

Port of Long Beach Harbor Plaza Development

Once completed, the 17-acre Harbor Plaza Development will include an 11-story administration building, two-level parking structure, high-bay maintenance building, vehicle storage canopy, materials storage building, and central plant. The development will replace the nearly 50-year-old seismically deficient administration building and consolidate all POLB administrative and maintenance functions to one location.

PROJECT RESULTS

Kleinfelder recommendations helped POLB save \$2 million in foundation construction costs by utilizing shallow foundations and ground improvement techniques for the maintenance building, instead of driven piles. Furthermore, we helped our client save an additional \$500,000 by processing and reusing concrete and asphalt from site demolition as base material and general fill.



HIGH-RISK SITES

Available sites within POLB boundaries sit on hydraulically placed fill, which has high potential for liquefaction during a seismic event. Since the landfills were constructed in stages over many years to accommodate port expansion, rock dikes representing different limits of expansion were left in place, and other areas of buried construction debris were created. POLB seeks minimum costs to structure financing during a period of lower cargo traffic, as well as LEED Platinum certification.

LONG-TERM PARTNERSHIP ON LARGE-SCALE PROJECT

Since 2003, Kleinfelder has performed geotechnical feasibility studies, assisted with siting of the various structures located subsurface utilities, characterized environmental contamination, and conducted design level foundation investigations—helping POLB plan for site demolition, utility removal, and remediation of soil contamination. Working with project architects, design and construction managers, and structural engineers, Kleinfelder selected foundation systems and ground improvement techniques to mitigate the impacts of soil liquefaction during seismic events.

Location:

Long Beach, California

Owner:

Port of Long Beach
(POLB)



Site conditions prior demolition



Deep dynamic compaction rig

