program acceptable to the City. Consultant will coordinate and include, as necessary, the VTA, Caltrans and regulatory agencies.

Throughout the duration of the Project, Consultant will provide the general project administration and coordinate the design process with the appropriate local, regional, state, and/or federal jurisdictions and the Project team. Consultant keep the City informed by close communications, monthly progress reports and updated Critical Path Method project schedules. Consultant will organize and coordinate trend meetings, design review meetings, comment resolution meetings and other necessary coordination meetings with the City, VTA and Caltrans. For these meetings, Consultant will prepare agendas, meeting minutes, data request logs, action logs and joint resolution reports. Agendas will cover cost, schedule and scope issues and be transmitted one week prior to meetings, and minutes and logs distributed to attendees within two weeks following the meeting.

On a monthly basis, Consultant will review, prepare and submit status on budgets, progress schedule, and performance; and document any changes in design scope, cost or schedule. This information will be summarized in a monthly progress report. Additionally, all documentation related to the Project will be filed and maintained in accordance with the Caltrans Uniform Filing System, if required by the City's Cooperative Agreement with Caltrans.

Consultant will meet with stakeholders to communicate design process. The meetings may be one-on-one or a public community meeting. As a record of the discussion, meeting summaries will be prepared and used for future reference and documentation supporting the PS&E.

If a community meeting is held, it is assumed that the City will provide the notifications, mailings and facility. Consultant will facilitate the presentations by providing a summary of the Project that would be part of a PowerPoint (or similar) presentation and graphic information including clear exhibits to illustrate the Project elements and improvements.

## **1B. Environmental Document**

Consultant will prepare an environmental document to clear the Project. Based on the community outreach that has been conducted, feedback received and direction from the City, the Consultant shall prepare an Initial Study (IS) leading to an Environmental Impact Report (EIR). The preparation of an IS will fulfill the requirements of the California Environmental Quality Act (CEQA). Compliance with the National Environmental Policy Act (NEPA) will not be needed per City direction. The City will be the Lead Agency under CEQA.

## **6. 60% Plans, Specifications and Estimate (PS&E)**

Task 6 will consist of preliminary engineering activities to support the development of the Project plans, determine right-of-way, utility easements, construction quantities, cost estimates and permit requirements for the Project and the continued development of plans, specifications and quantities for the Plans, Specifications and Estimate (PS&E) (60% submittal). The CONSULTANT's activities will include the following:

### **6.1. Encroachment Permit Application**

Consultant will prepare a Caltrans encroachment permit application for submission and processing. The permit will allow for the Consultant and its subconsultants to perform site visits and investigations required to establish the Project's existing conditions and criteria within the Project including the State right-of-way.

It is assumed that City encroachment permits will not be required and that fees for Caltrans encroachments to perform surveys, engineering field investigations and site visits will be waived by Caltrans.

### **6.2. Supplemental Topographic Surveys**

Consultant will provide supplemental topographic surveying services for the Project. Consultant will review the topographic base mapping and perform additional field surveys necessary to complete the design. The surveys will focus on notable features that will be critical to the design development. These surveys will include, but are not limited to cross sections, verifying utilities and drainage facilities, pavement elevations and locations, potholing, boring locations, conforms, vertical clearances, obstructions, trees, lighting fixtures, fences, retaining walls, drainage swales and ditches.

It is assumed that there is no need for traffic control to perform the topographic surveying.

### **6.3. Utility Potholing**

Consultant will perform utility potholing to map the existing utilities in the project area, positively locate utilities that potentially conflict with the proposed improvements and assist with the relocation plans for conflicting utilities. It is assumed that a City encroachment permit will be issued as a no fee permit. The number of potholes to be performed by Consultant is limited to 15.

It is assumed that a City encroachment permit will be issued as a no fee permit and the potholing can be performed no traffic control.

#### 6.4. Geotechnical Work

Consultant will perform geotechnical field investigations and testing as required for the structural, roadway and highway work associated with the Project. Per Caltrans standards, Consultant will provide a Geotechnical Design and Materials Report for the roadway work and retaining walls and a Bridge Foundation Report for the structural improvements. The scope of work for the geotechnical reports are as follows:

##### Foundation Report and Log of Test Borings

Consultant will prepare foundation report and log of test borings for the proposed new Overcrossing structure. The proposed structure is designed as a multi-span structure with four bents and two abutments. For the foundation report and log of test borings, the following will be performed:

- **Research and Data Collection:** Consultant will review readily available geologic and soil literature in the vicinity of the site including review of any as-built drawings and existing Log of Test Borings (LOTB), if any.

**Permits/USA Clearances:** Consultant will comply with the Caltrans Permit requirements and apply for the SCVWD drilling permit. Consultant assumes that a Caltrans will issue a no-fee encroachment permit. City of San Jose will provide no-fee encroachment permit for the traffic control and access to the sites.

- **Field Exploration:** The proposed boring program will include borings for the abutments and one of the bent supports. Cone Penetrometer tests will be conducted in between at bent supports as feasible. The borings and CPTs are as listed in the table below.

| <i>Project Element</i>                   | <i>Number of Borings/CPT</i> | <i>Approximate Depths</i> |
|--|------------------------------|---------------------------|
| Abutments & 1 bent                       | 3                            | 100'                      |
| Bents                                    | 3                            | 100'                      |
| Not all bent supports are being explored |                              |                           |

The boring and CPT locations will depend upon the available access and any boring data from previous studies. We anticipate using a truck mounted hollow stem auger drill rig (or mud-rotary drill rig if needed) for our work. Some traffic control (lane closure) is assumed at this time in areas where necessary such as the CPT locations along the I-880.

Classify and continuously log subsurface soil conditions encountered in each test boring at the time of drilling. Obtain "relatively undisturbed" and bulk samples of substrata from test borings. The borings will be drilled and capped in accordance with the SCVWD permit requirements.

- **Laboratory Testing:** Perform laboratory tests on representative soil samples such as moisture density, unconfined compression, gradation analyses, corrosion tests and Plasticity Index test, as necessary.
- **Engineering Analysis/Evaluation:** Perform engineering analyses and develop design recommendations for the proposed bridge foundation system. Discuss seismic

considerations, evaluate the liquefaction potential and comment on the site soil conditions from this standpoint. Information related to Caltrans Seismic design criteria (SDC v 1.7 - 2010 and updates 2012 version) such as depth to rock like material, etc. will be provided. Information related to the recently revised Seismic design guidelines (2010) and the ARS curves will be provided.

- Prepare Draft Foundation Report: Prepare preliminary recommendations for the proposed bridge foundations including results of the analyses. Using the general plan as a base map, we will provide boring logs using the standard Caltrans LOTB sheets.
- Prepare Final Foundation Report: Prepare final report including design recommendations for the tieback wall based on review comments and any updates subsequent to the draft report preparation.

Geotechnical Design and Materials Report

Consultant will prepare a combined Geotechnical Report for the roadway, embankment, and four retaining walls. For the geotechnical design and materials report (GDMR), the following will be performed:

- Research and Data Collection: Review of additional available geologic and soil literature in the vicinity of the site including review of any as-built drawings.

Permits/USA Clearances: Consultant will comply with local permit requirements. Consultant assumes that a Caltrans will issue a no-fee encroachment permit. Consultant will obtain a SCVWD drilling permit for borings deeper than 45'. We will field locate the borings and call for USA clearance. City of San Jose will provide no-fee encroachment permit for the traffic control and access to the sites.

- Field Exploration: Because of high costs associated with performing field borings, we will plan the borings in a judicious manner at locations that makes most logical senses. Consultant will conduct shallow R value borings to a depth of 5' for the roadway extensions. In addition for the proposed retaining walls that are to be included in the GDMR, we will drill four borings between 60'-80' depth. The boring program is summarized in the table below.

| <i>Project Element</i>                   | <i>Number of Borings/CPT</i> | <i>Approximate Depths</i> |
|--|------------------------------|---------------------------|
| Pavement                                 | 5                            | 5-10'                     |
| Retaining walls, embankments, & pavement | 4                            | 60-80'                    |

The boring locations will depend upon the available access and any boring data from previous studies. Consultant anticipates using a truck mounted auger drill rig (or mud-rotary drill rig if needed) for our work. Some traffic control is assumed in areas where necessary such as the west side of I-880 along Charcot Avenue.

Classify and continuously log subsurface soil conditions encountered in each test boring at the time of drilling. Obtain "relatively undisturbed" and bulk samples of substrata from test borings. The borings will be drilled and capped in accordance with the permit requirements. Generally, the borings are required to be backfilled with cement grout.

- **Laboratory Testing:** Perform laboratory tests on representative soil samples such as moisture and density, unconfined compression, consolidation, gradational analyses, Plasticity Index test, R-value tests, and corrosion tests, as necessary.

**Soils Analysis/Evaluation:** Perform engineering analyses and develop design recommendations for the embankments, and pavement design. Slope stability and settlement evaluation of proposed embankments will also be considered as appropriate. Alternate fill options should be considered to help mitigate the settlement of the embankments.

- **Prepare Draft Geotechnical Design and Materials Report:** Prepare detail report including design recommendations for embankment foundation, retaining walls and pavement sections. GDMR will include information on evaluation of proposed slopes, groundwater conditions, corrosion evaluations, etc. Using the general plan as a base map, Consultant will provide boring logs using the standard Caltrans LOTB sheets. R value borings will be tabulated and no special LOTB will be prepared.
- **Prepare Final Geotechnical Design and Materials Report:** Prepare final report based on review comments and any updates subsequent to the draft report preparation.

#### **6.5. Phase II Site Investigation Report**

Consultant will prepare a work plan and a Health and Safety Plan for CALTRANS' review and approval in order to move forward with the investigations required for the Phase II Site Investigation Report (ISR).

Consultant will obtain the following borings, within a day, to collect soil samples for ADL and TPH testing:

- Advance up 24 borings to 2.5 ft below ground surface
- 3 soil samples per boring (total 72 samples)

Consultant will perform the laboratory analyses on the collected soil samples:

- 60 soil samples for Total Lead
- 12 soil samples for CAM 17 metals
- 30 soil samples for Soluble (WET, WET-DI, or TCLP) Lead
- 24 soil samples for TPHg/BTEX/MTBE
- 24 soil samples for TPHd/mo
- 12 soil samples for Pesticides
- 12 soil samples for Herbicides
- 12 soil samples for pH

Consultant will prepare a Site Investigation Report (Draft and Final) and submit it to CALTRANS for review and approval.

In addition to collect borings and performing testing for ADL and TPH, Consultant will obtain the following borings for Grab-Groundwater Sampling for the bridge structure:

- Advance up 2 borings (one at each abutment) to 20 ft bgs
- 1 grab-groundwater sample per boring (total 2 samples)

Consultant will perform the laboratory analyses on the grab-groundwater sample and incorporate findings into the SIR:

- 2 grab-groundwater samples for CAM 17 Metals
- 2 grab-groundwater samples for TPHg/BTEX/MTBE
- 2 grab-groundwater samples for TPHd/mo
- 2 grab-groundwater samples for VOCs

#### **6.6. Utility Coordination**

Consultant will compile available utility occupation drawings, block maps, and third party utility as-built information of record to supplement the topographic base sheets. Consultant will coordinate with the utility owners to confirm existing disposition, rights and potential relocations. Based on the Project disturbances and existing disposition of utilities, Consultant shall conduct investigations to work with the utility owners to establish the need for and location available for utility relocations. Consultant will:

- Review and update as-built utility information for the Project area
- Request utility mapping from all affected utility owners
- Map the existing utilities
- Identify potential utility conflicts
- Prepare existing utility occupation maps and identify relocation requirements
- Submit utility occupation maps to affected utility owners
- Coordinate with utility owners to identify feasible relocation routes
- Coordinate with utility owners to obtain relocation plans, cost and

Consultant work with utility owners is limited to coordination and does not include developing relocation designs or providing agreements. It is assumed that PG&E, San Jose Water, Tel Communication and Cable will provide relocation drawings and the City will coordinate with the utility owners to prepare and execute necessary utility agreements.

#### **6.7. Structure Type Selection Report**

Consultant will prepare a type selection study in accordance with the requirements of the Caltrans Memo to Designers (MTD) 1-29 and Office of Special Funded Projects (OSFP) Information and Procedures Guide 4-2, for the Charcot Road Overcrossing and miscellaneous retaining walls.

Results from the Draft Foundation Reports will be used in developing design parameters. Preliminary design will be performed to develop details for each structural alternative. This includes preliminary analysis to aid development of structural elements such as depth of the superstructure, size and shape of the column members or pier walls, shape and size of bent caps, footing sizes, and abutment types. The analysis would be consistent with the preliminary nature of design and would not include steps necessary in developing final design. Special attention will be given to the following issues:

- Design issues such as design alternatives for superstructure, abutment, bent, and barrier
- Aesthetics and compatibility with the existing structure and surrounding areas
- Constructability and use of false work
- Clearances for construction operations
- Foundation issues



- Hydraulics/ hydrology issues
- Seismic performance
- Speed of construction
- Construction cost
- Construction impact and disruption to existing vehicular traffic
- Impact to the surrounding environment and uses during construction as well as permanent
- Hazardous material related issues
- Issues relating construction permits from the agencies that have jurisdiction over the construction site.

The single type selection report will include a type selection memo, bridge site data list, a vicinity map, a general plan, preliminary construction cost estimate (general plan estimate), and seismic design criteria, retaining wall type selection study and retrofit strategy report for each of the applicable structures being widened. The report will be submitted to the City, Caltrans, and other appropriate agencies for review and approval.

The results of the type selection report will be presented in a meeting at Caltrans Division of Engineering Services in Sacramento. No further design will be conducted prior to the written approval of the Structure Type Selection. Once approval is received from Caltrans on the proposed General Plans and retrofit strategy, Final General Plans and cost estimate will be submitted for Caltrans distribution.

Preliminary Construction Quantity Estimates will be developed for the Project structures during this task, including the recommended bridge type. Estimates will be prepared using a format acceptable to the City and Caltrans District 4 and will be in accordance with Article 3, Project Estimate of Cost, of the RTL Guide, latest revision. The list of items of work will be prepared based upon the Caltrans' Standard Items of Work, and adding items as may be necessary.

The cost estimate will identify construction work items, quantities, unit costs, and summarize the estimated total project cost, including allowances for supplemental work, owner furnished materials, expenses, mobilization and contingencies.

#### **6.8. Plans, Specifications and Estimate (PS&E)**

A set of design plans for the 60% PS&E submittal will contain all, or portions, of the following sheets. Consultant will use the following code letters and sheet names and arrange sheets in the order shown.

ID Code

Letter Sheet Name

|     |  |
|-----|--|
| --  | Title Sheet                                      |
| X   | Typical Cross Sections                           |
| CS  | Construction Staking Survey Control Data         |
| K   | Key Map and Line Index                           |
| L   | Layout   |
| P   | Profile and Superelevation Diagram               |
| C   | Construction Details                             |
| G   | Contour Grading                                  |
| WPC | Temporary Water Pollution Control Details        |
| EC  | Erosion Control Plans                            |
| D   | Drainage Plan, Profiles, Details, and Quantities |

|    |  |
|----|--|
| SS | Sanitary Sewer Plan, Profiles, Details, and Quantities       |
| U  | Utility Plan and Details                                     |
| SC | Stage Construction, Traffic Handling Plan and Detours        |
| TH | Traffic Handling Plan (that is not part of SC plans)         |
| DE | Detour (full sheets that are not part of SC plans)           |
| CS | Construction Area Signs                                      |
| PD | Pavement Delineation Plan, Details, and Quantities           |
| S  | Sign Plan, Details, and Quantities                           |
| PL | Planting Plan Details, and Quantities                        |
| IP | Irrigation Plan, Details, and Quantities                     |
| Q  | Summary of Quantities  |
| E  | Signal and Lighting, Sign Illumination, Flashing Beacon, etc |
| R  | Retaining Wall Plan, Details, and Quantities                 |
| -- | Structure Plans  |

Consultant will prepare, coordinate and submit design plan sheets in imperial units for the roadway and highway design, and assure that interface information is provided to the other design consultants. Design work is limited to work within the proposed City right of way and does not include restoration work, including landscaping and irrigation, on private property, mitigations outside of City right of way and the Project limits or work requiring Santa Clara Valley Water District approval.

Existing base mapping will be used for base sheets. No new aerial mapping or updating of the existing aerial mapping will be required. The following drawings will be in AutoCad format, convertible to Microstation CADD, and where applicable, to the OSFP Information and Procedures Guide and the Drafting and Plans Manual.

At a minimum, the Consultant shall submit the following sheets for the 60% PS&E:

Title Sheet will be prepared to provide an overview of the project limits and an index of the design sheets within the drawing package.

Layout Sheets will be prepared on 50' scale plan sheets. Sheets will include horizontal and vertical layout information and identify all major construction features.

Typical Cross Sections for the roadway will be based on the approved standard sections, including pavement structural sections.

Profile Sheets will be prepared at a 50' horizontal and 5' vertical scale and shall include superelevations.

Drainage and Sanitary Sewer Layout Sheets will be prepared on 50' scale plan sheets.

Utility Relocation/Occupation Plans will identify and propose final locations of public utilities that are affected by the Project (e.g. water, gas, electric, cable TV, and telephone/communications) on 50' scale plan sheets. The respective utility providers will design and perform the relocation of gas, electric, cable TV and telephone. For these utilities, Consultant will provide approximate relocation requirements for coordination with the appropriate utility provider.

Pavement Delineation will be prepared on 50' scale.

Inventory of Existing Signs. Consultant will conduct a field survey and develop an inventory of existing signs and confirm with as-builts. The plans will be developed depicting all signs within the project limits on a 50' scale.

Electrical Plans will be prepared for the proposed/modified lighting and traffic signals. Lighting plans will be prepared on 50' scale. Traffic signal plans will be developed at 20'scale. Consultant will also coordinate with PG&E in identifying new electrical service points if required.

Landscape Plans - Consultant will prepare a planting list and conceptual planting plans for areas within roadway right of way. Consultant will also coordinate with the City and/or San Jose Water to identify water service points

#### Structure Design Plans

Upon approval of the type selection report, Consultant will proceed with the final bridge design. This will include design calculations, details and construction documents prepared in accordance with Caltrans procedures, the agreed design criteria, and in accordance with the following Caltrans manuals and references:

- Information and Procedures Guide
- AASHTO LRFD Bridge Design Specifications
- Memo to Designers
- Bridge Design Aids
- Bridge Design Details
- Standard Plans
- Standard Specifications

Other pertinent plans. Consultant will be responsible for preparing and submitting an adequate number and type of plans in order to receive City's and Caltrans comments early in the design phase to minimize change in subsequent tasks. Other plans, such as stage construction, traffic handling may be submitted for review to the appropriate Caltrans departments.

#### **6.9. Design Reports**

Consultant will prepare Design Reports for roadways/highways/structures, and provide design interface information to the other design consultants for preparation of other reports. Consultant will prepare and submit or assist with the following Design Reports, as indicated:

##### Preliminary Drainage Report

Consultant shall conduct a study of local drainage and overland flood flow conditions, obtain historic drainage information and prepare a Preliminary Drainage Report in the format approved by City. The report shall include discussions on existing conditions and unusual and special conditions, a hydraulic analysis on the existing and proposed drainage systems, and a drainage map.

##### Storm Water Data Report

Consultant will prepare a Storm Water Data Report for the project in accordance with City and CALTRANS current requirements. The report will focus on the storm water quality issues to construct the project and implementation of appropriate temporary and permanent Best Management Practices (BMPs). The report will summarize the storm water quality issues of the project and will assess the water quality impacts as a result of the Project.

##### Lane Closure Report

Consultant will obtain 7 day 24 hour traffic counts from Caltrans. If the counts are not available, perform 7 day 24 hour traffic counts at mainline and for all ramps where closures are required, including local streets.

Perform lane closure calculations per Caltrans' standard methodology and submit draft lane closure report to Caltrans for review. This will also include Late Lane Closure Pickup calculations.

#### Traffic Management Plan

Consultant will review the Caltrans prepared data sheet and utilize it as a basis for preparing a Traffic Management Plan in accordance with Caltrans current requirements. The Traffic Management Plan (TMP) is a specialized program tailored to prevent and mitigate the impacts of a construction project by applying a variety of techniques including Motorist Information, Incident Management, Construction Strategies, and Public Information Strategies. The major objectives of the TMP are to maintain efficient and safe movement of vehicles through the construction zone; and to provide intensive public awareness of potential impacts in the vicinity of the project site. Consultant will present the TMP to Caltrans management staff for approval and concurrence.

#### Longitudinal Utility Encroachment Exception (LUEE)

It is assumed that a LUEE will not be required by Caltrans for the Project.

#### **6.10. Specifications and Special Provisions**

Consultant will review the latest version of Caltrans Standard Specifications and Standard Special Provisions.

For work items necessary for construction of the Project, Consultant will assemble data and prepare drafts of (1) necessary modifications to the Standard Special Provisions, and (2) additional specifications which may be necessary. City will prepare the "boiler plate" special provisions.

Consultant will provide a submittal to Caltrans for approval of nonstandard special provisions, if any.

#### **6.11. Preliminary Quantities and Estimates**

Consultant will prepare Preliminary Construction Quantity Estimates for the Project, including roadway, highway and structures. The cost estimate will identify construction work items, quantities, unit costs, and summarize the estimated total Project cost, including allowances for supplemental work, owner furnished materials, expenses, mobilization and contingencies. Estimates will be prepared using a format acceptable to City and Caltrans and will be in accordance with Section 7, Project Estimate of Cost, of Caltrans' Ready to List and Construction Contract Award Guide (RTL Guide).

#### **6.12. Quality Control (QC) Review**

Consultant will perform an in-house 60%PS&E QC review.

#### **6.13. Constructability Review**

Consultant will participate in a Constructability Review at the 60% submittal. Consultant will coordinate the Constructability Review meeting and address the comments generated by the review including providing explanation for comments not incorporated into the design.

#### **6.14. Permits**

It is assumed that no regulatory permits will be required.

#### **6.15. Right of Way Certification During PA&ED**

Consultant will review and sign the right of way certification required by Caltrans for the approval of the Project Report.

#### **6.16. Deliverables**

Consultant will prepare a PS&E (60%) design submittal. This submittal will include:

- Preliminary Design Plan Sheets
- Specifications and Special Provisions
- Quantities and Cost Estimates

- Type Selection/ Strategy Reports
- Draft Reports to include:
  - Drainage Report
  - Storm Water Data Report
  - Lane Closure Report
  - Traffic Management Plan
  - Foundation Reports
  - Materials Report
- Response to Constructability Review Comments

## **7. Draft Final 90% Plans, Specifications and Estimate (PS&E)**

Task 7 will consist of responses to comments from the 60% submittals and continued development of plans, specifications and quantities for the Draft Final PS&E (90% submittal). Consultant will provide the comment responses in written form, including justification for any comments not incorporated. Consultant will hold meetings if required, to resolve any outstanding issues. Review at this stage of design will require several revisions and resubmittals of plans, specifications, quantities and cost estimates. Consultant will allow adequate provisions in its design for these changes. It is assumed that formal constructability reviews will not be required for the PS&E documents.

Each submittal will be a complete, bid-ready set of documents, checked, stamped and signed. Consultant will perform the following activities:

### **7.1. Design Plans**

Consultant will incorporate all agreed upon comments received from City and Caltrans into the design plan sheets submitted as directed in Task 6 and prepare complete highway and structure construction plans.

### **7.2. Specifications and Special Provisions**

Consultant will incorporate all agreed upon comments into the Special Provisions and prepare Special Provisions (SSP) which are specific to the Project for use with the latest version of Caltrans' Standard Specifications.

Consultant will assure that every construction work item for the Project has a method of payment stated in the Specifications and is accounted for in the Construction Cost Estimate.

### **7.3. Construction Cost Estimate**

Consultant will update the Construction Quantities and Cost Estimates to reflect design development from the 60%PS&E to 90% PS&E and will promptly notify the City of any differences.

### **7.4. Design Reports**

Consultant will update the design reports described in Task 6, as appropriate, and will submit any revisions.

### **7.5. Independent Check**

Consultant will perform an independent check of all drawings and calculations per Caltrans Standard procedures. Consultant will prepare independent quantity calculations and conduct an independent review of the special provisions.

### **7.6. Quality Control (QC) Review**

Consultant will perform an in-house Draft Final 90% PS&E QC review.

### **7.7. Deliverables**

Consultant will prepare a Draft Final 90% PS&E design submittal. This submittal will include:

- Design Plan Sheets
- Specifications and Special Provisions
- Construction Cost Estimate
- Design Calculations
- Independent Structural Check Calculations
- Independent Quantity Check Calculations
- Final Materials Report and Foundation Report
- Final Drainage Report
- Final Storm Water Report
- Final Traffic Management Plan including Lane Closure Report

## **8. Bid Document (PS&E)**

Task 8 will consist of responses to comments from the 90% submittals and continued development of plans, specifications and quantities for the Bid Documents. Consultant will provide the comment responses in written form, including justification for any comments not incorporated. Consultant will hold meetings if required, to resolve any outstanding issues. Upon resolution of any outstanding issues, Consultant will submit the following:

### **8.1. Final Plans, Specifications and Estimates**

Consultant will update the Design Sheets, Special Provisions and Quantity Estimates submitted for Task 7 and incorporate the comments received from the City, Caltrans and other agencies.

### **8.2. Combining Roadway and Structure PS&E Documents**

Consultant will combine the (100%) Structures Plans, approved by the City and Caltrans, with the final (100%) Roadway and Highway PS&E documents into a combined single construction contract package. Consultant will assure consistency between all design documents prior to submittal to the City as Bid Documents.

### **8.3. Bid Package**

Consultant will prepare bid documents including bid forms and Final PS&E that can be used to solicit competitive bids for the Project. A draft bid set will be provided to the City for review. Consultant will incorporate comments and finalize the bid package.

### **8.4. Quality Control Review**

Consultant will perform a Bid Document QC review.

### **8.5. Deliverables**

Consultant will submit Bid Documents that include Plans, Specifications and Cost Estimates.

It is assumed that the Project will be advertised and awarded by the City of San Jose and therefore a Resident Engineer File and Survey File will not be required.

## 9. Right of Way Engineering

Task 9 addresses the right of way engineering for the Project. Consultant will establish the proposed right of way lines for the Project. The City shall be responsible performing the right-of-way acquisition activities. The right of way engineering work will consist of partial right of way acquisitions required by the Project. It is assumed that no more than 5 parcels will be affected by the Project. The right of way engineering scope of work excludes the preparing appraisal maps, performing pre-construction record of surveys and preparing right of way record mapping.

### 9.1. Review Right of Way Requirements

Consultant will review existing right of way documents and assess additional right of way needs for the Project. Title reports will be ordered for the parcels effected by the Project and existing County record information will be obtained by Consultant.

### 9.2. Boundary Resolution

Consultant will determine and resolve the existing right of way of parcels identified to be acquired based on the Project design. These existing parcels will be tied into resolved boundary and established ties to the Land Net. Consultant will field recover the boundary and resolve the parcel lines.

### 9.3. Right of Way Support

Consultant will assist the City in right of way activities such as preparation of exhibits to identify right of way needs and meeting with property owner to identify impacts.

### 9.4. Plats and Legals

Consultant shall prepare a draft plat and legal description for right of way take. The plat and legal descriptions will be submitted to the City for review and comment. Comments will be incorporated by Consultant and final plat and legal descriptions prepared and submitted to the City for approval. The plats and legals can be used to establish appraisals and for the preparation of deed transfer documents.

### 9.5. Appraisals Services

Consultant will prepare an appraisal report for each parcel and shall include the following information:

- The property owner will be contacted and offered the opportunity to accompany the appraiser during the inspection of the property.
- The purpose and function of the appraisal, including limiting factors and conditions.
- Description of the physical characteristics of the property being acquired in addition to the highest and best use of property.
- A discussion of all relevant and reliable approaches to value. In most cases this will necessitate the use of the sales comparison approach only.
- A description of comparable sales relied on in the determination of value.
- A statement of the value of the property rights to be acquired including damages to the remainder.
- A signed certification of the appraiser, and the effective date of the valuation.

An appraisal review will be completed for each acquisition in accordance with Federal and/or State policy. The appraisal review shall include a check of all mathematical calculations and a determination that all relevant and appropriate appraisal methodologies have been employed. The reviewed appraisal shall be forwarded to the City for the purpose of establishing the amount of just compensation in accordance with Federal and State laws. The amount of just compensation shall not be less than the approved appraisal.

### 9.6. Acquisition Services

Consultant will provide acquisition services which will include all contacts with the property owner for the purpose of negotiating for the purchase of the real property interest. Services to be provided include:

- Prepare the offer letter and other related documents based upon the review appraiser's accepted fair market value as approved by the Client.
- Prepare purchase agreement and conveyance documents.
- Meet with the property owners to discuss the project in general, review project maps and legal descriptions confirm information about occupants/owners and make the official first written offer.
- Explain the offer; maintain follow up contacts and to secure the necessary documentation upon acceptance of the offer for closing.
- Respond to property owner inquiries verbally and in writing.
- Maintain contact reports for the parcel with all pertinent information and contacts concerning the parcel.
- Maintain parcel file of original documentation related to the purchase of the real property.
- Provide recommendation and supporting documentation for consideration during the administrative review process.
- Continue personal negotiations with property owner until agreement is reached.
- Signed purchase agreements shall be transmitted to the Client promptly for acceptance and processing.

#### **9.7. Right of Way Certification**

Consultant will draft a Right of Way Certification for submission to the City and Caltrans. Upon receiving comments, the Right of Way Certification will be updated and a final Right of Way Certification be submitted for the Project. Consultant will review and sign the right of way certification required by Caltrans for the approval of the PS&E.

#### **9.8. Title and Closing Services**

Consultant will ensure that all closings are accomplished in a timely manner through continued coordination with the title company handling the escrows. Consultant will work closely with the title company to make sure that good title is obtained. These services include:

- Order preliminary title reports for the 5 properties in the Project area.
- Reviewing updated title
- Assist Title Company in obtaining releases of liens, mortgages and encumbrances of record.
- Prepare warrant requests to the Client with proper supporting documentation including recommended resolution of title issues.
- Review the final title policy to make sure that it reflects only those title exceptions that the Client had agreed to accept.
- Submit completed property acquisition report for each property, including transfer of all pertinent correspondence and files to the Client.

### **10. Bidding and Construction Support**

Consultant shall provide engineering services, including Task 1 Project Management scope, to support the bidding and construction phases of the Project as described herein. Consultant will not provide construction staking services for the construction phase of the Project.

#### **10.1. Bid Support**

##### **10.1.1. Bid Clarifications**

Consultant will provide answers to questions submitted from prospective bidders regarding the bid documents.



#### **10.1.2. Bid Addendum**

If necessary, Consultant will prepare a bid addenda and revisions to the design.

### **10.2. Construction Support**

#### **10.2.1. Design Clarifications**

Consultant will provide clarifications and/or explanations of the construction documents, as requested by the contractor during construction.

#### **10.2.2. Submittals and Request for Information (RFI)**

Consultant will review and provide comments on contractor's submittals, and respond to RFIs in a timely manner.

#### **10.2.3. Change Orders**

Consultant will assist the City in preparing and reviewing change orders, as necessary.

#### **10.2.4. Construction Meetings**

Consultant will attend meetings or participate in site visits during the course of the construction upon request of the City's Construction Manager. The number of meetings is estimated to be six (6).

#### **10.2.5. As-built Preparation**

Consultant will coordinate the preparation of as-built drawings with the contractor and City's Construction Project Manager during the construction and post construction phases. As-built information will be based on red-lined mark-ups provided by contractor.

### **City Provided Services**

1. City will provide or obtain a Caltrans cooperative agreement and encroachment permit for conducting field activities. If a Contractor Double Permit is required by Caltrans to perform field activities, fees will be paid by City.
2. City to provide tree arborist services if needed.
3. City to provide the general conditions and/or necessary boilerplate specifications of the Project Specifications.
4. City will advertise Project for construction.
5. City will provide construction administration and quality control testing.

### **Additional Services**

#### **1. Orchard School**

Due to the Charcot Avenue Extension over I-880, modifications to the Orchard School recreation area are required. The work will involve the reconstruction of the track and ball field and limited to providing landscape architectural and electrical lighting services at the northern part of asphalt court and ball field. Modifications to the site due to fire access, accessibility improvements, path of travel improvements beyond the field area and accessible parking is not included within this scope.

##### **1.1. Landscaping and Irrigation**

Consultant shall prepare landscaping and irrigation plans for the relocation of the ball field to include the entire sod field and irrigation system, the replacement or relocation of the existing play equipment and playground surfacing to include new backstop, foul poles, infield fines, dugout areas (at grade) and fencing and the relocation of the track.

## **1.2. Electrical Lighting**

Consultant will develop the electrical design for the replacement of lighting within the school yard. It is assumed that a new service point for the lighting will not be required.

## **2. Record of Survey**

At the completion of the construction of the Project, Consultant will develop a Record of Survey to be completed in accordance and filed with Santa Clara County Surveyor. Consultant will set monuments at angle points and curve points along the new right of way. The Record of Survey will provide delineation of property corner and monuments set by the Project. Map check and filing fees for the Record of Survey will be borne by the City.

**First**    **Second**    **Third**   **Revised Exhibit B: Compensation (Capital Projects)**

This revised Exhibit B is an attachment to the  **First**    **Second**    **Third** amendment to the Agreement.

**A. MAXIMUM AMOUNT**

The maximum amount of compensation the City shall pay to the Consultant under this Agreement for professional services shall not exceed Three Million and Six Hundred and Seventy One Thousand Nine Hundred and Thirty Six Dollars (\$3,671,936). Any work performed for which payment would result in a total exceeding the maximum amount shall be at no cost to the City.

**B. MANNER OF PAYMENT**

City shall pay the Consultant for work performed under this Agreement on a lump sum basis, upon successful completion to the satisfaction of the Director of Transportation ("Director") of each Task listed below. The lump sum amount compensates the Consultant for all its costs necessary to complete the work. Consultant shall complete all work listed in each Task for the lump sum amount listed below. Upon completion of a percentage of the work for each Task to the Director's satisfaction, the Consultant shall invoice the City for the percentage of the lump sum amount for that Task. The City shall pay the lump sum amount within thirty (30) days of the Director's approval of the Consultant's invoice.

| <i>Task</i>   | <i>Deliverables</i>  | <i>Task Total</i> |
|---------------|--|-------------------|
| <b>Task 1</b> | <b>Project Management</b>                                    | \$217,881         |
| <b>Task 2</b> | <b>Preliminary Investigations</b>                            | \$42,553          |
| <b>Task 3</b> | <b>Project Initiation Document (PID)</b>                     |                   |
| 3.1           | Traffic Engineering Performance Assessment (TEPA)            | \$25,200          |
| 3.2           | Purpose and Need   | \$682             |
| 3.3           | Geometric Design Alternatives and Analysis                   | \$9,015           |
| 3.4           | Preliminary Environmental Analysis Report (PEAR)             | \$25,641          |
| 3.5           | Supporting PID Documentation                                 | \$93,082          |
| 3.6           | PID Preparation  | \$92,383          |
| <b>Task 4</b> | <b>Project Approval and Environment Document (PA&amp;ED)</b> |                   |
| 4.1           | Draft Project Report   | \$224,646         |
| 4.2           | Value Engineering  | \$10,502          |
| 4.3           | Preliminary Design (30% PS&E Design)                         | \$54,837          |
| 4.4           | Final Project Report   | \$10,167          |
| <b>Task 5</b> | <b>Environment Document</b>                                  |                   |
| 5.1           | Technical Studies / Report                                   | \$139,407         |
| 5.2           | Draft Environmental Document (DED)                           | \$69,907          |
| 5.3           | Public Outreach (2 public meetings)                          | \$22,539          |
| 5.4           | Final Environmental Document                                 | \$31,973          |
| <b>Task 6</b> | <b>60% Plans, Specifications &amp; Estimate (PS&amp;E)</b>   |                   |
| 6.1           | Encroachment Permit Application                              | \$1,676           |
| 6.2           | Supplemental Topographic Surveys                             | \$34,588          |
| 6.3           | Utility Potholing  | \$30,482          |
| 6.4           | Geotechnical Work  | \$194,039         |
| 6.5           | Phase II Site Investigation Report                           | \$38,729          |
| 6.6           | Utility Coordination   | \$16,880          |
| 6.7           | Structure Type Selection Report                              | \$183,167         |
| 6.8           | Plans, Specifications and Estimate (PS&E)                    | \$517,525         |
| 6.9           | Design Reports   | \$26,102          |
| 6.10          | Specifications   | \$112,474         |

|                |  |                    |
|----------------|--|--------------------|
| 6.11           | Preliminary Quantities and Estimates                                   | \$69,861           |
| 6.12.          | Quality Control (QC) Review  | \$5,931            |
| 6.13           | Constructability Review  | \$2,904            |
| 6.14           | Permits  |                    |
| 6.15           | Right of Way Certification During PA&ED                                | \$1,166            |
| <b>Task 7</b>  | <b>Draft Final 90% Plans, Specifications &amp; Estimate (PS&amp;E)</b> |                    |
| 7.1            | Design Plans   | \$307,803          |
| 7.2            | Specifications and Special Provisions                                  | \$44,464           |
| 7.3            | Construction Cost Estimate   | \$40,540           |
| 7.4            | Design Reports   | \$11,096           |
| 7.5            | Independent Check  | \$42,696           |
| 7.6            | Quality Control (QC) Review  | \$5,781            |
| <b>Task 8</b>  | <b>Bid Documents (PS&amp;E)</b>  |                    |
| 8.1            | Final Plans, Specifications and Estimates                              | \$179,810          |
| 8.2            | Combining Roadway and Structures PS&E Documents                        | \$3,105            |
| 8.3            | Bid Package  | \$9,314            |
| 8.4            | Quality Control Review   | \$10,324           |
| <b>Task 9</b>  | <b>Right of Way Engineering</b>  |                    |
| 9.1            | Review Right of Way Requirements                                       | \$672              |
| 9.2            | Boundary Resolution  | \$27,044           |
| 9.3            | Right of Way Support   | \$4,914            |
| 9.4            | Plats and Legals   | \$32,700           |
| 9.5            | Appraisals Services  | \$52,143           |
| 9.6            | Acquisition Services   | \$21,189           |
| 9.7            | Right of Way Certification   | \$903              |
| 9.8            | Title and Closing Services   | \$2,058            |
| <b>Task 10</b> | <b>Bidding and Construction Support</b>                                |                    |
| 10.1           | Bid Support  | \$17,387           |
| 10.2           | Construction Support   | \$212,236          |
|                | <b>Additional Services</b>   | \$339,819          |
|                | <b>TOTAL</b>   | <b>\$3,671,936</b> |

**PROFESSIONAL PERSONNEL SERVICE FEES**

| <u>PERSONNEL</u>                                      | <u>HOURLY RATES</u>                       |
|---|---|
| <b>ENGINEERING</b>                                    |   |
| Principal   | \$237.00                                  |
| Senior Associate                                      | \$212.00                                  |
| Associate   | \$206.00                                  |
| Project Manager                                       | \$197.00 - \$202.00                       |
| Engineer IV   | \$182.00                                  |
| Engineer I, II, III                                   | \$129.00 - \$148.00 - \$168.00            |
| <b>PLANNING</b>                                       |   |
| Planner I, II, III                                    | \$129.00 - \$148.00 - \$168.00            |
| <b>SURVEYING</b>                                      |   |
| Senior Associate                                      | \$212.00                                  |
| Associate   | \$206.00                                  |
| Project Manager                                       | \$197.00-\$202.00                         |
| Surveyor I, II, III, IV                               | \$129.00 - \$148.00 - \$168.00 - \$182.00 |
| Survey Party Chief                                    | \$169.00                                  |
| Survey Chainman                                       | \$109.00                                  |
| Apprentice I, II, III, IV                             | \$67.00 - \$90.00 - \$99.00 - \$105.00    |
| Instrumentman   | \$145.00                                  |
| <b>DESIGN AND DRAFTING</b>                            |   |
| Technician I, II, III                                 | \$123.00 - \$131.00 - \$143.00            |
| Drafter I, II, III, IV                                | \$96.00 - \$106.00 - \$114.00 - \$127.00  |
| Student Engineer/Surveyor                             | \$61.00                                   |
| <b>CONSTRUCTION ADMINISTRATION/QSP-QSD/INSPECTION</b> |   |
| Senior Construction Administrator                     | \$191.00                                  |
| Resident Engineer                                     | \$142.00                                  |
| Field Engineer I, II, III                             | \$129.00 - \$148.00 - \$168.00            |
| <b>SERVICES AND EXPENSES</b>                          |   |
| Project Assistant                                     | \$79.00                                   |
| Clerical/Administrative Assistant                     | \$67.00                                   |

- First**  
 **Second**  
 **Third**

**Revised Exhibit C: Schedule of Performance**  
(Capital Project)

This revised Exhibit C is an attachment to the  First  Second  Third amendment to Agreement.

Work shall commence immediately upon full execution of this Agreement. All work under this Agreement shall be completed on or before December 31, 2023. Consultant shall schedule work such that tasks are completed in accordance with the schedule established in this Exhibit C:

| Due Date, on or before | Deliverables  |
|------------------------|---|
| 6/15/15                | Project Kick off Meeting  |
| 8/30/15                | Project Base Sheets   |
| 10/02/15               | Alternative Analysis Matrix<br>Draft Reports – TEPA, PEAR, SWDR, Design Exceptions, RMP |
| 11/13/15               | Final Reports – TEPA, PEAR, SWDR, Design Exceptions, RMP                                |
| 12/15/15               | Draft PSR/PDS   |
| 4/18/16                | Final PSR/PDS   |
| 6/30/16                | Traffic Operations and Analysis Report  |
| 9/15/16                | Geometric Alternatives<br>Design Exception Fact Sheets                                  |
| 6/15/18                | Environmental Technical Reports   |
| 10/30/18               | Draft Environmental Document  |
| 3/30/19                | Final Environmental Document  |
| 4/15/19                | Draft Project Report  |
| 8/30/19                | Final Project Report  |
| 3/30/19                | Type Selection Report   |

|          |   |
|----------|---|
| 5/30/19  | 60% Plans, Specifications and Estimate (PS&E)   |
| 5/30/19  | Draft Design Reports (Drainage, Stormwater, Lane Closure, Traffic Management Plan, Foundation, Materials) |
| 8/30/19  | Draft Final 90% Plans, Specifications and Estimate (PS&E)   |
| 8/30/19  | Final Design Reports (Drainage, Stormwater, Lane Closure, Traffic Management Plan, Foundation, Materials) |
| 11/30/19 | Final 100% Plans, Specifications and Estimate (PS&E)  |
| 1/15/20  | Bid Documents   |

