



OFFICE OF THE CITY ATTORNEY  
CHARLES PARKIN, City Attorney  
411 West Ocean Boulevard, 9th Floor  
Long Beach, CA 90802-4664

1           Hundred Seventy-Six Thousand Three Hundred Eighty-Six Dollars and Ninety-  
2           Seven Cents (\$6,976,386.97), at the rates or charges shown in Exhibit "B".

3                   2.     The Scope of Work in Exhibit "A" to the Agreement is hereby  
4 amended to include additional services more particularly described in Exhibit "A-2",  
5 attached hereto and incorporated by this reference.

6                   3.     The Rates in Exhibit "B" to the Agreement are hereby amended in  
7 accordance with Exhibit "B-2", attached hereto and incorporated by this reference.

8                   4.     Except as expressly modified herein, all of the terms and conditions  
9 contained in Agreement No. 33938 are ratified and confirmed and shall remain in full  
10 force and effect.

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IN WITNESS WHEREOF, the Parties have caused this document to be  
duly executed with all formalities required by law as of the date first stated above.

HDR ENGINEERING, INC., a Nebraska  
corporation

2/21/2020, 2020

By   
Name Thomas T. Kim, P.F.  
Title Senior Vice President

\_\_\_\_\_, 2020

By \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

"Consultant"

CITY OF LONG BEACH, a municipal  
corporation

3/6/, 2020


By   
City Manager

"City"

This Fourth Amendment to Agreement No. 33938 is approved as to form on

2-25, 2020.

CHARLES PARKIN, City Attorney

By   
Deputy

# EXHIBIT "A-2"

## Scope of Work

# Shoemaker Project Work Assignment G

## Amendment Scope of Work

Listed below are the tasks that are considered out of scope or require significantly more effort based on new project requirements and changes in the project schedule.

### G-1.0 Final Environmental Document and Final Project Report

#### G-1.1 Extended Environmental Services for the Environmental Document Updates to Caltrans Guidance and Procedures for Environmental Documents

Key Understanding:

Based on additional updates to the Caltrans Standard Environmental Reference Annotated Outlines as late as December 11, 2019, additional work will be required to update the Environmental Document (ED).

Key Activities:

We understand that based on previous experience on the Draft ED, that multiple rounds of comments will be received by Caltrans Headquarters during the 5 Step NEPA Review process of the Final ED. We anticipate that the FED will undergo two rounds of revisions at each NEPA Review step, resulting in up to ten (10) rounds of revisions and updates prior to obtaining signature for the Final ED.

Key Deliverable:

- Final Environmental Document. Addressing Caltrans' comments.

**Cost for Additional Efforts: \$144,998**

#### New SAFE Vehicle Rule and Ongoing Air Quality Conformity Changes

Key Understanding:

Due to the SAFE Vehicles Rule going into effect December 4, 2019, any changes to the Southern California Association of Government's (SCAG) Federal Transportation Implementation Plan (FTIP) or Regional Transportation Plan (RTP) are currently on hold. SCAG cannot finalize their 2020 RTP that is currently out for public review. Any project that is not currently included in the 2016 RTP and 2019 FTIP, and does not require any changes to those listings, cannot complete conformity. As Shoemaker requires an amendment to the opening year change, this will require additional coordination with Caltrans District 7, Caltrans Headquarters, and the Federal Highway Administration (FHWA) additional to help resolve this issue.

Key Activities:

Additional revisions will likely be required to the existing Draft Air Quality Conformity Report (AQCR) and Checklist, resulting up to four (4) rounds of revisions for the AQCR and Checklist prior to final signature from Caltrans and FHWA.

Key Deliverable:

- Updated Air Quality Conformity Report and Checklist.

**Cost for Additional Efforts: \$50,000**

**G-1.2 Extended Engineering Services for the Final Project Report and Final Environmental Document**

**Traffic Operation Analysis Report (TOAR)**

Key Understanding:

In 2017, the Shoemaker team met with the Caltrans Traffic group and agreed that Shoemaker would use the same traffic volumes used by the I-710 team. The TOAR was submitted to Caltrans multiple times along with the Draft Environmental Document, and minor comments were received. During the latest submittal of the TOAR to Caltrans, team was notified that the Caltrans Traffic Operations has not previously reviewed the TOAR and have significant comments.

Also, the two way traffic on 7<sup>th</sup> and 6<sup>th</sup> Street has been extended beyond Magnolia to Atlantic, per City's request. This is anticipated to have major updates to the intersection analysis in the TOAR.

Key Activities:

- During the alternative Selection process, Caltrans questioned the City's Preferred Alternative (Alternative 3 Design Option B (Y Intersection)). As a result, the HDR team will have to perform extensive revisions and updates to the Traffic Operation Analysis.
- Team is anticipating re-evaluation of the Y Intersection and investigate potential improvements to the Y Intersection in order to improve the operations. Including revisions to the signal at the Y Intersection.
- A significant number of comments has been provided by Traffic Operations during the submittal of TOAR and subsequent updates and several resolution meetings are anticipated that would result in additional effort beyond the original scope of work including:

Revisions to the SIDRA Traffic Model, additional queuing analysis at several locations, a cost benefit analysis of the interchange design options, additional ICE analysis, further review of midday peak hour truck/traffic volumes/conditions was requested.

- Additional coordination with the Port of Long Beach Pier B project is anticipated and evaluation of the impacts of the Pier B project with regards to the roadway changes.
- Caltrans geometric comments and changes to the design options will required additional traffic analysis including rerunning the SIDRA model, adjusting for traffic queuing and evaluating ramp metering.

Key Deliverables:

- Updating traffic analysis, queuing calculation and intersection evaluation based on the revised design option geometrics.

**Cost for Additional Efforts: \$62,867**

**Geometric Design and Alternative Development**

Key Understanding:

The Draft Project Report (DPR), in parallel with the Draft Environmental Document, includes plan sheets for all the alternatives and design options, with the purpose of confirming the feasibility of improvement in order to support the need of the project. In the process of the development of the alternatives and design options, it is anticipated that the two design options will require significantly more effort than planned in the original scope of work. The extra work anticipated is summarized below.

- The Geometrics Reviewed Drawings (GRD) have gone through multiple submittals and review process with Caltrans. However, the new Caltrans geometrician has been requesting extensive revisions and updates to the design options. Team has been involved in many coordination meetings and is anticipating additional coordination and revisions to the geometrics. These include the geometrics updates to the Design Option B (Y Intersection) that will require extensive refinements to reflect the operational improvements.
- To address Caltrans concerns regarding exit speed, team is required to provide signage concepts for the southbound Shoemaker off-ramp. Team is also researching unique pavement striping to focus driver attention on reducing speed before the proposed controlled intersection. Team is anticipating extensive additional meetings and coordination with Caltrans reviewer and revisions to the striping and signage concepts.
- The geometric changes will require updating additional reports in other engineering and environmental technical studies including the Final Project Report and Final Environmental Document to ensure consistency across all documents.

Key activities:

- Revisions and modifications to the Y Intersection to improve the Operations
- Addressing Caltrans comments and concerns regarding the exit speed, preparation of the sign plans, and use of unique pavement striping

- Updates to the Final Project Report and attachments as a result of Design Option revisions

Key Deliverables:

- Final Project Report

**Cost for Additional Efforts: \$109,412**

**Total Engineering Services Cost: \$172,279**

## G-2.0 Additional Geotechnical Services

### G-2.1 Extended Engineering Services for the Final Project Report and Final Environmental Document

Key Understanding:

HDR is working to obtain permit approval for the geotechnical investigation work within the LA River. The work will require detailed logistical planning with the drilling contractor, biological survey subconsultant, USACE, Caltrans, LA County Public Work and the City of Long Beach. Work began on the LA River permitting process in anticipation of performing investigations in the summer of 2018. During this timeframe, Caltrans was not involved in the Shoemaker project or planning for the LA River investigations. Caltrans re-engaged on the project in early 2018. In May 2018, Caltrans approved the Shoemaker Bridge Advanced Planning Study (APS) for the Cable-stay bridge type. In August 2018, Caltrans notified the team that since they are the NEPA lead for the project they would need to concur with the permitting for the LA River investigations. Caltrans had comments on the geotechnical investigation work plan, health and safety plan and environmental impacts. LA River Steelhead Trout and Marine Mammal study to support the findings in the Natural Environment Study was also requested. The additional work and the late Caltrans comments precluded us from performing the investigations in the 2018 work window. The team has continued to develop and define the bridge foundation design in conjunction with the Caltrans geotechnical group. There have been significant changes to the drilling requirements and approval process.

Key activities:

#### LA River Drilling Geotechnical Changes

- It was determined that the depth of the geotechnical investigation (drilling) will need to be extended beyond the depth originally defined (200' vs. 275'). A revised geotechnical investigation work plan needs to be developed in conjunction with the team and the drilling contractor.
- A different drill rig and related equipment is required to perform the work which also impacted the workplan.
- A modular barge is required to support the drill rig in the river (the original amphibious vehicle cannot carry the required rig).



- The duration of the drilling work in the river will be longer than originally planned.
- Caltrans required the preparation of a detailed Health and Safety plan signed by a Certified Industrial Hygienist.

**Cost for Additional Efforts: \$35,300**

#### **Additional Geotechnical Investigation**

- The City requested that we proceed with pavement coring and hand-auger borings to support city street and bike path design.

**Cost for Additional Efforts: \$13,360**

#### **Permitting, Agency Coordination and Bio-Surveys**

- The revised work plan needs to be reviewed and approved by the responsible permit agencies.
- Additional coordination with Caltrans (lead NEPA reviewer) is now required.
- The permit representatives at USACE and LACDPW responsible for reviewing and approving the applications have changed since the permits were originally submitted. This has resulted in additional permit reviews, meetings and coordination.
- New bio-surveys are required based on Caltrans and USACE requirements.
- New regulations for the USACE 408 and RWQCB 401 permits are in effect.

**Cost for Additional Efforts:**

#### **\$77,600 Drilling Coordination**

- All of these changes have required additional coordination and project management effort by HDR. This includes input to the new drilling work plan, coordination of bridge foundation designs with subconsultants and discussions with the Caltrans Geotechnical group. The team has also had to help respond to Caltrans environmental and health and safety comments on the drilling work plan and coordinate permit requirements and updates with the City and responsible agencies.

**Cost for Additional Efforts: \$19,400**

#### **Two Dimensional LA River Modeling**

- We also recommend proceeding with 2-D river modeling. At our meeting in 2018, with the USACE they indicated that 2-D modeling would be required to better estimate the water surface changes. This modeling is typically required during PS&E and was not included in the PAED scope of the work.

**Cost for Additional Efforts: \$12,000**

Key Deliverables:

- LA River Drilling Geotechnical Changes, Additional Geotechnical Investigation, Permitting, Agency Coordination and Bio-Surveys, Drilling Coordination, and Two Dimensional LA River Modeling.

**Total Additional Geotechnical Services Cost: \$157,660**

# EXHIBIT "B-2"

## Rates or Charges



**Shoemaker Bridge Replacement Project  
Fee Summary**

Work Assignment	Task Name	Committed	Work Assignment G	Date Approved
G-1.0	Final Environmental Document and Final Project Report			
G-1.1	Additional Environmental Services		\$ 194,998	
G-1.2	Additional Engineering Services		\$ 172,279	
G-2.0	Additional Geotechnical Services			
G-2.1	Geotechnical Investigation		\$ 157,660	
Existing Contract Value		\$ 6,451,450		
Work Assignment G Total			\$ 524,937	
Total New Contract Value		\$ 6,976,387		

## CERTIFICATE

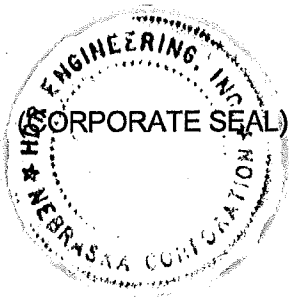
The undersigned hereby certifies that she is the Assistant Secretary of HDR Engineering, Inc., a Nebraska corporation (the "Corporation"), and that, as such, has custody of the minute books of the Corporation, and that, by Consent and Agreement of the Board of Directors dated January 1, 2014, the following resolution was unanimously adopted:

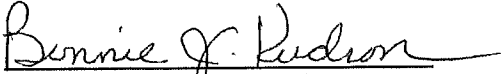
**"RESOLVED**, that effective immediately, and until June 20, 2014, or until termination of said individual from the Corporation, or until rescision by the Corporation's Board of Directors, whichever occurs first, the following individuals are hereby granted the nondelegable authority to execute or approve on behalf of the Corporation, contracts for engineering services and architectural services incidental to engineering services to be rendered by the Corporation, . . . , or releases of claim or lien in connection with such services, such contracts or releases so executed or approved shall be binding upon the Corporation:

. . . Brent R. Felker – Executive Vice President . . .  
. . . Sharon M. Greene – Senior Vice President . . .  
. . . Thomas T. Kim – Senior Vice President . . .  
. . . David A. Ludwin – Senior Vice President . . .  
. . . Laurie L. Roden – Senior Vice President . . .  
. . . Michael I. Schneider – Senior Vice President . . .  
. . . Kip Field – Vice President . . .  
. . . Jonny B. Rohrer – Authorized Representative . . ."

The undersigned further certifies that the foregoing resolution has been spread in full upon the minute books of the Corporation and is in full force and effect.

DATED March 11, 2014.



  
Bonnie J. Kudron, Asst. Secretary