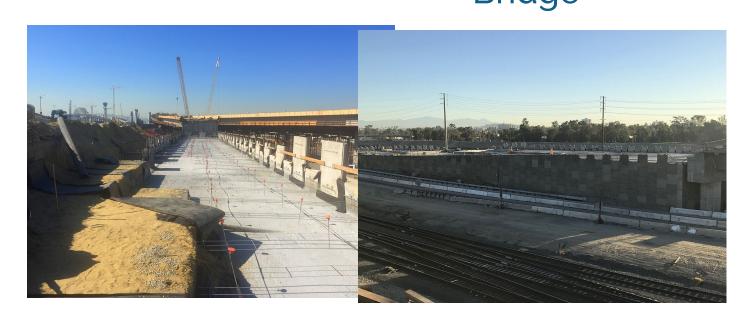


Project Spotlights: Gerald Desmond Bridge



CLIENT

Long Beach, CA

COMPLETION DATE

Ungoing

CATEGORY

Precast Panels with LCC

ABOUT THE PROJECT

The Port of Long Beach is the owner of this design-build project. Cellular concrete was elected due to the presence of compressible material. Approaches to the bridge address settlement and stability consideration on the in-situ soil and the magnitude of the earthquake design. A total of over 200,000 CY have been placed on the project in 6 different locations, using precast panels with LCC as the backfill material.

THE SOLUTION

Class II and Class III material is being utilized on the east side approaches to the bridge. At the lower portions of the fill, Class II cellular concrete will be poured to maximize the load reduction. Class IV cellular concrete will be used at the uppermost layers (directly under the pavement). The design approach included treating the LCC material as embankment material and designing the structure as a typical length of MSE wall reinforcement. Steel ladder reinforcement and ribbed steel straps were used. No reported/observed performance issues or concerns have been encountered to date.