



June 22, 2023

Mr. Gilbert Marquez
City of Carson
701 E. Carson Street
Carson, CA 90745

**RE: PROFESSIONAL ENGINEERING SERVICES – SEPULVEDA BOULEVARD
WIDENING PROJECT – CHANGE ORDER REQUEST #2**

Dear Mr. Marquez:

RKA Consulting Group is pleased to submit to you this proposal to provide additional professional construction support services for widening Sepulveda Boulevard over the Dominguez Channel. This proposal is intended to clarify the additional services being provided for this project.

SCOPE OF WORK

Task 1 –Provide HEC-RAS Model (\$19,320)

Through its subconsultant, Pace Engineering, RKA will provide a hydraulic analysis of Dominguez Channel in accordance to LA County Department of Public Works (LACDPW) Storm Water Engineering Division (SWED).

1. Data Collection and Review

Consultant shall perform initial data collection relevant to hydraulic modeling and floodplain mapping for the study reach of the Dominguez Channel. This data includes available reports/studies, hydraulic models, flow rate data, as built information, design plans for proposed improvements. Sources for this information will be the LACDPW, FEMA, other public agencies, or Client.

2. Hydraulic Model Assessment and Modification

Consultant shall obtain existing model for Dominguez Channel from LACDPW-SWED staff, as discussed in LACDPW comment letter to RKA Consulting Group dated October 19, 2022. PACE shall modify the existing condition model to incorporate the proposed bridge improvements associated with the Sepulveda Ave Bridge widening project. The existing condition model will serve as the baseline condition of the channel and will be the basis of comparison to the proposed project condition model. PACE shall utilize the hydraulic model results for the existing and proposed conditions to establish the magnitude and extents of hydraulic impacts caused by the proposed improvements.

3. Technical Memorandum

Consultant shall prepare a technical memorandum to summarize the results of the hydraulic analysis of the Dominguez Channel in the vicinity of the Sepulveda Ave Bridge crossing. The memorandum will present a comparison of the pre- and post-project conditions hydraulic parameters, specifically water surface elevation and velocity, to determine if there are any impacts to the existing design capacity of the Dominguez Channel.

4. LACDPW Processing, Review and Revisions

Consultant shall provide engineering services to process the technical memorandum through the LACDPW Storm Water Engineering Division. Revisions to the technical memo and minor modifications to the hydraulic model will be made during the technical review process. Consultant shall meet with LACDPW SWED staff as required to obtain clarification necessary to expedite the review process and obtain approval of the technical memo and analysis. Consultant shall make revisions to the hydraulic model and/or technical memo as requested by SWED staff.

This task time is a budget fee amount since the precise amount of work effort cannot be determined for each item. The fee specified for this task assumes response to comments/revisions based on one (1) round of review comments. If the budget amount shown in the fee section is to be exceeded and additional work is still required to complete the task, then additional work will be completed on either a time and materials basis or a separate contract addendum.

5. Project Coordination and Meetings

Consultant shall attend project meetings/telephone conferences and provide consulting services related to the project coordination during the particular engineering phase. The purpose of these meetings may include a review of the progress of work included in this Contract, or consultation and discussion needed on project issues. Consultation will be provided with the Client or other project consultants to resolve design related issues and ensure the progress of the project. The meetings and consultation allow adequate communication with the Client to allow input and feedback during the process.

This task item is a budget fee amount since the precise amount of work effort cannot be determined. If the budget amount shown in the fee section is to be exceeded and additional work is still required to complete the task, then additional work will be completed on either a time and materials basis or separate contract addendum.

Compensation

RKA will complete the work outlined herein and invoice Client monthly on a percentage of completion basis for tasks 1-3 and a time and expense fee for tasks 4-5.

Task Description		Fee
01	Data Collection and Review	\$1,725
02	Hydraulic Model Assessment and Modification	\$4,025
03	Technical Memorandum	\$5,520
04	LACDPW Processing, Review and Revisions (T&E)	\$4,600
05	Project Coordination and Meetings (T&E)	\$3,450

2023 PACE Engineering Rate Table	
Principal	\$327.75
Sr. Project Manager	\$281.75
Project Manager	\$264.50
Sr. Project Engineer/ Sr. Designer	\$241.50
Project Engineer	\$207.00
Sr. CAD Designer	\$189.75
Design Engineer	\$166.75
CAD Designer	\$161.00
Project Coordinator	\$115.00
Administrative Support	\$109.25

Task 2 –Provide Historical Resources Services (\$35,875)

Through its Environmental subconsultant, Chambers Group, and their subconsultant, Kleinfelder, RKA will provide historical resources services to evaluate the historical significance of the Sepulveda Boulevard Bridge and the Dominguez Channel to satisfy the requirements under Section 106 of the National Historic Preservation Act (Section 106) and the California Environmental Quality Act (CEQA). Kleinfelder will provide the technical services described below as part of the Chambers Group team. Kleinfelder understands that the USACE is the federal lead agency for this Project and the City of Carson is the CEQA lead agency.

I. Archival Research

Consultant will request a cultural resource record search through the South-Central Coastal Information Center (SCCIC), located at California State University Fullerton (CSUF) to request previous records and reports completed within the project area and surrounding 0.25-mile radius. The cultural resources review will identify previous cultural resources within the search area. The search will include a request for the detailed lists and/or tables of previously recorded sites and report completed within the project area and surrounding 0.25-mile radius, as well as Geographic information system (GIS) Shapefiles or a map of these locations. The request will not include Adobe portable document format (PDF) copies of the site forms or previous reports unless they are located within the Project area. Kleinfelder will inspect any available historical maps and aeriels, United States Geological Survey (USGS) survey plats, and Government Land Office (GLO) plants that depict the Project area. Kleinfelder will also review properties listed on the California Historical Landmarks (CHL), California Historical Resources

Inventories, California Points of Historical Interest (CPHI), local city and county registries of historic properties, the California Register of Historic Resources (CRHR), and the National Register of Historic Places (NRHP). Additional archival research at relevant repositories will be completed as necessary. The SCCIC's fee for a records search and literature review is estimated to cost approximately \$800.00 for this task based on projects of similar size. The SCCIC is estimating that records searches will take approximately between 6 to 9 weeks.

2. Historical Survey and Documentation

Consultant will conduct a historical built environment survey to photo document and assess the current condition of the Sepulveda Boulevard Bridge and the Dominguez Channel. The structures will be recorded on appropriate Department of Parks and Recreation (DPR) 523 series forms. In preparing the DPR 523 forms, the existing condition of the structures will be photographed and described in detail. This scope and cost estimate assume that no more than two resources (the Sepulveda Boulevard Bridge and the Dominguez Channel).

3. Historical Assessment Report

Consultant will prepare a historical assessment technical report. The report will include a historic context, a summary of field methods and results, significance evaluation of the Sepulveda Boulevard Bridge and the Dominguez Channel under NRHP and CRHR criteria, and recommendation of project effects. Please note that this report will not address archaeological or tribal resources.

Assumptions

- This scope assumes one round of comments will be addressed from USACE and the City (no more than 2 hours in total to address comments). Should SHPO require a response to comments, costs may increase.
- This scope includes up to one remote meeting lasting no more than 1 hour. If additional meetings or if in-person meetings are required, costs may increase.

Compensation

RKA will complete the work outlined herein and invoice Client monthly on a percentage of completion basis for Kleinfelder's fee and a time and expense fee for Chambers Group's fee.

Fee	
Kleinfelder	\$26,100
Chambers Group	\$9,775
Total	\$35,875

Task 3 –Provide Civil Engineering Support During Construction (\$85,000)

RKA will provide engineering support during construction. A separate consultant will be hired to provide Construction Management. The budgeted hours equate to approximately 4 hours/week for the Civil Engineer, and an additional 2 hours/week for project management and coordination.

1. Review and respond to Contractor's RFIs. Issue drawing revisions, if needed.
2. Provide guidance and clarification to the City on design issues
3. Review and approve material submittals and shop drawings
4. Construction observation/site visits. The Civil Structural Engineer will perform site visits once a month for 24 months during construction.
5. It is assumed construction will last approximately 24 months.
6. Provide as built based on legible redlines from the Contractor and modifications made due to RFI responses.

RKA Rate Schedule				
	Principal	Project Manager/Sr. Engineer	Project Engineer	Engineering Technician
2023	170.00	140.00	115.00	75.00
2024	178.50	147.00	120.75	78.75
2025	187.45	154.35	126.80	82.70

Task 4 –Provide Structural Engineering Support During Construction (\$81,000)

PacRim will provide structural construction support services as requested by the City on a time and material basis. The typical activities may include reviewing bidder's RFI's, issuance of addenda (if necessary), reviewing shop drawings, reviewing construction RFI's, performing monthly site visits for 24 months, and providing as built based on the contractor's redlines and any revisions made due to RFI's. The actual level of efforts may vary pending upon City's directions.

PacRim Rate Schedule						
	Principal Engineer	QA/QC Manager	Project Engineer	Senior Engineer	Design Engineer	CADD Drafter
2023	300.00	260.00	240.00	230.00	170.00	170.00
2024	315.00	273.00	252.00	241.50	178.50	178.50
2025	330.75	286.65	264.60	253.58	187.43	187.43

RKA proposes to provide these services on a time and materials, not to exceed amount of \$221,195.

We appreciate the opportunity to provide this proposal and look forward to continuing our work with you on this project. If you have any questions, please do not hesitate to call.

Sincerely,



Kurt Pedersen
Project Manager/Senior Engineer