

METROPOLITAN TRANSPORTATION COMMISSION

Agenda Item 3b

Bay Area Metro Center 375 Beale Street San Francisco, CA 94105 TEL 415.778.6700 WEB www.mtc.ca.gov

Memorandum

TO:	Operations Committee	DATE:	April 6, 2018
FR:	Executive Director	W.I.	1237

RE: <u>Contract Amendment – Transportation Engineering and Planning Services: Technical Assistance</u> for State Route 37 Design Alternative Assessment: Kimley-Horn & Associates, Inc. (\$250,000)

This memorandum requests Committee approval for a contract amendment with Kimley-Horn & Associates, Inc. to provide additional technical support to MTC to perform an alternatives analysis as part of the State Route 37 (SR 37) Design Alternative Assessment in an amount not to exceed \$250,000.

Partnerships

MTC is partnering with Caltrans and the four North Bay Congestion Management Agencies to analyze potential corridor improvements for SR 37 from SR 121 to Mare Island: Napa Valley Transportation Authority (NVTA), Solano Transportation Authority (STA), Sonoma County Transportation Authority (SCTA), and Transportation Authority of Marin (TAM).

Procurements

In June 2016, the Operations Committee approved a competitively-procured, pre-qualified panel of consultants to provide on-call transportation engineering and planning services under the various service categories on an as-needed basis. In January 2017, after a competitive procurement process with the pre-qualified consultants, the Operations Committee authorized the Executive Director to negotiate and enter into a contract with Kimley-Horn & Associates, Inc., to provide transportation engineering, design and traffic analysis for the SR 37 Design Alternative Assessment (DAA) project.

Project Status

MTC staff and the consultant team lead by Kimley-Horn & Associates, Inc. have completed the first phase of the DAA work, which included a corridor plan that identified Segment B from SR 37 to SR 121 to Mare Island as the highest-priority segment for operational/capacity improvements. Staff is working on the second phase of the DAA to develop a range of design options for Segment B. This second phase of the work involves the transitioning of the DAA work completed to date into a Caltrans-required engineering document called a Project Initiation Document that describes the project's purpose and need, alternatives assessment, cost and risks.

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MTC staff seeks technical support from the Kimley-Horn & Associates, Inc. team to conduct an alternatives analysis of a range of design options. Given that past Caltrans studies have considered new alignment options (e.g., tunnel, co-alignment with SR 12/121/116), staff had not originally scoped the alternatives assessment to include analysis of new alignments in the DAA. However, our SR 37 outreach with the environmental community and the Resilient by Design effort have resulted in renewed interest to consider new alignments that offer an inland retreat option or a bridge option to better adapt the corridor to anticipated sea level rise. Design options to be studied in this next phase of work may include various 3-lane or 4-lane configurations within the current roadway alignment; a 4-lane configuration on an entirely new inland alignment further north of the current alignment; and a 4-lane configuration on a new bridge in the Bay. Upon the completion of the alternatives analysis, staff expects to identify at least two design options that should be advanced for further evaluation in the Project Approval & Environmental Document phase.

Attachment A includes a summary of Kimley Horn & Associates, Inc. and its subcontractors' Small Business Enterprise and Disadvantaged Business Enterprise status.

Recommendation

Staff recommends that the Committee authorize the Executive Director or his designated representative to negotiate and enter into a contract amendment with Kimley-Horn & Associates, Inc. in an amount not to exceed \$250,000 for the above-described work.

Attachment:

• Attachment A: Kimley-Horn & Associates, Inc. Team Small Business Enterprise and Disadvantaged Business Enterprise Status

SH:kc

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Kimley-Horn & Associates Inc. Team Small Business Enterprise and Disadvantaged Business Enterprise Status

		DBE	E* Firm		SBE	** Firm	
Firm Name	Role on Project	Yes	If Yes, List #	No	Yes	If Yes, List #	No
Kimley-Horn & Associates, Inc.	Project Management, Alternatives Development			x			X
AECOM (Subcontractor)	Sea Level Rise and Environmental Analysis, Alternative Development and Structures Design			X			X
Chaudhary & Associates (Subcontractor)	Right-of-Way Mapping, Ground Surveys, Topo Mapping	X	#3110		X	#14927	
San Francisco Estuary Institute (Subcontractor)	Technical Support for Environmental Workshops and Working Groups			X			X
Wiltec (Subcontractor)	Data Collection	X	#8440				X
Kittelson & Associates (Subcontractor)	Highway Safety Analysis			X			X

*Denotes certification by the California Unified Certification Program (CUCP).

**Denotes certification by the State of California.

REQUEST FOR COMMITTEE APPROVAL Summary of Proposed Contract Amendment

Work Item No.:	1237				
Contractor:	Kimley-Horn & Associates, Inc. Pleasanton, CA				
Work Project Title:	SR 37 Design Alternative Assessment				
Purpose of Project:	Provide On-Call Transportation Engineering and Planning Services for the State Route 37 (SR 37) Design Alternative Assessment. Evaluate a range of improvement strategies for SR 37 to help improve both regional mobility and impacts due to sea level rise.				
Brief Scope of Work:	Perform an alternative alignment analysis of the SR 37 corridor.				
Project Cost Not to Exceed:	\$250,000 (this amendment)				
	Total Contract before this amendment: \$2,137,400				
	Total Authorized Contract after this amendment: \$2,387,400				
Funding Source:	STP/CMAQ				
Fiscal Impact:	Funding is included in the FY 2017-18 MTC Budget.				
Motion by Committee:	That the Executive Director or his designee is authorized to negotiate and enter into a contract amendment with Kimley-Horn & Associates, Inc. to provide on-call transportation engineering and planning services as described above and in the Executive Director's memorandum dated April 6, 2018, and the Chief Financial Officer is directed to set aside funds in the amount of \$250,000 for such amendment.				
Operations Committee:					
	Dave Cortese, Chair				
Approved:	Date: April 13, 2018				

RESILIENTSR37

Integrating Transportation, Ecology, and Sea Level Rise Adaptation into One Design

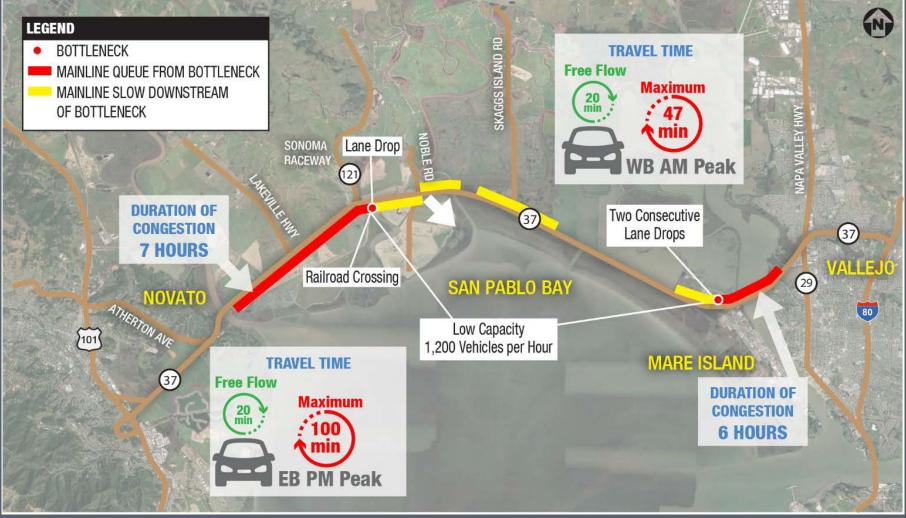
MTC Operations Committee April 13, 2018

SR 37 Corridor – Regional Focus is Segment B



RESILIENTSR37

Challenge #1: 100 Minutes to Travel Home to Solano Co. Every Day

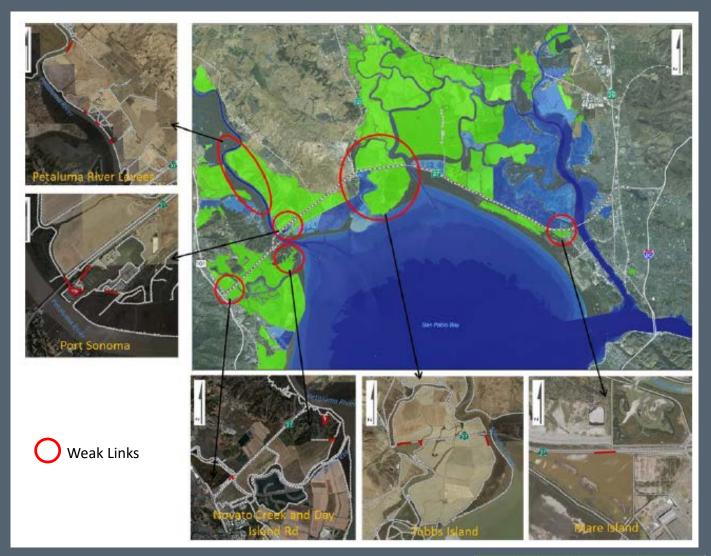


RESILIENTSR37

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Source: Kimley-Horn, 2017

Challenge #2: 6 Known Weak Links, Some Flooded in 2017 Storms



Spring 2017 Floods



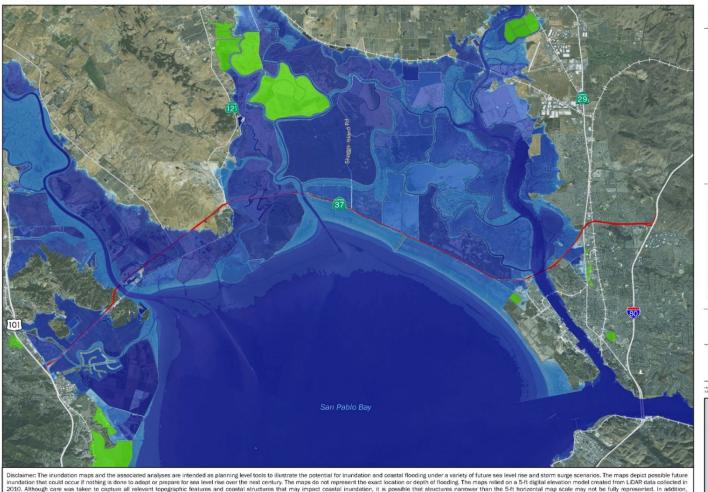




Source: AECOM, 2017

Lowlying Areas > 1 Acre

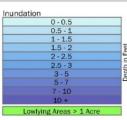
Challenge #3: 30 Years from Today Sea Level Rise Will Inundate SR 37



inundation and flooding of bridges along the SR 37 alignment was not evaluated. The maps are based on model outputs and do not account for all of the complex and dynamic San Francisco Bay processes or future conditions such as erosion, subsidence, future construction or shoreline protection upgrades, or other changes to San Francisco Bay or the region that may occur in response to sea level rise. For more context about the maps and analyses, including a description of the data and methods used, please see project documentation for the State Route 37 Integrated Traffic, Infrastructure and Sea Level Rise Analysis Study (UC Davis Road Ecology Center and Caltrans District 4).

California State Route 37 Inundation Mapping MHHW + 36" SEA LEVEL RISE

12" SLR + 5-yr Storm Surge 6" SLR + 10-yr Storm Surge 0" SLR + 25-yr Storm Surge









2100+

Source: SFEI, 2017

RESILIENTSR37

Challenge #4: 9 Special-Status Species, Pacific Flyway and Many Acres of Wetlands and Baylands

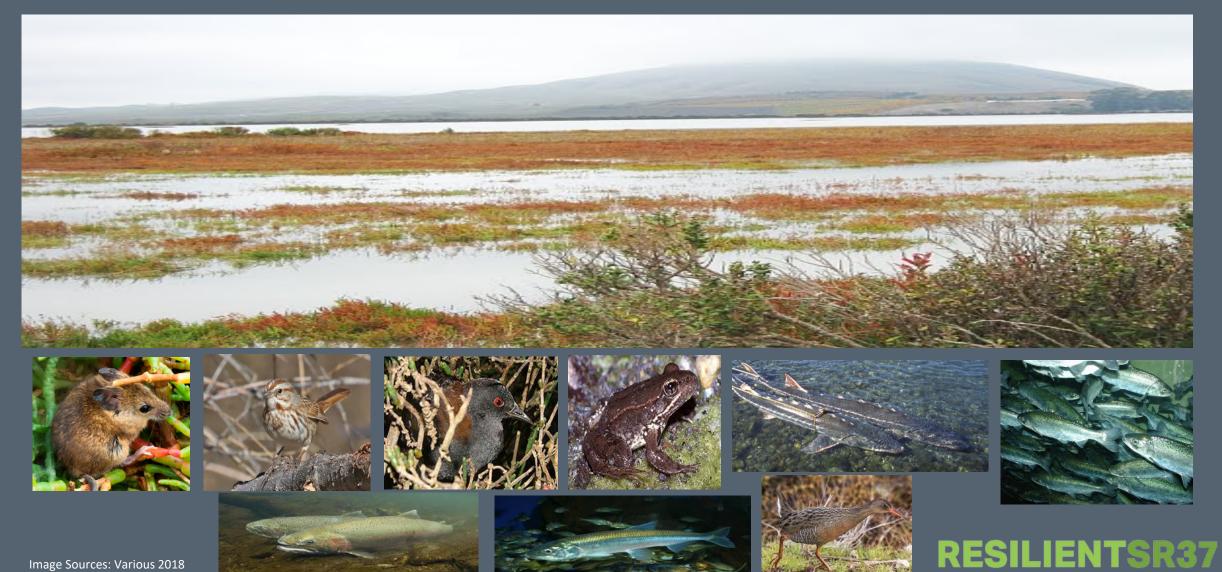


Image Sources: Various 2018

Break Tradition #1: Project Goals

ONE DESIGN





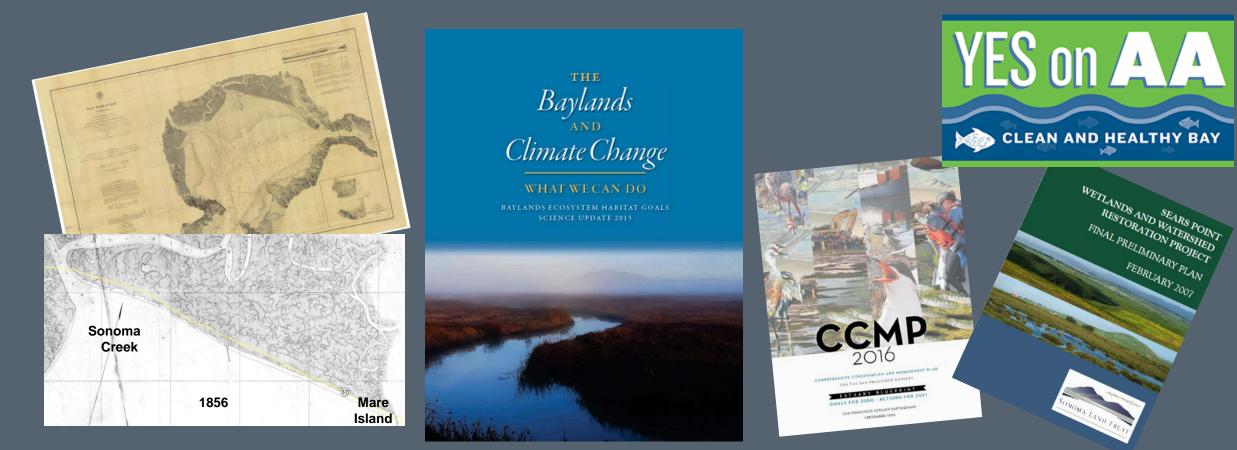


Integrate transportation, ecosystem, and sea level rise adaptation into one design

Improve mubility across all modes and maintain public access Increase corridor resiliency to storm surges and sea level rise



Break Tradition #2: Engage Scientists, Landowners, Resource Managers, etc. Early and Often



Historic Landscape \rightarrow Science \rightarrow Conservation, Management & Restoration **RESILIENTSR37**

Image Sources: SFEI, AECOM, & Various 2018

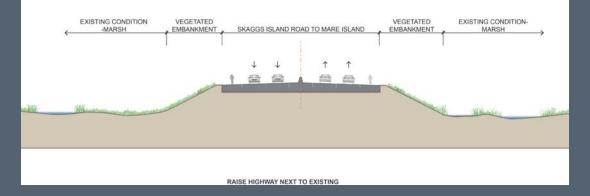
Break Tradition #3: Break the Project Delivery Paradigm



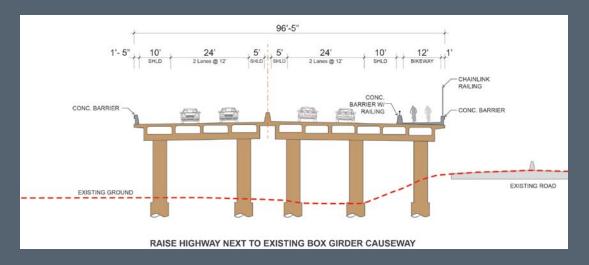


The Project: SR 37 Segment B [SR 121 -> Mare Island] Integrated Transportation, Ecology, & SLR Adaptation Project

- Raised/Elevated Roadway That Provides Resiliency to Long Term Sea Level Rise Threat through Year 2100
 - Hybrid Design: Berm and Causeway
 - Multimodal Improvements: Transit and Bike
 - New HOV/Managed Lanes
 - Incorporate Habitat Planning, Conservation and Restoration
- Early Delivery of a 3-Lane Contra-Flow or a 4-Lane Option on Existing Roadway to Improve Traffic Flow
- Range of Alternatives
 - Reconstruct Segment B Adjacent to the Current Alignment
 - New Northern/In-Land Alignment
 - New Southern/Bridge Over the San Pablo Bay Alignment



Examples of Typical Cross Sections



RESILIENTSR3

The Ultimate Challenge: How to Strike a Balance and Advance a Multi-Benefit SR 37 Project

Improve Traffic Existing and Future Land Use Multimodal Historical Function Restoration Wildlife Connectivity Sea Level Rise Recreation Public and Private Access Funding Integrate Ecological Benefits



