

A Pearl Rises Out of the Bay

A Geotechnical Study of the Golden State Warriors Arena



The new home of the Golden State Warriors is in the Mission Bay neighborhood of San Francisco. Originally a shallow bay off the San Francisco Bay, the site was reclaimed in the late 1880s to early 1900s. The subsurface stratigraphy consists of poorly placed fill, weak and compressible Bay Mud, very dense Colma formation sand, moderately strong Old Bay Clay, and Franciscan bedrock.

Liquefaction, lateral spreading, and consolidation are all hazards at the site. This talk will present the history of Mission Bay, subsurface conditions, geologic hazards and geotechnical issues, and the foundation solutions for support of the planned development. Discussion of foundations will include a variety of load testing methods, test results, and production foundation installation.



Lori A. Simpson is a Managing Principal at Langan Engineering and Environmental Services, Inc. She obtained a B.S. in Civil Engineering from Stanford University and an M.S. in Geotechnical Engineering from UC Berkeley. She is a registered Professional Engineer in the states of California, Oregon, Washington, and New York and a registered Geotechnical Engineer in California and Oregon. She practices geotechnical engineering in the San Francisco Bay Area and the Pacific Northwest and has been with her firm for 33 years.

Lori is on the Board of Trustees and serves as the Secretary for the Deep Foundations Institute (DFI). She is an active member and Past Chair of the DFI Codes and Standards Technical Committee and has testified in public hearings in support of code change proposals to the Soils and Foundations chapter of the International Building Code.