

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



**ITEM: 3.33
(ID # 12163)**

MEETING DATE:
Tuesday, June 23, 2020

FROM: TLMA-TRANSPORTATION:

SUBJECT: TRANSPORTATION AND LAND MANAGEMENT AGENCY/TRANSPORTATION:
Approval of Amendment No. 1 to the Agreement between the County of Riverside and Dokken Engineering for the Replacement of the Market Street Bridge at the Santa Ana River (Br. No. 56C-0024). District 2. [\$2,983,510 Total Cost - Federal Funds 88.53% and Local Funds 11.47%]

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve Amendment No. 1 to the Agreement between the County of Riverside and Dokken Engineering for the Replacement of the Market Street Bridge at the Santa Ana River (Br. No. 56C-0024), increasing the contract amount by \$2,983,510 for FYs 20/21-24/25 and authorize the Chairman of the Board to execute the same.

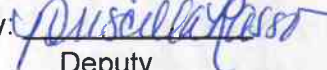
ACTION: Policy

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Washington, seconded by Supervisor Hewitt and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Spiegel, Washington, Perez and Hewitt
Nays: None
Absent: None
Date: June 23, 2020
xc: Transp.

Kecia R. Harper
Clerk of the Board

By: 
Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$ 1,400,000	\$ 1,583,510	\$ 2,983,510	\$ 0
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0
SOURCE OF FUNDS: Federal (HBP) Highway Bridge Program (88.53%), City of Jurupa Valley funds (10.44%) and City of Riverside funds (1.03%). There are no General Funds used in this project.			Budget Adjustment: No	
			For Fiscal Year: 19/20-24/25	

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The County of Riverside (County) in cooperation with the cities of Jurupa Valley and Riverside are proposing to replace the existing Market Street Bridge over the Santa Ana River (Project), with a new bridge to enhance safety and improve traffic circulation. The Market Street Bridge is located within the City of Jurupa Valley and City of Riverside.

Although the Project is located within the jurisdictional boundaries of the City of Jurupa Valley and the City of Riverside, the Cities have designated the County as the agency responsible for the overall development of the project in a Service Agreement approved by the Board of Supervisors on December 6, 2016 (Agenda Item 3-39). Therefore, the County will provide the administrative, technical, managerial, and support services necessary for the development of the Project.

On February 7, 2017 (Agenda Item 3.34), the County Board of Supervisors executed an Engineering Services Agreement for the Replacement of the Market Street Bridge over the Santa Ana River, between the County and Dokken Engineering to complete the preliminary engineering and environmental clearance for this project. On August 25, 2019, the City of Jurupa Valley adopted and approved the California Environmental Quality Act (CEQA) Initial Study with Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program. The National Environmental Policy Act (NEPA) Categorical Exclusion was issued on November 25, 2019.

Amendment 1 of the Engineering Services Agreement will add geotechnical investigations, environmental permitting, final design, preparation of bid documents, and design support during construction advertisement. The Amendment 1 to the Engineering Services Agreement provides the terms, conditions, and a detailed scope of work including the negotiated fee of \$2,983,510 for engineering services and environmental work to complete the work of design through construction.

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

Impact on Residents and Businesses

Informal public information meetings will be held as necessary during the development of the project to keep the public informed. The project is expected to have minimum impact on the surrounding environment and the community during development and construction. The replacement bridge will be designed in accordance with the latest state of the art bridge design criteria.

**SUPPLEMENTAL:
Additional Fiscal Information**

The consultant's proposed fee for Amendment 1 Scope of Work is \$2,983,510. It will be funded with federal 88.53% HBP funds with 11.47% of local matching funds from the City of Jurupa Valley and the City of Riverside. The contract expiration date is December 31, 2024.

Original Contract for - Preliminary and Environmental Documentation	\$1,270,659
Amendment 1 for - Final Design to Construction	\$2,983,510
<hr/>	
Total Amended Contract:	\$4,254,169

Work Order No.: C0-0528

Contract History and Price Reasonableness

The consultant's negotiated fee proposal of \$2,983,510 is below the County's independent fee estimate and is comparable to currently ongoing county projects of similar scope and complexity.

ATTACHMENTS:

Vicinity Map
Agreement



Jason Farin, Principal Management Analyst 6/15/2020

AMENDMENT NO. 1

Amendment to Agreement Between

The County of Riverside and Dokken Engineering

THIS AMENDMENT (hereinafter the "Amendment 1") to an agreement is made and entered into as of this 23 day of June, 2020, by and between the County of Riverside, a political subdivision of the State of California (hereinafter the "COUNTY"), and Dokken Engineering (hereinafter "ENGINEER").

RECITALS

- A. COUNTY and ENGINEER have entered in an agreement entitled "Engineering Services Agreement for Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024) between County of Riverside • Transportation Department and Dokken Engineering that is dated February 7, 2017 (hereinafter the "Agreement"). The Agreement provides the terms and conditions, scope of work, schedule and budget for the performance of professional and technical services related to preliminary engineering and environmental technical studies necessary to complete an environmental document and obtain environmental clearance.
- B. The above noted services are significantly complete and the project is in the final stages of obtaining environmental clearance. The COUNTY is now prepared to proceed with the preparation of Plans, Specifications and Estimates (PS&E) that are needed in order to construct the proposed improvements.
- C. The preliminary engineering and environmental services have been funded 88.53% by Federal Funds and 11.47% by Local Funds. Federal funding is to continue for the PS&E phase of the project.
- D. Since the preliminary engineering and environmental services were performed by Dokken Engineering on the Replacement of Market Street Bridge at Santa Ana River project, they are uniquely qualified to complete the final design in a timely and cost-effective manner.
- G. The parties desire to amend the Agreement to include the scope of work, schedule and budget needed to perform the final design and construction support services for the project.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants hereinafter contained, the parties agree as follows:

- 1. Appendix A is amended to include the additional services as described in the attached Scope of Services entitled "AMENDMENT 1 • APPENDIX A1 • PS&E, BID SUPPORT, AND CONSTRUCTION SUPPORT SCOPE OF SERVICES".

- 1 2. Appendix B, Article B1 is amended to extend the Schedule of Services to December 30, 2024, as shown in
2 the attached Schedule of Services entitled "AMENDMENT 1 • APPENDIX B1 • SCHEDULE OF SERVICES".
- 3 3. Article VI (Compensation) and Appendix C • Article CV are amended by increasing the contract budget by
4 \$2,983,510.60 for a total revised budget of \$4,254,169.83 as provided below and in accordance with the
5 attached Fee Proposal entitled "AMENDMENT 1 • APPENDIX C1 • PS&E, BID SUPPORT, AND
6 CONSTRUCTION SUPPORT FEE PROPOSAL WORKSHEETS".

7 **Original Contract**

8 Phase I: Preliminary Engineering & Environmental	\$1,270,659.23
9 Contingency *	<u>\$0.00</u>
10 Phase I Summary	\$1,270,659.23

11 **Amendment 1 Proposed Budget**

12 Phase II: Plans, Specifications and Estimates	\$2,410,618.18
13 Phase III: Construction Bidding and Award Support	\$55,759.00
14 Phase IV: Construction Support	\$317,133.42
15 Contingency *	<u>\$200,000.00</u>
16 Phase II - IV Summary	\$2,983,510.60

17 **Amended Budget**

\$4,254,169.83

18 * Contingency funds are subject to the original contract requirements as defined in Article VI •
19 Compensation.

- 20 4. Except to the extent specifically modified or amended hereunder, all of the terms, covenants and conditions
21 of the Agreement shall remain in full force and effect between the parties hereto.

22 IN WITNESS HEREOF, the parties hereto have caused this Amendment 1 to the Agreement to be duly
23 executed this day and year first written above.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

ARTICLE VIII • APPROVALS

COUNTY Approvals

RECOMMENDED FOR APPROVAL:



PATRICIA ROMO

Director of Transportation

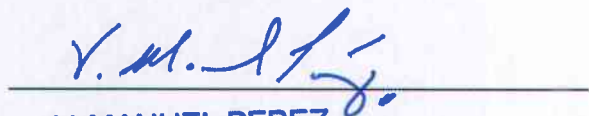
APPROVED AS TO FORM:

GREGORY P. PRIAMOS, COUNTY COUNCEL



K. Bell Valdez
By Deputy

APPROVAL BY THE BOARD OF SUPERVISORS

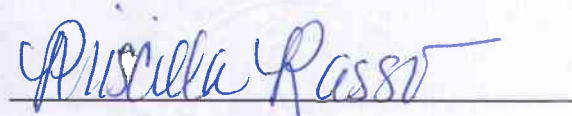


V. MANUEL PEREZ

PRINTED NAME

Chairman, Riverside County Board of Supervisors

ATTEST:



Clerk of the Board (SEAL)

ENGINEER Approvals

ENGINEER:



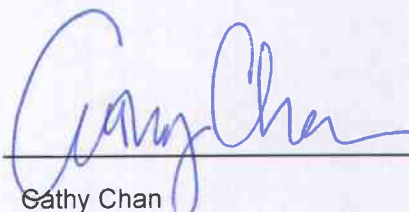
Richard T. Liptak

PRINTED NAME

CEO

TITLE

ENGINEER:



Gathy Chan

PRINTED NAME

Secretary

TITLE

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

AMENDMENT 1 • APPENDIX A1

SCOPE OF SERVICES



AMENDMENT 1 • APPENDIX A1 •

PS&E, BID SUPPORT, AND CONSTRUCTION SUPPORT SCOPE OF SERVICES

TABLE OF CONTENTS

1

2

3

4 **ARTICLE AI • INTRODUCTION A-3**

5 A. DESCRIPTION A-3

6 B. LOCATION A-2

7 C. COORDINATION A-2

8 D. PHASES A-2

9 E. STANDARDS A-3

10 F. KEY PERSONNEL A-3

11 G. COUNTY RESPONSIBILITIES A-4

12 **ARTICLE AII • PROJECT ADMINISTRATION (PHASES II, III, & IV) A-4**

13 A. PROJECT MANAGEMENT A-4

14 B. COST ACCOUNTING/PROGRESS REPORTS A-4

15 C. SCHEDULING A-5

16 **ARTICLE AIII • PLANS, SPECIFICATIONS AND ESTIMATES TASK LIST (PHASE II) A-5**

17 T1 PROJECT MANAGEMENT A-5

18 1.1 PROJECT COORDINATION AND PROJECT TEAM MEETINGS A-5

19 1.2 MONTHLY PROGRESS REPORTS A-5

20 1.3 PROJECT SCHEDULE A-6

21 1.4 QUALITY CONTROL A-6

22 1.5 COST ACCOUNTING A-6

23 1.6 PERMITS A-6

24 T2 SURVEYING/RIGHT OF WAY ENGINEERING A-6

25 2.1 SUPPLEMENTAL FIELD SURVEY A-6

26 2.2 PROPERTY OWNER EXHIBITS A-7

27 2.3 RIGHT OF WAY REQUIREMENTS MAP A-7

28 2.4 PLATS AND LEGAL EXHIBITS A-7

29 2.5 RFA DOCUMENTATION AND APPROVALS A-7

Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)

1	T3	UTILITY COORDINATION.....	A-7
2	3.1	UTILITY COORDINATION.....	A-7
3	T4	GEOTECHNICAL DESIGN REPORT.....	A-15
4	4.1	GEOTECHNICAL FIELD INVESTIGATIONS.....	A-15
5	4.2	LABORATORY TESTING.....	A-16
6	4.3	GEOTECHNICAL ENGINEERING ANALYSIS.....	A-16
7	4.4	GEOTECHNICAL REPORTS.....	A-17
8	T5	HYDRAULICS & STORM WATER.....	A-17
9	5.1	DRAINAGE REPORT.....	A-17
10	5.2	UPDATE BRIDGE DESIGN HYDRAULIC STUDY REPORT.....	A-18
11	5.3	NPDES DATA FORM.....	A-19
12	5.4	NPDES GENERAL CONSTRUCTION PERMIT.....	A-19
13	T6	65% SUBMITTAL.....	A-20
14	6.1	65% ROADWAY PLANS.....	A-20
15	6.2	TYPE SELECTION AND 65% STRUCTURE PLANS.....	A-21
16	6.3	65% QUANTITIES AND ESTIMATE.....	A-23
17	T7	ENVIRONMENTAL PERMITTING.....	A-23
18	7.1	RIVERSIDE COUNTY FLOOD CONTROL DISTRICT ENCROACHMENT PERMIT.....	A-23
19	7.2	SECTION 401 CLEAN WATER ACT.....	A-24
20	7.3	SECTION 404 CLEAN WATER ACT.....	A-25
21	7.4	SECTION 1602 STREAMBED ALTERATION.....	A-25
22	7.5	MITIGATION IN-LIEU FEE COORDINATION.....	A-25
23	T8	95% SUBMITTAL.....	A-26
24	8.1	95% ROADWAY PLANS.....	A-26
25	8.2	95% STRUCTURE PLANS.....	A-26
26	8.3	95% QUANTITIES AND ESTIMATE.....	A-27
27	8.4	95% DRAFT SPECIAL PROVISIONS.....	A-28
28	T9	100% SUBMITTAL.....	A-28
29	9.1	100% ROADWAY PLANS (INCLUDING CROSS SECTIONS).....	A-28

1 9.2 100% STRUCTURE PLANS..... A-29

2 9.3 100% QUANTITIES AND ESTIMATE A-29

3 9.4 100% SPECIAL PROVISIONS A-29

4 T10 FINAL APPROVED SUBMITTAL..... A-30

5 10.1 100% SUBMITTAL..... A-30

6 **ARTICLE AIV • CONSTRUCTION BIDDING AND AWARD SUPPORT (PHASE III)..... A-31**

7 T11 BID AND AWARD SUPPORT..... A-31

8 11.1 BID AND AWARD SUPPORT..... A-31

9 **ARTICLE AV • CONSTRUCTION SUPPORT (PHASE IV) A-31**

10 T12 CONSTRUCTION SUPPORT..... A-31

11 12.1 RESPONSE TO RFI A-31

12 12.2 REVIEW SHOP DRAWINGS..... A-31

13 12.3 PREPARE AS-BUILT PLANS A-31

14 12.4 ENVIRONMENTAL CONSTRUCTION SUPPORT A-31

AMENDMENT 1 • APPENDIX A1 • PS&E, BID SUPPORT, AND CONSTRUCTION SUPPORT

SCOPE OF SERVICES

ARTICLE AI • INTRODUCTION

A. DESCRIPTION

The County of Riverside proposes to replace the existing 2 lane Market Street Bridge (Br. No. 56C-0024) over Santa Ana River in Riverside County with a new 4 lane bridge and reconstruct the connecting approach roadways. On February 7, 2017 the County of Riverside Transportation Departments (COUNTY) entered into an Engineering Services Agreement with Dokken Engineering (ENGINEER) to prepare Alternative Concepts, Environmental Clearance and Documentation, and Preliminary Engineering for the proposed bridge replacement. Environmental Clearance was completed in late 2019. COUNTY now desires to amend the existing agreement to include additional scope and budget to allow ENGINEER to prepare Plan, Specification, and Estimate documents required to bid a construction contract for the desired improvements.

1 **B. LOCATION**

2 The location of the proposed improvements is generally consistent with the location as described in the original
3 agreement. The specific location is expected to be dependent on the selected alternative derived for the Project
4 Approval/Environmental Documents.

5 **C. COORDINATION**

6 ENGINEER shall continue to coordinate with other agencies as per the terms of the original agreement.

7 **D. PHASES**

8 The original agreement identifies the services that constitute the first phase as shown below:

- 9 • Phase I – Preliminary Engineering / Environmental Clearance / Technical Report

10 Services performed by ENGINEER under this Amendment 1 shall be accomplished in the following phases:

- 11 • Phase II – Plans, Specifications and Estimates (PS&E)
- 12 • Phase III – Construction Bidding and Award Support
- 13 • Phase IV – Design Support during Construction

14 Phase II shall proceed upon written notice to proceed by the COUNTY. The subsequent phases shall not
15 proceed until authorized in writing by the COUNTY.

E. STANDARDS

The Plans, Specifications and Estimates shall be prepared in accordance with current CALTRANS regulations, policies, procedures, manuals and standards including compliance with Federal Highway Administration (FHWA) requirements and/or COUNTY Road Standards as appropriate. Improvements of local roads may be prepared in accordance with COUNTY standards in lieu of CALTRANS standards as directed by the COUNTY PROJECT MANAGER. ENGINEER will prepare fact sheets for COUNTY approval, documenting the exceptions to mandatory and advisory design standards. All documents shall be prepared using English Standard Units and dimensions.

1. Environmental

The standards for environmental activities are not changed and remain per the terms of the original agreement.

2. Survey

Supplemental topographic and ground surveys shall be performed by the COUNTY.

3. Design

The standards for design activities are not changed and remain per the terms of the original agreement.

4. Project Files

The standards for project files are not changed and remain per the terms of the original agreement.

F. KEY PERSONNEL

The key personnel for performance of this PROJECT are as identified in Amendment 1 and is modified by this Amendment 1 to include the following:

Assignment	Key Personnel
Principal in Charge	Richard Liptak, PE
Project Manager	Juann Ramos, PE
Roadway Engineer	Kris Kofoed, PE
Structures Engineer	Martin Maechler, PE
Senior Environmental Planner	Namat Hosseinion
QA/QC Engineer	Elizabeth Diamond, PE

G. COUNTY RESPONSIBILITIES

The following includes tasks to be completed by the COUNTY:

- Provide all current COUNTY standards, existing plans, and manuals when requested by ENGINEER and available to COUNTY personnel.
- Provide supplemental survey controls, supplemental topographic mapping, current digital orthophotography and supplemental surveys.
- Provide updated right of way and parcel mapping in Caltrans format
- Verify that COUNTY survey control points are still in place and undisturbed.
- Provide survey records research, including grant deeds and right of way documents in support of Right of Way base mapping prepared by COUNTY surveyor for the preferred alternative
- COUNTY will provide Survey and Land Acquisition Services generally as described below:
 - Prepare existing right of way and parcel mapping.
 - Coordinate Permits for Right of Entry with property owners.
 - Obtain and review Title Reports, identify easements and encumbrances.
 - Preparation of Plats and Legal Exhibits.
 - Prepare appraisals for temporary and permanent right of way and perform appraisal review.
 - Perform right of way negotiations and acquisitions.
 - Certify new acquired right of way.

ARTICLE AII • PROJECT ADMINISTRATION (PHASES II, III, & IV)

A. PROJECT MANAGEMENT

This task includes the day-to-day management of the work performed under this Amendment 1 and is a continuation of the management activities performed under the Agreement.

B. COST ACCOUNTING/PROGRESS REPORTS

The ENGINEER will continue to prepare budgets for each task and milestone under this Amendment 1. Such budgets will be entered into the ENGINEER's Management Information System along with actual costs incurred and used as a basis for cost monitoring and control. ENGINEER will continue to prepare monthly reports of expenditures and progress reports consistent with the terms of the Agreement.

1 **C. SCHEDULING**

2 Within one month from the Notice to Proceed (NTP) of this Amendment 1, the ENGINEER will provide an
3 updated project schedule, which indicates milestones, major activities and deliverables, to the COUNTY for
4 review and comments. This schedule will reflect assumed review times necessary by all the agencies involved.
5 Review of the schedule will occur at subsequent trend meetings. Adjustments will be made, if necessary, due
6 to changing circumstances.

7
8 **ARTICLE AIII • PLANS, SPECIFICATIONS AND ESTIMATES TASK LIST (PHASE II)**

9 ENGINEER shall provide a Plans, Specifications and Estimates for the PROJECT. The following task list is
10 consistent with the project schedule.

11 **T1 PROJECT MANAGEMENT**

12 Project Management shall be conducted to ensure a smooth flow of information between Project Development
13 Team (PDT) members. A project schedule shall be developed and periodically updated. A comprehensive
14 Quality Assurance/Quality Control (QA/QC) plan shall be implemented. Monthly PDT Meetings shall be held.

15 **1.1 PROJECT COORDINATION AND PROJECT TEAM MEETINGS**

16 A Project Development Team (PDT), for the Plans, Specifications and Estimates Phase, including
17 representatives from the COUNTY, the City of Jurupa Valley, the City of Riverside, Caltrans Local
18 Assistance, subconsultants, and other relevant agencies will be established within fifteen days after
19 Notice to Proceed (NTP). A kick off meeting with the PDT will be held as soon as possible after NTP.
20 PDT meetings with the COUNTY PROJECT MANAGER and other representatives from affected
21 agencies will be held at least once a month. ENGINEER shall prepare minutes for each meeting and
22 distribute the minutes to all attendees and other interested parties.

23 **1.2 MONTHLY PROGRESS REPORTS**

24 ENGINEER shall prepare progress reports to record the progress of the project and as supporting data
25 for invoices presented monthly to the COUNTY. The Progress Report shall include accomplished tasks
26 for the month, anticipated progress for the next month, pending issues and schedule completion target
27 dates. ENGINEER shall mail progress reports with the monthly invoices and deliver the Progress
28 Reports to the COUNTY at the monthly PDT meetings.

1 **1.3 PROJECT SCHEDULE**

2 ENGINEER shall, within 2 weeks of Notice to Proceed (NTP), provide a detailed project baseline
3 schedule, indicating milestones, major activities and deliverables, to the COUNTY for review and
4 comments. ENGINEER shall update the schedule on a monthly basis, to coincide with the PDT meetings
5 or as required.

6 **1.4 QUALITY CONTROL**

7 ENGINEER shall have a quality control plan in effect during the entire course of the project. ENGINEER
8 shall develop a plan establishing a process to ensure design calculations are independently checked.
9 Exhibits and plans shall also be checked, corrected and back-checked for accuracy and completeness.
10 ENGINEER shall review environmental and engineering Sub-consultant report submittals to ensure that
11 appropriate background information, study methodology, interpretation of data, format and content are
12 completed in accordance with current standards.

13 **1.5 COST ACCOUNTING**

14 The ENGINEER shall prepare monthly reports of expenditures for the PROJECT by task and milestone.
15 Expenditures include direct labor costs, other direct costs, and sub-consultant costs. These reports shall
16 be included as supporting data for invoices presented to the COUNTY every month.

17 **1.6 PERMITS**

18 ENGINEER shall prepare all necessary encroachment permits and rights of entry needed for Phase II
19 activities.

20 *Deliverable: ENGINEER shall prepare meeting notices, agendas and minutes, schedules,*
21 *monthly progress reports and invoices, and maintain project files. ENGINEER shall*
22 *obtain permits and right-of-entry. Although fees for encroachment permits to obtain*
23 *information are included, fees for construction permits are not included.*

24 **T2 SURVEYING/RIGHT OF WAY ENGINEERING**

25 **2.1 SUPPLEMENTAL FIELD SURVEY**

26 COUNTY shall perform field survey to supplement the aerial topographic mapping at conforms, tie-ins,
27 potential conflicts, etc. ENGINEER will provide COUNTY with survey requests limits for all areas that
28 need to be supplemented with new field data. The ENGINEER will review survey data for consistency.

29 *Deliverable: ENGINEER shall prepare survey request exhibits.*

1 **2.2 PROPERTY OWNER EXHIBITS**

2 After reconciliation of the right of way base map by County surveyor, ENGINEER will determine
3 permanent right-of-way and temporary construction easement requirements for each parcel. These
4 needs will be depicted on individual parcel exhibits. These exhibits will include an aerial photograph of
5 the parcel, with the County boundary survey information, owner, APN, address, parcel size and take area
6 all shown. The exhibits will be used by ENGINEER and COUNTY staff during the appraisal and
7 acquisition discussions with the property owner. ENGINEER will prepare permanent and temporary right
8 of way base mapping for preparation of plats and legals.

9 *Deliverable: ENGINEER shall prepare Property Owner Exhibits & Right of Way Mapping*

10 **2.3 RIGHT OF WAY REQUIREMENTS MAP**

11 ENGINEER shall prepare a map showing anticipated right of way requirements for the proposed
12 alternative. The right of way requirement map shall provide enough detail to support the decision-making
13 process in selecting an alignment and shall define property acquisition/easement areas required.

14 *Deliverable: ENGINEER shall prepare a Preliminary Right of Way Requirements Map*

15 **2.4 PLATS AND LEGAL EXHIBITS**

16 COUNTY will prepare right of way and temporary construction easement plats and legal exhibits.
17 ENGINEER will review, check, and verify the plats and legals to the right of way base mapping.

18 *Deliverable: ENGINEER shall review, check, and verify plats and legal exhibits for right of way,*
19 *temporary construction easements.*

20 **2.5 RFA DOCUMENTATION AND APPROVALS**

21 Construction funding for the project may include Federal or State funds that require the completion of a
22 Request for Authorization (RFA) package to obligate the funds. In the event such funds are obtained,
23 COUNTY will prepare the necessary forms with assistance from ENGINEER and requests to Caltrans
24 Local Assistance.

25 *Deliverable: ENGINEER shall assist COUNTY with preparation of RFA Approval Forms*

26 **T3 UTILITY COORDINATION**

27 **3.1 UTILITY COORDINATION**

28 The intent of the COUNTY is that the services of the ENGINEER shall be complete and “turn-key” with
29 respects to all utility coordination matters, including complete coordination for the protection and

1 relocation of existing facilities as described herein, as well as coordination, preparation of applications,
2 and all other matters pertaining to the relocation and installation of water and electric services, except
3 for those procedures that must be performed by COUNTY.

4 ENGINEER shall designate dedicated staff who shall be responsible for all coordination work related to
5 utilities for Project, including but not limited to relocations of existing trunk and mainline facilities,
6 installation of new trunk and mainline facilities, relocation of existing electric and water services, and
7 installation of new electric and water services.

8 ENGINEER shall coordinate with utility owners and COUNTY and Caltrans utility coordination staff with
9 respect to all utility related matters, including but not limited to:

- 10 a. Requests for utility as-built plans and inventory maps.
- 11 b. Request for property rights information.
- 12 c. Design coordination meetings and communications.
- 13 d. Notices to owner to initiate design.
- 14 e. Notices to owner and agreements to pothole including submissions to CALTRANS for
15 encroachment permits.
- 16 f. Inclusion of utility information, including sub-surface engineering data, on improvement plans.
- 17 g. Notices to owner to relocate conflicting utilities.
- 18 h. Coordination and communication with respect to utility facilities that are to be installed within
19 planned bridge structures including preparation of agreements as required.
- 20 i. Coordination and communication with respect to utility facilities that are to be installed prior to or
21 concurrent with COUNTY's construction project, including preparation of agreements as required.
- 22 j. No conflict letters.
- 23 k. Other procedures and communications as required.

24 ENGINEER shall provide copies of all correspondence with utility companies and other utility related
25 information to the COUNTY and Caltrans as required.

26 ENGINEER shall act as extension of staff to implement utility coordination and relocation in accordance
27 with Caltrans Local Assistance Procedures Manual, Chapter 14 and necessary COUNTY procedures,
28 including but not limited to:

- 29 a. Preparation of Letters to Owners of Utilities

1 Many letters will require signature by County's utility coordination or project management staff.
2 ENGINEER shall prepare letters for County signature as required. ENGINEER shall prepare and
3 send correspondence under ENGINEER's signature when feasible and appropriate.

4 b. Phone, Email and Office Communication

5 ENGINEER shall communicate effectively as needed to achieve necessary and required utility
6 coordination and relocations via all communication methods.

7 c. Meetings

8 ENGINEER shall set up utility coordination meetings as needed.

9 d. Agreements

10 ENGINEER shall prepare Agreements utilizing Caltrans format and language, modified as
11 necessary for execution by the County of Riverside.

12 e. Submittals

13 ENGINEER shall submit letters, notices to owner, agreements, and other documents to COUNTY
14 and Caltrans for reviews and approvals.

15 f. Caltrans Procedures, General

16 ENGINEER shall comply fully with Caltrans utility coordination procedures, as outlined in Chapter
17 14 of the Caltrans Local Assistance Procedures Manual. ENGINEER shall be knowledgeable in
18 the required procedures and shall coordinate with COUNTY and Caltrans as required. ENGINEER
19 shall maintain files in accordance with Caltrans filing requirements and shall provide Caltrans with
20 duplicate files and shall provide COUNTY with original files upon completion of construction.

21 Other and related duties of ENGINEER are as follows, as appropriate and as required:

22 ENGINEER shall obtain record copies of utility maps from each utility owner within the project limits for
23 existing and/or proposed utility facilities. ENGINEER shall include mapping and/or exhibits that clearly
24 define the project limits as part of the requests for utility information.

25 ENGINEER shall identify utility companies affected by the project and delineate utilities within the
26 project's sphere of influence on the plans. ENGINEER shall prepare preliminary plans, which shall
27 include all existing utilities (above ground and below ground) identified by location, size, type, and owner,
28 as appropriate. ENGINEER shall check horizontal and vertical clearances for utilities and coordinate
29 design with the various utility companies to address conflicts. In addition to information provided by the

1 owning utility companies and through research of other record maps, field surveys shall be used to locate
2 utility features such as manholes, valves, fire hydrants, poles, risers, etc., which shall be reflected on the
3 plans.

4 If it is necessary to pothole existing utilities at critical locations, ENGINEER shall coordinate with
5 COUNTY and Caltrans staff to arrange with the respective utility owner to pothole its facility. ENGINEER
6 shall coordinate the use field survey crews to locate potholed utilities by coordinates and elevations
7 based on the project's survey controls.

8 Known utility conflicts shall be shown on the plans with construction notes indicating action to be taken
9 and by whom. Inventory numbers of poles, vaults and other surface facilities shall be shown on the plans
10 for those facilities that have such numbers attached to the facility and as provided on the owner's
11 inventory maps.

12 ENGINEER shall send preliminary design plans to owning utility companies within the project limits with
13 request for review and comments on the plans relevant to their respective facilities, and other project
14 specific information.

15 ENGINEER shall monitor responses of utility notices received and make recommendations for mitigating
16 conflicts. ENGINEER shall provide written responses to utility companies regarding stated concerns and
17 conduct design coordination meetings with utility companies as needed. Unresolved issues shall be
18 brought to the attention of the COUNTY PROJECT MANAGER as early as practical. Utility conflict issues
19 shall be resolved prior to the completion of the final design plans as follows:

- 20 • ENGINEER, through COUNTY staff, shall request and obtain a written acknowledgement of any
21 conflicts from the respective utility owners.
- 22 • Reasonable efforts shall be taken to accommodate utility company requests for minor design
23 changes to accommodate their facilities. ENGINEER understands that the utility companies are
24 generally operating within the COUNTY or Caltrans right-of-way, but may have prior rights to that
25 of the COUNTY / Caltrans or may have rights prescribed by Master Utility Agreements between
26 Caltrans and utility companies.
- 27 • ENGINEER shall coordinate inclusion of special provisions in County's bid documents for
28 adjustments and relocations of utility facilities as alternate bid items, if requested by the owning
29 utility. Said work may require that cooperative agreements be prepared between the County of

1 Riverside and the owning utility companies. Engineer shall prepare agreements and shall provide
2 information and exhibits as required to support the preparation of cooperative agreements, if
3 needed.

4 ENGINEER shall conduct utility coordination meetings, as needed, regarding adjustments and
5 relocations, to resolve conflict issues, and with respect to performing work for utility companies by
6 COUNTY contractors.

7 For utility conflicts that require relocating, ENGINEER shall prepare notices to owner relocate conflicting
8 facilities. However, it is expected that COUNTY staff will sign the orders.

9 ENGINEER shall make recommendations for special provision language regarding utility issues,
10 recommendations for construction windows of time for utility relocation activities, recommendations for
11 inclusion of utility bid items, etc.

12 ENGINEER shall coordinate with COUNTY survey and utility companies as required with respect to prior
13 rights claims and determinations.

14 If new water service will be needed, ENGINEER shall provide support as directed by COUNTY. Such
15 support includes, but is not limited to, the following responsibilities:

- 16 • Obtain approved water service point from the serving water company for each water meter to be
17 installed and identify requirements that the serving water company has for the provision of service.
18 Coordinate with water company with respect to design issues associated with the provision of
19 service. Coordinate with serving water company to fulfill serving water company requirements as
20 appropriate, including preparation of all utility company forms and submission to County for
21 execution. Advise COUNTY of requirements that are beyond the scope of the ENGINEER (e.g.:
22 execution of applications for service). However, ENGINEER is expected to provide turn-key
23 service.

24 ***Deliverable:*** *ENGINEER shall prepare the following:*

- 25 • *Irrigation design to show preferred service location.*
- 26 • *Application to water purveyor for water service point, including any and all water*
27 *use calculation information and landscaping plans as required by Water*
28 *Company.*
- 29 • *Obtain service address from appropriate municipality.*

Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)

- *Obtain approved water service plan from water purveyor.*
- *Staging plans for relocation of water meters.*
- *Application to water purveyor for water service, including coordination with account holder for signatures, payments of fees, etc.*
- *Service spreadsheet and exhibit as described herein.*
- *Plans, special provisions, and water company drawings, details and requirements for inclusion in bid package.*

If new electrical service will be needed, ENGINEER shall provide support as directed by COUNTY. Such support includes, but is not limited to, the following responsibilities:

- Obtain approved electrical service point from the serving electric company for each service equipment enclosure to be installed and identify requirements that the serving electric company has for the provision of service. Coordinate with electric company with respect to design issues associated with the provision of service. Coordinate with serving electric company to fulfill serving electric company requirements as appropriate, including preparation of all utility company forms and submission to County or Caltrans for execution. Advise COUNTY of requirements that are beyond the scope of the ENGINEER (e.g.: execution of applications for service). However, ENGINEER is expected to provide turn-key service.
- Serving electric company shall be notified that Electrical Safety Orders clearance requirements must be met (10' radial clearance between 12kv overhead electrical facilities and signal poles and mast arms, and greater clearance for higher voltage electrical facilities). Show such clearance conflicts on the plans with construction notes.
- Submit plans indicating proposed service connection locations to serving electric company for approval (service equipment enclosure, conduit runs, riser quadrant, pole number, and connections to vaults as appropriate).
- Provide detailed load calculations to serving electric company, with a copy to the COUNTY, which provides calculations of the normal and maximum expected loads.
- For both water and electric service, Consultant shall prepare a spreadsheet of the tasks required to obtain service, in accordance with the sample provided by, or as approved by, the Transportation Department, which shall be utilized as an ongoing list of action items and a dynamic record of

1 actions completed, throughout the development of the project. The spreadsheet shall be
2 supplemented with a map exhibit of the project footprint with the locations of all services plotted
3 and referenced to the spreadsheet. Consultant's Project Manager shall arrange for a second
4 qualified person to periodically review work of the consultant staff that is assigned this
5 responsibility, and that person shall independently verify the accuracy of the information on a
6 regular basis. The Consultant agrees that any costs that are incurred by the County resulting from
7 incomplete or inadequate arrangements for water or electric service, including relocations or
8 removals of existing services, will be the funding responsibility of the Consultant.

9 ***Deliverable:*** *ENGINEER shall prepare the following:*

- 10 • *Electrical design to show preferred service location.*
- 11 • *Application to electric purveyor for electric service point(s), including any and all*
12 *electricity use calculation information and electrical plans as required by electric*
13 *company.*
- 14 • *Obtain service address from appropriate municipality.*
- 15 • *Obtain approved electric service plan from electric purveyor.*
- 16 • *Staging plans for relocation of electrical service meters.*
- 17 • *Application to electric purveyor for electric service, including coordination with*
18 *account holder for signatures, payments of fees, etc.*
- 19 • *Service spreadsheet and exhibit as described herein.*
- 20 • *Plans, special provisions, and electric company drawings, details and*
21 *requirements for inclusion in bid package.*

22 Potholing of both high and low risk utilities, including all utilities that could be in conflict with the
23 improvements, shall be anticipated by the ENGINEER. The ENGINEER shall prepare potholing exhibits
24 as needed to adequately locate underground utilities, shall enter into a contract with a licensed contractor
25 for the potholing of utilities, and shall ensure that appropriate permits are obtained from all appropriate
26 jurisdictions prior to the start of work.

27 The contract between the ENGINEER and the potholing contractor shall require that the Contractor's
28 insurance policies name the ENGINEER, the County of Riverside, and any other affected jurisdictions
29 as additionally insured with respect to the contractor's general liability, excess liability and automobile

1 liability policy. The contractor shall meet the insurance requirements, as set forth elsewhere in this
2 agreement, except that the contractor will not be required to provide professional liability coverage.
3 Review and approval of the Contractor's insurance certificate and endorsements by the County's
4 representative shall be obtained prior to the start of potholing work.

5 The ENGINEER shall evaluate the potholing data and shall include the information on the utility plans in
6 table format, with numbered or letter references to the location of the location of the potholes. The
7 ENGINEER shall determine whether the facilities are in conflict, and the limits of the conflict, both of
8 which shall be shown on the utility plans with construction notes.

9 ENGINEER shall assist with the resolution of utility related issues that may arise during the bidding
10 process and during construction, including design modifications as needed and as approved by the
11 COUNTY PROJECT MANAGER.

12 Specific issues, Caltrans requirements and utility company requirements may result in deviation from the
13 procedures outlined herein.

14 If and as applicable, ENGINEER shall perform all tasks required with respect to utilities to enable
15 certification of right-of-way for the project. Certification of the utility section of the Right-of-Way
16 certification shall be in accordance with Chapter 13 of the Caltrans Local Assistance Procedures Manual
17 and shall comply with applicable Federal and State requirements. ENGINEER shall be fully
18 knowledgeable in the requirements to certify Right-of-Way with respect to utilities and shall schedule
19 project activities accordingly.

20 ENGINEER shall communicate and coordinate with County's Project Manager and Utility Unit and shall
21 request and coordinate any necessary actions of the County which cannot be performed by ENGINEER,
22 such as agreement execution and document signatures. ENGINEER shall allow enough time in the
23 project schedule for completion of tasks by County.

24 Upon completion of right-of-way certification, ENGINEER shall transmit documents to Caltrans Right-of-
25 Way branch as requested, including Notices to Owners, Utility Agreements and relocation plans.

26 Upon completion of right-of-way certification, ENGINEER shall prepare utility liability package files for
27 Caltrans and Construction Manager to include: Project Engineer's Certification of Utility Facilities, Right
28 of Way Certification, Notices to Owners, Utility Agreements, Engineer's certifications that owner's plans
29

1 comply with the needs of the project, Caltrans relocation plan approvals, relocation plans, and no-conflict
2 letters. Said files shall be neatly organized by utility owner.

3 ENGINEER shall also provide to County a complete file as described above, but which also includes the
4 property rights documents and prior rights documentation, communication diaries, requests for utility
5 plans, liability claim letters and responses, structures letters, and all other relevant documents. Said files
6 shall be neatly organized by utility owner.

7 *Deliverable: ENGINEER shall prepare Utility Letters, Report of Investigations, Notice of Owners,*
8 *Utility Agreements*

9 **T4 GEOTECHNICAL DESIGN REPORT**

10 Geotechnical work will include conducting a field investigation, performing laboratory tests, and conducting
11 analyses to develop geotechnical parameters and recommendations for the design and construction of
12 proposed structures, roadway embankment, and pavement structural sections.

13 **4.1 GEOTECHNICAL FIELD INVESTIGATIONS**

14 The geotechnical field investigation plan to be performed by ENGINEER is presented in Table 1 below.

15 **TABLE 1. PROPOSED SOIL BORING INFORMATION**

Design Element	Number of Borings/CPTs and Approximate Depth
Bridge Abutments	2 abutment borings: 90 feet each
Bridge Piers	8 borings: 130 feet
Retaining Walls	4 borings: 30 feet
Sound Wall	2 borings: 30 feet

16
17
18
19
20
21 *Note: Some of the above borings are used for more than one Design Element.*

22 Caltrans requirements for soil borings follow 2012 AASHTO LRFD guidelines which specify that for
23 bridges with a width of no more than 100 feet, a soil boring is required at each support location. The
24 minimum boring depth shall extend 20 feet below the specified pile tip elevation. Caltrans guidelines also
25 require a boring every 100-200 feet for retaining walls and 500 feet for sound walls.

26 ENGINEER will conduct the bridge bent borings from the channel bed.

27 The proposed approximate boring depths can be raised if refusal is encountered. Data obtained from
28 some boreholes will be used for multiple design elements. The boreholes will be excavated using a truck-
29 mounted rotary-wash drill rig. Soil cuttings from borings will be temporarily stored onsite in 55-gallon

1 drums, tested for contaminants, then dispose offsite. Asphalt concrete cold-patch will be used to replace
2 asphalt that is removed by excavations, and quick-set cement will be used to replace concrete that is
3 removed by excavations.

4 ENGINEER will secure an encroachment permit from Riverside County Transportation Department, City
5 of Riverside, and City of Jurupa.

6 ENGINEER field personnel will collect soil samples for laboratory testing, including bulk samples of near-
7 surface soils and small disturbed and relatively undisturbed ring samples of deeper soils. The small
8 disturbed and relatively undisturbed soil samples will be collected using split-spoon samplers at a vertical
9 interval of about 5 feet, alternating between the Standard Penetration Test (SPT) sampler and the
10 Modified California Drive (MCD) sampler. Samples of subsurface soils will be logged during the field
11 investigation, secured in their containers or collected in plastic bags, and transported to the
12 EMI laboratory.

13 **4.2 LABORATORY TESTING**

14 ENGINEER will review field logs of the boreholes to select representative soil samples for laboratory
15 testing. Various laboratory tests will be performed on soil samples to determine or derive their physical
16 and engineering characteristics. Anticipated laboratory tests include: in-situ density and moisture content,
17 grain size, direct shear, R-value, and soil corrosion tests. Laboratory tests will be conducted in general
18 accordance with American Society for Testing and Materials (ASTM) standards or California Test
19 methods.

20 **4.3 GEOTECHNICAL ENGINEERING ANALYSIS**

21 Results obtained from the field investigation and laboratory testing will be used to characterize
22 subsurface soils and conditions and create idealized soil profiles for design purpose. The following
23 analyses will be performed for the project:

- 24 • Evaluation of seismicity and estimation of Peak Ground Acceleration based on the Caltrans
25 design criteria.
- 26 • Assessment of soil liquefaction potential, seismic settlement, and lateral spreading.
- 27 • Bridge, retaining wall, and sound walls foundation design.
- 28 • Assessment of global slope stability and settlement of embankments.
- 29 • Evaluation of soil corrosivity conditions and recommendations for mitigation measures.

- Design of pavement structural section in accordance with the Caltrans method.

4.4 GEOTECHNICAL REPORTS

ENGINEER will prepare the reports listed in Table 2.

TABLE 2. Design Reports

Design Element	Review Agency	Deliverables
Bridge	Caltrans/County	Foundation Report
Retaining Wall, Sound Wall, Pavement Structural Sections	County	Geotechnical Report

4.4.1 Final Foundation Report

A Foundation Report will be developed by the ENGINEER for the Market Street Bridge in accordance with the Caltrans Guideline – Foundation Reports for Bridges dated February 2017. ENGINEER will address any comments resulting from the Caltrans and County review and prepare a Final Foundation Report.

Deliverable: ENGINEER shall prepare a Draft Structures Foundation Report at 65% and Final Structures Foundation Report at 95%

4.4.2 Final Geotechnical Report

ENGINEER will prepare a Geotechnical Report to provide design and construction recommendations for retaining wall, sound walls, and pavements. ENGINEER will address any comments resulting from the Caltrans and County review and prepare a Final Geotechnical Report.

Deliverable: ENGINEER shall prepare Draft Geotechnical Report at 65% and Final Geotechnical Report at 95%

T5 HYDRAULICS & STORM WATER

5.1 DRAINAGE REPORT

ENGINEER will update and expand upon the Preliminary Drainage Report that was prepared during the Preliminary Engineering / Environmental Clearance / Technical Report phase of the project. ENGINEER has previously determined the existing drainage patterns and storm drain facilities in the project area, including existing channels/ditches, pipe/culvert locations, sizes, local rainfall intensities, and flows. This information will be used for on- and off-site hydrologic analyses of the existing and post-project condition, emphasizing the primary objective of maintaining existing flow patterns and runoff amounts.

1 The on-site analyses will include identifying where new facilities are needed, developing drainage
2 boundaries for the areas within the project limits, developing flows for each facility based on Rational
3 Method calculations, and laying out the new/retrofitted storm drain facilities. The off-site analyses involve
4 obtaining flows for the water courses draining toward and/or through the project area from outside the
5 project limits and designing new or upgraded facilities for these flows. If flows are not readily available
6 for these water courses and the contributing watersheds exceed 0.5 square miles, ENGINEER will
7 approximate the off-site flows based on the conveyance of facilities immediately up- or downstream. For
8 off-site watersheds less than 0.5 square miles in area, drainage boundaries will be developed, and flows
9 calculated based on the Rational Method where appropriate.

10 A draft Drainage Report will be prepared to document the hydrologic and hydraulic analysis and will
11 provide a detailed discussion of the following: existing conditions and facilities in the project area, the on-
12 and off-site hydrologic analyses, existing and post-project drainage patterns, conditions and any issues
13 of special concern or significance, results of the on- and off-site hydraulic analyses and any issues of
14 special concern or significance. The draft report will be submitted to the COUNTY for review at the 65%
15 milestone and will be finalized upon completion of the 100% PS&E.

16 *Deliverable:* ENGINEER shall prepare Draft and Final Drainage Report

17 **5.2 UPDATE BRIDGE DESIGN HYDRAULIC STUDY REPORT**

18 During the Preliminary Engineering / Environmental Clearance phase of the project, a Bridge Design
19 Hydraulic Study (BDHS) Report was prepared. The hydraulic analysis contained in the BDHS Report
20 was based on the Santa Ana River flows present prior to the Seven Oaks Dam project that was
21 constructed upstream of the Market Street Bridge crossing. With the Seven Oaks Dam in place, flows in
22 the Santa Ana River have been significantly reduced. In addition, the existing BDHS Report does not
23 include an analysis of the construction condition, which will include numerous additional piers/falsework
24 in the channel. The hydraulic and scour analysis will be updated during the design phase to reflect the
25 reduced flows and the construction condition, and the BDHS Report will be revised to reflect the new
26 freeboard and scour results. A draft report will be submitted to the COUNTY for review at the 65%
27 milestone and will be finalized upon completion of the 100% PS&E.

28 *Deliverable:* ENGINEER shall prepare Draft and Final Bridge Design Hydraulic Study Report
29

1 **5.3 NPDES DATA FORM**

2 ENGINEER's Qualified Stormwater Developer (QSD) will complete the County's Transportation
3 Improvement Project NPDES Data Form. Preparation of the NPDES Data Form will include determining
4 the construction period/duration, the total disturbed and percent impervious area of the project site, the
5 project category and MS4 permit region, the receiving water and groundwater conditions, and the
6 project's risk level. The form will be submitted to the County at the 65% milestone and will be finalized
7 on completion of the 100% PS&E.

8 *Deliverable: ENGINEER shall prepare Draft and Final NPDES Data Form*

9 **5.4 NPDES GENERAL CONSTRUCTION PERMIT**

10 ENGINEER's Qualified Stormwater Developer (QSD) will prepare the Storm Water Pollution Prevention
11 Plan (SWPPP) and, at the COUNTY's discretion, populate the SMARTS system with this information.
12 Preparation of the SWPPP will involve the following tasks:

- 13 • Developing a detailed water pollution control drawings;
- 14 • Determining the risk level classification of the project;
- 15 • Identifying the sources that could add pollutants to storm water discharges or could result in non-
16 storm water discharges;
- 17 • Selecting risk level appropriate Best Management Practices (BMPs) that will control each of the
18 identified pollutants;
- 19 • Identifying the required construction site monitoring efforts and, dependent on risk level, preparing
20 a monitoring and sampling exhibit;
- 21 • Integrating appropriate post-construction storm water BMPs;
- 22 • Developing a maintenance, inspection and repair program.

23 A draft SWPPP will be provided to the COUNTY for review and comment. Upon receipt of comments,
24 ENGINEER will make the necessary modifications to the SWPPP and prepare a final SWPPP for use in
25 obtaining the NPDES permit. ENGINEER will provide QSD services through the issuance of the Waste
26 Discharge Identification Number.

27 *Deliverable: ENGINEER shall prepare the SWPPP*

1 **T6 65% SUBMITTAL**

2 **6.1 65% ROADWAY PLANS**

3 Roadway, Construction Details, Construction Area Signs, Erosion Control, Contour Grading Plans,
4 Drainage Plans, Stage Construction Plans, Signing and Striping Plans

5 ENGINEER will prepare the plans for the roadway improvements, which will follow the 35% roadway
6 plans prepared during the PA/ED Phase. The 65% plans will be submitted for review by the COUNTY
7 and Cities. The 65% submittal will include construction details, construction area signs, erosion control,
8 contour grading plans, drainage plans, stage construction plans, and signing and striping plans.

9 *Deliverable: ENGINEER shall prepare 65% Roadway including Title Sheet/Typical*
10 *Sections/Plans/Profile/Superelevation/Construction Details/Construction Area*
11 *Signs/Erosion Control/Contour Grading Plans/Stage Construction Plans/Drainage*
12 *Plans/Signing and Striping Plans*

13 Utility Plans

14 ENGINEER will prepare 65% utility plans. The plans will include the following:

- 15 • Identify utility companies affected by the project and delineate utilities within the project's sphere
16 of influence on the plans.
- 17 • Include all existing utilities (above ground and below ground) identified by location, size, type and
18 owner.
- 19 • Known utility conflicts with construction notes indicating action to be taken and by whom.
- 20 • Inventory numbers of poles, vaults and other surface facilities.

21 In addition to information provided by the owning utility companies and through research of other record
22 maps, field surveys shall be used to locate utility features such as manholes, valves, fire hydrants, poles,
23 risers, etc., which will be reflected on the plans.

24 *Deliverable: ENGINEER shall prepare 65% Utility Plans*

25 Electrical Plans (Traffic Signals and Bridge and Street Lighting Plans)

26 ENGINEER will prepare the 65% electrical plans. The plans will include the following:

- 27 • Modification of the existing signal at the intersections of Market Street and Via Cerro
- 28 • Provided intersection and bridge lighting for the proposed project
- 29 • Electrical design to show preferred service location

- Application to electric purveyor for electric service point(s), including any and all electricity use calculations information
- Obtain service address for appropriate municipality
- Application to electric purveyor for electric service, including coordination with account holder for signatures, payments of fees, etc.

The traffic signal, intersection and bridge lighting will be designed to current COUNTY and CA MUTCD standards. This will include any ADA considerations.

Deliverable: ENGINEER shall prepare 65% Electrical Plans/Details

6.2 TYPE SELECTION AND 65% STRUCTURE PLANS

ENGINEER will use the conceptual bridge type and span configuration previously approved by COUNTY during the PAVED Phase. ENGINEER will develop a General Plan for a cast-in-place bridge alternative and a precast bridge alternative. The Bridge General Plans for each bridge type will be prepared showing the plan, profile and typical section views. Denoted on these views will be the lanes, shoulders, sidewalks, utility locations, horizontal and vertical permanent clearances, falsework opening sizes, abutment heights, barrier types, lighting, aesthetic treatments, and slope protections.

6.2.1 Structure Type Selection

The Type Selection Package will follow the format provided in Caltrans Memo to Designers and include a memorandum with discussions of the following: bridge types considered, alternative deliver method of providing a full PS&E for both a cast-in-place bridge alternative and precast bridge alternative, wall types considered, site geometric and hydraulic constraints, life cycle costs of considered alternatives, environmental impacts, community concerns, construction duration, and any maintenance requirements. Specific bridge treatment ideas will be discussed in the memo including abutment, barrier, bridge lighting, and any unique sidewalk scoring pattern. Included with the Package submittal will be the memorandum, the Bridge General Plans for both the cast-in-place bridge alternative and precast bridge alternative, the Bridge Foundation Plan, the Preliminary Foundation Report, and Drainage Report.

A meeting to confirm the selected and alternative bridge type and functional/aesthetic features will be scheduled at the COUNTY to conclude the type selected bridge prior to the start of detailed

1 design. Any changes to the Structures Type Selection Memo will be recorded in the meeting
2 minutes.

3 *Deliverable: ENGINEER shall prepare Bridge Type Selection Package, including Bridge*
4 *General Plans, Bridge Draft Foundation Plan, Bridge General Plan Estimates*
5 *and Bridge Preliminary Foundation Report*

6 **6.2.2 65% PS&E Structure Plans (Cast-In-Place Alternative)**

7 After the COUNTY acceptance of the Structure Type Selection, the ENGINEER will proceed with
8 detailed design for the structures. The 65% bridge plans will comprise all anticipated plan sheets
9 and details for the unchecked bridge design for the cast-in-place bridge alternative.

10 The bridge design will follow the Caltrans structure design procedures, specifications, manuals
11 and standards including the following publications: AASHTO LRFD Bridge Design Specifications
12 2007 Edition with California Amendments, Caltrans Memo to Designers, Caltrans Bridge Design
13 Aids, Caltrans Seismic Design Criteria (Version 2.0) and Caltrans Bridge Design Details manual.

14 The design of the foundations for the structure will be coordinated between the bridge design
15 engineer and the geotechnical engineer.

16 The plans will be prepared for use with Caltrans Standard Plans and Specifications dated 2018.

17 The structure plans will be prepared in English Units, using Microstation software.

18 ENGINEER will prepare the structure design, detailing all elements of the bridge and walls, and
19 completing the full design with a set of stamped calculations prepared by a Registered Civil
20 Engineer.

21 *Deliverable: ENGINEER shall prepare 65% Draft Structure Plans/ Structure Pay Item List*
22 *for the Cast-In-Place Bridge Alternative*

23 **6.2.3 65% PS&E Structure Plans (Precast Alternative)**

24 After the COUNTY acceptance of the Structure Type Selection, the ENGINEER will proceed with
25 detailed design for the structures. The 65% bridge plans will comprise all anticipated plan sheets
26 and details for the unchecked bridge design for the precast bridge alternative.

27 The bridge design will follow the Caltrans structure design procedures, specifications, manuals
28 and standards including the following publications: AASHTO LRFD Bridge Design Specifications
29

2007 Edition with California Amendments, Caltrans Memo to Designers, Caltrans Bridge Design Aids, Caltrans Seismic Design Criteria (Version 2.0) and Caltrans Bridge Design Details manual.

The design of the foundations for the structure will be coordinated between the bridge design engineer and the geotechnical engineer.

The plans will be prepared for use with Caltrans Standard Plans and Specifications dated 2018.

The structure plans will be prepared in English Units, using Microstation software.

ENGINEER will prepare the structure design, detailing all elements of the bridge and walls, and completing the full design with a set of stamped calculations prepared by a Registered Civil Engineer.

Deliverable: ENGINEER shall prepare 65% Draft Structure Plans/ Structure Pay Item List for the Precast Bridge Alternative.

6.3 65% QUANTITIES AND ESTIMATE

ENGINEER will prepare detailed quantity calculations from the 65% roadway and structure plans. The quantities will be based on estimated calculations, using a contingency of 20%. Unit prices will be estimated from Caltrans cost data, other ENGINEER projects recently advertised and other COUNTY or regional project bid results.

Deliverable: ENGINEER shall prepare 65% Quantities and Estimates

T7 ENVIRONMENTAL PERMITTING

Following the approval of the Environmental Document and based on the results of the Biological Report, ENGINEER will prepare applications and conduct coordination to obtain the following encroachment and regulatory permits:

7.1 RIVERSIDE COUNTY FLOOD CONTROL DISTRICT ENCROACHMENT PERMIT

The Santa Ana Floodway is controlled by the Riverside County Flood Control and Water Conservation District (RCFCWCD). As the project will need access to the floodway to conduct geotechnical investigations and to construct the project, two encroachment permits are required. ENGINEER will prepare both encroachment permit applications and coordinate with the RCFCWCD to obtain the final permits authorizing geotechnical investigations and project construction. It is assumed that the COUNTY will be responsible for all permit application fees.

1 As part of the encroachment permit process, the RCFCWCD and the COUNTY will need to coordinate
2 with the US Army Corps of Engineers (USACE) to obtain a 408 permit. USACE requires permitting when
3 working or encroaching onto a USACE jurisdictional facility, which includes the Santa Ana River
4 floodway. As the project requires two encroachment permits, it will also require two USACE 408 permits,
5 one issued for geotechnical investigations and one issue for project construction. ENGINEER will prepare
6 and process both Section 408 Permit Applications.

7 Both USACE 408 permits will require NEPA environmental analysis and documentation to support the
8 permit application process. For the USACE 408 geotechnical permit, ENGINEER will prepare a NEPA
9 Categorical Exclusion utilizing the NEPA technical studies previously prepared during the PA&ED phase
10 of the project. For the USACE 408 project construction permit, ENGINEER will assist the USACE in the
11 preparation of an Environmental Assessment, utilizing the NEPA technical studies and the CEQA
12 environmental document previously prepared during the PA&ED phase of the project.

13 **Deliverable:** *RCFCWCD Encroachment Application and Permit for geotechnical investigations;*
14 *USACE 408 application for geotechnical investigations; USACE Categorical*
15 *Exclusion; RCFCWCD Encroachment Application and Permit for project*
16 *construction; USACE 408 application for project construction.*

17 **7.2 SECTION 401 CLEAN WATER ACT**

18 The Santa Ana River is a jurisdictional water of the US and State. As the project will temporarily impact
19 the Santa Ana River, the project will be required to obtain a Clean Water Act (CWA) Section 401
20 certification, issued by the Santa Ana Regional Water Quality Control Board (SARWCB). The project will
21 also be required to obtain a General Section 401 Water Qualification Certification Order Notification to
22 permit the geotechnical investigations within the floodway. ENGINEER will prepare both applications and
23 all appropriate figures and attachments. Following submittal of the applications, ENGINEER will
24 coordinate with the SARWCB to ensure timely processing and issuances of both certifications. It is
25 assumed that ENGINEER will pay the initial 401 application fee and COUNTY will pay the 401 fees prior
26 to issuance of the certification.

27 **Deliverable:** *Section 401 Application and Certification for Project Construction; General Section*
28 *401 Water Qualification Certification Order Notification Application and Certification*
29 *for Geotechnical Investigations.*

1 7.3 SECTION 404 CLEAN WATER ACT

2 The Santa Ana River is a jurisdictional water of the U.S. A CWA Section 404 permit issued through the
3 USACE will be required for work within the ordinary high-water mark of the river. Project construction will
4 qualify under a Nationwide Permit (NWP). ENGINEER will prepare the application and all appropriate
5 figures and attachments. Following submittal of the application, ENGINEER will coordinate with the
6 USACE to ensure timely processing and issuance of the NWP for project construction. Geotechnical
7 investigations qualify for a USACE NWP 6 (Survey Activities); therefore, individual notification is not
8 necessary.

9 *Deliverable: Section 404 USACE NWP Application and Permit for Project Construction.*

10 7.4 SECTION 1602 STREAMBED ALTERATION

11 CDFW requires notification when a project may substantially alter or divert the natural flow of a stream
12 or deposit debris in an area where it may pass into a stream, lake, or river. A 1602 streambed alteration
13 agreement will be required for work within the Santa Ana River. The project will require two 1602 permits,
14 one issued for geotechnical investigations and one issued for project construction. ENGINEER will
15 prepare both 1602 streambed alteration agreement applications. The CEQA IS/MND approved for the
16 project will be used to support both applications. It is assumed that the ENGINEER will pay all 1602
17 application fees.

18 *Deliverable: Section 1602 Streambed Alteration Agreement for Project Construction; Section*
19 *1602 Streambed Alteration Agreement for Geotechnical Investigations.*

20 7.5 MITIGATION IN-LIEU FEE COORDINATION

21 ENGINEER will coordinate with the COUNTY to facilitate the compensatory mitigation fee payments required
22 as part of the environmental permits and as required by the Western Riverside Multiple Species Habitat
23 Conservation Plan (WRMSHCP). Coordination will include determining the appropriate mitigation banks
24 servicing the project area, negotiating in-lieu fees, and processing all associated contracts and documentation.
25 It is assumed that the COUNTY will pay all mitigation fees. ENGINEER provide proof of mitigation to all
26 permitting agencies, as required.

27 *Deliverable: Executed Mitigation Bank Contracts.*

1 **T8 95% SUBMITTAL**

2 **8.1 95% ROADWAY PLANS**

3 Roadway, Construction Details, Temporary Water Pollution Control Plans, Utility Plans, ESA Fencing
4 Plans, Construction Area Signs, Stage Construction Plans, Detour Plans, Contour Grading Plans,
5 Erosion Control Plans, Drainage Plans, Signing and Striping Plans, Electrical Plans

6 Upon receipt of comments on the 65% submittal, ENGINEER will prepare a written response to each
7 comment from the COUNTY and Cities. Resolution of any difficult comments will be facilitated in a
8 meeting with the COUNTY and Cities.

9 ENGINEER will update the 65% plans and prepare the 95% plan submittal.

10 *Deliverable: ENGINEER shall prepare 95% Roadway including Title Sheet/Typical*
11 *Sections/Plans/Profile/Superelevation/ Construction Details/Temporary Water*
12 *Pollution Control/Utility Plans/ESA Fencing/Construction Area Signs/Stage*
13 *Construction Plans/Detour Plans/Contour Grading Plans/Erosion Control*
14 *Plans/Drainage Plans/Signing and Striping Plans /Electrical Plans/Responses to*
15 *Comments*

16 **8.2 95% STRUCTURE PLANS**

17 **8.2.1 95% PS&E Structure Plans (Cast-In-Place Alternative)**

18 ENGINEER will address any comments from the COUNTY on the 65% review. The designer will
19 also address ENGINEER Quality Control Review comments as well as coordination input from
20 roadway design, electrical design, drainage design and the utility coordinator. The designer and
21 checker will meet to resolve any discrepancies noted in the design and the structure plans will
22 be updated accordingly for the cast-in-place bridge alternative.

23 *Deliverable: ENGINEER shall prepare 95% Checked Structure Plans / Structure Design*
24 *Calculations / Final Foundation Report/Responses to Comments for the*
25 *Cast-In-Place Bridge Alternative.*

26 **8.2.2 Independent Design Check (Cast-In-Place Alternative)**

27 ENGINEER will complete the independent design check for each of the structures to be
28 performed by a registered civil engineer completely independent from the designer. The design
29 checker will prepare a complete set of design check calculations to verify the capacity of all

1 substructure and superstructure elements for the cast-in-place bridge alternative. All structure
2 plan details will be reviewed by the check engineer for completeness and accuracy.

3 *Deliverable: ENGINEER shall prepare Independent Check Calculations for the Cast-In-
4 Place Bridge Alternative.*

5 **8.2.3 95% PS&E Structure Plans (Precast Alternative)**

6 ENGINEER will address any comments from the COUNTY on the 65% review. The designer will
7 also address ENGINEER Quality Control Review comments as well as coordination input from
8 roadway design, electrical design, drainage design and the utility coordinator. The designer and
9 checker will meet to resolve any discrepancies noted in the design and the structure plans will
10 be updated accordingly for the precast bridge alternative.

11 *Deliverable: ENGINEER shall prepare 95% Checked Structure Plans / Structure Design
12 Calculations / Final Foundation Report/Responses to Comments for the
13 Precast Bridge Alternative.*

14 **8.2.4 Independent Design Check (Precast Alternative)**

15 ENGINEER will complete the independent design check for each of the structures to be
16 performed by a registered civil engineer completely independent from the designer. The design
17 checker will prepare a complete set of design check calculations to verify the capacity of all
18 substructure and superstructure elements for the precast bridge alternative. All structure plan
19 details will be reviewed by the check engineer for completeness and accuracy.

20 *Deliverable: ENGINEER shall prepare Independent Check Calculations for the Precast
21 Bridge Alternative.*

22 **8.3 95% QUANTITIES AND ESTIMATE**

23 ENGINEER will prepare detailed quantity calculations from the 95% plans. The detailed item list will be
24 updated for any new items added between the 65% and 95% design and will be checked against the
25 independent check quantities. The quantities will now be based on detailed calculations, allowing the
26 contingency to be reduced to 10%. Quantities will be calculated using the roadway design software and
27 checked using hand calculations and the design plans. Structure quantities will be hand calculated and
28 checked by independent hand calculation. Unit prices will be estimated from Caltrans cost data, other
29 ENGINEER projects recently advertised and other County or regional project bid results.

Deliverable: ENGINEER shall prepare 95% Checked Quantities and Estimates.

8.4 95% DRAFT SPECIAL PROVISIONS

Project Special Provisions will be based upon the Caltrans 2018 Standard Specifications and Standard Special Provisions. ENGINEER will prepare a full set of special provisions for the project in Microsoft Word for the 95% submittal, gathering all necessary input from each design discipline.

ENGINEER will make recommendations for special provisions language regarding utility issues, recommendations for construction windows of time for utility relocation activities, recommendations for inclusion of utility bid items, etc.

ENGINEER will work with COUNTY staff to make edits to the as necessary and to make the project requirements clear.

Deliverable: ENGINEER shall prepare 95% Draft Special Provisions/Responses to Comments

T9 100% SUBMITTAL

9.1 100% ROADWAY PLANS (INCLUDING CROSS SECTIONS)

ENGINEER will prepare 100% Roadway Design plans based on comments received from the COUNTY and Cities on the 95% plans. The plans will be checked for accuracy and completeness and will incorporate any changes to the other roadway plans that may have been updated or modified.

Cross sections will be generated along the alignment at a minimum of 50 ft intervals. Additional cross sections will be generated at points such as the following: begin/end of tapers and unique features.

Deliverable: ENGINEER shall prepare 100% Roadway including Title Sheet/Typical Sections/Plans/Profile/Superelevation/Construction Details/Temporary Water Pollution Control/Utility Plans/ESA Fencing/Construction Area Signs/Stage Construction Plans/Detour Plans/Contour Grading Plans/Erosion Control Plans/Drainage Plans/Signing and Striping Plans /Electrical Plans/Responses to Comments

1 **T10 FINAL APPROVED SUBMITTAL**

2 **10.1 100% SUBMITTAL**

3 Final Roadway Design

4 ENGINEER will prepare Final Roadway Design plans based on comments received from the COUNTY
5 and Cities on the 100% plans. The plans will be checked for accuracy and completeness and will
6 incorporate any changes to the other roadway plans that may have been updated or modified.

7 Upon approval, ENGINEER will provide signed plans to be incorporated into the bid package.

8 *Deliverable: ENGINEER shall prepare Final Roadway Design/Roadway Cross Sections*
9 */Responses to Comments*

10 Final Structure Design

11 ENGINEER will prepare the Final Structure Design plans based on comments received from the
12 COUNTY on the 100% plans. The plans will be checked for accuracy and completeness and will
13 incorporate any changes to the other structure plans that may have been updated or modified. Upon
14 approval, ENGINEER will provide signed plans to be incorporated into the bid package.

15 *Deliverable: ENGINEER shall prepare Final Structure Design Plans/ Responses to Comments*

16 Final Quantities and Estimate

17 ENGINEER will update the quantities from the 100% submittal. Quantities will be updated in the
18 calculations, the estimate and on the quantity plan sheets for any changes made between the 100% and
19 Final Submittals.

20 *Deliverable: ENGINEER shall prepare Final Bid Item List with Quantities/Final Engineer's*
21 *Estimate/Responses to Comments*

22 Final Special Provisions

23 ENGINEER will prepare the final special provisions and meet with the COUNTY to discuss any revisions
24 that could have a major impact on construction. Upon approval, ENGINEER will provide signed special
25 provisions to be incorporated into the bid package

26 *Deliverable: ENGINEER shall prepare Final Signed Special Provisions/Responses to Comments*

1 **ARTICLE AIV • CONSTRUCTION BIDDING AND AWARD SUPPORT (PHASE III)**

2 **T11 BID AND AWARD SUPPORT**

3 **11.1 BID AND AWARD SUPPORT**

4 Contract Award, Contract Analysis, and Construction Bidding Support. If clarification is needed during
5 the bid phase, ENGINEER will be available to provide a written response. Corrective action taken will
6 be in the form of an addendum prepared by ENGINEER and issue by the COUNTY or by a covering
7 change order after the award of the construction contract.

8
9 **ARTICLE AV • CONSTRUCTION SUPPORT (PHASE IV)**

10 **T12 CONSTRUCTION SUPPORT**

11 Following award of the contract, ENGINEER will provide County, City of Jurupa, and City of Riverside with
12 construction support services.

13 **12.1 RESPONSE TO RFI**

14 ENGINEER will attend the pre-construction meeting with the successful construction contractor. During
15 construction, ENGINEER will furnish all necessary additional drawings as required and will respond to
16 requests for information. ENGINEER will be available to visit the job site for on-site review of construction
17 and other visits to the job site as requested to resolve any discrepancies in the contract documents.

18 *Deliverable: Pre-Construction Meeting, Job Site Visits, Additional Drawings/Clarifications.*

19 **12.2 REVIEW SHOP DRAWINGS**

20 ENGINEER will review shop drawings submitted by the construction contractor.

21 *Deliverable: Shop Drawing Reviews*

22 **12.3 PREPARE AS-BUILT PLANS**

23 ENGINEER will prepare and deliver to the COUNTY “As-Built” plans at the completion of project
24 construction. The plans will be delivered in Microstation format and/or mylar hard copies as desired by
25 the COUNTY within three months of completion of the project.

26 *Deliverable: As-built Plans.*

27 **12.4 ENVIRONMENTAL CONSTRUCTION SUPPORT**

28 ENGINEER will provide all required environmental support prior to and during construction. It is
29 anticipated that environmental construction support will be required for two construction seasons. It is

1 assumed that the COUNTY will contract separately for materials and installation of materials required
2 bird exclusion and bat exclusion. It is assumed that additional environmental construction support may
3 be necessary depending upon the permit conditions. No revegetation efforts within the disturbed areas
4 are included in this task and are assumed to be under a separate contract.

5 **12.4.1 Regulatory Agency Coordination**

6 Pursuant to the 1602, 401, and 404 permit requirements, ENGINEER will coordinate with each
7 regulatory agency prior to construction to ensure that construction starts on-time and without
8 delay. Coordination with regulatory agencies will continue throughout construction as needed.

9 *Deliverable: Agency Notification Letters.*

10 **12.4.2 Preconstruction Biological Surveys and Support**

11 ENGINEER's qualified project biologists shall conduct special status plant, wildlife, nesting bird,
12 and burrowing owl pre-construction clearance surveys. Surveys will be consistent with agency
13 approved survey methods and seasons. The surveys for special status plants will take place
14 during the blooming season and nesting bird surveys would take place during the appropriate
15 nesting season. Should any sensitive species be found during preconstruction survey efforts,
16 ENGINEER will coordinate with the appropriate agencies. A report of all findings during surveys
17 will be submitted to the COUNTY for review. This task also includes biological support during
18 installation of any animal exclusion measures including bat exclusion and/or swallow exclusions.

19 *Deliverable: Biological Survey Reports.*

20 **12.4.3 Environmental Awareness Trainings**

21 ENGINEER's qualified project biologist shall conduct environmental resource trainings prior to
22 and during construction to inform project proponents and personnel of pertinent commitments
23 outlined in the ECR relating to sensitive biological resources. Trainings will include specific
24 project information for each resource and will be given in accordance with the appropriate agency
25 standards. Further, ENGINEER will develop and present cultural resource identification and
26 sensitivity training to all construction workers so that all on-site workers are aware of the
27 appropriate procedures and chain-of-command should cultural resources be discovered during
28 construction.

29 *Deliverable: Environmental Awareness Training Materials*

1 physical removal of invasive species. It is assumed that the COUNTY will contract directly with a
2 restoration company and that ENGINEER will provide oversight of this company only.

3 **Deliverable:** *5-year Invasive Species Removal Plan; Annual Monitoring Reports.*

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

AMENDMENT 1 • APPENDIX B1

PROJECT SCHEDULE



AMENDMENT 1 • APPENDIX B1 • SCHEDULE OF SERVICES

ARTICLE BI • INTRODUCTION

The Engineer shall perform the covenants set forth in Appendix A, Scope of Services in accordance with the performance requirements of Article V of this agreement and with the following Schedule of Services. All Covenants set forth in this agreement shall be completed by December 2024, unless extended by supplemental agreement.

A. PHASES

The Schedule is divided into the following 4 phases:

1. PAVED
2. PS&E
3. Bidding Support
4. Construction Support

B. GANTT CHART

A gantt chart is provided below that graphically illustrates the sequencing and completion time for the project phases.

C. DELIVERABLES

See Attached

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29

AMENDMENT 1 • APPENDIX C1

FEE PROPOSAL



**APPENDIX C1 • PS&E, BID SUPPORT, AND CONSTRUCTION SUPPORT
FEE PROPOSAL WORKSHEETS**

Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)

May 4, 2020

COMPANIES	PHASE I	PHASE II	PHASE III	PHASE IV	TOTAL
Dokken Engineering Prime		\$ 2,054,935.93	\$ 50,313.16	\$ 296,275.42	\$ 2,401,524.50
Earth Mechanics Inc. Geotech		\$ 355,682.25	\$ 5,445.84	\$ 20,858.01	\$ 381,986.10
TOTAL		\$ 2,410,618.18	\$ 55,759.00	\$ 317,133.42	\$ 2,783,510.60

Phase I Preliminary Engineering & Environmental
Phase II Plans, Specifications and Estimates
Phase III Construction Bidding and Award Support
Phase IV Construction Support

FEE PROPOSAL WORKSHEET

COMPANY: Dokken Engineering	SCOPE OF WORK: Plans, Specifications and Estimates	PHASE: Phase II
PROJECT: Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)		DATE: May 4, 2020

DIRECT LABOR

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Richard Liptak	Principal In Charge	80	@ \$110.00	\$8,800.00
Juann Ramos	Project Manager	1,020	@ \$85.00	\$86,700.00
Martin Maechler	Structures Engineer	992	@ \$71.00	\$70,432.00
Staff	Senior Engineer	1,806	@ \$63.00	\$113,778.00
Namat Hosseinion	Senior Environ Planner	96	@ \$80.00	\$7,680.00
Staff	Associate Engineer	3,396	@ \$50.00	\$169,800.00
Staff	Assistant Engineer	4,746	@ \$35.00	\$166,110.00
Staff	Assoc. Env. Planner	318	@ \$44.00	\$13,992.00
Staff	Env. Planner/Biologist	130	@ \$34.00	\$4,420.00
Staff	SR CAD/Detailer	1,152	@ \$59.00	\$67,968.00
Staff	Engineering Technician	64	@ \$22.00	\$1,408.00
TOTAL HOURS		13,800	AL DIRECT LABOR	\$711,088.00

MULTIPLIERS

ESCALATION @	(of Direct Labor)	
OVERHEAD @	80.40% (of Direct Labor + Escalation)	\$571,714.75
PAYROLL ADDITIVES @	76.88% (of Direct Labor + Escalation)	\$546,684.45
PROFIT (FIXED FEE) @	10.0% (of Direct Labor + Escalation + Overhead + Payroll Additives)	\$182,948.72
TOTAL MULTIPLIERS		\$1,301,347.93

OTHER DIRECT COSTS

*** Billed at Actual Cost ***

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Haz Waste Testing and Reporting	1	LS	@ \$10,000.00	\$10,000.00
Utility Potholing Reporting	1	LS	@ \$4,500.00	\$4,500.00
Riverside County Flood Control Encroachment Permit	1	LS	@ \$5,000.00	\$5,000.00
Utility Fees	1	LS	@ \$10,000.00	\$10,000.00
Geotech Permit Fee (1602/401)	1	LS	@ \$5,000.00	\$5,000.00
Project Permit Fee (1602/401)	1	LS	@ \$8,000.00	\$8,000.00
TOTAL ODC'S				\$42,500.00

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
Earth Mechanics Inc.	\$76,292.00	\$174,137.25	\$105,253.00	\$355,682.25

TOTAL SUBCONSULTANT SERVICES **\$355,682.25**

TOTAL \$2,410,618.18

FEE PROPOSAL WORKSHEET

COMPANY: Dokken Engineering	SCOPE OF WORK: Construction Support	PHASE: Phase IV
PROJECT: Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)		DATE: May 4, 2020

DIRECT LABOR

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Richard Liptak	Principal In Charge		\$110.00	
Juann Ramos	Project Manager	110	@ \$85.00	\$9,350.00
Martin Maechler	Structures Engineer	118	@ \$71.00	\$8,378.00
Staff	Senior Engineer	240	@ \$63.00	\$15,120.00
Namat Hosseinion	Senior Environ Planner	56	@ \$80.00	\$4,480.00
Staff	Associate Engineer	320	@ \$50.00	\$16,000.00
Staff	Assistant Engineer	440	@ \$35.00	\$15,400.00
Staff	Assoc. Env. Planner	122	@ \$44.00	\$5,368.00
Staff	Env. Planner/Biologist	386	@ \$34.00	\$13,124.00
Staff	SR CAD/Detailer	220	@ \$59.00	\$12,980.00
Staff	Engineering Technician	204	@ \$22.00	\$4,488.00

TOTAL HOURS **2,216** %L DIRECT LABOR **\$104,688.00**

MULTIPLIERS

ESCALATION @	(of Direct Labor)	
OVERHEAD @	80.40% (of Direct Labor + Escalation)	\$84,169.15
PAYROLL ADDITIVES @	76.88% (of Direct Labor + Escalation)	\$80,484.13
PROFIT (FIXED FEE) @	10.0% (of Direct Labor + Escalation + Overhead + Payroll Additive)	\$26,934.13
TOTAL MULTIPLIERS		\$191,587.42

OTHER DIRECT COSTS

*** Billed at Actual Cost ***

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Haz Waste Testing and Reporting		LS	\$10,000.00	
Utility Potholing Reporting		LS	\$4,500.00	
Riverside County Flood Control Encroachment Permit		LS	\$5,000.00	
Utility Fees		LS	\$10,000.00	
Geotech Permit Fee (1602/401)		LS	\$5,000.00	
Project Permit Fee (1602/401)		LS	\$8,000.00	

TOTAL ODC'S

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
Earth Mechanics Inc.	\$6,672.00	\$14,186.01		\$20,858.01

TOTAL SUBCONSULTANT SERVICES **\$20,858.01**

TOTAL **\$317,133.42**

MANHOUR WORKSHEET

COMPANY: Dokken Engineering	SCOPE OF WORK: Manhour Summary	PHASE: All Phases
PROJECT: Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)		DATE: May 4, 2020

TASK	PRINCIPAL IN CHARGE	PROJECT MANAGER	STRUCTURES ENGINEER	SENIOR ENGINEER	SENIOR ENVIRON PLANNER	ASSOCIATE ENGINEER	ASSISTANT ENGINEER	ASSOC. ENV. PLANNER	ENV. PLANNER/BIOLOGIST	SR CAD/DETAILER	ENGINEERING TECHNICIAN	HOURS
	\$311.31	\$240.56	\$200.94	\$178.30	\$226.41	\$141.50	\$99.05	\$124.52	\$96.22	\$166.97	\$62.26	
PHASE TOTALS	80	1,160	1,132	2,146	160	3,776	5,246	448	524	1,386	276	16,334
PHASE I												
PHASE II	80	1,020	992	1,806	96	3,396	4,746	318	130	1,152	64	13,800
PHASE III		30	22	100	8	60	60	8	8	14	8	318
PHASE IV		110	118	240	56	320	440	122	386	220	204	2,216

MANHOUR WORKSHEET

COMPANY Dokken Engineering	SCOPE OF WORK Plans, Specifications and Estimates	PHASE: Phase II
PROJECT Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)		DATE: May 4, 2020

TASK	PRINCIPAL IN CHARGE	PROJECT MANAGER	STRUCTURES ENGINEER	SENIOR ENGINEER	SENIOR ENVIRON PLANNER	ASSOCIATE ENGINEER	ASSISTANT ENGINEER	ASSOC. ENV. PLANNER	ENV. PLANNER/BIOLOGIST	SR CAD/DETAILER	ENGINEERING TECHNICIAN	HOURS	COST
	\$311.31	\$240.56	\$200.94	\$178.30	\$226.41	\$141.50	\$99.05	\$124.52	\$96.22	\$166.97	\$62.26		
Total Manhours	80	1,020	992	1,806	96	3,396	4,746	318	130	1,152	64	13,800	

TASK T1 PROJECT MANAGEMENT													
1.1 Project Coordination and Project Team Meet		320	36	72	12			36				476	\$ 104,249
1.2 Monthly Progress Reports		44										44	\$ 10,584
1.3 Project Schedule		44										44	\$ 10,584
1.4 Quality Control	80											80	\$ 24,905
1.5 Cost Accounting		54										54	\$ 12,990
1.6 Permits		54										54	\$ 12,990
TASK T2 SURVEYING/RIGHT OF WAY ENGINEERING													
2.1 Supplemental Field Survey		12		20			40					72	\$ 10,415
2.2 Property Owner Exhibits		16		30			80					126	\$ 17,122
2.3 Right of Way Requirements Map		24		60			160					244	\$ 32,320
2.4 Plats and Legal Exhibits		14		26			40					80	\$ 11,966
2.5 RFA Documentation and Approvals		30		60			40					130	\$ 21,877
TASK T3 UTILITY COORDINATION													
3.1 Utility Coordination (mapping,potholing,submittals)		100		140		180	260					680	\$ 100,241
TASK T4 GEOTECHNICAL DESIGN REPORT													
4.1 Geotechnical Field Investigations		10		8			12					30	\$ 5,021
4.2 Laboratory Testing		10										10	\$ 2,406
4.3 Geotechnical Engineering Analysis		10		16								26	\$ 5,258
4.4 Geotechnical Reports		12	12	22								46	\$ 9,220
TASK T5 HYDRAULICS & STORM WATER													
5.1 Drainage Report		8		24		80	160			16		288	\$ 34,368
5.2 Update BDHS Report		8		14		60	100			8		190	\$ 23,314
5.3 NPDES Data Form		6		8		20	40					74	\$ 9,662
5.4 NPDES General Construction Permit		12		20		30	70			32		164	\$ 19,624

MANHOUR WORKSHEET

COMPANY: Dokken Engineering	SCOPE OF WORK: Plans, Specifications and Estimates	PHASE: Phase II
PROJECT: Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)		DATE: May 4, 2020

TASK	PRINCIPAL IN CHARGE	PROJECT MANAGER	STRUCTURES ENGINEER	SENIOR ENGINEER	SENIOR ENVIRON PLANNER	ASSOCIATE ENGINEER	ASSISTANT ENGINEER	ASSOC. ENV. PLANNER	ENV. PLANNER/BIOLOGIST	SR CAD/DETAILER	ENGINEERING TECHNICIAN	HOURS	COST
TASK T6 65% SUBMITTAL													
6.1 65% Roadway Plans			32	204	256	436						928	\$ 123,482
6.2 65% Structures Plans			28	240	490	1,052	1,420		570			3,800	\$ 527,017
6.2.1 65% Structures Plans (Precast Option)			6	56	108	240	320		130			860	\$ 119,316
6.3 65% Quantities and Estimate			18	56	112	102	110		36			434	\$ 66,892
TASK T7 ENVIRONMENTAL PERMITTING													
7.1 Riverside Flood Control District Encroachment Permit			14	4	48	16	30	142	60	8		322	\$ 44,138
7.2 Section 401 Clean Water Act			4		8			40	8			60	\$ 8,524
7.3 Section 404 Clean Water Act			4		8			40				52	\$ 7,754
7.4 Section 1602 Streambed Alteration			4		12			40	12			68	\$ 9,815
7.5 Mitigation In-Lieu Fee Coordination			2		8			20	50			80	\$ 9,594
TASK T8 95% SUBMITTAL													
8.1 95% Roadway Plans			18	112	186	330						646	\$ 83,306
8.2 95% Structure Plans			10	140	300	360			80			890	\$ 122,005
8.2.1 95% Structure Plans (Precast Option)			4	80	160	200			48			492	\$ 67,503
8.3 95% Quantities and Estimate			10	100	56	218	110		54			548	\$ 83,244
8.4 95% Draft Special Provisions			12	36	72	102						222	\$ 37,391
TASK T9 100% SUBMITTAL													
9.1 100% Roadway Plans (Including Cross Sections)			16	74	74	110						274	\$ 38,410
9.2 100% Structure Plans			12	104	142	104			56			418	\$ 63,530
9.2.1 100% Structure Plans (Precast Option)			2	24	32	24			14			96	\$ 14,547
9.3 100% Quantities and Estimate			8	54	54	100			90			306	\$ 45,349
9.4 100% Special Provisions			12	18	18	36						84	\$ 12,616
TASK T10 FINAL APPROVED SUBMITTAL													
10.1 100% Submittal			16	36	54	74	54		74			308	\$ 48,887

MANHOUR WORKSHEET

COMPANY: Dokken Engineering	SCOPE OF WORK: Construction Bidding and Award Support	PHASE: Phase III
PROJECT: Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)		DATE: May 4, 2020

TASK	PRINCIPAL IN CHARGE	PROJECT MANAGER	STRUCTURES ENGINEER	SENIOR ENGINEER	SENIOR ENVIRON PLANNER	ASSOCIATE ENGINEER	ASSISTANT ENGINEER	ASSOC. ENV. PLANNER	ENV. PLANNER/BIOLOGIST	SR CAD/DETAILER	ENGINEERING TECHNICIAN	HOURS	COST
------	---------------------	-----------------	---------------------	-----------------	------------------------	--------------------	--------------------	---------------------	------------------------	-----------------	------------------------	-------	------

\$311.31 \$240.56 \$200.94 \$178.30 \$226.41 \$141.50 \$99.05 \$124.52 \$96.22 \$166.97 \$62.26

Total Manhours

30	22	100	8	60	60	8	8	14	8	318
-----------	-----------	------------	----------	-----------	-----------	----------	----------	-----------	----------	------------

TASK T11 BID AND AWARD SUPPORT													
11.1 BID AND AWARD SUPPORT	30	22	100	8	60	60	8	8	14	8		318	\$ 50,313

SUBCONSULTANT MANHOUR WORKSHEET SUMMARY

COMPANY: Earth Mechanics Inc.	SCOPE OF WORK: Geotech	PHASE: All Phases
PROJECT: Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)		DATE: February 11, 2020

TASK	PRINCIPAL	PRINCIPAL ENGINEER	SENIOR PROJECT ENGINEER	PROJECT GEOLOGIST	SENIOR TECHNICIAN	STAFF ENGINEER						HOURS
	\$270.42	\$236.03	\$146.93	\$139.12	\$125.05	\$100.82						

PHASE TOTALS	288	234	384	308	140	148							1,502
---------------------	------------	------------	------------	------------	------------	------------	--	--	--	--	--	--	--------------

PHASE I													
PHASE II	288	206	334	272	120	100							1,320
PHASE III		4	10	16		8							38
PHASE IV		24	40	20	20	40							144

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY: Earth Mechanics Inc.	SCOPE OF WORK: Geotech	PHASE: Phase IV
---	----------------------------------	---------------------------

PROJECT: Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)	DATE: February 11, 2020
--	-----------------------------------

TASK	PRINCIPAL	PRINCIPAL ENGINEER	SENIOR PROJECT ENGINEER	PROJECT GEOLOGIST	SENIOR TECHNICIAN	STAFF ENGINEER										HOURS	COST
	\$270.42	\$236.03	\$146.93	\$139.12	\$125.05	\$100.82											

Total Manhours		24	40	20	20	40										144	
-----------------------	--	-----------	-----------	-----------	-----------	-----------	--	--	--	--	--	--	--	--	--	------------	--

TASK T12 CONSTRUCTION SUPPORT																	
12.1 Response to RFI		24	40	20	20	40										144	\$ 20,858

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY Earth Mechanics Inc.	SCOPE OF WORK: Geotech	PHASE: Phase II
PROJECT: Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)		DATE: February 11, 2020

TASK	PRINCIPAL	PRINCIPAL ENGINEER	SENIOR PROJECT ENGINEER	PROJECT GEOLOGIST	SENIOR TECHNICIAN	STAFF ENGINEER								HOURS	COST
------	-----------	--------------------	-------------------------	-------------------	-------------------	----------------	--	--	--	--	--	--	--	-------	------

\$270.42 \$236.03 \$146.93 \$139.12 \$125.05 \$100.82

Total Manhours **288 206 334 272 120 100** **1,320**

TASK T4 GEOTECHNICAL DESIGN REPORT															
4.1 Geotechnical Field Investigations	8	12	24	200										244	\$ 36,345
4.2 Laboratory Testing	28	12	34	16	120	60								270	\$ 38,680
4.3 Geotechnical Engineering Analysis	104	68	132			40								344	\$ 67,601
4.4 Geotechnical Reports	148	114	144	56										462	\$ 95,877

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY: Earth Mechanics Inc.	SCOPE OF WORK: Geotech	PHASE: Phase IV
---	----------------------------------	---------------------------

PROJECT: Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)	DATE: February 11, 2020
--	-----------------------------------

TASK	PRINCIPAL	PRINCIPAL ENGINEER	SENIOR PROJECT ENGINEER	PROJECT GEOLOGIST	SENIOR TECHNICIAN	STAFF ENGINEER										HOURS	COST
------	-----------	--------------------	-------------------------	-------------------	-------------------	----------------	--	--	--	--	--	--	--	--	--	-------	------

\$270.42 \$236.03 \$146.93 \$139.12 \$125.05 \$100.82

Total Manhours	24	40	20	20	40											144	
-----------------------	-----------	-----------	-----------	-----------	-----------	--	--	--	--	--	--	--	--	--	--	------------	--

TASK T12 CONSTRUCTION SUPPORT																		
12.1 Response to RFI		24	40	20	20	40											144	\$ 20,858

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

AMENDMENT 1 • APPENDIX D1

Maximum Position Hourly Rate



PERSONNEL	POSITION	INITIAL / AVERAGE RATE (2020)	2021	2022	2023
Richard Liptak	Principal In Charge	\$110.00	\$110.00	\$110.00	\$110.00
Juann Ramos	Project Manager	\$85.00	\$85.00	\$85.00	\$85.00
Martin Maechler	Structures Engineer	\$71.00	\$73.00	\$75.00	\$77.00
Staff	Senior Engineer	\$63.00	\$66.00	\$69.00	\$72.00
Namat Hosseinion	Senior Environ Planner	\$80.00	\$80.00	\$80.00	\$80.00
Staff	Associate Engineer	\$50.00	\$53.00	\$56.00	\$59.00
Staff	Assistant Engineer	\$35.00	\$37.00	\$39.00	\$41.00
Staff	Assoc. Env. Planner	\$44.00	\$46.00	\$48.00	\$50.00
Staff	Env. Planner/Biologist	\$34.00	\$36.00	\$38.00	\$40.00
Staff	SR CAD/Detailer	\$59.00	\$62.00	\$65.00	\$68.00
Staff	Engineering Technician	\$22.00	\$24.00	\$26.00	\$28.00

Rates will adjust on January 1st of each year.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

AMENDMENT 1 • APPENDIX E1

MANDATORY FISCAL AND FEDERAL PROVISIONS



APPENDIX E MANDATORY FISCAL AND FEDERAL PROVISIONS

(Based on Caltrans 10-R Dated August 2016)

Definitions:

- A. CONSULTANT means the same as ENGINEER in the Agreement.
B. Contract means the same as Agreement in the Agreement.
C. LOCAL AGENCY means the same as COUNTY in the Agreement
D. Contract Administrator means the same as COUNTY PROJECT MANAGER in the Agreement

Mandatory Fiscal and Federal provisions:

Table listing articles and their corresponding page numbers: Article I Performance Period (E-1), Article II Allowable Costs and Payments (E-1), Article III Termination (E-2), Article IV Cost Principles and Administrative Requirements (E-3), Article V Retention of Records/Audit (E-3), Article VI Audit Review Procedures (E-3), Article VII Subcontracting (E-3), Article VIII Equipment Purchase (E-4), Article IX State Prevailing Wage Rates (E-4), Article X Conflict of Interest (E-5), Article XI Rebates, Kickbacks or other Unlawful Consideration (E-5), Article XII Prohibition of Expending Local Agency State or Federal Funds for Lobbying (E-5), Article XIII Statement of Compliance (E-6), Article XIV Debarment and Suspension Certification (E-6), Article XV Disadvantaged Business Enterprises (DBE) Participation (E-7)

ARTICLE I PERFORMANCE PERIOD (Verbatim)

- A. This contract shall go into effect on February 7, 2017 contingent upon approval by LOCAL AGENCY, and CONSULTANT shall commence work after notification to proceed by LOCAL AGENCY'S Contract Administrator. The contract shall end on December 31, 2024 unless extended by contract amendment.
B. CONSULTANT is advised that any recommendation for contract award is not binding on LOCAL AGENCY until the contract is fully executed and approved by LOCAL AGENCY.

ARTICLE II ALLOWABLE COSTS AND PAYMENTS (Verbatim)

- A. The method of payment for this contract will be based on actual cost plus a fixed fee. LOCAL AGENCY will reimburse CONSULTANT for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by CONSULTANT in performance of the work. CONSULTANT will not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved CONSULTANT'S Cost Proposal, unless additional reimbursement is provided for by contract amendment. In no event, will CONSULTANT be reimbursed for overhead costs at a rate that exceeds LOCAL AGENCY's approved overhead rate set forth in the Cost Proposal. In the event, that LOCAL AGENCY determines that a change to the work from that specified in the Cost Proposal and contract is required, the contract time or actual costs reimbursable by LOCAL AGENCY shall be adjusted by contract amendment to accommodate the changed work. The maximum total cost as specified in Paragraph "H" shall not be exceeded, unless authorized by contract amendment.

Replacement of Market Street Bridge at Santa Ana River

- B. In addition to the allowable incurred costs, LOCAL AGENCY will pay CONSULTANT a fixed fee of **\$309,461.01**. The fixed fee is nonadjustable for the term of the contract, except in the event of a significant change in the scope of work and such adjustment is made by contract amendment.
- C. Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal.
- D. When milestone cost estimates are included in the approved Cost Proposal, CONSULTANT shall obtain prior written approval for a revised milestone cost estimate from the Contract Administrator before exceeding such cost estimate.
- E. Progress payments will be made monthly in arrears based on services provided and allowable incurred costs. A pro rata portion of CONSULTANT's fixed fee will be included in the monthly progress payments. If CONSULTANT fails to submit the required deliverable items according to the schedule set forth in the Statement of Work, LOCAL AGENCY shall have the right to delay payment or terminate this Contract in accordance with the provisions of Article VI Termination.
- F. No payment will be made prior to approval of any work, nor for any work performed prior to approval of this contract.
- G. CONSULTANT will be reimbursed, as promptly as fiscal procedures will permit upon receipt by LOCAL AGENCY's Contract Administrator of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of work for which CONSULTANT is billing. Invoices shall detail the work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this contract number and project title. Final invoice must contain the final cost and all credits due LOCAL AGENCY including any equipment purchased under the provisions of Article XI Equipment Purchase of this contract. The final invoice should be submitted within 60 calendar days after completion of CONSULTANT's work. Invoices shall be mailed to LOCAL AGENCY's Contract Administrator at the following address:

TLMA Account Payable
Umer Ahmed, PE, County Project Manager
PO BOX 1605
Riverside, CA 92502
- H. The total amount payable by LOCAL AGENCY including the fixed fee shall not exceed **\$4,254,169.83**.
- I. Salary increases will be reimbursable if the new salary is within the salary range identified in the approved Cost Proposal and is approved by LOCAL AGENCY's Contract Administrator.
- J. For personnel subject to prevailing wage rates as described in the California Labor Code, all salary increases, which are the direct result of changes in the prevailing wage rates are reimbursable.

ARTICLE III TERMINATION (Verbatim)

- A. LOCAL AGENCY reserves the right to terminate this contract upon thirty (30) calendar days written notice to CONSULTANT with the reasons for termination stated in the notice.
- B. LOCAL AGENCY may terminate this contract with CONSULTANT should CONSULTANT fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination, LOCAL AGENCY may proceed with the work in any manner deemed proper by LOCAL AGENCY. If LOCAL AGENCY terminates this contract with CONSULTANT, LOCAL AGENCY shall pay CONSULTANT the sum due to CONSULTANT under this contract prior to termination, unless the cost of completion to LOCAL AGENCY exceeds the funds remaining in the contract. In which case the overage shall be deducted from any sum due CONSULTANT under this contract and the balance, if any, shall be paid to CONSULTANT upon demand.
- C. The maximum amount for which the LOCAL AGENCY shall be liable if this contract is terminated is **\$4,254,169.83** dollars.

ARTICLE IV COST PRINCIPLES AND ADMINISTRATIVE REQUIREMENTS (Verbatim)

- A. CONSULTANT agrees that the Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., shall be used to determine the cost allowability of individual items.
- B. CONSULTANT also agrees to comply with federal procedures in accordance with 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
- C. Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 49 CFR, Part 18 and 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by CONSULTANT to LOCAL AGENCY.

ARTICLE V RETENTION OF RECORDS/AUDIT (Verbatim)

For the purpose of determining compliance with Public Contract Code 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of the contract pursuant to Government Code 8546.7; CONSULTANT, subconsultants, and LOCAL AGENCY shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of the contract, including but not limited to, the costs of administering the contract. All parties shall make such materials available at their respective offices at all reasonable times during the contract period and for three years from the date of final payment under the contract. The state, State Auditor, LOCAL AGENCY, FHWA, or any duly authorized representative of the Federal Government shall have access to any books, records, and documents of CONSULTANT and its certified public accountants (CPA) work papers that are pertinent to the contract and indirect cost rates (ICR) for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested.

ARTICLE VI AUDIT REVIEW PROCEDURES (Verbatim)

- A. Any dispute concerning a question of fact arising under an interim or post audit of this contract that is not disposed of by agreement, shall be reviewed by LOCAL AGENCY'S Chief Financial Officer.
- B. Not later than 30 days after issuance of the final audit report, CONSULTANT may request a review by LOCAL AGENCY'S Chief Financial Officer of unresolved audit issues. The request for review will be submitted in writing.
- C. Neither the pendency of a dispute nor its consideration by LOCAL AGENCY will excuse CONSULTANT from full and timely performance, in accordance with the terms of this contract.
- D. CONSULTANT and subconsultant contracts, including cost proposals and ICR, are subject to audits or reviews such as, but not limited to, a contract audit, an incurred cost audit, an ICR Audit, or a CPA ICR audit work paper review. If selected for audit or review, the contract, cost proposal and ICR and related work papers, if applicable, will be reviewed to verify compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR audit work paper review it is CONSULTANT's responsibility to ensure federal, state, or local government officials are allowed full access to the CPA's work papers including making copies as necessary. The contract, cost proposal, and ICR shall be adjusted by CONSULTANT and approved by LOCAL AGENCY contract manager to conform to the audit or review recommendations. CONSULTANT agrees that individual terms of costs identified in the audit report shall be incorporated into the contract by this reference if directed by LOCAL AGENCY at its sole discretion. Refusal by CONSULTANT to incorporate audit or review recommendations, or to ensure that the federal, state or local governments have access to CPA work papers, will be considered a breach of contract terms and cause for termination of the contract and disallowance of prior reimbursed costs.

ARTICLE VII SUBCONTRACTING (Verbatim)

- A. Nothing contained in this contract or otherwise, shall create any contractual relation between LOCAL AGENCY and any subconsultant(s), and no subcontract shall relieve CONSULTANT of its responsibilities

and obligations hereunder. CONSULTANT agrees to be as fully responsible to LOCAL AGENCY for the acts and omissions of its subconsultant(s) and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by CONSULTANT. CONSULTANT's obligation to pay its subconsultant(s) is an independent obligation from LOCAL AGENCY'S obligation to make payments to the CONSULTANT.

- B. CONSULTANT shall perform the work contemplated with resources available within its own organization and no portion of the work pertinent to this contract shall be subcontracted without written authorization by LOCAL AGENCY's Contract Administrator, except that, which is expressly identified in the approved Cost Proposal.
- C. CONSULTANT shall pay its subconsultants within ten (10) calendar days from receipt of each payment made to CONSULTANT by LOCAL AGENCY.
- D. All subcontracts entered into as a result of this contract shall contain all the provisions stipulated in this contract to be applicable to subconsultants.
- E. Any substitution of subconsultant(s) must be approved in writing by LOCAL AGENCY's Contract Administrator prior to the start of work by the subconsultant(s).

ARTICLE VIII EQUIPMENT PURCHASE (Verbatim)

- A. Prior authorization in writing, by LOCAL AGENCY's Contract Administrator shall be required before CONSULTANT enters into any unbudgeted purchase order, or subcontract exceeding \$5,000 for supplies, equipment, or CONSULTANT services. CONSULTANT shall provide an evaluation of the necessity or desirability of incurring such costs.
- B. For purchase of any item, service or consulting work not covered in CONSULTANT's Cost Proposal and exceeding \$5,000 prior authorization by LOCAL AGENCY's Contract Administrator; three competitive quotations must be submitted with the request, or the absence of bidding must be adequately justified.
- C. Any equipment purchased as a result of this contract is subject to the following: "CONSULTANT shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of \$5,000 or more. If the purchased equipment needs replacement and is sold or traded in, LOCAL AGENCY shall receive a proper refund or credit at the conclusion of the contract, or if the contract is terminated, CONSULTANT may either keep the equipment and credit LOCAL AGENCY in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established LOCAL AGENCY procedures; and credit LOCAL AGENCY in an amount equal to the sales price. If CONSULTANT elects to keep the equipment, fair market value shall be determined at CONSULTANT's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to by LOCAL AGENCY and CONSULTANT, if it is determined to sell the equipment, the terms and conditions of such sale must be approved in advance by LOCAL AGENCY." 49 CFR, Part 18 requires a credit to Federal funds when participating equipment with a fair market value greater than \$5,000 is credited to the project.

ARTICLE IX STATE PREVAILING WAGE RATES (Verbatim)

- A. CONSULTANT shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code, Section 1770, and all Federal, State, and local laws and ordinances applicable to the work.
- B. Any subcontract entered into as a result of this contract, if for more than \$25,000 for public works construction or more than \$15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this Article, unless the awarding agency has an approved labor compliance program by the Director of Industrial Relations.

- C. When prevailing wages apply to the services described in the scope of work, transportation and subsistence costs shall be reimbursed at the minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See <http://www.dir.ca.gov>.

ARTICLE X CONFLICT OF INTEREST (Verbatim)

- A. CONSULTANT shall disclose any financial, business, or other relationship with LOCAL AGENCY that may have an impact upon the outcome of this contract, or any ensuing LOCAL AGENCY construction project. CONSULTANT shall also list current clients who may have a financial interest in the outcome of this contract, or any ensuing LOCAL AGENCY construction project, which will follow.
- B. CONSULTANT hereby certifies that it does not now have, nor shall it acquire any financial or business interest that would conflict with the performance of services under this contract.
- C. CONSULTANT hereby certifies that neither CONSULTANT, nor any firm affiliated with CONSULTANT will bid on any construction contract, or on any contract to provide construction inspection for any construction project resulting from this contract. An affiliated firm is one, which is subject to the control of the same persons through joint-ownership, or otherwise.
- D. Except for subconsultants whose services are limited to providing surveying or materials testing information, no subconsultant who has provided design services in connection with this contract shall be eligible to bid on any construction contract, or on any contract to provide construction inspection for any construction project resulting from this contract.

ARTICLE XI REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION (Verbatim)

CONSULTANT warrants that this contract was not obtained or secured through rebates kickbacks or other unlawful consideration, either promised or paid to any LOCAL AGENCY employee. For breach or violation of this warranty, LOCAL AGENCY shall have the right in its discretion; to terminate the contract without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

ARTICLE XII PROHIBITION OF EXPENDING LOCAL AGENCY STATE OR FEDERAL FUNDS FOR LOBBYING (Verbatim)

- A. CONSULTANT certifies to the best of his or her knowledge and belief that:
1. No state, federal or local agency appropriated funds have been paid, or will be paid by-or-on behalf of CONSULTANT to any person for influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in connection with the awarding of any state or federal contract; the making of any state or federal grant; the making of any state or federal loan; the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.
 2. If any funds other than federal appropriated funds have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection with this federal contract, grant, loan, or cooperative agreement; CONSULTANT shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- B. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

- C. CONSULTANT also agrees by signing this document that he or she shall require that the language of this certification be included in all lower-tier subcontracts, which exceed \$100,000 and that all such sub recipients shall certify and disclose accordingly.

ARTICLE XIII STATEMENT OF COMPLIANCE

- A. CONSULTANT's signature affixed herein, and dated, shall constitute a certification under penalty of perjury under the laws of the State of California that CONSULTANT has, unless exempt, complied with, the nondiscrimination program requirements of Government Code Section 12990 and Title 2, California Administrative Code, Section 8103.
- B. During the performance of this Contract, Consultant and its subconsultants shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (e.g., cancer), age (over 40), marital status, and denial of family care leave. Consultant and subconsultants shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Consultant and subconsultants shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable regulations promulgated there under (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Contract by reference and made a part hereof as if set forth in full. Consultant and its subconsultants shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.
- C. The Consultant shall comply with regulations relative to Title VI (nondiscrimination in federally-assisted programs of the Department of Transportation – Title 49 Code of Federal Regulations, Part 21 - Effectuation of Title VI of the 1964 Civil Rights Act). Title VI provides that the recipients of federal assistance will implement and maintain a policy of nondiscrimination in which no person in the state of California shall, on the basis of race, color, national origin, religion, sex, age, disability, be excluded from participation in, denied the benefits of or subject to discrimination under any program or activity by the recipients of federal assistance or their assignees and successors in interest.
- D. The Consultant, with regard to the work performed by it during the Agreement shall act in accordance with Title VI. Specifically, the Consultant shall not discriminate on the basis of race, color, national origin, religion, sex, age, or disability in the selection and retention of Subconsultants, including procurement of materials and leases of equipment. The Consultant shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the U.S. DOT's Regulations, including employment practices when the Agreement covers a program whose goal is employment.

ARTICLE XIV DEBARMENT AND SUSPENSION CERTIFICATION

- A. CONSULTANT's signature affixed herein, shall constitute a certification under penalty of perjury under the laws of the State of California, that CONSULTANT has complied with Title 2 CFR, Part 180, "OMB Guidelines to Agencies on Government wide Debarment and Suspension (nonprocurement)", which certifies that he/she or any person associated therewith in the capacity of owner, partner, director, officer, or manager, is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency; has not been suspended, debarred, voluntarily excluded, or determined ineligible by any federal agency within the past three (3) years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years. Any exceptions to this certification must be disclosed to LOCAL AGENCY.
- B. Exceptions will not necessarily result in denial of recommendation for award, but will be considered in determining CONSULTANT responsibility. Disclosures must indicate to whom exceptions apply, initiating agency, and dates of action.

- C. Exceptions to the Federal Government Excluded Parties List System maintained by the General Services Administration are to be determined by the Federal highway Administration.

ARTICLE XV DISADVANTAGED BUSINESS ENTERPRISES (DBE) PARTICIPATION

- A. This contract is subject to 49 CFR, Part 26 entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs". Consultants who obtain DBE participation on this contract will assist Caltrans in meeting its federally mandated statewide overall DBE goal.
- B. The goal for DBE participation for this contract is 2 %. Participation by DBE consultant or subconsultants shall be in accordance with information contained in the Consultant Proposal DBE Commitment (Exhibit 10-O1), or in the Consultant Contract DBE Information (Exhibit 10-O2) attached hereto and incorporated as part of the Contract. If a DBE subconsultant is unable to perform, CONSULTANT must make a good faith effort to replace him/her with another DBE subconsultant, if the goal is not otherwise met.
- C. DBEs and other small businesses, as defined in 49 CFR, Part 26 are encouraged to participate in the performance of contracts financed in whole or in part with federal funds. CONSULTANT or subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. CONSULTANT shall carry out applicable requirements of 49 CFR, Part 26 in the award and administration of US DOT-assisted agreements. Failure by CONSULTANT to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as LOCAL AGENCY deems appropriate.
- D. Any subcontract entered into as a result of this contract shall contain all of the provisions of this section.
- E. A DBE firm may be terminated only with prior written approval from LOCAL AGENCY and only for the reasons specified in 49 CFR 26.53(f). Prior to requesting LOCAL AGENCY consent for the termination, CONSULTANT must meet the procedural requirements specified in 49 CFR 26.53(f).
- F. A DBE performs a Commercially Useful Function (CUF) when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a CUF, the DBE must also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a CUF, evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing, and other relevant factors.
- G. A DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, examine similar transactions, particularly those in which DBEs do not participate.
- H. If a DBE does not perform or exercise responsibility for at least thirty percent (30%) of the total cost of its contract with its own work force, or the DBE subcontracts a greater portion of the work of the contract than would be expected on the basis of normal industry practice for the type of work involved, it will be presumed that it is not performing a CUF.
- I. CONSULTANT shall maintain records of materials purchased or supplied from all subcontracts entered into with certified DBEs. The records shall show the name and business address of each DBE or vendor and the total dollar amount actually paid each DBE or vendor, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all firms. DBE prime consultants shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.
- J. Upon completion of the Contract, a summary of these records shall be prepared and submitted on the form entitled, "Final Report-Utilization of Disadvantaged Business Enterprise (DBE), First-Tier Subconsultants" CEM-2402F [Exhibit 17-F, of the LAPM], certified correct by CONSULTANT or CONSULTANT's authorized representative and shall be furnished to the Contract Administrator with the final invoice. Failure to provide the summary of DBE payments with the final invoice will result in twenty-five percent (25%) of the dollar value of the invoice being withheld from payment until the form is submitted. The amount will be

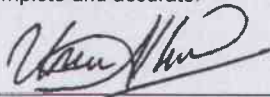
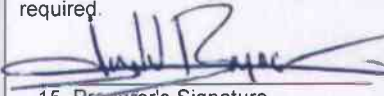
Replacement of Market Street Bridge at Santa Ana River

returned to CONSULTANT when a satisfactory “Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subconsultants” is submitted to the Contract Administrator.

- K. If a DBE subconsultant is decertified during the life of the contract, the decertified subconsultant shall notify CONSULTANT in writing with the date of decertification. If a subconsultant becomes a certified DBE during the life of the Contract, the subconsultant shall notify CONSULTANT in writing with the date of certification. Any changes should be reported to LOCAL AGENCY’s Contract Administrator within 30 days.

EXHIBIT 10-O2 CONSULTANT CONTRACT DBE COMMITMENT

1. Local Agency: County of Riverside 2. Contract DBE Goal: 2%
 3. Project Description: Replacement of Market Street Bridge at Santa Ana River
 4. Project Location: Market Street Bridge at Santa Ana River in Riverside County, CA
 5. Consultant's Name: Dokken Engineering 6. Prime Certified DBE: 7. Total Contract Award Amount: \$3,826,701.47
 8. Total Dollar Amount for **ALL** Subconsultants: \$520,047.67 9. Total Number of **ALL** Subconsultants: 4

10. Description of Work, Service, or Materials Supplied	11. DBE Certification Number	12. DBE Contact Information	13. DBE Dollar Amount
Geotechnical Engineering	6956	Earth Mechanics, Inc. 17800 Newhope #B, Fountain Valley, CA 92708	\$432,767.32
Hydraulics/Hydrology	30066	WRECO, 1243 Alpine #108, Walnut Creek, CA 94596	\$30,427.36
Local Agency to Complete this Section			
20. Local Agency Contract Number: <u>Umer Ahmed</u>	14. TOTAL CLAIMED DBE PARTICIPATION		\$ 463,194.68
21. Federal-Aid Project Number: <u>BRLS-5956(200)</u>			12.1 %
22. Contract Execution Date: <u>Feb 7, 2017</u>			
Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.			
 23. Local Agency Representative's Signature	24. Date: <u>5/14/20</u>	 15. Preparer's Signature	16. Date: <u>3/26/2020</u>
<u>Umer Ahmed</u>	26. Phone: <u>951-955-1637</u>	<u>Juann Ramos</u>	18. Phone: <u>(916) 858-0642</u>
25. Local Agency Representative's Name: <u>Sr. Civil Engineer</u>		17. Preparer's Name: <u>Project Manager</u>	
27. Local Agency Representative's Title		19. Preparer's Title	

DISTRIBUTION: 1. Original – Local Agency
 2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.