



SPECIAL FINANCE COMMITTEE AGENDA

Thursday, March 8, 2018

8:30 AM

Executive Conference Room, Level Three
Brea Civic & Cultural Center, 1 Civic Center Circle, Brea, California

MEMBERS: Council Member Cecilia Hupp and Council Member Marty Simonoff
ALTERNATE: Mayor Glenn Parker

Materials related to an item on this agenda submitted to the Finance Committee after distribution of the agenda packet are available for public inspection in the third floor lobby of the Civic and Cultural Center at 1 Civic Center Circle, Brea, CA during normal business hours. Such documents may also be available on the City's website subject to staff's ability to post documents before the meeting.

CALL TO ORDER / ROLL CALL

1. Matters from the Audience

CONSENT

2. Approval of Minutes of February 27, 2018 Meeting

Attachments

Minutes

3. Polyphagous Shot Hole Borer Treatment

Attachments

Quotes

4. Amendment No. 1 to Professional Services Agreement with Parsons Transportation Group, Inc. for Design Services and Resolution for Appropriating Additional Funds for the SR-57 & Lambert Road Interchange Improvements, CIP 7251

Attachments

Amendment No.1

Resolution

NOTE: This agenda is subject to amendments up to 72 hours prior to the meeting date.

DISCUSSION

5. 2017 Comprehensive Annual Financial Report - Status
6. Schedule Next Meeting: March 27, 2018

cc: Mayor Pro Tem Christine Marick
Council Member Steven Vargas

Special Accommodations

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk's Office at (714) 990-7757. Notification 48 hours prior to the meeting will enable City staff to make reasonable arrangements to ensure accessibility. (28 CFR 35.102.35.104 ADA Title II)

City of Brea

FINANCE COMMITTEE COMMUNICATION

FROM: Bill Gallardo

DATE: 03/08/2018

SUBJECT: Approval of Minutes of February 27, 2018 Meeting

Attachments

Minutes



FINANCE COMMITTEE MINUTES

Tuesday, February 27, 2018

8:30 AM

Executive Conference Room, Level Three

Brea Civic & Cultural Center, 1 Civic Center Circle, Brea, California

CALL TO ORDER / ROLL CALL

ATTENDEES: Council Member Cecilia Hupp, Council Member Marty Simonoff, Chris Emeterio, David Crabtree, Tony Olmos, Cindy Russell, Bill Bowlus, Faith Madrazo, Lee Squire, Alicia Brenner, Ana Conrique, Neil Groom and Gillian Lobo.

1. Matters from the Audience – *None*

CONSENT

2. Approval of Minutes of February 13, 2018 – *An update to the City's audit has been scheduled for the next Finance Committee. Approved.*
3. Playground Surfacing at 9 Parks, CIP #7934 and #7939 – *Recommended for City Council approval.*
4. Sports Park Playground, CIP #7935 – *Recommended for City Council approval.*
5. Professional Services Agreement with HF&H For As-Needed Support Services for Refuse Contract Modernization in the Amount Not-to-Exceed \$50,000 – *Forward to City Council as an Administrative Item with no recommendation.*

DISCUSSION

6. Schedule Next Meeting: March 13, 2018

Meeting adjourned: 8:36 AM

cc: Mayor Glenn Parker
Mayor Pro Tem Christine Marick
Council Member Steven Vargas

City of Brea**FINANCE COMMITTEE COMMUNICATION**

TO: Finance Committee Members

FROM: Bill Gallardo

DATE: 03/08/2018

SUBJECT: Polyphagous Shot Hole Borer Treatment

RECOMMENDATION

Approve Purchase Order for Polyphagous Shot Hole Borer (PSHB) Treatment in the amount not-to-exceed \$50,000 with West Coast Arborists, Inc.

BACKGROUND/DISCUSSION

Recently, a pest called the PSHB has been attacking native and landscape trees. It has been spotted in Brea by our tree contractor, West Coast Arborists, primarily infesting our Sycamore trees. Brea's tree inventory contains approximately 360 Sycamores. Method of treatment depends on the severity and the length of infestation. In the past, the solution was to remove the infested tree. However, there are now other less severe options available in an effort to save the trees.

One of these other options involves soil drenching and trunk spraying and another is trunk injections, which contain a blend of insecticide and fungicide and is expected to give two years of treatment. City staff feels the latter is the most cost effective and efficient option at this time. This method has the least impact to the public compared to the spraying and soil soak methods and is expected to extend the life of the trees. Injection costs are based on a dollar amount per tree inch diameter at chest height and three bids were received as follows:

Contractor	Price Per Inch
West Coast Arborists, Inc.	\$7.00 per inch unrestricted inches
Reliable Pest Work, Inc. (RPW Services, Inc.)	\$9.00 per inch under 1,000 inches
	\$8.00 per inch between 1,000 and 3,000 inches
	\$7.00 per inch over 3,000 inches
TruGreen Commercial	\$21.00 per inch under 1,000 inches
	\$17.00 per inch over 1,000 inches

We currently estimate that we will be treating over 5,000 inches, which puts West Coast Arborists, Inc. and RPW Services, Inc. at the \$7.00 per inch price; however, the City has had West Coast Arborists, Inc. as our tree contractor for over twenty years and City staff feels they will do a faster, more efficient job without as much oversight since they already know our tree inventory. Funds are available in the 2017/18 Fiscal Year budget.

SUMMARY/FISCAL IMPACT

Staff recommends approving the Purchase Order for PSHB Treatment with West Coast Arborists, Inc. from accounting 110-51-5142-4249 for the not-to-exceed amount of \$50,000. Funds are available in the 2017/18 Fiscal Year Budget. Three quotes are attached.

RESPECTFULLY SUBMITTED

William Gallardo, City Manager

Prepared by: Chris Beckman, Park Supervisor

Concurrence: Bill Bowlus, Public Works Superintendent
Tony Olmos, Public Works Director

Attachments

Quotes

Proposal 48899

CA Contractors License #366764 | AZ Contractors License #258981
DIR Registration #1000000956
Liability Insured



West Coast Arborists, Inc.
2200 E. Via Burton St.
Anaheim, CA 92806
(P) 800.521.3714 (E) 714.991.7844

PROFORMA FOR TREE MAINTENANCE SERVICES

CUSTOMER: CITY OF BREA	INV. NEEDED: Yes			
MAIN CONTACT: CHRIS BECKMAN	BILLING CONTACT: CHRIS BECKMAN			
ADDRESS: 545 N. BERRY STREET BREA, CA 92821	ADDRESS: 545 N. BERRY STREET BREA, CA 92821			
PHONE/FAX: (714) 240-9484 / -	PHONE/FAX: (714) 240-9484 / -			
EMAIL: CHRISBE@CI.BREA.CA.US	EMAIL: CHRISBE@CI.BREA.CA.US			
JOB LOCATION: Various				
JOB DESCRIPTION: Sycamore Tree Injections per inch DBH cost. Actual number of inches to be determined in the field.				
QTY	DESCRIPTION	U/M	U/P	TOTAL
1	Sycamore Tree Injections per inch DBH	Inch	\$7.00	\$7.00
GRAND TOTAL:				\$7.00
<i>All work will be completed in accordance with ANSI A300 standards. Price reflects payment of prevailing wage rates under the wage determination: Tree Maintenance Laborer, and reporting of certified payroll to the Department of Industrial Relations as applicable in accordance with state labor laws.</i>				
COMMENTS: Price: \$7 per inch Chemicals: 5 Ml of Tree-age G4 (insecticide) 6 Ml of Propizol (fungicide) The chemicals and rates are based on the attached research from Arborjet.				
ESTIMATED BY: RANDY THOMPSON		Date: 2/26/2018		
ACCEPTED BY:		Date:		

RPW SERVICES, INC

RESPONSIVE PEST WORK

PROPOSAL

TO:	FROM:
Chris Beckman	Paul Webb
COMPANY:	DATE:
City of Brea Parks Division	2/26/2018
EMAIL:	TOTAL NO. OF PAGES:
Beckman, Chris <ChrisBe@ci.brea.ca.us>	1
PHONE NUMBER:	RE:
714-990-7692	PSHB
<input type="checkbox"/> URGENT <input checked="" type="checkbox"/> FOR REVIEW <input type="checkbox"/> PLEASE COMMENT <input type="checkbox"/> PLEASE REPLY <input type="checkbox"/> PLEASE RECYCLE	

NOTES/COMMENTS:

Chris,

There are varying methods of control of PSHB. One of the most promising methods shown to provide control of the borer is the use of trunk injections with the Arborjet System, injecting Treeage insecticide and Propisol fungicide. This is based on research and studies performed by UCR, Akif Eskalen, published December 2016.

Our prices are based on Volume;

Under 1,000 DBH \$9.00 per DBH

Up to 3,000 and Under DBH \$8.00 per DBH (2,500 DBH cost is \$20,000.00)

Up to and Over 3,000 DBH \$7.00 per DBH (3,000 DBH cost is \$21,000.00)

RPW Services Inc. will measure every tree to insure proper dosage, 10 ml Treeage and 20ml Propisol per diameter breast height, and record the application.

If there are any questions please call.

Paul Webb

PO BOX 2342 FULLERTON, CA. 92837

STATE LICENSE: 30650 C27: 942173

714-870-6352 909-608-1234 FAX: 714-870-6485 MOBILE: 714-412-3515

E-MAIL: PWEBB@RPWSERVICESINC.COM



PROPOSAL FOR WORK TO BE DONE

February 26, 2018
Deanna Brush
1620 S. Sinclair St.
Anaheim, CA 92806
(805) 207-6499 cell
(714) 630-3085 ext.2 office
(714) 705-4886 fax

Customer Information

Bill To:

City of Brea
1 Civic Center Cir
Brea, CA 92821
(714) 990-7600

Service Location:

Various Sycamores
Throughout the city**

Detail of Charges

Service Description	Qty.	Total Price
Tree-age Injections \$11 per DBH under 1000		
Tree-age Injections \$9 per DBH over 1000		
Fungicide Injections \$10 per DBH under 1000		
Fungicide Injections \$8 per DBH over 1000		

Special Instructions:

Service includes injections for Sycamore Trees located in
Residential Parkways, City Parks and Facilities and Areas

City of Brea

FINANCE COMMITTEE COMMUNICATION

TO: Finance Committee Members

FROM: Bill Gallardo

DATE: 03/08/2018

SUBJECT: Amendment No.1 to Professional Services Agreement with Parsons Transportation Group, Inc. for Design Services and Resolution for Appropriating Additional Funds for the SR-57 & Lambert Road Interchange Improvements, CIP 7251

RECOMMENDATION

Adopt Resolution for Appropriating Additional Funds; and
Approve Amendment No. 1 to Professional Services Agreement (PSA)

BACKGROUND/DISCUSSION

The State Route (SR)-57 & Lambert Road Interchange Improvements ("Project"), Project 7251, was initiated in 1999 between the City of Brea and the State of California Department of Transportation ("Caltrans") to address traffic congestion on Lambert Road at the SR-57 interchange and at the adjacent intersection of Lambert Road and State College Boulevard. In 2007, the Project Study Report was completed and the Project was formally programmed in the City's 2008 Capital Improvement Program ("CIP") budget as well as Caltrans' annual budget.

A Project Study Report ("PSR") to develop project need and purpose, and to develop preliminary alternatives for the proposed improvements, was approved by Caltrans in November 2007. On August 16, 2011, the preparation of environmental documents called "Project Approval and Environmental Document Phase" ("PA&ED Phase") was initiated by Caltrans and their consultant RBF Consulting, a Michael Baker International Company ("RBF"). The PA&ED Phase was completed in November 2015, with the approval of the Project Report and Environmental Document. The preferred Project Alternative 7A within the PA&ED documents proposes to add a northbound loop on-ramp and realign northbound off-ramp; widen southbound ramps and bridge over the railroad; convert southbound exit ramp to a two (2) lane exit and widen Lambert Road from west State College.

On June 16, 2015, the City Council approved a Professional Services Agreement ("PSA") with Parsons Transportation Group, Inc. ("Parsons") to complete the "Plans, Specifications, and Estimate Phase" ("PS&E Phase") for the Project in the amount of \$3,320,000 with a \$100,000 contingency and total PSA amount of \$3,420,000. The original scope of work for this PSA was defined to complete the PS&E for the preferred Project Alternative 7A. Since November 2015, the City along with Parsons have been working with Caltrans to complete the PS&E Phase. In December 2016, the 65% PS&E was completed for the Project Alternative 7A with some modifications to the design which included additional

widening of the existing Lambert Road bridge to accommodate a future Caltrans truck climbing lane. Soon thereafter, the Project was separated into four (4) phases due to construction funding constraints, with the focus on completing the PS&E Phase for the Phase 1 Project. Phase 1 construction will add the northbound loop on-ramp and realign northbound off-ramp and modify the existing northbound on-ramp north of Lambert Road (East of SR-57). Phase 2 will convert the southbound off-ramp to a two (2) lane exit. Phase 3 will widen the southbound on-ramp and bridge over the railroad. This phase will also widen Lambert Road west of the southbound ramps. The final Phase 4 includes widening of Lambert Road and SR-57 bridge modification on the east side of the freeway, which is part of the Caltrans Truck Climbing Lane Project.

In June of 2017, the PS&E for the Phase 1 Project was considered substantially complete by Parsons and ready for final review and approval from Caltrans, which required securing the necessary Right-of-Way ("R/W") to construct. Therefore, on June 6, 2017, the City Council approved a PSA with CPSI ("R/W Consultant") to assist the City with the completion of the R/W Phase. The R/W acquisition for the Project involves a full take and several partial takes. The construction of Phase 1 requires the full acquisition of the existing Carwash on Lambert Road, including partial acquisitions with the adjacent properties east of the Carwash and Olen Point property on the north side of Lambert Road. Phases 2 and 3 construction also require R/W, however, all parcels affected in Phases 2 and 3 are owned by the City and the Orange County Transportation Authority ("OCTA"). No R/W take is anticipated for the Phase 4 construction, other than some potential utility relocations. It is anticipated that the R/W Acquisition Phase will be completed in November 2018.

In October of 2017, staff submitted a grant application to OCTA in the amount of \$12.8 million to fund the construction of the Phase 1 Project, which is currently being reviewed for final selection as part of the competitive Measure M2 Comprehensive Transportation Funding Program. On December 5, 2017, the City Council adopted Resolution 2017-070 approving the submittal of the grant application. If approved by OCTA around May 2018, it is anticipated that these funds would be available in Fiscal Year 2018-19.

In November 2017, staff from Caltrans, OCTA, and the City began discussions on funding the entire Project using various funding sources from the United States Department of Transportation's Infrastructure for Rebuilding America ("INFRA") competitive grant program and the California State Transportation's Trade Corridor Enhancement Program ("TCEP"). Therefore, the collective group decided to hold the Phase 1 PS&E submittal at the substantial completion stage and to look into completing the overall Project PS&E (Phases 1-4) as one bid package with the intent to seek funding to construct the entire Project. Furthermore, it was decided that Caltrans would take the lead on this effort and Advertise, Award, and Administer ("AAA") the construction contract, with City oversight.

In November 2017 and January 2018, OCTA and Caltrans submitted the appropriate documentation for both grant programs with an estimated total construction and construction engineering cost of \$77 million. This cost estimate included the additional work related to the Phase 4 bridge widening truck climbing lanes component; the added sound walls along the north and south bound on-ramps; some modifications to the retaining walls at the south bound off-ramp; design updates based on the Caltrans Standard Specifications and Plans; and Caltrans AAA costs. It is anticipated that the final decision with respect to grant notifications for the OCTA INFRA grant application (\$25 M) will be in the summer of 2018. The California Transportation Commission ("CTC") will review and consider approval of project awards for the TCEP grant application (\$65.7M) at their May 16, 2018 meeting.

Currently, the TCEP grant application has been ranked very high by Caltrans and is part of the top five projects within the \$1.3 billion program. Therefore, staff is optimistic that this grant application will be approved for funding by the CTC.

This added scope of work was not included within the original PSA with Parsons. Therefore, staff requested Parsons to provide an amended Scope of Work ("SOW") with costs for review and inclusion within a PSA Amendment for the City Council to consider. In February 2018, staff received the amended SOW with costs from Parsons and through several meetings and negotiations reached a reasonable PS&E Phase amended SOW for a not-to-exceed cost of \$2.15 million. This amended cost would bring the total PSA for the Project to \$5.57 million, which is approximately 10% of the updated construction estimate. This detailed amended SOW is provided as Attachment B-1 within Amendment No. 1 to the PSA (see attached "Amendment No. 1"). If this Amendment No. 1 is approved by the City Council, Parsons has estimated that the PS&E bid ready package for the entire Project will be completed by October 2018. Furthermore, to insure the Project continues on course to construction, if Caltrans and OCTA grant funding opportunities for the entire Project don't obtain approval, then Parsons will complete the Phase 1 PS&E for a bid ready project as part of the original PSA SOW.

Additionally, in order to proceed with the amended SOW, the Project design budget needs to be increased appropriately for the added \$2.15 million. Therefore, staff prepared a Resolution to appropriate the additional funds to the Project for the City Council to consider (see "Resolution").

SUMMARY/FISCAL IMPACT

The current FY 2017-18 Budget for Design and R/W Acquisition for the Project, which includes the carryover balance from FY 2016-17, is depicted within the following tables:

Expense Category	FY 2017-18 Budget	Proposed Amendment	Total Amended Budget
Design	\$638,851	\$2,150,000	\$2,788,851
R/W Acquisition	\$14,929,000	\$0	\$14,929,000
TOTALS	\$15,568,051	\$2,150,000	\$17,717,851

Funding Source	FY 2017-18 Budget	Proposed Amendment	Total Amended Budget
Fund 540	\$638,851	\$2,150,000	\$2,788,855
OCTA M2 Grant	\$5,929,200	\$0	\$5,929,200
STIP (1)	\$9,000,000	\$0	\$9,000,000
TOTALS	\$15,568,051	\$2,150,000	\$17,717,851

(1) - The State Transportation Improvement Program (STIP) funding was originally programed for construction funding at \$22.1 million in FY 2019-20. Due to the FY 2016-17 State STIP Shortfall, the funding allocation was reduced to \$9 million and re-appropriated for R/W Acquisition in FY 2019-20, with an ability to obtain an advancement of funds in FY 2017-18. Caltrans and OCTA are currently working with the CTC to advance the funds to FY 2017-18 in coordination with the TCEP grant application.

With the requested funds of \$2.15 million from the Traffic Impact Fees (Fund 540), the Design Phase will be fully funded to deliver the complete Project (Phases 1-4) for an anticipated bid for construction in the fall of 2018. Currently, there is approximately \$2.4 million fund balance within Fund 540. There are no General Funds being used for the Project. Staff has prepared a Resolution to appropriate the additional funds from Fund 540 to the Project for design. Therefore, staff recommends the City Council consider adopting the Resolution.

Parsons has been working on the PS&E Phase for this Project since June of 2015 with the goal to deliver the bid ready set of documents for construction in 2018. Due to various modifications, additional Phase 4 work, updated standard specifications requirements, and added soundwalls, the PSA with SOW requires an amendment. The main catalyst to move forward with the amended PSA now relates to the recent opportunity for Caltrans, OCTA, and City to apply for INFRA and TCEP funds to allocate for the entire Project construction and construction engineering cost, which is now estimated at \$77 million. Staff has negotiated an amended SOW with Parsons in the amount of \$2.15 million to complete the work and delivery the complete PS&E Phase for Caltrans to bid in the fall of 2018, pending funding commitments from the two grant programs. Therefore, staff recommends the City Council consider approving Amendment No. 1 to the PSA with Parsons.

RESPECTFULLY SUBMITTED

William Gallardo, City Manager

Prepared by: Steve Kooyman, P.E., City Engineer

Concurrence: Tony Olmos, P.E., Public Works Director

Attachments

Amendment No.1

Resolution

AMENDMENT NO. 1 TO PROFESSIONAL SERVICES AGREEMENT

This Amendment No. 1 to Professional Services Agreement is made and entered into this _____ day of _____ 2018, by and between **Parsons Transportation Group Inc.** ("CONSULTANT") and the **CITY OF BREA** ("CITY").

A. Recitals.

(i) **On or about June 16, 2015**, CITY and CONSULTANT entered into an Agreement for professional services, whereby CONSULTANT provides professional services with respect to the preparation of Plans, Specifications, and Estimate for the SR-57 & Lambert Road Interchange Improvements ("Project") ("Agreement", hereinafter).

(ii) The parties hereto desire to amend the Scope of Work within the Agreement and to increase the total contract amount for said Scope of Work from \$3,420,000 to \$5,570,000.

B. Amendment.

NOW, THEREFORE, it is agreed by and between CITY and CONSULTANT as follows:

1. Notwithstanding any other provision therein, Section B2. of the Agreement shall be amended with the Scope of Work pursuant to Attachment B-1; and
2. Notwithstanding any other provision therein, Section B1. (c) of the Agreement shall be amended for the Completion of the Project date pursuant to Attachment C-1; and
3. Notwithstanding any other provision therein, the contract amount within Section B3. of the Agreement shall be increased from \$3,320,000 plus \$100,000 contingency (\$3,420,000) to a total Not-To-Exceed amount of \$5,570,000; and
4. Except as amended by this Amendment No. 1, all other terms and conditions of the Agreement remain unchanged; and
5. **The persons** executing this Amendment No. 1 warrant that they are authorized to execute this Amendment No. 1 and that this Amendment is binding on the parties hereto.

NOW, WHEREFORE, the parties have executed this Amendment No. 1 as of the date first set forth above.

CITY OF BREA
A California municipal corporation

CONSULTANT
Parsons Transportation Group Inc.

Mayor

ATTEST:

Lillian Harris-Neal, City Clerk

(two signatures required if corporation)

ATTACHMENT B-1
Amended Scope of
Work

SCOPE OF WORK

SECTION 1

DESCRIPTION OF PROJECT

1.1 PROJECT DESCRIPTION

1.1-1 Background

Parsons original contract Scope of Work and fee for developing Plans, Specifications, and Estimate (PS&E) for the SR-57 & Lambert Road Interchange Improvements (Project) included design of the northbound and southbound ramps pursuant to the City's Request for Proposal dated August 15, 2014 and Proposal from Parsons dated May 29, 2015. Alternative 7A was determined to be the preferred alternative within the approved Environmental Document and Project Report, which was approved in November 2015. Soon thereafter, Parsons and City proposed some design modifications to Alternative 7A which was accepted by Caltrans. Therefore, Parsons pursued the PS&E for the Modified Alternative 7A. Upon completion of the Draft PS&E (65%) Submittal, the City and Caltrans agreed to a phased delivery of the Project to meet available funding budget. The Phases were divided into four (4), with Phase 1-3 associated with the original PS&E Scope of Work and Phase 4 part of a future NB Truck Climbing Lane project lead by Caltrans. The City and Caltrans determined that improvements to the northbound ramps, including the proposed loop ramp were the most cost-effective improvements to be implemented as the Minimum Operating Segment (Phase 1). This phased delivery change required preparation of a supplemental Project Report and Environmental Revalidation as well as preparing a revised PS&E package specific to delivery of Phase 1 to construction. Upon submittal of the 95% Phase 1 PS&E package, it has been determined that full Project funding may be allocated, which also includes accommodations for the future NB truck climbing lane (Phase 4). In order to meet the funding requirements, the Final PS&E for all four phases needs to be Caltrans certified Ready To List (RTL) prior to October 2018. Therefore, the Scope of Work to achieve this delivery schedule with added design features has been updated accordingly.

1.1-2 Location and Limits

SR-57 between Imperial Highway (SR-90) and Lambert Road Off-ramp in the City of Brea (Post Miles 19.89/21.2).

1.1-3 Statement of Intent

Consultant shall perform management, engineering, and environmental services to prepare the PS&E submittal for Caltrans certified RTL with complete support to achieve the accelerated RTL date for the proposed Project.

1.1-4 Proposed Project Alternatives

The proposed improvements, described as Phases 1 through 4, will be the basis for the work contained in this Scope of Work.

The four (4) Project phases are generally described as follows:

Phase 1 (Minimum Operating Segment [MOS])

- Realign the northbound (NB) Off-Ramp to accommodate new NB loop on-ramp
- Construct new NB Loop Ramp from EB Lambert Road.
- Widen existing NB on-ramp shoulders to standard width.
- Widen eastbound (EB) Lambert Road to provide a dedicated right turn pocket for the NB loop on-ramp.
- Widen westbound (WB) Lambert Road to provide a dedicated right turn pocket for the existing NB on-ramp.
- Restripe Lambert Road to provide additional WB left turn storage capacity for the southbound (SB) on-ramp.

Phase 2

- Construct SB auxiliary lane.
- Construct additional lane on the SB off-ramp.
- Widen SB SR-57 median and general-purpose lanes to standard widths.

Phase 3

- Construct additional lane on the SB on-ramp.
- Widen Brea Overhead at the Tracks at Brea.

Phase 4

- Widen NB SR-57 to accommodate truck climbing lane and provide standard median lane and travel lane widths.
- Construct tieback walls under the Lambert Road UC.
- Lower Lambert Road.
- Widen Lambert Road UC to accommodate the future truck climbing lane.
- Widen EB Lambert Road to provide an additional lane from Pomelo Avenue to the SR-57 SB On-Ramp.

1.2 STANDARDS

1.2-1 Latest Editions

Consultant shall perform all services under the Agreement in conformance and in compliance with the latest Caltrans editions and FHWA guidelines of applicable design and environmental standards as of February 2018.

1.2-2 Conflicts

In case of conflict, ambiguities, discrepancies, errors or omissions among the reference materials obtained by Consultant from other agencies, Consultant shall submit the matter to the City for clarification. Any work affected by such conflicts, ambiguities, discrepancies, errors or omissions which is performed by Consultant prior to clarification by the City shall be at Consultant's risk. Such conflicts, ambiguities, discrepancies, errors or omissions among the references shall not give rise to a claim by Consultant for extra work unless Consultant can demonstrate that it has incurred additional expenses as a result thereof.

1.2-3 Plans, Specifications, and Estimate

PS&E shall be prepared in English units and in conformance with all applicable Federal, State, and local laws, rules, regulations, policies, procedures, manuals, standard plans and specifications, roadway maintenance and structure maintenance reports, and other standards that STATE would normally follow, including but not limited to, compliance with applicable Federal Highway Administration (FHWA) requirements. As part of the work involved in the preparation of the PS&E, Consultant shall prepare Special Provisions pertaining to items of work included in the plans that are not addressed in the latest Caltrans Standard Specifications and Caltrans approved Standard Special Provisions. Consultant shall furnish the Special Provisions to Caltrans.

1.2-4 Roadway/Design

Roadway design shall be performed in accordance with all applicable Federal, State and local laws, rules, regulations, policies, procedures, manuals, standard plans and specifications, roadway maintenance and structure maintenance reports, and other standards that STATE would normally follow, including but not limited to, compliance with applicable Federal Highway Administration (FHWA) requirements. Fact sheets for mandatory non-standard features shall require approval from Caltrans and FHWA.

1.2-5 Drafting

Roadway and related plans shall be prepared in conformance with the current version as of February 2018 of the Caltrans "Drafting and Plans Manual" and "CADD Manual." CONSULTANT is required to furnish .dgn

files at PS&E.

The size and clarity of lettering on plan sheets requires special attention, as final contract plans are half-size. Plans, which are illegible or otherwise difficult to read, are unacceptable.

1.2-6 Reference Material

Consultant shall utilize the following documents. Please note it is not City's intent to provide a comprehensive list of resources; therefore, Consultant shall make use of additional reference material as appropriate. Consultant shall also be responsible for ensuring they are using the most recent applicable version of all reference material, including any addenda and errata, as of February 2018.

- A Policy on Geometric Design of Highways and Streets (AASHTO)
- Caltrans Highway Design Manual including updated Design Information Bulletins, and Design Memorandums
- Manual of Uniform Traffic Control Devices (MUTCD)
- California MUTCD
- Caltrans DOS Structures Manuals, including Information & Procedures Guide, Design Details, Aids, Practice and Memo to Designers Manuals
- Caltrans Project Development Procedures Manual
- Caltrans Environmental Guidelines & Manuals
- Caltrans Plans Preparation Manual
- Caltrans CADD Manual
- Caltrans Highway Planting and Irrigation Manual
- Caltrans Guide for Submittal of PS&E
- Caltrans RTL Guide
- Caltrans Standard Plans and Standard Specifications
- Caltrans Storm Water Quality Handbooks
- Orange County Hydrology Manual
- Caltrans Right of Way Engineering Procedures Handbook
- Caltrans HOV Guidelines
- Caltrans Local Assistance Procedures
- Caltrans Surveys Manual
- Caltrans District 12 R/W Engineering Requirements for the Preparation of Documents and Maps
- Applicable Local Codes and Manuals
- Construction Best Management Practices (BMPs)
- Caltrans Signal and Lighting Guidelines, CMS Guidelines, Ramp Metering Guidelines, Communication Systems Guidelines and National Electrical Code.
- Applicable Caltrans District 12 Design Memorandum
- Caltrans District 12 Quality Control Review Checklists

1.2-7 Product Delivery

- All plans prepared by Consultant shall be in a .dgn file format using the latest Microstation Version as directed by Caltrans District 12 CADD personnel as of February 2018. The plans shall include the Engineer's signature and seal.
- All vector geographic data layers shall be delivered in either ESRI Shapefile or Personal Geodatabase (MS ACCESS) format. Aerial photography shall be delivered in tiled Tagged Image File Format (TIFF) with "world" files or Joint Photographic Experts Group (JPEG) with "world" files. Raster data can be delivered in ArcGRID format.

1.3 DESIGN CRITERIA

The following is a general listing of specific design criteria which shall be adhered to. Consultant shall utilize the most current version as of February 2018. This list is by no means comprehensive and other standards may apply.

1.3-1 Roadway

Design speed shall follow Caltrans Highway Design Manual (HDM) guidelines as well as pertinent City of Brea standards.

1.3-2 Bridge

Design: Bridge Design Specifications (LRFD) and Seismic Design Criteria (SDC)

1.3-3 Surveys

Consultant shall conduct all surveys in conformance with the Land Surveyor's Act and Caltrans Survey Manual for PS&E.

1.3-4 Materials Report

Consultant shall conform to the guidelines established by Caltrans Office of Materials Engineering and Testing Services (METS).

1.3-5 Drainage

- Q25 for Design on-site drainage
- Q100 for Design off-site drainage
- Q50 for Design for bridge Deck Drain

SECTION 2

GENERAL CONDITIONS AND REQUIREMENTS

2.1 SCOPE OF WORK GENERAL CONDITIONS AND REQUIREMENTS

- 2.1-1** Consultant shall carry out the instructions as received from the City's Project Manager and shall cooperate with Caltrans, and any other consultants working on this Project.
- 2.1-2** It is not the intent of the foregoing paragraph to relieve Consultant of his professional responsibility during the performance of this contract. In those instances where Consultant believes a better design or solution to a problem is possible, Consultant shall promptly notify City/Caltrans Project Managers of these concerns, together with the reasons therefore.
- 2.1-3** Consultant is responsible for the accuracy and completeness of data, reports, studies, PS&E prepared for this project and shall check such material accordingly. While Caltrans will review the data and plans for conformity with Caltrans Design Standards, as well as conformance with NEPA and CEQA requirements, the responsibility for accuracy and completeness lies with Consultant.
- 2.1-4** Neither Consultant nor its subcontractors shall incorporate materials, or equipment of single or sole source origin, other than those included in Caltrans Standards, into the design without the prior written approval of Caltrans.
- 2.1-5** Reports, studies, plans, data, estimates, and documents produced by Consultant shall be subject to approval and acceptance by Caltrans and FHWA. In the event of non-acceptance due to errors, inconsistencies and omissions, Consultant shall make corrections and return the documents to Caltrans in accordance to the project schedule.
- 2.1-6** The plans, specifications, designs, estimates, calculations, reports, studies, and other documents furnished under this Scope of Work shall be of a quality acceptable to Caltrans and the City. The minimum criteria for acceptance shall be a product of neat appearance that is well organized, technically and grammatically correct, and thoroughly checked in accordance with the Caltrans QA/QC Procedures Manual. All work products shall clearly identify both the preparer and checker. The standards of appearance, organization, and contents of the reports and drawings shall meet or exceed those of similar documents produced by Caltrans.
- 2.1-7** The page identifying preparers of engineering reports, the title for

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specifications and each sheet of plans, shall bear the professional seal, certificate number and expiration date, registration classification, and the signature of the professional engineer(s) responsible for their preparation

2.1-8 To assist in understanding contract objectives and requirements,
Consultant

shall hold regular meetings with the City and Caltrans. If the original established schedule is insufficient, Consultant shall hold additional meetings as necessary. The primary purpose of these meetings is to discuss work objectives, Consultant's work schedule, the terms of the contract and other related issues. In addition, the meetings shall serve as a forum for resolving any issues related to the PS&E development.

- 2.1-9** Consultant may establish direct contact with governmental regulatory and resource agencies and others in order to obtain information, expertise, and assistance in developing baseline data and resource inventories. Consultant shall maintain a record of such contacts and shall transmit copies of those records to Caltrans and City on a regular basis. At a minimum, these records shall be transmitted monthly or more frequently, when the content or extent of the records so warrants.
- 2.1-10** Caltrans and City will retain responsibility for final consultation, both informal and formal, with state and federal agencies regarding project mitigation and compensation proposals.
- 2.1-11** Consultant shall comply with OSHA regulations regarding safety equipment and procedures, safety instructions issued by Caltrans, and the safety provisions included in the Caltrans Survey Manual. While working on the job site, Consultant's personnel shall wear white hard hats, rubber soled shoes, and appropriate safety vests. In the case of a discrepancy between the Caltrans and OSHA requirements, the more stringent regulation shall apply.
- 2.1-12** Consultant shall designate a Surveys Manager who will coordinate Consultant's surveying operations. The Surveys Manager shall be responsible for all matters related to Consultant's surveying operations, but shall coordinate with Consultant's Project Manager.
- 2.1-13** Surveys performed by Consultant shall conform to the requirements of the Land Surveyors Act and the Caltrans Surveys Manual. In accordance with the Act, "responsible charge" for the work shall reside with a pre-January 1, 1982, Registered Civil Engineer or a Licensed Land Surveyor, in the State of California.
- 2. 1-14** In the case of conflicts between the instructions contained in this Scope of Work and those found in the Bridge Memos to Designers, the instructions in this Scope of Work take precedence.
- 2.1-15** Where Consultant is required to prepare and submit studies, reports, plans, etc., to Caltrans as required by this Scope of Work, these shall be submitted in draft to City for review prior to submitting to Caltrans. The Project schedule shall reflect City reviews and Consultant revisions as necessary. In addition to City reviews, draft submittals reflected on project schedule and opportunity shall be provided for Caltrans to request

revisions, prior to final submission.

2.1-16 Throughout the design of this project, Consultant shall consider least cost alternatives analysis for major project components, where appropriate.

2.1-17 City Project Manager will administer Consultant contract and provide general direction to Consultant. Caltrans will provide Independent Quality Assurance as well as final approval of the PS&E, required reports, and work product.

2.1-18 Selected Consultant shall request and obtain the latest version of the following material (as available) from Caltrans/City:

- Existing aerial photographs and negatives
- Existing survey control data and site survey information (hard copy and electronic files) including survey control maps, coordinate control maps, existing right-of-way maps, existing monument maps, existing land-net information and any pertinent records of information
- Project Approval/Environmental Document (electronic file)
- Project Report design plans (electronic dgn files)
- Existing Caltrans Detailed Seismic Revisions Data Sheets
- Existing maintenance reports
- Existing as-built Logs of Test Borings
- Existing noise data
- Existing Materials Data and Foundation Reports
- Pertinent correspondence
- Caltrans standard CADD cell library including bridge, geometric, landscape, project plans, right of way, and traffic/electrical (hard copy and electronic files)
- Caltrans District CADD cell library (hard copy and electronic files)
- Caltrans Headquarters/District font library
- Caltrans CADD plotting pen tables
- Caltrans CADD seed file
- Available aerial mapping for the entire project limits (hard copy and electronic files) in proper format
- Current Standard Special Provisions (hard copy and electronic files)
- Monument disks, plugs, tags, and marker posts
- Current Traffic Counts and Future Year Traffic Projections

2.1-19 Encroachment Permit:

It is the responsibility of Consultant and its sub Consultants to prepare Caltrans encroachment application for the City and obtain the proper permit(s) from Caltrans (including Double Permit) and/or local agencies prior to any field surveys.

2.1-20 Progress Reports:

At the end of each month, Consultant shall report the progress of the work. Progress shall be based on physical percent complete such as number of

drawings or deliverables completed or estimated progress toward completion. Progress payments will be based upon percent complete of the major tasks identified.

Consultant shall submit one copy of a monthly Progress Report to the City Project Manager consisting of a written narrative and an updated bar-chart format of the Project Master Schedule. This report shall be received no later than the tenth (10th) calendar day of the month.

The narrative portion of the monthly Progress Report shall describe overall progress of the work, discuss significant problems and present proposed corrective action and show the status of major changes.

All schedule tasks will be updated to reflect current percent complete. If the latest completion time for a significant work item does not fall within the time allowed by the original Project Master Schedule, the sequence of work and/or duration shall be revised by Consultant through concurrent operations, additional staffing or overtime, until the resultant schedule indicates that all significant project completion dates shall be met. If during the course of the work, Consultant falls behind in overall performance in accordance with the current schedule, a project management meeting will be called to determine the cause. If cause is found to be due to Consultant performance, payment to Consultant may be withheld pending the submittal of an action plan outlining the steps which will be taken to correct the identified delay(s).

The initial Project Master Schedule as agreed to by City shall become the project target. The target schedule shall be displayed on the updated Project Master Schedule.

Consultant Deliverables:

Following are the progress reports, which Consultant shall be responsible for preparing and providing:

- Monthly Progress Reports

2.1-21 Quality Assurance / Quality Control (QA / QC) Plan:

Consultant shall maintain a Quality Assurance / Quality Control Plan throughout performance of the services under this Agreement. The QA/QC Plan is intended to ensure that the reports, plans, studies, estimates, and other documents submitted under the Agreement are complete, accurate, checked, and proofread to meet professional engineering practices in effect at the time of execution of the Agreement, and of a quality acceptable to City.

The following quality control elements are required by Consultant throughout the preparation of PS&E for the project.

1. Provide independent checking and verification of all calculations.

2. Provide independent checking, correction, and back checking for all plans. Plans shall be marked clearly as being checked, signifying that the preparation of the material followed the QA/QC Plan established for the project.
3. Route pertinent project related correspondence and memoranda to affected personnel and bind in appropriate project files.
4. Establish appropriate means to avoid conflicts and misalignments between both new and existing improvements, particularly where several drawings show different elements of work in the same area.
5. Conformance with the approved Environmental Document requirements.
6. Identify critical QA reviews within the Project Master Schedule.
7. Include in the QA/QC Plan a procedure where each deliverable is certified by the Quality Manager or Project Manager as being prepared and checked in accordance with the approved QA/QC Plan.
8. Certify each deliverable by the Quality Manager or Project Manager as being prepared and checked in accordance with the approved QA/QC Plan.

Consultant Deliverables:

- 1 copy of QC documents for deliverables completed/submitted upon request of Caltrans or the City

PLANS, SPECIFICATIONS, AND ESTIMATES (PS&E)

SECTION 3

STATEMENT OF

WORK

3.1 TASK 1 - PROJECT MANAGEMENT/ COORDINATION/ ADMINISTRATION

This task covers project management services including the requirements for meetings, schedules, progress reports, invoicing, and administration of Consultant's work.

3.1-1 Project Management

Purpose: To provide overall execution and financial management of the project, including City and Department coordination, coordination with local, state and federal regulatory agencies, tracking progress of the work, administering subcontract, attending public workshops, preparing invoices, and conducting project meetings.

Methodology: Consultant Project Manager shall provide overall project management, coordination, and supervision of project staff to facilitate the performance of the work in accordance with the scope and requirements of City and Department. Consultant shall maintain coordination with other members of the project development team (PDT) and regulatory agencies impacted by the project. Consultant design team meetings shall be held as necessary to coordinate project activities, review assignments and progress, and identify issues to be resolved.

Deliverables:

- Project Management Plan
- Communication Plan

3.1-2 Coordination/Administration

3.1-2a Coordination and Meetings

Meetings with affected parties shall be held to discuss issues pertinent to analysis, design, and effects of the Project. During these meetings, City and Caltrans may provide direction for development of the PS&E.

Consultant shall participate in the following meetings:

Project Development Team (PDT) Meetings with City and Caltrans

shall be held as needed to discuss policy, procedural and freeway-specific issues. Consultant shall bring progress plans as appropriate. No special presentation materials shall be required.

Agency Coordination/Technical Workshop Meetings shall be held to discuss technical issues with specific agencies. Consultant shall bring progress plans as appropriate. No special presentation materials shall be required.

Right-of-Way Coordination meetings shall be held before starting work between Consultant, City and the Chief of Caltrans District 12 R/W Engineering (CHIEF). Thereafter monthly progress meetings (up to a maximum of 15 meetings) shall take place between Consultant, City and the CHIEF at District 12 Headquarters. An emergency meeting may be called at any time to address pressing problems.

Deliverables:

Following are the meeting materials which Consultant shall be responsible for preparing and providing:

- Notices
- Agendas
- Handouts
- Minutes
- Progress plans
- Meeting-Specific exhibits

3.1-2b Administration

Following are administrative duties which shall be performed by Consultant:

- Supervise subcontractors, coordinate, and monitor work for conformance with Caltrans standards and policies.
- Apply for and obtain Caltrans encroachment permits necessary for Consultant to be on the jobsite.
- Apply for and obtain City approvals and permits as required.
- Prepare, circulate, and file correspondence and memoranda as appropriate.
- Maintain Project files using the Caltrans Uniform File System.
- Thirty days after Notice to Proceed, Consultant shall submit the Project Master Schedule to City and Caltrans Project Managers.

3.1-3 Schedules

Consultant shall submit an initial Project Master Schedule. The approved Project Target Schedule shall be displayed on the Project Master Schedule updates. The following elements must be included by Consultant in the Schedule:

- Work items and deliverables identified in accordance with a Work Breakdown Structure (WBS) as developed by Consultant and approved by City and Caltrans
- Work items of agencies and other third parties that may affect or be affected by Consultant's activities
- Resource loading of work items in work hours to show the effort required to perform the work. Resource loading shall be used to develop plan and actual progress curves
- The Project Master Schedule shall include all data necessary to represent the total Project and the critical path shall be clearly identified
- The order, sequence, and interdependence of significant work items shall be reflected on the Project Master Schedule

Major tasks shall be broken down into subtasks as warranted.

Monthly schedule updates shall be part of the Progress Report and will be in accordance with the requirements shown in Section 2.1-20.

Deliverables:

Following are the schedules which Consultant shall be responsible for preparing and providing:

- Project Master Schedule

3.2 TASK 2 – 35% PS&E

3.2-1 Data Collection

Consultant shall collect existing topographic maps, as-built drawings, reports, and other available materials. Consultant shall request data from the City of Brea, Caltrans, the County, and other agencies, as appropriate.

3.2-2 Workshop

Consultant shall conduct a workshop with Caltrans District 12 staff, the geometric reviewer, and City staff to present and obtain consensus on the geometrics of the ultimate Improvements and proposed project design. Consultant shall identify and clarify any major non-standard features.

3.2-3 Fact Sheets

Consultant shall review Fact Sheets for Mandatory and Advisory Design Exceptions for non-standard design features prepared during PA&ED phase and coordinate any needed updates and revisions with Caltrans.

Deliverables:

- Caltrans approved Fact Sheet(s)

3.2-4 Design Surveys

Consultant shall perform design surveys during this phase. Consultant to request and obtain available recent data (photogrammetric or otherwise) from City/Caltrans. No new mapping is anticipated, however, if significant topographic changes have occurred, supplemental mapping will be necessary, subject to prior City approval. Should such additional mapping be required, the compensation will be via a contract amendment. Any additional survey work or mapping performed prior to receiving the required approvals will be at Consultant's risk and expense.

Upon receipt of the Survey Control Data from Caltrans, Consultant shall verify the physical existence of the "Monument Control Points" and, if necessary, reestablish such Control Points.

Consultant shall perform detailed field surveys of existing street and drainage features. The Surveys Manager shall coordinate with the Design Engineer to establish limits of work. Cross sections and tie-in surveys will ensure accurate design fit and smooth transitions from existing roadway and infrastructure features.

Consultant shall verify survey results and then transmit them in MicroStation 3D DGN and CaiCE DTM formats, along with ASCII point and station-offset files of all field survey ties. All work and files will be based on project coordinate control and in accordance with Caltrans Surveys and Right-of-Way Manuals, and Caltrans District 12 Right of Way Engineering Requirements for the Preparation of Documents and Maps.

Consultant shall survey Geotechnical Boring locations to verify these locations. (see Geotechnical Exploration Plan)

Deliverables:

- Survey Plans (original and electronic copies)

3.2-5 Geotechnical Exploration Plan

Consultant shall prepare and submit a geotechnical review and exploration plan for City and Caltrans review. Consultant shall obtain right-of-entry permits prior to exploration. Consultant shall conduct subsurface investigation and evaluate the results in accordance with Caltrans testing criteria. Consultant shall analyze the results and present them in the geotechnical report.

Deliverables:

- Geotechnical Report

3.2-6 Roadway Plans

Consultant shall prepare 35 percent level layouts, profiles, super elevation diagrams, typical sections, and ROW requirements per Selected Alternate and the field survey.

Deliverables:

- 35% Roadway Plans – (10 sets and an electronic copy)

3.2-7 Preliminary Foundation Report

To assist in Type selection, Consultant shall prepare a Preliminary Foundation Report, in accordance with Caltrans Office of Structural Foundations requirements. This report shall include a summary of the exploration program, description of the site geotechnical issues, and recommendations for foundation design and construction including retaining walls, if appropriate.

Deliverables:

- Preliminary Foundation Report

3.2-8 Type Selection (Bridge and Structural Walls)

Consultant shall prepare the Structure Type Selection documents and the Bridge/Structural Wall General Plans to comply with the most current Caltrans guidelines, including, but not necessarily limited to: Bridge Design Details 3-10 to 314; Bridge Design Aids, Section 10; Memos To Designers 1-23, 14-29, 17105, 110, and 21-19.

The Type Selection Report shall include a discussion of foundation and false work requirements, seismic and aesthetic considerations, traffic handling requirements and alternatives, and construction cost and staging. In addition, Consultant shall develop an order-of-magnitude construction cost estimate. Anticipated construction methods will be identified in the Type Selection process and coordinated with the project geometry.

Consultant shall submit Type Selection documents to the Caltrans District 12 for review and approval.

Deliverables:

- Type Selection documents (Bridge and Structural Walls)
- Advance Planning Studies (Tie Back Walls) (Subject to separate scope/fee approval by City)

3.2-9 Type Selection Meeting and Approval (Bridge and Structural Walls)

Consultant shall attend a Type Selection review meeting at Caltrans Headquarters in Sacramento to finalize structure type, foundations, seismic design, aesthetics, and traffic handling plans. Consultant shall summarize and submit meeting proceedings to the liaison engineer within one week for written Type Selection approval. The meeting summary may update or supplement the Type Selection Report.

Deliverables:

- Meeting Minutes

3.2-10 Project Cost

Consultant shall prepare a preliminary cost estimate at 35% completion. Throughout development of the PS&E, Consultant shall update this estimate. If this cost estimate, or any of the updates, exceeds the Project Report Cost Estimate, Consultant shall recommend alternatives for reducing the project costs.

Deliverables:

- Project Cost Estimate

3.2-11 Utilities

Consultant shall coordinate and work closely with the City, Caltrans and utility companies to determine the need to relocate impacted utility lines as per Caltrans high and low risk Policy Manual. Consultant shall use utility conflict matrix to identify utility conflicts. It is assumed the utility companies will perform relocation design for their own facilities. Any necessary utility relocation plans will be not be part of the PS&E package developed by Consultant. Consultant shall perform potholing of existing utilities, and prepare and distribute utility base maps to affected utilities. If necessary, Consultant shall conduct a utility relocation feasibility study to evaluate existing systems and optimize relocations.

Deliverables:

- Utility base maps and plans
- Utility relocation feasibility study, if needed

3.2-12 Hazardous Waste

Aerially Deposited Lead (ADL): Consultant shall test the unpaved area within the project limits for lead contamination and incorporate the results and conclusions into the PS&E package. This task shall also address the removal and disposal of traffic stripes and pavement markings.

3.2-13 Aesthetics Plan

Consultant shall prepare one conceptual aesthetic treatment plan for retaining walls, structures, and soundwalls.

Deliverables:

- Conceptual Aesthetic Treatment Plan

3.2-14 Geometrics

3.2-14a Workshops

Consultant shall conduct workshops with Caltrans District 12 staff, the geometric reviewer, and City staff to present and obtain consensus on the geometrics of the ultimate Improvements and proposed project design. Consultant shall identify and clarify any major non-standard features.

3.2-14b Fact Sheets

Consultant shall prepare Supplemental Fact Sheets for Mandatory and Advisory Design Exceptions for non-standard design features beyond those prepared during PA&ED phase and coordinate any needed updates and revisions with Caltrans.

Deliverables:

- Caltrans approved Fact Sheet(s)

3.3 TASK 3 – DRAFT PS&E (65 %) SUBMITTAL

3.3-1 Roadway Plans

Consultant shall incorporate all reviewing agency comments into the roadway plans and estimates. Where it is not possible or desirable to incorporate certain comments, Consultant shall provide an explanation. Deliverables (10 sets and an electronic copy of the following plans):

1. Title Sheet
2. Typical Cross Sections
3. Key Map and Line Index
4. Layout Plans
5. Profiles and Superelevation Diagrams
6. Construction Details
7. Contour Grading
8. Summary of Quantities

3.3-1b Updated Roadway Plans

Consultant shall incorporate all reviewing agency comments into the roadway Draft 65% plans and estimates. Where it is not possible or desirable to incorporate certain comments, Consultant shall provide an explanation.

Deliverables:

1. Previous 65% submittal to include concept traffic handling and stage construction sheets

3.3-2 Drainage Plans

Consultant shall prepare a drainage report to address the existing drainage condition and the proposed mitigation and design. This report shall consider both onsite and offsite systems. Consultant shall prepare drainage plans, profiles, and quantities based on the drainage report. To address stormwater quality (NPDES & Caltrans) requirements, Consultant shall update the existing SWDR and incorporate its findings into the project's PS&E. The drainage, SWDR, temporary water pollution control, and erosion control plans will be prepared in accordance with Caltrans Standard Drainage Plans and Quality Sheets guidance. Consultant shall also prepare temporary drainage plans where needed.

Deliverables (10 sets and an electronic copy of the following):

- Drainage Report
- Drainage Plans, Profiles, Details, and Quantities
- Storm Water Data Report
- Water Pollution Control Plans
- Temporary Drainage Plans, if needed
- Erosion Control Plans

3.3-3 Stage Construction, Traffic Handling, Detour Plans, and Transportation Management Plan (TMP)

The objective of the TMP is to provide continuous traffic circulation and access, with adequate space for safe and efficient construction. The TMP will be coordinated with the City of Brea, Caltrans, and other stakeholders, including the CHP. Stage Construction and Detour Plans shall include construction detour routes.

Deliverables (10 sets and an electronic copy of the following):

- Transportation Management Plan
- Stage construction and traffic handling/detour plans
- Detour layouts, profiles, and superelevation diagrams
- Construction area signs
- Quantity sheets

3.3-4 Pavement Delineation Plans

Consultant shall prepare pavement delineation plans to identify locations of painted and thermoplastic stripes and markings, pavement markers, and delineators.

Deliverables (10 sets and an electronic copy of the following):

- Pavement Delineation Plans
- Pavement Details
- Quantity Sheets

3.3-5 Sign Plans

Consultant shall prepare Sign Plans to show existing and proposed new signs. The plans will include sign details and quantity sheets.

Deliverables (10 sets and an electronic copy of the following):

- Sign Plans
- Sign Details
- Quantity Sheets

3.3-6 Lighting, Signal Plans, and Electrical Ramp Metering and Traffic Monitoring

Consultant shall prepare Lighting and Signal Plans for the project including safety lighting and ramp metering plans. Consultant shall coordinate with Caltrans to ensure that ramp meter and electrical designs will accommodate future SR-57 traffic monitoring features within the project limits.

Deliverables (10 sets and an electronic copy of the following):

- Lighting plans and Details
- Electrical Ramp Metering Plans
- Traffic Signal Plans

3.3-7 Planting and Irrigation Plans (Subject to separate scope/fee approval by City)

Consultant shall prepare a replacement Landscaping theme for the project limits.

Deliverables:

- Planting and Irrigation Plans (10 sets and an electronic copy)

3.3-8 Right-of-Way Engineering Services

3.3-8a Location

Over and along that portion of SR-57 described as: "Limits of the project as defined by Caltrans"

3.3-8b References

Ref 1 Caltrans Right of Way Manual (with special attention to Chapter 6 - Right of Way Engineering)

Ref 2 Caltrans Surveys Manual

Ref 3 Caltrans Drafting and Plans Manual

Ref 4 Caltrans District 12 R/W Engineering Requirements for the Preparation of Documents and Maps (dated JAN-2007)

Ref 5 Caltrans District 12 R/W Engineering CADD Standards (dated 2003)

In the event of conflict between Ref 1, 2, 3 and Ref 4, 5 – the latter shall prevail.

3.3-8c Activities

In compliance with the above references and as project needs dictate, Consultant shall perform the following:

3.3-2c-1 Perform Record Data Search

Search, acquisition, and analysis of appropriate deeds, field notes, and survey maps contained in State, County, and City files.

3.3-8c-2 Acquire Title Reports

Acquire title reports for all parcels impacted by proposed R/W fee and easement takes.

3.3-8c-3 Perform Land Net Recovery and Field Ties

Field and related survey effort necessary to search, recover, describe, and tie-in controlling land survey monuments. (See "State Right of Way Boundary Establishment" Ref 4)

3.3-8c-4 Prepare Land Net Map - "Before Condition" Record of Survey

This activity is required by the Professional Land Surveyors Act and involves the production and filing of the "Before Condition" Record of Survey. (See "Records of Survey" Ref 4)

3.3-8c-5 Perform Monument Perpetuation Surveys

This activity is required by the Professional Land Surveyors Act and includes:

- Preparation of lists of monuments threatened with destruction.
- Referencing threatened monuments with tie-outs for perpetuation through construction.
- Setting replacement monuments after construction to effect said perpetuation.

All reset replacement monuments shall meet the requirements described below under the activity "Final Monuments".

The "Before Condition" Record of Survey (See "Records of Survey" Ref 4) shall be the instrument on which tie-outs are documented prior to construction. In the cases where swing ties or tangent over ties are the method of tie-out, each monument tied out using these methods shall clearly be shown as a separate "Detail" on the "Before Condition" Record of Survey.

3.3-8c-6 Prepare Right of Way Maps

Prepare various types of R/W Maps (See Ref 1 and Ref 3) as dictated by project need. (Also see "Right of Way Maps"

Ref 4). Various types of R/W Maps may include but are not limited to:

- Appraisal Map
- Resolution of Necessity Map
- Director's Deed Map
- Relinquishment Map
- Vacation Map
- Transfer Control and Possession Map
- Right of Way Record Map

3.3-8c-7 Prepare Acquisition Documents

Property acquisition documents will be prepared by the City. (See "Legal Descriptions & Exhibits" Ref 4)

3.3-8c-8 Prepare Resolution of Necessity, Legal Descriptions and Plats

Prepare legal descriptions and plats. Resolution of Necessity and any additional information for the filing of the complaint will be prepared by the City. (See "Legal Descriptions & Exhibits" Ref 4)

3.3-8c-9 Prepare Deed and Plats

Prepare Deed and attendant maps or plats. (See "Legal Descriptions & Exhibits" Ref 4)

3.3-8c-10 Prepare Utility Legal Descriptions and Plat Prepare legal description and plat to fulfill contract obligations with utility entities. Joint Use Agreement and Consent to Common Use Agreement will be prepared by the State/City. (See "Legal Descriptions & Exhibits" Ref 4)

3.3-8c-11 Prepare Parcel Files

For each R/W fee of easement take, prepare a parcel file. (See "Parcel Files" Ref 4).

3.3-8c-12 Final Monumentation (Subject to separate scope/fee approval by City)

Conduct field survey and related activity to monument new R/W boundaries. Monumentation should include all local street controls established/reestablished or to perpetuated through a Monumentation map (Record of Surveys) or Corner Records. Monument type shall vary depending on the surface character at the point as follows:

- In dirt - 2-inch diameter galvanized iron pipe at least 24 inches in length with bronze disk cemented in top. The

pipe and disk should be countersunk no more than 2 inches and no less than 1 inch from the dirt surface.

- In concrete structure or surface - bronze disk cemented into concrete. Disk shall be countersunk so that top of disk is flush with the concrete surface.
- In asphalt surface street - bronze disk in Type D (Alternative No. 1) well monument as shown on Caltrans Standard Plan A74 (See Caltrans "Standard Plans" publication).
- In asphalt surface non-street - Galvanized iron spike at least 6 inches in length collared with a brass identification tag. Immediately underneath the brass tag shall be a stiff metal washer to prevent the brass tag from becoming deformed when the point is set. Spike and tag shall be countersunk flush with the surface. The use of "gear spikes" or "gin spikes" is expressly prohibited.

All bronze disks shall be at least 2-1/4 inches in diameter.

All disks and spikes set shall have a clear and unambiguous punch mark defining the point. Each disk or brass tag set shall be clearly and permanently labeled with the license number of the professional in responsible charge of the work. If the license number is rendered illegible in the process of setting the point, the point shall be remonumented so as to make the license number legible.

3.3-8c-13 Monumentation Map - "After Condition" Record of Survey
(Subject to separate scope/fee approval by City)

This activity is required by the Professional Land Surveyors Act and involves the production and filing of the "After Condition" Record of Survey. (See "Records of Survey" Ref 4).

3.3-8d Deliverables

Specific requirements for various deliverables are contained in Ref. All deliverables shall be in compliance with the above stated REFERENCES. All deliverables shall meet the standard of Professional Land Surveyor work. Whenever Consultant delivers surveying and mapping information produced within this scope of work to any party, Consultant shall automatically and simultaneously provide an exact duplicate of the delivered information to the Chief of Caltrans District 12 R/W Engineering.

In addition, the final alignments (mainline freeway, arterial streets and ramp connectors/collectors) as developed and utilized in this project and copies of any field survey information/mapping as it

relates to Right-of-Way Engineering shall be supplied to Caltrans Surveys.

3.3-8e Applicable Law

All work shall be conducted in compliance with all applicable State law and regulation, and all applicable local ordinance and regulation.

3.3-3 Geotechnical and Foundation Reports

3.3-9a Geotechnical Design Report (GDR)

Consultant shall prepare a report discussing the geotechnical design basis of the project and recommendations for design and construction of earth retaining structures, cut, and fill slopes, pavement, and drainage facilities. This report will be submitted to Caltrans for review. Consultant shall address any comments stemming from this review and prepare a final draft. All calculations supporting the design recommendations will be included as an appendix to the GDR.

Deliverable:

- Draft/Final Geotechnical Design Reports

3.3-9b Foundation Reports for Bridges, Retaining Walls and Soundwalls

Consultant shall prepare a Foundation Report based upon Type Selection comments and additional information from the GDR analyses. Logs of test borings will be included as 11-inch by 17inch plans.

Deliverable:

- Draft Foundation Reports

3.3-9c Materials Report

CONSULTANT shall prepare a report discussing the new pavement structure recommendations for the project. This report shall be submitted to Caltrans for review. CONSULTANT shall address any comments stemming from this review and prepare a final draft. All calculations supporting the recommendations shall be included as an appendix to the Materials Report.

Deliverables:

- Draft/Final Materials Report

3.3-9d Life Cycle Cost Analysis (LCCA)

CONSULTANT shall prepare an LCCA discussing the cost analysis for alternative pavement structure recommendations for the project. This report shall be submitted to Caltrans for review. CONSULTANT shall address any comments stemming from this review and prepare a final draft. All calculations supporting the recommendations shall be included as an appendix to the LCCA.

Deliverables:

- Draft/Final LCCA

3.3-10 Bridge Plans

Consultant shall prepare layout plans and structural details for construction, widening or modification Bridges. Consultant shall also prepare draft technical special provisions for the bridges.

Bridge design shall be in accordance with Caltrans Seismic Design Criteria, Bridge Design Specifications, Memos to Designers and Bridge Design Details Manual. Details and construction specifications shall be prepared in accordance with Caltrans Standard Plans, Standard Specifications, and Standard Special Provisions.

Consultant shall update the bridge General Plan estimate to verify its ongoing validity.

Deliverables:

- Unchecked structure plans
- Draft Structures Special Provisions
- Updated Structures Cost Estimate

3.3-11 Retaining Wall Plans

Consultant shall prepare layout plans, profiles and structural details, if

necessary, for the walls specified along the project route. Plans will incorporate aesthetic details consistent with Conceptual Aesthetics Treatment Plan. Consultant will prepare draft technical special provisions for the retaining walls.

Deliverables:

- Retaining Wall Plans, Details and Quantities

3.3-12 Soundwall Plans

CONSULTANT will prepare soundwall plans. Plans will incorporate aesthetic details consistent with the Conceptual Aesthetics Treatment Plan. CONSULTANT will prepare draft technical special provisions for the soundwalls.

Deliverables:

- Soundwall Plans, Details and Quantities

3.3- 13 Utility Plans

CONSULTANT will prepare and update the utility conflict maps as a result of the coordination, reviews and potholing done during the 35% PS&E.

Deliverables:

- Utility conflict maps with pothole information
- Updated Utility Conflict Matrix

3.3-14 Permit Applications

Consultant shall prepare and submit permit applications for surveying, geotechnical investigations, and construction.

3.4 TASK 4 - INITIAL PS&E (95 %) SUBMITTAL

3.4-1 Roadway Plans

This submittal will include comments, reviews, coordination efforts, and updated information. Consultant shall update Roadway Plans, Stage Construction/Traffic Handling Plans, Drainage Plans, Soundwall, Planting and Irrigation Plans, and, and will provide Quantity Sheets with updated Special Provisions and BEES estimate, and initialed and dated copy of the Environmental Commitment Record (ECR). Any Revised and/or New Standard Plans developed by Caltrans shall be included with Consultant's Roadway Plan submittal.

Deliverable:

- 95 percent Roadway PS&E – 15 sets plus electronic copy

3.4-2 Bridge and Retaining Wall Plans

Consultant shall independently review the unchecked plans, draft special provisions, quantities, and construction cost estimate for the Bridges and retaining walls. Consultant's independent review team shall analyze the structures, verify member capacities, review the special provisions, and prepare independent quantity calculations. All issues raised by the checkers shall be resolved with the structural designers. The final design shall reflect agreement among the designers and independent checkers.

Deliverables:

- 95 percent structure plans, reduced size – 10 sets
- Edited structures special provisions – 2 copies
- Design calculations – 1 set
- Design independent check calculations – 1 set
- Quantities and check calculations

3.4-3 Construction Schedule

Prepare CPM construction schedule in consultation with the City Project Manager based on the estimated required working days for project construction.

Deliverables:

- CPM Schedule

3.4-4 Utility and ROW Update

Consultant shall verify and update utility and ROW engineering data.

Deliverable:

- Report containing all updated utility and ROW engineering data with changes clearly identified

3.4-5 Update SWDR

Consultant will update the Storm Water Data Report (SWDR) based on comments received from Caltrans.

Deliverables:

- Final SWDR

3.4-6 Planting and Irrigation Plans

Consultant shall update the planting and irrigation plans based on Caltrans review comments.

Deliverables:

- *Separate Highway Planting and Irrigation PS&E – 10 sets*

3.4-7 Environmental Commitment Record (ECR)

Consultant shall update the ECR based on changes during final design provided by the project engineer.

3.4-8 Update TMP

Consultant will update the TMP based on comments received from Caltrans.

Deliverables:

- Transportation Management Plan – 2 copies

3.5 TASK 5 – FINAL PS&E (100 PERCENT) SUBMITTAL

3.5-1 Roadway Plans, Bridge Plans, Special Provisions, Cost Estimates, and Working Day Schedules

Consultant shall submit the Final PS&E package to Caltrans District 12 Project Manager for final approval. The submittal shall incorporate review comments from all involved agencies.

Deliverables:

- Final Roadway PS&E – 15 sets and 2 electronic files
- Full-size reproducible final structure plans – 1 set
- Final structures special provisions – 4 sets
- Prints of final structure plans – 4 sets; Cost estimates – 2 copies
- Working day schedules – 2 copies
- Original/checked quantity calculations – 2 copies Deliverables to Office of Special Funded Projects (OSFP)
- Full-size reproducible final structure plans – 1 set
- Final structures special provisions – 4 sets
- Prints of final structure plans, reduced size – 4 sets

In addition, Consultant shall provide electronic version of all plans, special provisions, estimates and schedules.

3.5-2 Resident Engineer File

Consultant shall meet with the City's Resident Engineer (RE) and Public Works Department and provide the following information for the RE file. This list is not comprehensive and Consultant shall provide additional information as appropriate:

- Permits
- Surveying Notes
- Geotechnical (GDR) and Foundation (FDR) Reports
- Hydrology/Hydraulics Report and calculations
- Relevant correspondence and memoranda
- Engineering calculations (horizontal and vertical alignments, earthwork quantities, etc.)
- Environmental Agreements and Reports
- Summary and discussion of Environmental issues
- Traffic Management Plan and supplements
- Material Handouts
- Storm Water Data Report
- Right-of-Way Maps & Agreements
- List of Project Personnel
- Cooperative Agreements Deliverables:
 - RE file
 - Bridge four-scale plans – 3 sets

Deliverables:

- RE File
- Consultant shall provide an electronic version of all RE file information.

3.5-3 Materials Handouts

Consultant shall prepare materials handout information per Caltrans HDM, Section 111.3 Materials Information Furnished to Prospective Bidders.

Deliverable:

- Material Handouts

3.6 TASK 6 – CONSTRUCTION BIDDING PHASE

Bidding procedures will be the responsibility of Caltrans.

Consultant shall support Caltrans regarding the proper response to contractor requests during the bid advertisement phase. Any necessary corrective action

shall be in the form of an addendum prepared by Consultant and issued by Caltrans.

3.6-1 Pre-Bid Meeting

Consultant shall attend the pre-bid meeting.

Deliverable:

- Pre-Bid Notes

3.6-2 Respond to Inquiries

Consultant shall draft responses to bidders' inquiries as requested by Caltrans.

- Draft Bidder Inquiry Responses (hard copy and electronic in ms word)

3.6-3 Addenda

Consultant shall prepare addenda as requested by Caltrans.

Deliverable:

- Copies of Addenda

3.7 TASK 7 – CONSTRUCTION SUPPORT PHASE (Subject to separate scope/fee approval by City)

Construction of the project will be the responsibility of City and Caltrans will provide Independent Quality Assurance. During the construction phase, Consultant shall work closely with City's Resident Engineer (RE) within the budget allotted to assist and advise the RE in order to minimize construction conflicts and to expedite project completion.

3.7-1 Pre-Construction Meeting

Consultant shall attend the pre-construction meeting.

3.7-2 Partnering Workshop

Consultant shall attend a partnering workshop as requested by City.

3.7-3 Additional Drawings Due to Consultant Error, Omission, or Revision

In the case of errors and/or omissions, Consultant shall furnish additional and/or revised drawings necessary for corrections and change orders. City will provide a written request for such drawings and Consultant shall provide said drawings at no additional cost to City and Caltrans. Consultant shall also provide the original tracings of the drawings and contract wording for related change orders to city and Caltrans at no additional cost.

3.7-4 Shop Drawing and Submittal Review

Consultant shall review all submittals and shop drawings. The review of shop drawings shall include bridge working drawing submittals, construction contractor's submittals for substitutions, construction contractor's alternative construction approval, steel layout for structures, independent check of construction contractor's falsework submittal and others as requested by the Resident Engineer.

3.7-5 Additional Drawings at City Request

If requested by City, Consultant shall prepare additional drawings and change order-supporting documents. Any such additional drawings constitute extra work; therefore, prior approval from City is required. Any such additional engineering services, drawings, or change order documentation prepared prior to receiving the required approval shall be at Consultant's risk and expense.

3.7-6 Site Visits

Consultant shall visit the job site as requested by the City.

3.7-7 Respond to Inquiries/RFIs

Consultant shall draft responses to contractor inquiries and RFIs as requested by the Resident Engineer.

3.7-8 Change Order Preparation and Review

Consultant shall review proposed change orders, draft change order language and make recommendations as requested by Resident Engineer. If said changes are necessary as a direct result of design errors and omissions, Consultant shall prepare and/or review contract change orders at no additional cost.

City/Resident Engineer Responsibility

- Provide advice on any issues raised and inquiries made by Resident Engineer
- Inform Design Consultants of all field changes and Contract Change Orders (CCOs)
- Provide as-built mark-ups in the field

3.7-9 As-built Plans

Consultant shall be responsible for preparing as-built plans, signed and stamped by Consultant and submitted to Caltrans.

Deliverables:

- As-built plans – hard copy and electronic .dgn format – 1 set

3.8 TASK 8 – PROJECT CLOSEOUT (Subject to separate scope/fee approval by City)

After construction, Consultant shall provide all final construction project records in accordance with Section 5-104 of the Caltrans Construction Manual and all other Caltrans requirements. Records shall include, but not necessarily be limited to design survey records, including legible hard copies and electronic files, recorded monumentations, and post audits. Consultant shall maintain all project records in accordance with the Caltrans Uniform filing system.

3.8-1 Develop Final Record Drawing Plans

While City's Resident Engineer is responsible for maintaining field as-built plans, Consultant shall keep a similar set of plans, noting any variation between the plans and the actual construction. These marked up plans will form the basis for the development of the Final record drawing PS&E. In developing the Final record drawing PS&E, Consultant shall follow all requirements specified in Sections 5-104D (1) and (2) of the Caltrans Construction Manual and submit to Caltrans no later than 60 days after construction contract acceptance by City and Caltrans.

Deliverables:

- Final record copies of the PS&E

3.8-2 Deliver Project Files

Consultant shall provide all pertinent project records to City and Caltrans. Documents shall be organized in accordance with the Caltrans Uniform Filing System.

Deliverables:

- 2 sets of Project Files
- Certificate of Environmental Compliance

3.8-3 Recorded Monumentations

In accordance with the Professional Land Surveyors Act, Consultant shall review monument surveys for the project right-of-way. Consultant shall also review mapping and documentation for all recorded monuments associated with the project. Monumentation should include all local street controls established/reestablished or to be perpetuated through a Monumentation map (Record of Surveys) or Corner Records.

Deliverables:

- Final alignments (mainline freeway, arterial streets and ramp connectors/collectors) as developed and utilized in this project and copies of any field survey information/mapping as it relates to Right-of-Way Engineering shall be supplied to Caltrans Surveys.

3.8-4 Post Audits

Consultant shall assist City and Caltrans with the post audits, as required and requested by City and/or Caltrans.

3.9 Task 9 Supplemental Project Report and Environmental Revalidation

Consultant shall be responsible for preparing a Supplemental Project Report and Environmental Revalidation to support final approval of the project. A Memorandum To File will be prepared for each previously approved technical study to document the project refinements are within the original approved study area. Additionally, a Paleontological Monitoring Plan and PS&E-Level Life Cycle Cost Analysis will be prepared to supplement the technical studies. Parsons will also coordinate with USFWS staff on behalf of the City to identify and assist with the required gnat catcher mitigation requirements.

Deliverables:

- Draft/Final Supplemental Project Report
- Draft/Final Environmental Revalidation

3.10 TASK 10 - PROJECT SCHEDULE

Activity	Proposed Date
A. Notice to Proceed 2018)	TBD (Target March
B. Draft PS&E	
B.1 Submit 65% PS&E	April 2018
B.2 Submit Initial 95% PS&E	May 2018
C. Submit Final PS&E (100%) to Caltrans	August 2018*
D. Advertise	TBD
E. Award	TBD
F. Begin Construction	TBD
G. Complete Construction	TBD
H. Project Close-out	TBD

*Note: City has strict timeline for PS&E completion to comply with project- funding guidelines. The Project Delivery Schedule will be updated pursuant to Section 2.1-20 and 3.1-3.

TASK	DESCRIPTION	Project Manager	Engineering Manager	Roadway Lead	Engineer II	Engineer I	Drainage Lead	Drainage Engineer	Traffic Lead	Traffic Engineer	Environmental	Structures Lead	Structures Project Engineer	Structures Design Engineer	Structures CADD	Project Controls	TOTAL HOURS
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3.1 TASK 1 - PROJECT MANAGEMENT/COORDINATION/ADMINISTRATION																	
3.1-1	Project Management	200	220				80		80		80	100				160	
3.1-2	Coordination/ Administration	120	120														
3.1-3	Schedules	40															
	SUBTOTAL	360	340	0	0	0	80	0	80	0	80	100	0	0	0	160	1,200

3.2 TASK 2 - Geometrics																	
3.2-1	Data Collection																
3.2-2	Workshops	60	30				20			40		50					
3.2-3	Fact Sheets																
3.2-4	Design Surveys																
3.2-5	Geotechnical Exploration Plan		20														
3.2-6	Roadway Plans																
3.2-7	Preliminary Foundation Report		20														
3.2-8	Type Selection (Bridge and Structural Walls)		20									80	80	80	80		
	Type Selection Meeting and Approval (Bridge and Structural Walls)		20									80	80	80	80		
3.2-9	Project Cost																
3.2-10	Utilities		20														
3.2-11	Hazardous Waste		10								80						
3.2-12	Aesthetics Plan																
3.2-13	Geometrics	20	50				40			20		10					
	SUBTOTAL	80	190	0	0	0	60	0	0	60	80	220	160	160	160	0	0

3.3 TASK 3 - DRAFT 65% PS&E																	
3.3-1	Roadway Plans		40	40					80	160							
3.3-2	Drainage Plans																
	Stage Construction, Traffic Handling, Detour Plans and Transportation Management Plan (TMP)																
3.3-3	Pavement Delineation Plans																
3.3-5	Sign Plans																
	Lighting, Signal Plans, and Electrical Ramp Metering and Traffic Monitoring																
3.3-7	Planting and Irrigation Plans																
3.3-8	Right-of-Way Engineering Services		20														
3.3-9	Geotechnical and Foundation Reports		20									40					
3.3-10	Bridge Plans		20									60	160	180	180		
3.3-11	Retaining Wall Plans		20	50	60	60						60	60	80	80		
3.3-12	Soundwall Plans		20	100	150	150						60	60	80	80		
3.3-13	Utility Plans		40														
3.3-14	Permit Applications		20		40												
	SUBTOTAL	0	200	190	250	210	0	0	80	160	0	180	320	340	340	0	2,270

TASK 4 - 95% PS&E																	
3.4-1	Roadway Plans, Specifications and Estimate		200	500	600	500	250	405	180	400							
3.4-2	Bridge and Retaining Wall Plans											150	580	660	650		
3.4-3	Construction Schedule		20	80													
3.4-4	Utility and ROW Update		20	80													
3.4-5	Update SWDR						40	150									
3.4-6	Planting and Irrigation Plans		20	100	300	300											
3.4-7	Environmental Commitment Record (ECR)		20									120					
3.4-8	Update Transportation Management Plan (TMP)		20						80	160							
3.4-9	Geotechnical Reports																
3.4-11	Materials/Information Handout																
	SUBTOTAL	0	300	760	900	800	290	555	260	560	120	150	580	660	650	0	6,585

TASK 5 - Final 100% PS&E																	
3.5-1	Final Roadway Plans, Bridge Plans, Special Provisions, cost Estimates, and Working Day Schedules		50	150	150	150	50	150	40	100	100	20	120	120	120		
3.5-2	Resident Engineer File		40	50		20				50		50					
3.5-3	Materials Handout		20		60	60											
3.5-4	Safety Review/Coordination/Revisions																
3.5-5	DOE Review/Coordination/Revisions																
3.5-6	Survey File																

PARSONS Amendment #1 COST	SUBCONSULTANT Amendment #1 COST (Labor)	Amendment #1 COST
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\$159,813	\$0	\$159,813
\$43,999	\$0	\$43,999
\$8,092	\$0	\$8,092
\$211,903	\$0	\$211,903

\$0	\$0	\$0
\$36,160	\$0	\$36,160
\$0	\$0	\$0
\$0	\$20,000	\$20,000
\$3,287	\$10,000	\$13,287
\$0	\$0	\$0
\$3,287	\$10,000	\$13,287
\$53,861	\$5,000	\$58,861
	\$5,000	\$5,000
\$0	\$0	\$0
\$3,287	\$50,000	\$53,287
\$10,747	\$5,000	\$15,747
\$0	\$0	\$0
\$24,275	\$0	\$24,275
\$188,766	\$105,000	\$239,905

\$45,516	\$0	\$45,516
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$3,287	\$35,000	\$38,287
\$11,379	\$20,000	\$31,379
\$87,239	\$0	\$87,239
\$65,366	\$0	\$65,366
\$91,665	\$0	\$91,665
\$6,575	\$40,000	\$46,575
\$7,839	\$0	\$7,839
\$318,867	\$95,000	\$413,867

\$360,615	\$0	\$360,615
\$290,419	\$0	\$290,419
\$14,413	\$0	\$14,413
\$14,413	\$20,000	\$34,413
\$12,138	\$0	\$12,138
\$81,676	\$0	\$81,676
\$16,942	\$0	\$16,942
\$36,666	\$0	\$36,666
\$0	\$0	\$0
\$0	\$0	\$0
\$827,283	\$20,000	\$847,283

\$160,065	\$0	\$160,065
\$33,758		\$33,758
\$16,184	\$0	\$16,184
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0

Original Contract Cost	Amendment #1TOTAL COST	Total Contract Cost
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\$95,695	\$159,813	\$255,508
\$210,765	\$43,999	\$254,764
\$18,704	\$8,092	\$26,796
\$325,164	\$211,903	\$537,067

\$2,334	\$0	\$2,334
\$10,839	\$36,160	\$46,999
\$18,022	\$0	\$18,022
\$87,321	\$20,000	\$107,321
\$10,259	\$13,287	\$23,546
\$79,299	\$0	\$79,299
\$18,794	\$13,287	\$32,081
\$67,961	\$58,861	\$126,822
\$4,837		\$4,837
\$12,176	\$0	\$12,176
\$70,079	\$53,287	\$123,366
\$67,060	\$15,747	\$82,807
\$16,999	\$0	\$16,999
\$0	\$24,275	\$24,275
\$465,980	\$293,766	\$700,885

\$145,880	\$45,516	\$191,396
\$131,243	\$0	\$131,243
\$80,762	\$0	\$80,762
\$13,777	\$0	\$13,777
\$31,275	\$0	\$31,275
\$192,674	\$0	\$192,674
\$0	\$0	\$0
\$134,221	\$38,287	\$172,508
\$189,406	\$31,379	\$220,785
\$225,221	\$87,239	\$312,460
\$19,000	\$65,366	\$84,366
\$19,000	\$91,665	\$110,665
\$14,753	\$46,575	\$61,328
\$8,439	\$7,839	\$16,278
\$1,205,651	\$413,867	\$1,619,518

\$455,877	\$360,615	\$816,492
\$195,506	\$290,419	\$485,925
\$7,954	\$14,413	\$22,367
\$25,419	\$34,413	\$59,832
\$5,428	\$12,138	\$17,566
\$0	\$81,676	\$81,676
\$2,537	\$16,942	\$19,479
\$924	\$36,666	\$37,590
\$2,800	\$0	\$2,800
\$2,385	\$0	\$2,385
\$698,830	\$847,283	\$1,546,113

\$316,930	\$160,065	\$476,995
\$28,961	\$33,758	\$62,719
\$584	\$16,184	\$16,768
\$15,074	\$0	\$15,074
\$80,082	\$0	\$80,082
\$10,861	\$0	\$10,861

TASK	DESCRIPTION	Project Manager	Engineering Manager	Roadway Lead	Engineer II	Engineer I	Drainage Lead	Drainage Engineer	Traffic Lead	Traffic Engineer	Environmental	Structures Lead	Structures Project Engineer	Structures Design Engineer	Structures CADD	Project Controls	TOTAL HOURS
	SUBTOTAL	0	110	200	210	210	70	150	40	150	100	70	120	120	120	0	1,670

TASK 6 - Construction Bidding Phase																	
3.6-1	Pre-bid Meeting	10	10	10								10					
3.6-2	Respond to Inquiries		20	40	40						10	40					
3.6-3	Addenda		20	40	40							40					
	SUBTOTAL	10	50	90	80	0	0	0	0	0	10	90	0	0	0	0	0

TASK 9 - Supplemental Project Report and Environmental Revalidation																	
3.9.1	Supplemental Project Report and Environmental Revalidation	20	100	100	100						300		40				
	SUBTOTAL	20	100	100	100	0	0	0	0	0	300	0	40	0	0	0	0

	TASK 1	360	340	0	0	0	80	0	80	0	80	100	0	0	0	160	1,200
	TASK 2	80	190	0	0	0	60	0	0	60	80	220	160	160	160	0	0
	TASK 3	0	200	190	250	210	0	0	80	160	0	180	320	340	340	0	2,270
	TASK 4	0	300	760	900	800	290	555	260	560	120	150	580	660	650	0	6,585
	TASK 5	0	110	200	210	210	70	150	40	150	100	70	120	120	120	0	1,670
	TASK 6	10	50	90	80	0	0	0	0	0	10	90	0	0	0	0	0
	TASK 9	20	100	100	100	0	0	0	0	0	300	0	40	0	0	0	0
	SUBTOTAL	470	1,290	1,340	1,540	1,220	500	705	460	930	690	810	1,220	1,280	1,270	160	11,725

Subconsultants and Parsons ODC																	
Geotechnical - EMI																	
Utilities & TMP- KOA																	
Potholing - Saf-R-Dig																	
Survey & ROW Engineering - Guida																	
Travel																	
Reprographic Printing																	
Postage/Shipping/Courier																	
Exhibits/Photos																	
Misc Contingency																	
Subconsultant Total																	

GRAND TOTAL PS&E PHASE \$2,149,999

PARSONS Amendment #1 COST	SUBCONSULTANT Amendment #1 COST (Labor)	Amendment #1 COST
\$210,007	\$0	\$210,007

\$7,207	\$0	\$7,207
\$23,137	\$0	\$23,137
\$22,000	\$0	\$22,000
\$52,344	\$0	\$52,344

\$87,998	\$0	\$87,998
\$87,998	\$0	\$87,998

\$211,903	\$0	\$211,903
\$188,766	\$105,000	\$293,766
\$318,867	\$95,000	\$413,867
\$827,283	\$20,000	\$847,283
\$210,007	\$0	\$210,007
\$52,344	\$0	\$52,344
\$87,998	\$0	\$87,998
\$1,897,167	\$220,000	\$2,117,167

ODCs (Amd #1)	ubconsultant ODC (Amd #1)	
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$6,232	\$0	\$6,232
\$23,000	\$0	\$23,000
\$600	\$0	\$600
\$3,000	\$0	\$3,000
\$0	\$0	\$0
\$32,832	\$0	\$32,832

Original Contract Cost	Amendment #1 TOTAL COST	Total Contract Cost
\$452,492	\$210,007	\$662,499

\$0	\$7,207	\$7,207
\$0	\$23,137	\$23,137
\$0	\$22,000	\$22,000
\$0	\$52,344	\$52,344

\$18,546	\$87,998	\$106,544
\$18,546	\$87,998	\$106,544

\$325,164	\$211,903	\$537,067
\$465,980	\$293,766	\$759,746
\$1,205,651	\$413,867	\$1,619,518
\$698,830	\$847,283	\$1,546,113
\$452,492	\$210,007	\$662,499
\$0	\$52,344	\$52,344
\$18,546	\$87,998	\$106,544
\$3,166,663	\$2,117,167	\$5,283,830

ODCs (Original)	ODCs (Amd #1)	ODCs (Total)
\$76,929	\$0	\$76,929
\$1,542	\$0	\$1,542
\$32,000	\$0	\$32,000
\$10,397	\$0	\$10,397
\$3,369	\$6,232	\$9,601
\$23,200	\$23,000	\$46,200
\$2,900	\$600	\$3,500
\$3,000	\$3,000	\$6,000
\$100,000	\$0	\$100,000
\$253,337	\$32,832	\$286,169

\$3,420,000 \$2,149,999 \$5,569,999

PRICE SUMMARY SHEET Amd #1 SCHEDULE OF FEES				
SCHEDULE I - HOURLY RATE SCHEDULE				
All rates are "fully loaded", i.e., including all overhead costs, general, administrative and profit.				
Job Function	Hourly Rate			
Project Manager	\$202.29			
Engineering Manager	\$164.36			
Roadway Lead	\$139.08			
Engineer II	\$113.79			
Engineer I	\$101.15			
Drainage Lead	\$189.65			
Drainage Engineer	\$30.34			
Traffic Lead	\$189.65			
Traffic Engineer	\$113.79			
Environmental	\$113.79			
Structures Lead	\$214.94			
Structures Project Engineer	\$202.29			
Structures Design Engineer	\$113.79			
Structures CADD	\$101.15			
Project Controls	\$139.08			

Note:

These rates were calculated using approximate salary ranges and includes the following to develop fully burdened rates:

Overhead Rate:	129.88%	
Profit:	10%	2.53 Multiplier

PRICE SUMMARY SHEET SCHEDULE OF FEES Amd #1				
SCHEDULE II - OTHER DIRECT COSTS SCHEDULE				
Type of ODC		Quantity	Unit Rate	Budget Amount
1	Travel	1	\$6,231.60	\$6,232
2	Reprographic Printing	1	\$23,000.00	\$23,000
3	Postage/Shipping/Courier	1	\$600.00	\$600
4	Exhibits/Photos	1	\$3,000.00	\$3,000
5	Potholing	1	\$0.00	\$0
6	Subcontractors	1	\$220,000.00	\$220,000
Total				\$252,832

This offer shall remain firm for 180 days from the date of proposal.

COMPANY NAME

PARSONS

ADDRESS

2201 Dupont Drive, Irvine CA 92603

TELEPHONE

(858) 568-8568

EMAIL ADDRESS:

chris.a.johnson@parsons.com

SIGNATURE OF PERSON
AUTHORIZED TO BIND OFFEROR

NAME AND TITLE

Chris Johnson, Vice-President

DATE SIGNED

OTHER DIRECT COSTS Amd #1

Travel					
	Trips	Miles	Total Miles	Cost / Unit	Total Cost
Data Collection/Review	5	40	200	\$0.56	\$112
Encroachment Permits	5	13	65	\$0.56	\$36
Site Visits	13	40	520	\$0.56	\$291
Attend Focus Meetings	60	40	2,400	\$0.56	\$1,344
Attend Other Coordination Meetings/Minutes	20	40	800	\$0.56	\$448
Structures Meetings in Sacramento (2 trips with 4 engineers at \$500/trip)	2	4	8	\$500.00	\$4,000
Subtotal					\$6,232

Reprographic Printing					
	Sheets	Copies	Submittals*	Cost / Sheet	Total Cost
Plans (450 sheets)	450	25	4	\$0.20	\$9,000
Specifications (220 pages)	200	25	4	\$0.10	\$2,000
Reports (Type Selection, Hydrology, TMP, Geotech, Structures) [15 reports @ 200 pages each]	3,000	5	4	\$0.20	\$12,000
* 4 submittals (65%, 95%, 100%, Final)					
Subtotal					\$23,000

Postage/Shipping/Courier				
	Deliveries		Cost / Unit	
Overnight Mail (Two packages per month @ 6 months)	12		\$40.00	\$480
Courier Mail (One package per month @ 6 months)	6		\$20.00	\$120
Subtotal				\$600

Exhibits/Photos					
	Size	Copies	Meetings	Cost / ft ²	Total
Plan Review and Workshops (36" x 120")	30	4	5	\$2.00	\$1,200
Exhibits (Photo 36" x 120")	30	4	5	\$5.00	\$3,000
Subtotal					\$3,000

Potholing				
				Total
	potholes		\$800.00 per pothole	\$0
Subtotal				\$0

Subcontractors					
					Total
Survey & ROW Engineering					\$55,000
Geotechnical					\$60,000
Utilities					\$105,000
Subtotal					\$220,000

Total (All ODC's)	
TOTAL	\$252,832

Cost & Price Form - EXHIBIT B-1 (Amd #1)

Name of Firm: PARSONS				TITLE OF PROJECT Preparation of Plans, Specifications and Estimates for the State Route 57 & Lambert Road Interchange Improvements Project in Brea					
1. DIRECT LABOR		HOURS	AVG. RATE	COST					
Project Manager	470	\$80.00	\$37,600						
Engineering Manager	1,290	\$65.00	\$83,850						
Roadway Lead	1,340	\$55.00	\$73,700						
Engineer II	1,540	\$45.00	\$69,300						
Engineer I	1,220	\$40.00	\$48,800						
Drainage Lead	500	\$75.00	\$37,500						
Drainage Engineer	705	\$12.00	\$8,460						
Traffic Lead	460	\$75.00	\$34,500						
Traffic Engineer	930	\$45.00	\$41,850						
Environmental	690	\$45.00	\$31,050						
Structures Lead	810	\$85.00	\$68,850						
Structures Project Engineer	1,220	\$80.00	\$97,600						
Structures Design Engineer	1,280	\$45.00	\$57,600						
Structures CADD	1,270	\$40.00	\$50,800						
Project Controls	160	\$55.00	\$8,800						
TOTAL	13,885		\$750,260	0		\$0			
							TOTAL COST		
				TOTAL DIRECT LABOR (from above)			\$750,260		
2. INDIRECT COSTS (overhead, G&A - specify)		INDIRECT RATE (%)	X BASE =	COST					
Fringe	47.73%	\$750,260	\$358,099						
G&A	13.79%	\$750,260	\$103,461						
OH	68.36%	\$750,260	\$512,878						
				TOTAL INDIRECT	\$974,438				
3. TOTAL DIRECT COST AND INDIRECT COSTS (sum of lines 1-2)							\$1,724,698		
4. FIXED FEE OR PROFIT (specify, applies to line 3 only)		PERCENT	X BASE =	FEE (S)					
PROFIT	10.00%	\$1,724,698	\$172,470						
			\$0						
				TOTAL FEE	\$1,897,167				
5. OTHER DIRECT COSTS (specify) & Subconsultants									
Travel							\$6,232		
Reprographic Printing							\$23,000		
Postage/Shipping/Courier							\$600		
Exhibits/Photos							\$3,000		
Potholing							\$0		
Subcontractors							\$220,000		
				TOTAL OTHER DIRECT	\$252,832				
6. TOTAL PROPOSED PRICE (sum of lines 3, 4 and 5)							\$2,149,999		
DATE		SIGNATURE AND TITLE OF AUTHORIZED REPRESENTATIVE OF CONSULTANT							
2/21/2018									

Cost & Price Form - EXHIBIT B-1 (Amd #1)

Name of Firm: PARSONS				TITLE OF PROJECT					
				Preparation of Plans, Specifications and Estimates for the State Route 57 & Lambert Road Interchange Improvements Project in Brea					
1. DIRECT LABOR									
	HOURS	AVG. RATE	COST						
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Project Controls	160	\$55.00	\$8,800						
TOTAL	13,885		\$750,260	0		\$0			
								TOTAL COST	
								\$750,260	
2. INDIRECT COSTS (overhead, G&A - specify)				TOTAL DIRECT LABOR (from above)					
		INDIRECT RATE (%)		X BASE =		COST			
Fringe		47.73%		\$750,260		\$358,099			
G&A		13.79%		\$750,260		\$103,461			
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					TOTAL INDIRECT		\$974,438		
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4. FIXED FEE OR PROFIT (specify, applies to line 3 only)		PERCENT		X BASE =		FEE (S)			
PROFIT		10.00%		\$1,724,698		\$172,470			
				\$1,724,698		\$0			
					TOTAL FEE		\$1,897,167		
5. OTHER DIRECT COSTS (specify) & Subconsultants									
Travel								\$6,232	
Reprographic Printing								\$23,000	
Postage/Shipping/Courier								\$600	
Exhibits/Photos								\$3,000	
Potholing								\$0	
Subcontractors								\$220,000	
					TOTAL OTHER DIRECT		\$252,832		
6. TOTAL PROPOSED PRICE (sum of lines 3, 4 and 5)								\$2,149,999	
DATE		SIGNATURE AND TITLE OF AUTHORIZED REPRESENTATIVE OF CONSULTANT							
2/21/2018									

ATTACHMENT C-1

Amended Schedule

Attachment C-1 Amendment #1 Milestone Schedule		
Task #	Name	Completion Date
Task 1	Project Management/Coordination/Administration	December 2018
Task 2	Geometrics	April 2018
Task 3	Draft 65%PS&E	April 2018
Task 4	95% PS&E	May 2018
Task 5	100% PS&E	August 2018
Task 6	Construction Bidding Phase	December 2018
Task 7	Construction Support Phase*	July 2020
Task 8	Project Closeout*	October 2020

*Subject to separate scope/fee approval by City

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BREA TO AMEND THE FISCAL YEAR 2017-18 OF THE CAPITAL IMPROVEMENT PROGRAM BUDGET AND APPROPRIATE ADDITIONAL FUNDS FROM THE TRAFFIC IMPACT FEES FUND (540) TO THE CAPITAL IMPROVEMENT PROGRAM FUND (510) FOR PROJECT 7251, SR-57 FREEWAY/LAMBERT ROAD INTERCHANGE IMPROVEMENTS

A. RECITALS:

(i) The City Council has determined that it is in the best interest of the City of Brea to appropriate funds from the Traffic Impact Fees Fund (540), to the Capital Improvement Program Fund (510), for Project 7251, SR-57 Freeway/Lambert Road Interchange Improvements, for the fiscal year 2017-18.

(ii) The Capital Improvement Program Budget, Resolution No. 2017-041, and subsequent amendments, did not appropriate funds for this unanticipated adjustment.

B. RESOLUTION:

NOW, THEREFORE, be it found, determined and resolved by the City Council of the City of Brea that Capital Improvement Program Budget, Resolution No. 2017-041, as heretofore amended, be further amended to:

1. Increase funding from the Traffic Impact Fees Fund (540) to Capital Improvement Program Fund (510) for Project 7251, SR-57 Freeway/Lambert Road Interchange Improvements, by \$2.15 M; and

3. Appropriate an additional \$2.15 M to the Capital Improvement Program Fund (510) for Project 7251, SR-57 Freeway/Lambert Road Interchange Improvements.

APPROVED AND ADOPTED this 20th day of March, 2018.

Mayor

ATTEST: _____
City Clerk

I, Lillian Harris-Neal, City Clerk of the City of Brea, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the City Council of the City of Brea, held on the 20th day of March, 2018, by the following vote:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ABSTAINED: COUNCIL MEMBERS:

Dated: _____

City Clerk

City of Brea

FINANCE COMMITTEE COMMUNICATION

FROM: Bill Gallardo

DATE: 03/08/2018

SUBJECT: 2017 Comprehensive Annual Financial Report - Status
