From:	Zachariasen, Judith@DOC
То:	Roach, Jason P@DOT
Cc:	OLRA@DOC; OPR State Clearinghouse
Subject:	Vincent Thomas Bridge Deck Replacement Project - SCH Number 2023040301
Date:	Friday, April 14, 2023 5:42:22 PM
Attachments:	image001.png



Dear Jason Roach,

The California Geological Survey (CGS) has received the Notice of Preparation of a Draft Environmental Impact Report (DEIR) for the Vincent Thomas Bridge Deck Replacement Project. This email conveys the following recommendations from CGSconcerning geologic issues related to the project area:

1. Liquefaction Hazards

The bridge abutment areas are located within an earthquake zone of required investigation (ZORI) for liquefaction mapped by CGS. The DEIR and supporting documents should address this hazard as it relates to the design of the proposed structures. Additional information is available at the links below: <u>https://maps.conservation.ca.gov/cgs/EQZApp/app/</u> <u>https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?</u> map=regulatorymaps

2. Ground Shaking Hazards

The project area is not located in an Earthquake Fault Zone mapped by CGS. However, several active faults are nearby, and the site could be subject to significant ground shaking. The DEIR and supporting documents shouldaddress this hazard as it relates to the design of the proposed structures. Additional information about ground shaking hazard can be obtained at the following sites:

https://usgs.maps.arcgis.com/apps/webappviewer/index.html? id=14d2f75c7c4f4619936dac0d14e1e468 https://earthquake.usgs.gov/scenarios/catalog/bssc2014/

3. Surface Fault Rupture Hazard

The project area is not located in an Earthquake Fault Zone mapped by CGS. However, the Latest Quaternary (less than 15,000 years) Palos Verdes Fault Zone has been mapped at or near the abutments of the bridge. The DEIR and supporting documents should address this hazard as it relates to the design of the proposed structures. Additional information about surface faults can be obtained at the following sites:

https://usgs.maps.arcgis.com/apps/webappviewer/index.html? id=5a6038b3a1684561a9b0aadf88412fcf

If you have any additional comments or questions, please feel free to call or email.

Thank you, Judy Zachariasen



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