

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



ITEM: 3.45
(ID # 21120)

MEETING DATE:
Tuesday, February 28, 2023

FROM : TLMA-TRANSPORTATION:

SUBJECT: TRANSPORTATION AND LAND MANAGEMENT AGENCY/TRANSPORTATION:
Approval of Amendment No. 3 to the Engineering Services Agreement between the County of Riverside and HNTB Corporation for Grade Separation Improvements on Jurupa Road. District 2. [\$2,020,129 FY 22/23-25/26 Cost, \$11,780,725 Total Cost - State Funds 100%]

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve Amendment No. 3 to the Engineering Services Agreement between the County of Riverside and HNTB Corporation for the Jurupa Road Grade Separation Project to increase the not to exceed amount by \$2,020,129; and
2. Authorize the Chair of the Board of Supervisors to execute the amendment to the contract on behalf of the County.

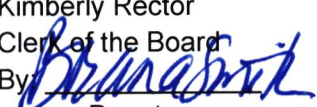
ACTION:Policy


Mark Lancaster, Director of Transportation 1/30/2023

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Spiegel, seconded by Supervisor Gutierrez and duly carried, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Spiegel, Washington, and Gutierrez
Nays: None
Absent: Perez
Date: February 28, 2023
xc: Trans.

Kimberly Rector
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	\$ 1,250,000	\$770,129	\$ 2,020,129	\$ 0
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0
SOURCE OF FUNDS: SB-132 Funds 100%. No General Funds will be used on this project.			Budget Adjustment: No	
			For Fiscal Year: 22/23 - 25/26	

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The County of Riverside Transportation Department, in cooperation with the City of Jurupa Valley (City), desires to construct a new grade separation to replace the existing Union Pacific Railroad (UPRR) at-grade crossing located on Jurupa Road in the City, east of Van Buren Boulevard. Jurupa Road is a two-lane arterial highway that provides access to commercial, industrial and residential land uses in the City.

This proposed project will grade separate Jurupa Road and the UPRR mainline tracks with an underpass where it crosses the tracks. This improvement will expand vehicular traffic circulation and safety. The project will also provide uninterrupted and efficient access to motorists, residents, businesses, pedestrians and emergency vehicles in the area. Additionally, the project will enhance the operational characteristics such as speed, efficiency, and reliability of freight and passenger trains throughout Riverside County by eliminating conflicts between railroad operations and vehicular traffic.

In April 2017, the Governor and State Legislators dedicated \$427 million to improve five major transportation projects in Riverside County. The Jurupa Road Grade Separation project was allocated \$108.4 million for the design and construction of a new roadway and structure to grade separate Jurupa Road from the UPRR tracks. Without this approved funding, the project would not have been built for many years. These funds are being distributed through the Riverside County Transportation Commission (RCTC).

On October 24, 2017 (Minute Order 3.14), the Board of Supervisors approved an agreement between the County, the City and RCTC that designated the County as the lead agency to implement the Project.

On March 13, 2018 (Minute Order 3.18), the Board of Supervisors approved an Agreement between the County and HNTB Corporation for engineering and environmental services (Agreement). The Agreement provides the terms and conditions, scope of work, schedule and budget for the performance of professional and technical services necessary to obtain

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

environmental clearance and prepare plans, specifications and estimates suitable for awarding a contract to construct the proposed grade separation.

The original scope and budget for the project were based on a roadway overpass of the UPRR corridor. However, during the project development phase, it was determined that an underpass would better meet the goals of the developing community and would minimize impacts to local businesses. As a result, the Jurupa Valley City Council approved the selection of a roadway underpass alternative. The underpass alternative required several additional features that affected the project design scope and budget.

On September 22, 2020 (Minute Order 3.16), the Board of Supervisors approved Amendment No.1 to the Agreement between the County and HNTB Corporation for engineering and environmental services to complete the additional services for the underpass alternative.

During the development of the plans for the underpass, UPRR has required that the County incorporates additional improvements to the UPRR facilities that were not scoped and budgeted in the original Agreement or in Amendment No.1. The additional improvements have resulted in additional submittals to UPRR for review that were not included with the original Agreement and Amendment No.1.

On March 29, 2022 (Minute Order 3.26), the Board of Supervisors approved Amendment No. 2 to the Agreement between the County and HNTB Corporation for engineering and environmental services to complete the additional improvements requested by UPRR.

UPRR has recently revised and updated its requirements related to the construction of its facilities. These UPRR updated requirements were not included in the original Agreement, Amendment No.1 or Amendment No. 2. For this reason, UPRR track plans need to be updated for incorporation of UPRR new standards and requirements.

This Amendment No. 3 provides the additional scope of work and the funding to make the necessary revisions and incorporate the additional improvements required by UPRR's current standards. This Amendment No. 3 will increase the funding as follows:

Original authorization	\$5,357,952
Authorized by Amendment No. 1	\$1,865,873
Authorized by Amendment No. 2	\$2,536,771
Authorized by Amendment No. 3	<u>\$2,020,129</u>
Total	\$11,780,725

Impact on Residents and Businesses

The Jurupa Road grade separation project will improve vehicular traffic circulation and safety and will provide uninterrupted and efficient access for motorists, residents, businesses,

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

pedestrians and emergency vehicles in the area. Additionally, the project will enhance the operational characteristics such as speed, efficiency, and reliability of freight and passenger trains through Riverside County by eliminating conflicts between railroad operations and vehicular traffic.

SUPPLEMENTAL:

Additional Fiscal Information

On April 6, 2017, the California Senate approved Senate Bill Number 132 (hereinafter "SB-132") which added appropriation to the budget bill to provide \$427,172,000 for five major transportation projects. SB-132 includes provisions for providing funding in the amount of \$108.4 Million for the construction on the Jurupa Road Grade Separation project. SB-132 funds for the project will be distributed through the RCTC.


The City of Jurupa Valley will be 100% responsible for funding the portions of the project not covered by SB-132. No County funds will be used.

Contract History and Price Reasonableness

The Amendment No. 3 price was negotiated and is consistent with industry standards.

Attachments:

Amendment No. 3
Vicinity Map



Jason Farin, Principal Management Analyst 2/23/2023



Ronak Patel, Deputy County Counsel 2/21/2023

AMENDMENT NO. 3

TO THE ENGINEERING SERVICES AGREEMENT

FOR JURUPA ROAD GRADE SEPARATION PROJECT

BETWEEN COUNTY OF RIVERSIDE • TRANSPORTATION DEPARTMENT AND HNTB CORPORATION

THIS AMENDMENT NO. 3 TO THE ENGINEERING SERVICES AGREEMENT FOR JURUPA ROAD GRADE SEPARATION PROJECT (hereinafter "Amendment No. 3") is made and entered into as of the 28th day of February, 2023, by and between the County of Riverside, a political subdivision of the State of California, (hereinafter the "COUNTY") and HNTB Corporation, a Delaware corporation, (hereinafter "ENGINEER").

RECITALS

- A. COUNTY and ENGINEER have entered into an agreement entitled "Engineering Services Agreement for Jurupa Road Grade Separation Project between County of Riverside • Transportation Department and HNTB Corporation" that is dated March 13, 2018 (hereinafter "Agreement"). The Agreement provides the terms and conditions, scope of work, schedule and budget for the performance of professional and technical services necessary to obtain environmental clearance and prepare plans, specifications and estimates suitable for awarding a contract to construct the proposed grade separation.
- B. The original scope and budget for the project was based on a roadway overpass of the Union Pacific Railroad (UPRR) corridor. However, during the project development phase, it was determined that an underpass would better meet the goals of community development and would minimize impacts to the local businesses. As a result, the Jurupa Valley City Council approved the selection of a roadway underpass alternative. Amendment No. 1 to the Agreement (hereinafter "Amendment No. 1") was executed on September 22, 2020, by the COUNTY and ENGINEER to add several engineering and environmental tasks needed for the underpass alternative.
- C. During the development of the plans for the underpass, UPRR required that the COUNTY incorporate additional improvements to the UPRR facilities that were not scoped and budgeted in the Agreement or in Amendment No. 1. Amendment No. 2 to the Agreement (hereinafter "Amendment No. 2") was executed on March 29, 2022, by the COUNTY and ENGINEER to add several engineering and environmental tasks needed to incorporate additional improvements to the UPRR facilities that were not scoped and budgeted in the Agreement, or Amendment No. 1.

D. As the project has progressed, additional engineering and environmental tasks are required to incorporate UPRR's improvements that were not anticipated in the scope and budget in the Agreement, Amendment No. 1, or Amendment No. 2.

E. The parties desire to once again amend the Agreement to modify the scope of services provided by the ENGINEER and increase the contract budget.

F. This Amendment No. 3 provides additional funding to make the necessary revisions to complete additional engineering and environmental tasks. This Amendment No. 3 will increase the funding as follows:

Original authorization	\$5,357,952
Authorized by Amendment No. 1	\$1,865,873
Authorized by Amendment No. 2	\$2,536,771
<u>Authorized by Amendment No. 3</u>	<u>\$2,020,129</u>
Revised Total Authorized	\$11,780,725

AGREEMENT

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

- Appendix A is amended to include the additional services as described in the attached Scope of Services entitled "AMENDMENT 3 • APPENDIX A3 • SCOPE OF SERVICES" attached hereto and incorporated herein.
- Article VI • Compensation and Appendix C• Article CV • Cost Proposal are amended to increase the contract not to exceed amount by \$2,020,129 for a total not to exceed amount of \$11,780,725 in accordance with the attached Fee Proposal entitled "AMENDMENT 3• APPENDIX C3 • JURUPA ROAD GRADE SEPARATION AMENDMENT NO. 3 FEE PROPOSAL" attached hereto and incorporated herein.
- Except to the extent specifically modified or amended hereunder, all of the terms, covenants and conditions of the Agreement, Amendment No. 1, and Amendment No. 2 shall remain in full force and effect between the parties hereto.

IN WITNESS HEREOF, the parties hereto have caused this Amendment No. 3 to the Agreement to be duly executed this day and year first written above.

1 **APPROVALS**

2 **COUNTY Approvals**

3 **RECOMMENDED FOR APPROVAL:**

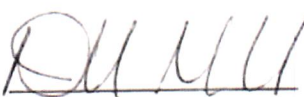
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5
6  Dated: 2-21-23

7 **MARK LANCASTER**

8 **Director of Transportation**

9
10 **APPROVED AS TO FORM:**


11 **County Counsel**

12
13  Dated: _____

14 **Danielle Maland**

15 **Deputy County Counsel**

16
17 **APPROVAL BY THE BOARD OF SUPERVISORS**

18
19
20  Dated: 2/28/23

21 **KEVIN JEFFRIES**

22 PRINTED NAME

23 **Chairman, Riverside County Board of Supervisors**

24 **ATTEST:**

25
26  Dated: 2/28/23

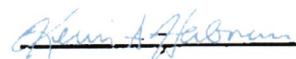
27 **KIMBERLY RECTOR**

28 **Clerk of the Board (SEAL)**

29

ENGINEER Approvals

ENGINEER:

 Dated: 2/16/23

Kevin A. Haboian, P.E.

PRINTED NAME

Senior Vice President

TITLE

ENGINEER:

 Dated: 2/16/23

Juan Uribe, P.E.

PRINTED NAME

Senior Vice President

TITLE

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APPROVALS

COUNTY Approvals

RECOMMENDED FOR APPROVAL:

_____ Dated: _____

MARK LANCASTER

Director of Transportation

APPROVED AS TO FORM:

County Counsel

_____ Dated: _____

Danielle Maland

Deputy County Counsel

APPROVAL BY THE BOARD OF SUPERVISORS

_____ Dated: _____

PRINTED NAME

Chairman, Riverside County Board of Supervisors

ATTEST:

_____ Dated: _____

KIMBERLY RECTOR

Clerk of the Board (SEAL)

ENGINEER Approvals

ENGINEER:

 _____ Dated: 2/16/23

Kevin A. Haboian, P.E.
PRINTED NAME

Senior Vice President
TITLE

ENGINEER:

 _____ Dated: 2/16/23

Juan Uribe, P.E.
PRINTED NAME

Senior Vice President
TITLE

**CERTIFICATE OF AUTHORITY
AND
POWER OF ATTORNEY**

The undersigned, Vice President of HNTB Corporation, a Delaware corporation, (the "Corporation") hereby certifies that KEVIN A. HABOIAN has been authorized by the Board of Directors of the Corporation, commencing as of the date hereof, to enter into agreements and contracts for usual and customary architectural, engineering, planning, and management professional services, and to incur ordinary and necessary obligations in connection therewith, in the name of and on behalf of the Corporation, and the Corporation shall be bound thereby. The Corporation hereby ratifies and confirms any action taken by such individual pursuant to this certificate. Such authority shall expire as of May 31, 2023.

Date: May 13, 2022

By:  _____
5C05C82D688B47A... Thomas D. O'Grady

AMENDMENT 3 • APPENDIX A3 • SCOPE OF SERVICES

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APPENDIX A • ARTICLE AI • INTRODUCTION

A. PROJECT DESCRIPTION

No Change. See Agreement and Amendment No. 1.

B. LOCATION

No Change. See Agreement.

C. COORDINATION

No Change. See Agreement.

D. PHASES

No Change. See Agreement.

E. STANDARDS

No Change. See Agreement.

F. KEY PERSONNEL

No Change. See Agreement.

ARTICLE AII • PROJECT ADMINISTRATION

A. PROJECT MANAGEMENT PLAN

ENGINEER will implement and monitor the Project Management Plan (PMP) for an additional 14 months, due to the additional reviews and submittals required by UPRR.

B. QUALITY CONTROL PLAN

ENGINEER will implement and monitor the Quality Control Plan for an additional 14 months, due to the additional reviews and submittals required by UPRR.

C. BUDGETING

ENGINEER will implement and monitor the Budgeting for an additional 14 months, due to the additional reviews and submittals required by UPRR.

D. COST ACCOUNTING

ENGINEER will implement and monitor the Cost Accounting for an additional 14 months, due to the additional reviews and submittals required by UPRR.

E. SCHEDULING

ENGINEER will monitor and update the schedule for the project for an additional 14 months, due to the additional reviews and submittals required by UPRR.

1 **F. CONTRACT ADMINISTRATION AND MEETINGS**

2 1. Project Management and Administration

3 Additional 14 months of project management is required by the ENGINEER for the continuing design
4 efforts related to gaining approval of UPRR's track and structure plans.

5 2. Project Meetings

6 ENGINEER will attend up to 14 additional monthly PDT meetings for resolution of issues and to
7 apprise the participating agencies of the progress of the PROJECT. The ENGINEER shall attend up
8 to 30 additional meetings for agency coordination and project coordination.

9 If additional meetings are needed due to the quality and inaccuracy of the ENGINEER's submittals,
10 then the additional meetings shall be scheduled and conducted by the ENGINEER. Any costs incurred
11 by the ENGINEER for these meetings shall be at the expense of the ENGINEER.

12 **G. CONTRACT DELIVERABLES**

13 ENGINEER will manage additional submittals for UPRR track, UPRR bridge, Rutile Street at-grade
14 UPRR crossing, and culvert extension submittals.

15 **H. OUTREACH**

16 No Change. See Agreement.

17 **I. UNION PACIFIC PAYMENTS**

18 No Change. See Amendment No. 1.

19 **ARTICLE AIII • PLANNING AND PROJECT DEVELOPMENT**

20 **A. RESEARCH AND DATA GATHERING**

21 No Change. See Agreement.

22 **B. PERMITS**

23 UPRR is requiring a separate right-of-entry permit to perform four (4) additional geotechnical borings for
24 the extension of the concrete culvert to accommodate UPRR's improvements. ENGINEER will complete
25 all the tasks necessary to obtain the right-of-entry permit.

26 **C. DESIGN SURVEYS**

27 No Change. See Agreement.

28 **D. PRELIMINARY GEOTECHNICAL INVESTIGATIONS**

29 1. Preliminary Foundation Report

- 1 No Change. See Agreement.
- 2 2. Phase 1 Environmental Site Assessment
- 3 No Change. See Agreement.
- 4 3. Aerially Deposited Lead (ADL) Survey
- 5 No Change. See Agreement.
- 6 4. Phase II Environmental Site Assessment
- 7 No Change. See Amendment No. 1.
- 8 Task 1 – Commercial Structure Investigation / Former Agricultural Use
- 9 No Change. See Amendment No. 1.
- 10 Task 2 – Soil Disposal Profiling
- 11 No Change. See Amendment No. 1.
- 12 Task 3 – Lead and Asbestos Survey
- 13 No Change. See Amendment No. 1.
- 14 5. Bly Channel Geotechnical Investigation
- 15 Task 1 – Field Preparation and Permit
- 16 No Change. See Amendment No. 1.
- 17 Task 2 – Field Exploration Program
- 18 No Change. See Amendment No. 1.
- 19 Task 3 – Laboratory Testing
- 20 No Change. See Amendment No. 1.
- 21 Task 4 – Geotechnical Analyses and Project Management
- 22 No Change. See Amendment No. 1.
- 23 Task 5 –Report Preparation/Deliverables
- 24 No Change. See Amendment No. 1.

E. PLANNING STUDIES

- 25 No Change. See Agreement and Amendment No. 1.

F. VISUAL AIDS

- 28 No Change. See Agreement.

G. ENVIRONMENTAL DETERMINATION AND ENVIRONMENTAL ISSUES

- 29 Engineering Services Agreement • Scope of Services • Amendment No. 3

1 No Changes. See Amendment No. 2.

2 I. Process extension of the 404 and 401 permits

3 No Changes. See Amendment No. 2.

4 II. Update PD/Limits in the Southern area of the current limits to accommodate UPRR's preferred signal
5 pad location.

6 No Changes. See Amendment No. 2.

7 **1. Water Quality and Erosion**

8 No Change. See Agreement.

9 **2. Floodplain**

10 UPRR is requesting an additional floodplain analysis for the culvert extension. ENGINEER to
11 coordinate reviews and resolution with the City of Jurupa Valley (CITY) to determine that the proposed
12 culvert modification does not pose a significant increase in flood hazard.

13 **3. Noise Study Report (NSR)**

14 No Change. See Agreement.

15 **4. Cultural Resources Report**

16 No Change. See Amendment No. 2.

17 **5. Community Impact Assessment Memorandum**

18 No Change. See Agreement.

19 **6. Preparation and Processing of Regulatory Permits**

20 No Change. See Amendment No. 2.

21 **7. Preparation and Processing of MSHCP Consistency Determination and DBESP**

22 No Change. See Amendment No. 2.

23 **H. PRELIMINARY ENGINEERING REPORT**

24 No Change. See Agreement.

25 **I. GEOMETRIC APPROVAL DRAWINGS**

26 No Change. See Agreement.

27 **J. DESIGN DRAINAGE REPORT**

28 UPRR is requiring a separate drainage study report for the culvert extension at MP 48.56 which is needed
29 to accommodate final UPRR directed track alignment. ENGINEER will complete this drainage study report.

1 The report will be submitted as part of the 60% and 100% UPRR culvert extension packages and follow
2 the same submittal schedule.

3 **K. GEOTECHNICAL DESIGN REPORT**

4 UPRR is requesting four (4) additional borings for the extension of a UPRR concrete culvert that will
5 accommodate UPRR's improvements. ENGINEER will coordinate with UPRR to obtain a right of entry
6 permit needed to obtain access to complete the four (4) subsurface borings for the culvert extension.
7 ENGINEER will also coordinate with COUNTY, CITY, and utility owners to obtain public access needed to
8 obtain the four (4) subsurface borings for the culvert extension.

9 ENGINEER will prepare a report to supplement the geotechnical design report required by UPRR for the
10 culvert extension.

11 **L. RIGHT-OF-WAY MAPS**

12 Additional reviews and updates will be required for the Right of Way maps based on current alignment
13 revisions, configuration changes, and right of way negotiations as requested from UPRR. See Article AV.
14 Roadway, Section E. Miscellaneous Plans, 2. Right of Way Requirements Plans for additional work
15 associated with Right of Way Requirements maps.

16 **M. AGREEMENTS**

17 No Change. See Agreement.

18 **N. UTILITY COORDINATION**

19 No Changes. See Amendment No. 2.

20 **O. MISCELLANEOUS DESIGN SUPPORT**

21 1. Design Exceptions

22 No Changes. See Amendment No. 2.

23 2. Traffic Management Plan

24 No Change. See Agreement.

25 3. Track Design

26 No Change. See Amendment No. 2.

27 **Task 1: Project Meetings**

28 Due to the delay in obtaining UPRR's plan approval, ENGINEER will need to participate in an
29 additional 14 weekly bi-design progress meetings. All meetings will be conference calls with screen
Engineering Services Agreement • Scope of Services • Amendment No. 3

1 share software or in person as permitted by jurisdictional authorities and COUNTY policies. It is
2 assumed that 3 representatives from the ENGINEER's track and track drainage design team will be
3 present. These meetings will be 2 hours in length.

4 Any additional submittal meetings conducted by the ENGINEER due to the quality and inaccuracy of
5 the submittals will be at the expense of the ENGINEER.

6 **Task 2: UPRR Design**

7 See Article AV. Roadway, Section E. Miscellaneous Plans, 3. Track Plans for additional work
8 associated with the 100% track plans.

9 4. Pump Station Design

10 No Change. See Amendment No. 1.

11 5. Rutile Street Crossing Plans Package and CPUC GO-88 Application

12 The ENGINEER will prepare a separate plans package for UPRR approval and bidding to upgrade and
13 modernize the Rutile Street at-grade UPRR crossing. The plans package will include the following:

- 14 • Civil sheets – nine (9) sheets
- 15 • Signals sheets – two (2) sheets
- 16 • Rutile Street quantities

17 The ENGINEER will prepare an application package for approval by the California Public Utilities
18 Commission (CPUC) to modify an Existing Rail Crossing (GO-88 Application) for review by UPRR,
19 CITY, and the COUNTY. The application package includes a narrative of approximately 10 pages,
20 plans (track and roadway) and exhibits, design documentation, and signal pre-emption documentation.

21 The ENGINEER will prepare three (3) GO-88 application updates and modified plans in response to
22 COUNTY, CPUC, UPRR, and CITY to obtain final approval.

23 6. Jurupa Grade Separation CPUC GO-88 Application

24 The ENGINEER will prepare an application package for approval by CPUC to modify the Existing Rail
25 Crossing to a Grade Separation (GO-88 Application) for review by UPRR, CITY, and the COUNTY.

26 The application package includes a narrative of approximately 10 pages, plans (track, structure, and
27 roadway) and exhibits, design documentation, and signal estimate documentation.

28 The ENGINEER will prepare three (3) GO-88 application updates and modified plans in response to
29 COUNTY, CPUC, UPRR, and CITY to obtain final approval.

ARTICLE AIV • STRUCTURES

Sections A through I - roadway bridge over roadway. Section J - UPRR bridge over roadway.

A. STRUCTURE TYPE SELECTION AND BRIDGE GENERAL PLANS

No Change. See Agreement and Amendment No. 1.

B. GEOTECHNICAL COORDINATION AND FOUNDATION REPORT

No Change. See Amendment No. 2.

C. STRUCTURAL DESIGN AND CALCULATIONS

No Change. See Amendment No. 2.

D. INDEPENDENT CHECK REVIEW AND QUALITY CONTROL

No Change. See Amendment No. 2.

E. STRUCTURE SPECIFICATIONS & ESTIMATES

No Change. See Amendment No. 2.

F. INITIAL STRUCTURE PS&E (65% UNCHECKED PLANS)

No Change. See Amendment No. 2.

G. INTERMEDIATE STRUCTURE PS&E (90% CHECKED PLANS)

No Change. See Amendment No. 2.

H. DRAFT FINAL STRUCTURE PS&E (95%)

No Change. See Agreement and Amendment No. 1.

I. FINAL STRUCTURE PS&E

No Change. See Agreement and Amendment No. 1.

J. UNION PACIFIC RAILROAD STRUCTURE PLAN SUBMITTAL AND APPROVAL PROCESS

After initial approval of the UPRR structure plans, a change was requested to modify the field welded plates to a bolted connection. This involves extensive calculations and coordination between the supplier and UPRR as well as minor plan changes. ENGINEER to coordinate between fabricator/supplier and UPRR design to gain approval of calculations, plans, and specifications for the bolted connection

K. BOX CULVERT EXTENSION

Work associated with the culvert extension has progressed since Amendment 2 however, several guidelines developed for this project have been modified by UPRR during this culvert extension review.

Additional track, drainage, and geotechnical design/coordination is needed from the ENGINEER. The Engineering Services Agreement • Scope of Services • Amendment No. 3

1 culvert extension will accommodate mainline tracks and temporary tracks, but not accommodate UPRR's
2 future track.

3 ENGINEER will respond to additional clarifications and comments provided by UPRR and update
4 submittals accordingly.

5 If the COUNTY deems portions of a submittal do not follow applicable standards, ENGINEER will correct
6 the deficiencies in the submittal at their own expense.

7 The Engineer assumes the following additional for submittals for the culvert extension:

- 8 • 10% Submittal: two (2) reviews
- 9 • 30% Submittal: three (3) review
- 10 • 60% Submittal: Anticipated three (3) reviews (one additional)
- 11 • 100% Submittal: two (2) reviews (one additional)

12 **ARTICLE AV • ROADWAY**

13 **A. BASIC ROADWAY PLANS**

14 ENGINEER will revise Jurupa Road roadway plans to incorporate trackwork changes needed to
15 accommodate UPRR and private property access and local drainage conditions. This will require 4 to
16 6 plan sheets to be revised.

17 **B. CALCULATIONS**

18 UPRR directed changes to both the mainline and spur tracks require minor adjustments to the roadway
19 and grading plans as well as updated quantities. ENGINEER will prepare updated roadway plans,
20 earthwork calculations and quantities and submit a plan design change once the 100% track plans are
21 final approved.

22 **C. DRAINAGE PLANS**

23 1. Storm Drain Plans

24 No Change. See Amendment No. 2.

25 2. Bly Channel Culvert Extension

26 No Change. See Amendment No. 2.

27 **D. TRAFFIC AND ELECTRICAL PLANS**

28 No Change. See Agreement and Amendment No. 1.

29 **E. MISCELLANEOUS PLANS**

Engineering Services Agreement • Scope of Services • Amendment No. 3

1 1. Utility Composite Plans

2 No Change. See Agreement and Amendment No. 1.

3 2. Right-of-Way Requirements Plans

4 During UPRR's review of the 100% track plans, UPRR requested some modifications to the track and
5 structural plans. ENGINEER will need to update the right of way requirement plans to accommodate
6 UPRR's requested revisions. The updated right of way requirement maps will be used as the
7 supporting documentation for the Construction and Maintenance Agreement needed to complete the
8 construction of the UPRR facilities.

9 3. Track Plans

10 UPRR requested changes as part of their review of the 100% track plans. ENGINEER needs to extend
11 the limits of construction to incorporate modifications requested by UPRR. These modifications will
12 require additional plan sheets and quantity changes. ENGINEER will prepare updated track plans,
13 earthwork calculations, and quantities and submit plans to UPRR for approval. It is assumed that an
14 additional 17 plan sheets will be needed to accommodate UPRR's comments. The following are the
15 additional 17 plan sheets:

16 Quantities: 1 additional sheet

17 Typical Cross Sections: 9 additional sheets

18 Access Details: 6 additional sheets

19 Drainage Details: 1 additional sheet

20 Total Count: Net 17 additional sheets (excluding cross sections)

21 If the COUNTY deems portions of a submittal do not follow applicable standards, ENGINEER will
22 correct the deficiencies in the submittal at their own expense.

23 4. Retaining Wall Plans

24 No Change. See Agreement and Amendment No. 1.

25 4. Pump Station Plans

26 No Change. See Agreement and Amendment No. 1.

27 5. Parking Lot

28 ENGINEER will redesign Jack-In-The-Box Parking Lot based on design configuration changes due to

29 UPRR track comments. This revision is assumed to be one revision once track plans are approved
Engineering Services Agreement • Scope of Services • Amendment No. 3

1 and as directed by the COUNTY.

2 **F. INTERMEDIATE REVIEWS**

3 No Change. See Agreement and Amendment No. 1.

4 **G. SPECIFICATIONS AND ESTIMATE**

5 Review and update railroad specifications to accommodate UPRR Requirements. No changes to the
6 roadway specifications are covered in the amendment.

7 **H. QUALITY CONTROL**

8 Implement quality control reviews on additional design submittals consistent with the project quality
9 management plan.

10 **I. DRAFT PS&E (95% COMPLETE)**

11 No Changes. See Amendment No. 2.

12 **J. FINAL PS&E (100% COMPLETE)**

13 No Changes. See Amendment No. 2.

14 **K. CONSTRUCTABILITY REVIEW**

15 No Change. See Agreement and Amendment No. 1.

16 **L. SCHEDULE OF SERVICES**

17 UPRR Track Submittals

18 March 2022 - 90% UPRR Track Submittal

19 April 2022 - 90% UPRR Track Resubmittal #1

20 June 2022 - 100% UPRR Track Submittal

21 August 2022 - 100% UPRR Track Resubmittal #1

22 September 2022 - 100% UPRR Track Resubmittal #2

23 October 2022 – 100% UPRR Track Resubmittal #3

24 Pending – 100% UPRR Track Resubmittal #4

25 UPRR Culvert Extension Structure Submittals

26 January 2022 - 10% UPRR (Structure) Culvert Extension Submittal

27 March 2022 – 10% UPRR (Structure) Culvert Extension Resubmittal #1

28 April 2022 - 30% UPRR (Structure) Culvert Extension Submittal

29 September 2022 - 60% UPRR (Structure) Culvert Extension Submittal

1 Pending – 60% UPRR (Structure) Culvert Extension Resubmittal #1

2 Pending – 60% UPRR (Structure) Culvert Extension Resubmittal #2

3 Pending – 100% UPRR (Structure) Culvert Extension Submittal

4 Pending – 100% UPRR (Structure) Culvert Extension Resubmittal #1

5
6 **ARTICLE AVI • CONSTRUCTION BIDDING PHASE**

7 No Change. See Amendment No. 2.

8 **ARTICLE AVII • CONSTRUCTION SUPPORT PHASE**

9 Additional design services during construction support are needed from the ENGINEER to complete the
10 project. All provision included in Article AVII of the original Engineering Services Agreement apply to this
11 additional work. In addition, Design Services During Construction for Environmental is added to the existing
12 scope for Phase IV of the work according to the terms set forth in Article AVII in the original Engineering
13 Services Agreement. This amendment includes an additional 12 months of Phase IV support.

14 **ARTICLE AVIII • COMPUTER FACILITIES**

15 **A. CALCULATIONS**

16 No Change. See Agreement.

17 **B. COMPUTER AIDED DRAFTING AND DESIGN (CADD)**

18 No Change. See Agreement.

19
20 **ARTICLE AIX • VALUE ENGINEERING**

21 No Change. See Agreement.

AMENDMENT 3 • APPENDIX C3 • JURUPA ROAD GRADE SEPARATION
AMENDMENT NO. 3 FEE PROPOSAL

January 19, 2023

COMPANIES	PHASE I	PHASE II	PHASE III	PHASE IV	Phase All Contingency	TOTAL
Original Budget + Amendment 1 + Amendment 2	\$ 2,945,942.29	\$ 5,491,447.72	\$ 187,327.16	\$ 935,878.64	\$ 200,000.00	\$ 9,760,595.81
AMENDMENT (No. 3)	\$ 399,112.67	\$ 1,029,422.87		\$ 591,592.81		\$ 2,020,128.35
HNTB Prime	\$ 377,058.06	\$ 1,029,422.87		\$ 542,675.65		\$ 1,949,156.58
Advanced Civil Technologies (ACT) Third Party Coord/Construction Staging						
Arellano Associates Public Outreach						
Leighton Consulting Geotechnical & Haz Mat Phase I				\$ 10,022.25		\$ 10,022.25
LIN Consulting Traffic Engineering				\$ 18,964.26		\$ 18,964.26
Safeprobe Potholing						
Tatsumi and Partners, Inc. Landscape Architecture				\$ 19,930.64		\$ 19,930.64
Towill Right-of-Way Requirements Map	\$ 22,054.61					\$ 22,054.61
Vandermost Consulting Services (VCS) Environmental Services						
GRAND TOTAL	\$ 3,345,054.96	\$ 6,520,870.59	\$ 187,327.16	\$ 1,527,471.45	\$ 200,000.00	\$ 11,780,724.16

- Phase I Preliminary Engineering & Environmental
- Phase II Plans, Specs & Estimates
- Phase III Bid Support
- Phase IV Construction Support

January 19, 2023

COMPANIES	PHASE I	PHASE II	PHASE III	PHASE IV	TOTAL
HNTB Prime	\$ 377,058.06	\$ 1,029,422.87		\$ 542,675.65	\$ 1,949,156.58
Advanced Civil Technologies (ACT) Third Party Coord/Construction Staging					
Arellano Associates Public Outreach					
Leighton Consulting Geotechnical & Haz Mat Phase I				\$ 10,022.25	\$ 10,022.25
LIN Consulting Traffic Engineering				\$ 18,964.26	\$ 18,964.26
Safeprobe Potholing					
Tatsumi and Partners, Inc. Landscape Architecture				\$ 19,930.64	\$ 19,930.64
Towill Right-of-Way Requirements Map	\$ 22,054.61				\$ 22,054.61
Vandermost Consulting Services (VCS) Environmental Services					
TOTAL	\$ 399,112.67	\$ 1,029,422.87		\$ 591,592.81	\$ 2,020,128.35

Phase I Preliminary Engineering & Environmental

Phase II Plans, Specs & Estimates

Phase III Bid Support

Phase IV Construction Support

FEE PROPOSAL WORKSHEET

COMPANY: HNTB	SCOPE OF WORK: Project Summary	PHASE: All Phases
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

DIRECT LABOR

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Adam Dayhoff	Project Manager	269	@ \$132.00	\$35,508.00
Shannon Willits	DPM/Lead Civil	1,322	@ \$91.00	\$120,302.00
Kelly Lumen	Quality Manager	196	@ \$74.00	\$14,504.00
Steve Greene	Lead Traffic	100	@ \$110.00	\$11,000.00
	Technical Manager	1,162	@ \$110.00	\$127,820.00
	Technical Lead	1,155	@ \$84.00	\$97,020.00
	Sr. Project Engineer	872	@ \$74.00	\$64,528.00
	Project Engineer/Planner	535	@ \$60.00	\$32,100.00
	Engineer/Planner III	995	@ \$46.00	\$45,770.00
	Engineer II	1,490	@ \$40.00	\$59,600.00
	Engineer I	415	@ \$37.00	\$15,355.00
	CADD-Civil	1,095	@ \$49.00	\$53,655.00
	Project Analyst	851	@ \$49.00	\$41,699.00
	Administrative Assistant		\$32.00	
Nien Wang	Lead Structures		\$110.00	
	Structures Sr. Project Engineer		\$76.00	
	Structures Project Engineer		\$65.00	
	Structures Engineer III		\$53.00	
	Structures Engineer II		\$51.00	
	CADD-Structures		\$65.00	
TOTAL HOURS		10,457	TOTAL DIRECT LABOR	\$718,861.00

MULTIPLIERS

ESCALATION @	(Rates Vary by Phase)	
OVERHEAD @	97.96% (of Direct Labor + Escalation)	\$704,196.24
PAYROLL ADDITIVES @	48.27% (of Direct Labor + Escalation)	\$346,994.20
PROFIT (FIXED FEE) @	10.0% (of Direct Labor + Escalation + Overhead + Payroll Additives)	\$177,005.14
TOTAL MULTIPLIERS		\$1,228,195.58

OTHER DIRECT COSTS

*** Billed at Actual Cost ***

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Travel/Mileage	3889	MI @	\$0.54	2100
Traffic Counts		LS	\$18,000.00	
Printing, Plotting & Copies		LS	\$5,000.00	
Exhibits, Plotting & Mounting		LS	\$2,500.00	
TOTAL ODC'S				\$2,100.00

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
Advanced Civil Technologies (ACT)				
Arellano Associates				
Leighton Consulting	\$3,192.41	\$6,829.84		\$10,022.25
LIN Consulting	\$6,505.75	\$12,458.51		\$18,964.26
Safeprobe				
Tatsumi and Partners, Inc.	\$6,915.56	\$13,015.08		\$19,930.64
Towill	\$7,032.99	\$15,021.62		\$22,054.61
Vandermost Consulting Services (VCS)				
TOTAL SUBCONSULTANT SERVICES				\$70,971.77

TOTAL \$2,020,128.35

FEE PROPOSAL WORKSHEET

COMPANY: HNTB	SCOPE OF WORK: Preliminary Engineering & Environmental	PHASE: Phase I
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Adam Dayhoff	Project Manager	162	@	\$132.00	\$21,384.00
Shannon Willits	DPM/Lead Civil	434	@	\$91.00	\$39,494.00
Kelly Lumen	Quality Manager	66	@	\$74.00	\$4,884.00
Steve Greene	Lead Traffic			\$110.00	
	Technical Manager	185	@	\$110.00	\$20,350.00
	Technical Lead	60	@	\$84.00	\$5,040.00
	Sr. Project Engineer	80	@	\$74.00	\$5,920.00
	Project Engineer/Planner	145	@	\$60.00	\$8,700.00
	Engineer/Planner III			\$46.00	
	Engineer II			\$40.00	
	Engineer I	120	@	\$37.00	\$4,440.00
	CADD-Civil			\$49.00	
	Project Analyst	576	@	\$49.00	\$28,224.00
	Administrative Assistant			\$32.00	
Nien Wang	Lead Structures			\$110.00	
	Structures Sr. Project Engineer			\$76.00	
	Structures Project Engineer			\$65.00	
	Structures Engineer III			\$53.00	
	Structures Engineer II			\$51.00	
	CADD-Structures			\$65.00	

TOTAL HOURS **1,828** TOTAL DIRECT LABOR **\$138,436.00**

MULTIPLIERS

ESCALATION @	(of Direct Labor)	
OVERHEAD @	97.96% (of Direct Labor + Escalation)	\$135,611.91
PAYROLL ADDITIVES @	48.27% (of Direct Labor + Escalation)	\$66,823.06
PROFIT (FIXED FEE) @	10.0% (of Direct Labor + Escalation + Overhead + Payroll Additives)	\$34,087.10
TOTAL MULTIPLIERS		\$236,522.06

OTHER DIRECT COSTS

*** Billed at Actual Cost ***

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Travel/Mileage	3889	MI @	\$0.54	\$2,100.00
Traffic Counts		LS	\$18,000.00	
Printing, Plotting & Copies		LS	\$5,000.00	
Exhibits, Plotting & Mounting		LS	\$2,500.00	
Travel/Mileage		LS	\$2,100.00	

TOTAL ODC'S **\$2,100.00**

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
Advanced Civil Technologies (ACT)				
Arellano Associates				
Leighton Consulting				
LIN Consulting				
Safeprobe				
Tatsumi and Partners, Inc.				
Towill	\$7,032.99	\$15,021.62		\$22,054.61
Vandermost Consulting Services (VCS)				

TOTAL SUBCONSULTANT SERVICES **\$22,054.61**

TOTAL \$399,112.67

FEE PROPOSAL WORKSHEET

COMPANY: HNTB	SCOPE OF WORK: Plans, Specs & Estimates	PHASE: Phase II
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

DIRECT LABOR

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Adam Dayhoff	Project Manager	53	@ \$132.00	\$6,996.00
Shannon Willits	DPM/Lead Civil	428	@ \$91.00	\$38,948.00
Kelly Lumen	Quality Manager	5	@ \$74.00	\$370.00
Steve Greene	Lead Traffic		\$110.00	
	Technical Manager	602	@ \$110.00	\$66,220.00
	Technical Lead	930	@ \$84.00	\$78,120.00
	Sr. Project Engineer	547	@ \$74.00	\$40,478.00
	Project Engineer/Planner	310	@ \$60.00	\$18,600.00
	Engineer/Planner III	620	@ \$46.00	\$28,520.00
	Engineer II	1,170	@ \$40.00	\$46,800.00
	Engineer I	295	@ \$37.00	\$10,915.00
	CADD-Civil	900	@ \$49.00	\$44,100.00
	Project Analyst		\$49.00	
	Administrative Assistant		\$32.00	
Nien Wang	Lead Structures		\$110.00	
	Structures Sr. Project Engineer		\$76.00	
	Structures Project Engineer		\$65.00	
	Structures Engineer III		\$53.00	
	Structures Engineer II		\$51.00	
	CADD-Structures		\$65.00	
TOTAL HOURS		5,860	TOTAL DIRECT LABOR	\$380,067.00

MULTIPLIERS

ESCALATION @	(of Direct Labor)	
OVERHEAD @	97.96% (of Direct Labor + Escalation)	\$372,313.63
PAYROLL ADDITIVES @	48.27% (of Direct Labor + Escalation)	\$183,458.34
PROFIT (FIXED FEE) @	10.0% (of Direct Labor + Escalation + Overhead + Payroll Additives)	\$93,583.90
TOTAL MULTIPLIERS		\$649,355.87

OTHER DIRECT COSTS

*** Billed at Actual Cost ***

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Travel/Mileage		LS	\$0.54	
Traffic Counts		LS	\$18,000.00	
Printing, Plotting & Copies		LS	\$5,000.00	
Exhibits, Plotting & Mounting		LS	\$2,500.00	
TOTAL ODC'S				

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
Advanced Civil Technologies (ACT)				
Arellano Associates				
Leighton Consulting				
LIN Consulting				
Safeprobe				
Tatsumi and Partners, Inc.				
Towill				
Vandermost Consulting Services (VCS)				
TOTAL SUBCONSULTANT SERVICES				

TOTAL \$1,029,422.87

FEE PROPOSAL WORKSHEET

COMPANY: HNTB	SCOPE OF WORK: Bid Support	PHASE: Phase III
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

DIRECT LABOR

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Adam Dayhoff	Project Manager		\$132.00	
Shannon Willits	DPM/Lead Civil		\$91.00	
Kelly Lumen	Quality Manager		\$74.00	
Steve Greene	Lead Traffic		\$110.00	
	Technical Manager		\$110.00	
	Technical Lead		\$84.00	
	Sr. Project Engineer		\$74.00	
	Project Engineer/Planner		\$60.00	
	Engineer/Planner III		\$46.00	
	Engineer II		\$40.00	
	Engineer I		\$37.00	
	CADD-Civil		\$49.00	
	Project Analyst		\$49.00	
	Administrative Assistant		\$32.00	
Nien Wang	Lead Structures		\$110.00	
	Structures Sr. Project Engineer		\$76.00	
	Structures Project Engineer		\$65.00	
	Structures Engineer III		\$53.00	
	Structures Engineer II		\$51.00	
	CADD-Structures		\$65.00	

TOTAL HOURS

TOTAL DIRECT LABOR

MULTIPLIERS

ESCALATION @		(of Direct Labor)
OVERHEAD @	97.96%	(of Direct Labor + Escalation)
PAYROLL ADDITIVES @	48.27%	(of Direct Labor + Escalation)
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)

TOTAL MULTIPLIERS

OTHER DIRECT COSTS

*** Billed at Actual Cost ***

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Travel/Mileage		LS	\$0.54	
Traffic Counts		LS	\$18,000.00	
Printing, Plotting & Copies		LS	\$5,000.00	
Exhibits, Plotting & Mounting		LS	\$2,500.00	

TOTAL ODC'S

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
Advanced Civil Technologies (ACT)				
Arellano Associates				
Leighton Consulting				
LIN Consulting				
Safeprobe				
Tatsumi and Partners, Inc.				
Towill				
Vandermost Consulting Services (VCS)				

TOTAL SUBCONSULTANT SERVICES

TOTAL

FEE PROPOSAL WORKSHEET

COMPANY: HNTB	SCOPE OF WORK: Construction Support	PHASE: Phase IV
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Adam Dayhoff	Project Manager	54	@	\$132.00	\$7,128.00
Shannon Willits	DPM/Lead Civil	460	@	\$91.00	\$41,860.00
Kelly Lumen	Quality Manager	125	@	\$74.00	\$9,250.00
Steve Greene	Lead Traffic	100	@	\$110.00	\$11,000.00
	Technical Manager	375	@	\$110.00	\$41,250.00
	Technical Lead	165	@	\$84.00	\$13,860.00
	Sr. Project Engineer	245	@	\$74.00	\$18,130.00
	Project Engineer/Planner	80	@	\$60.00	\$4,800.00
	Engineer/Planner III	375	@	\$46.00	\$17,250.00
	Engineer II	320	@	\$40.00	\$12,800.00
	Engineer I			\$37.00	
	CADD-Civil	195	@	\$49.00	\$9,555.00
	Project Analyst	275	@	\$49.00	\$13,475.00
	Administrative Assistant			\$32.00	
Nien Wang	Lead Structures			\$110.00	
	Structures Sr. Project Engineer			\$76.00	
	Structures Project Engineer			\$65.00	
	Structures Engineer III			\$53.00	
	Structures Engineer II			\$51.00	
	CADD-Structures			\$65.00	
TOTAL HOURS		2,769		TOTAL DIRECT LABOR	\$200,358.00

MULTIPLIERS

ESCALATION @	(of Direct Labor)	
OVERHEAD @	97.96% (of Direct Labor + Escalation)	\$196,270.70
PAYROLL ADDITIVES @	48.27% (of Direct Labor + Escalation)	\$96,712.81
PROFIT (FIXED FEE) @	10.0% (of Direct Labor + Escalation + Overhead + Payroll Additives)	\$49,334.15
TOTAL MULTIPLIERS		\$342,317.65

OTHER DIRECT COSTS

*** Billed at Actual Cost ***

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Travel/Mileage		LS	\$0.54	
Traffic Counts		LS	\$18,000.00	
Printing, Plotting & Copies		LS	\$5,000.00	
Exhibits, Plotting & Mounting		LS	\$2,500.00	
TOTAL ODC'S				

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
Advanced Civil Technologies (ACT)				
Arellano Associates				
Leighton Consulting	\$3,192.41	\$6,829.84		\$10,022.25
LIN Consulting	\$6,505.75	\$12,458.51		\$18,964.26
Safeprobe				
Tatsumi and Partners, Inc.	\$6,915.56	\$13,015.08		\$19,930.64
Towill				
Vandermost Consulting Services (VCS)				
TOTAL SUBCONSULTANT SERVICES				\$48,917.16

TOTAL \$591,592.81

MANHOUR WORKSHEET

COMPANY: HNTB	SCOPE OF WORK: Manhour Summary	PHASE: All Phases
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

TASK	PROJECT MANAGER	DPM/LEAD CIVIL	QUALITY MANAGER	LEAD TRAFFIC	TECHNICAL MANAGER	TECHNICAL LEAD	SR. PROJECT ENGINEER	PROJECT ENGINEER/PLANNER	ENGINEER/PLANNER III	ENGINEER II	ENGINEER I	CADD-CIVIL	PROJECT ANALYST	ADMINISTRATIVE ASSISTANT	HOURS	(Top & Bottom) HOURS
	\$357.53	\$246.48	\$200.43	\$297.94	\$297.94	\$227.52	\$200.43	\$162.51	\$124.59	\$108.34	\$100.22	\$132.72	\$132.72	\$86.67		
PHASE TOTALS	269	1,322	196	100	1,162	1,155	872	535	995	1,490	415	1,095	851		10,457	10,457
PHASE I	162	434	66		185	60	80	145			120		576		1,828	1,828
PHASE II	53	428	5		602	930	547	310	620	1,170	295	900			5,860	5,860
PHASE III																
PHASE IV	54	460	125	100	375	165	245	80	375	320		195	275		2,769	2,769

TASK	LEAD STRUCTURES	STRUCTURES SR. PROJECT ENGINEER	STRUCTURES PROJECT ENGINEER	STRUCTURES ENGINEER III	STRUCTURES ENGINEER II	CADD-STRUCTURES	HOURS
	\$297.94	\$205.85	\$176.05	\$143.55	\$138.14	\$176.05	
PHASE TOTALS							
PHASE I							
PHASE II							
PHASE III							
PHASE IV							

MANHOOR WORKSHEET

COMPANY: HNTB	SCOPE OF WORK: Preliminary Engineering & Environmental	PHASE: Phase I
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

TASK	PROJECT MANAGER	DP/LEAD CIVIL	QUALITY MANAGER	LEAD TRAFFIC	TECHNICAL MANAGER	TECHNICAL LEAD	SR. PROJECT ENGINEER	PROJECT ENGINEER/PLANNER	ENGINEER/PLANNER III	ENGINEER II	ENGINEER I	CADD-CIVIL	PROJECT ANALYST	ADMINISTRATIVE ASSISTANT	HOURS	COST
	\$357.53	\$246.48	\$200.43	\$297.94	\$297.94	\$227.52	\$200.43	\$162.51	\$124.59	\$108.34	\$100.22	\$132.72	\$132.72	\$86.67		

Total Manhours	162	434	66	185	60	80	145			120		576			1,828	
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ARTICLE AII - PROJECT ADMINISTRATION

A. Project Management Plan (14mo)	20	15											200		235	\$ 37,391
B. Quality Control Plan (14mo)		16	40		30										86	\$ 20,899
C. Budgeting (14mo)	20	90											200		310	\$ 55,877
D. Cost Accounting (14mo)	20	80													100	\$ 26,869
E. Scheduling (14mo)	20	60	24										176		280	\$ 50,108
F. Contract Administration and Meetings																
F.1 Project Management/Administration (14 mos)	25	60			40		50								175	\$ 43,770
F.2 Project Meetings (14 PDT meetings)	40	60			40	40	45								225	\$ 57,421
G. Contract Deliverables																
H. Outreach																
H.1 Collateral Materials & Coordination																
H.2 Open House Community Meetings																
H.3 Stakeholder and Business Briefings																
I. Union Pacific Payments																

ARTICLE AIII - PLANNING AND PROJECT DEVELOPMENT

A. Research and Data Gathering																
B. Permits	1	10			10		10								31	\$ 7,427
C. Design Surveys																
D. Preliminary Geotechnical Investigations																
D.1 Preliminary Foundation Report																
D.2 Phase I Environmental Site Assessment																
D.3 Aerially Deposited Lead (ADL) Survey																
E. Planning Studies																
E.1 Geometrics																
E.2 Draft Drainage Analysis																
E.3 Utility Impact Identification																
E.4 Structure Advance Planning Study																
E.5 Track Geometrics																
E.6 Estimate of Probable Cost																
E.7 Schedule																

MANHOOR WORKSHEET

COMPANY: HNTB	SCOPE OF WORK: Preliminary Engineering & Environmental	PHASE: Phase I
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

TASK	PROJECT MANAGER	DP/LEAD CIVIL	QUALITY MANAGER	LEAD TRAFFIC	TECHNICAL MANAGER	TECHNICAL LEAD	SR PROJECT ENGINEER	PROJECT ENGINEER/PLANNER	ENGINEER/PLANNER III	ENGINEER II	ENGINEER I	CADD-CIVIL	PROJECT ANALYST	ADMINISTRATIVE ASSISTANT	HOURS	COST
E.8 Constructability																
E.9 Traffic Study																
E.10 Landscape and Aesthetics																
F. Visual Aids																
F.1 Photo Simulations (9)																
F.2 Videos (1)																
G. Environmental Determination and Issues																
G.1 Process extension of permits																
G.2 Potential update to PD/Limits										20					40	60 \$ 12,459
H. Preliminary Engineering Report																
I. Geometric Approval Drawings																
J. Design Drainage Report & WQMP	2	4	2				80				120				208	\$ 30,162
K. Geotechnical Design Report		4								10	20				34	\$ 8,516
L. Right-of-Way Maps																
M. Agreements																
N. Utility Coordination																
N.1 Utility Research & Mapping																
N.2 Utility Coordination & Meetings																
N.3 Utility Potholing																
N.4 Electric and Water Service Meters																
O. Miscellaneous Design Support																
O.1 Design Exceptions																
O.2 Traffic Management Plan																
O.3 Track Design	14	35													35	84 \$ 24,060

MANHOOR WORKSHEET

COMPANY: HNTB	SCOPE OF WORK: Plans, Specs & Estimates	PHASE: Phase II
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

TASK	PROJECT MANAGER	DPW/LEAD CIVIL	QUALITY MANAGER	LEAD TRAFFIC	TECHNICAL MANAGER	TECHNICAL LEAD	SR. PROJECT ENGINEER	PROJECT ENGINEER/PLANNER	ENGINEER/PLANNER III	ENGINEER II	ENGINEER I	CADD/CIVIL	PROJECT ANALYST	ADMINISTRATIVE ASSISTANT	HOURS	COST
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\$357.53 \$246.48 \$200.43 \$297.94 \$297.94 \$227.52 \$200.43 \$162.51 \$124.59 \$108.34 \$100.22 \$132.72 \$132.72 \$86.67

Total Manhours	53	428	5	602	930	547	310	620	1,170	295	900				5,860	
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TASK	PROJECT MANAGER	DPW/LEAD CIVIL	QUALITY MANAGER	LEAD TRAFFIC	TECHNICAL MANAGER	TECHNICAL LEAD	SR. PROJECT ENGINEER	PROJECT ENGINEER/PLANNER	ENGINEER/PLANNER III	ENGINEER II	ENGINEER I	CADD/CIVIL	PROJECT ANALYST	ADMINISTRATIVE ASSISTANT	HOURS	COST
ARTICLE AIV - STRUCTURES																
A. Structure Type Selection and Bridge General Plans																
B. Geotechnical Coordination and Foundation Report																
C. Structural Design and Calculations																
D. Independent Check Review and Quality Control																
E. Structure Specifications & Estimates																
F. Initial Structure PS&E (65% unchecked plans)																
G. Intermediate Structure PS&E (90% Checked Plans)																
H. Draft Final Structure PS&E (95%)																
I. Final Structure PS&E																
J. UPRR Structure Submittals	15	80		140	150							150			535	\$ 120,828
K. Box Culvert Plans	17	75		100	225	22			275	295	50				1,059	\$ 175,952
ARTICLE AV - ROADWAY																
A. Basic Roadway Plans																
A.1 Title Sheet/General Sheets																
A.2 Horizontal Control Plans																
A.3 Typical Sections																
A.4 Plan & Profile Sheets		30		20	40		20	90	15		50				265	\$ 45,178
A.5 Construction Details		10		40			10	20	30		60				170	\$ 29,713
A.6 Grading Plans		25		33			20	80	20		40				218	\$ 36,687
A.7 Removal Plans		5		10			30				20				65	\$ 11,741
A.8 Planting & Irrigation Plans		5													5	\$ 1,232
B. Calculations																
B.1 Geometric Traverse & Right-of-Way		15		20	10	80				70					195	\$ 35,549
B.2 Grid Grades						45				20					65	\$ 11,186
B.3 Profile		15		30	40	20	40	40	35						220	\$ 41,021
B.4 Earthwork Quantities		20		50	60	15	50	40	30						265	\$ 52,843
B.5 Other Quantities		12		60	40	20			65						197	\$ 40,985
C. Drainage Plans																
C.1 Storm Drain Plans																
C.2 BMP & Erosion Control Plans																

FEE PROPOSAL WORKSHEET

COMPANY: Leighton Consulting	SCOPE OF WORK: Construction Support	PHASE: Phase IV
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Jeffrey DeLand	Staff Geologist	5	@	\$28.50	\$142.50
Breeanna Copeland	Staff Scientist	19	@	\$23.50	\$446.50
Zach Freeman, PG	Project Scientist	1	@	\$32.21	\$32.21
Richard Orr, PG	Associate Geologist	8	@	\$57.21	\$457.68
Simon Said, PE, GE	Principal Engineer/PM	2	@	\$70.07	\$140.14
Kris Lutton, PG	Sr. Principal Geologist/QC-Enviro	2	@	\$106.97	\$213.94
Buu Tran	CAD Operator	6	@	\$40.87	\$245.22
Mary Murphy	GIS Analyst	3	@	\$34.25	\$102.75
Bashir Said	Staff Engineer	6	@	\$28.50	\$171.00
Debbie Maggers	Word Processor/Admin	14	@	\$24.95	\$349.30
Mary-Ann Verrill	Project Accountant	12	@	\$24.68	\$296.16
Robert Riha, CEG	Sr. Principal Geologist/QC	7	@	\$84.13	\$595.01

TOTAL HOURS **85** TOTAL DIRECT LABOR **\$3,192.41**

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	58.40%	(of Direct Labor + Escalation)	\$1,864.37
PAYROLL ADDITIVES @	127.00%	(of Direct Labor + Escalation)	\$4,054.36
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	\$911.11
TOTAL MULTIPLIERS			\$6,829.84

OTHER DIRECT COSTS

*** Billed at Actual Cost ***

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Travel/Mileage		LS	\$0.54	
Traffic Counts		LS	\$18,000.00	
Printing, Plotting & Copies		LS	\$5,000.00	
Exhibits, Plotting & Mounting		LS	\$2,500.00	

TOTAL ODC'S

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
Advanced Civil Technologies (ACT)				
Arellano Associates				
Leighton Consulting				
LIN Consulting				
Safeprobe				
Tatsumi and Partners, Inc.				
Towill				
Vandermost Consulting Services (VCS)				

TOTAL SUBCONSULTANT SERVICES

TOTAL \$10,022.25

MANHOOR WORKSHEET

COMPANY: Leighton Consulting	SCOPE OF WORK: Construction Support	PHASE: Phase IV
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

TASK	Staff Geologist	Staff Scientist	Project Scientist	Associate Geologist	Principal Engineer/PM	Sr. Principal Geologist/OC-Enviro	CAD Operator	GIS Analyst	Staff Engineer	Word Processor/Admin	Project Accountant	Sr. Principal Geologist/OC	HOURS	COST
	\$89.47	\$73.78	\$101.12	\$179.61	\$219.98	\$335.82	\$128.31	\$107.52	\$89.47	\$78.33	\$77.48	\$264.12		

Total Manhours	5	19	1	8	2	2	6	3	6	14	12	7	85
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ARTICLE AVII - CONSTRUCTION SUPPORT PHASE	Staff Geologist	Staff Scientist	Project Scientist	Associate Geologist	Principal Engineer/PM	Sr. Principal Geologist/OC-Enviro	CAD Operator	GIS Analyst	Staff Engineer	Word Processor/Admin	Project Accountant	Sr. Principal Geologist/OC	HOURS	COST
A. Project Administration (12 months)		6											12	\$ 1,372
B. Pre-Construction Meeting														
C. Meetings & Site Reviews	1	1	1	1	2								6	\$ 884
D. Response to Inquiries/RFI's	2	6		5		6			10			7	36	\$ 4,941
E. Submittal & Shop Drawing Review														
F. Change Order Support	2	6		2	2			3	6	4			25	\$ 2,825
G. Outreach Support														
H. As-Builts														

FEE PROPOSAL WORKSHEET

COMPANY: LIN	SCOPE OF WORK: Construction Support	PHASE: Phase IV
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
William Sun	Principal	27	@	\$65.00	\$1,755.00
Ray Kommidi	Senior Project Manager	70	@	\$53.50	\$3,745.00
Ryan Woo	Project Engineer	27	@	\$37.25	\$1,005.75
		TOTAL HOURS	124	TOTAL DIRECT LABOR	\$6,505.75

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	165.00%	(of Direct Labor + Escalation)	\$10,734.49
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	\$1,724.02
TOTAL MULTIPLIERS			\$12,458.51

OTHER DIRECT COSTS

*** Billed at Actual Cost ***

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Travel/Mileage		LS	\$0.54	
Traffic Counts		LS	\$18,000.00	
Printing, Plotting & Copies		LS	\$5,000.00	
Exhibits, Plotting & Mounting		LS	\$2,500.00	
TOTAL ODC'S				

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
N/A				
TOTAL SUBCONSULTANT SERVICES				

TOTAL SUBCONSULTANT SERVICES

TOTAL **\$18,964.26**

FEE PROPOSAL WORKSHEET

COMPANY: Tatsumi and Partners, Inc	SCOPE OF WORK: Construction Support	PHASE: Phase IV
PROJECT: Jurupa Road Grade Separation		DATE: January 19, 2023

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
David H. Tatsumi	Principal/Landscape Architect	16	@	\$92.41	\$1,478.56
Ryohei Ota	Project Manager	32	@	\$41.00	\$1,312.00
Nathan Quy	Lead Landscape Designer	33	@	\$36.50	\$1,204.50
Jimmy Ogata	Lead Irrigation Designer	33	@	\$36.50	\$1,204.50
Weywantheawy Kang	Designer	33	@	\$25.00	\$825.00
Samuel Meljia	Designer	33	@	\$27.00	\$891.00

TOTAL HOURS **180** TOTAL DIRECT LABOR **\$6,915.56**

MULTIPLIERS

ESCALATION @	(of Direct Labor)	
OVERHEAD @	162.00% (of Direct Labor + Escalation)	\$11,203.21
PAYROLL ADDITIVES @	(of Direct Labor + Escalation)	
PROFIT (FIXED FEE) @	10.0% (of Direct Labor + Escalation + Overhead + Payroll Additives)	\$1,811.88
TOTAL MULTIPLIERS		\$13,015.08

OTHER DIRECT COSTS

*** Billed at Actual Cost ***

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Travel/Mileage		LS	\$0.54	
Traffic Counts		LS	\$18,000.00	
Printing, Plotting & Copies		LS	\$5,000.00	
Exhibits, Plotting & Mounting		LS	\$2,500.00	

TOTAL ODC'S

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
N/A				

TOTAL SUBCONSULTANT SERVICES

TOTAL **\$19,930.64**

