



I-880/CA-92 Interchange MSE Wall Support

Hayward, California

The Rammed Aggregate Pier® System was selected in lieu of other alternative foundation support methods to increase shear resistance for bearing capacity and global stability

Description: This phase of construction consisted of construction for MSE walls approaching the I-880 westbound connector to Highway 92 in Hayward, California. Two MSE walls were constructed with maximum heights of 30 feet and 60 feet face-to-face from each wall.

Subsurface Conditions: The subsurface conditions consisted of medium stiff to stiff clay extending to depths of 12 to 15 feet overlying very stiff clay and medium dense to dense sand. Groundwater was encountered at 7 feet.

Geopier Solution: A Rammed Aggregate Pier® (RAP) solution was selected over stone columns and deep soil mixing. RAP elements were installed beneath the MSE Walls to provide increased shear resistance for bearing capacity and global stability and for settlement control. A total of 281 RAP elements were installed to depths of 12 to 15 feet at 5 to 7.5 feet on-center.



PROJECT TEAM

Owner:

CALTRANS

Geotechnical Engineer:

CALTRANS

General Contractor:

Flatiron/Granite Construction

Geopier Installer:

Farrell Design-Build Companies, Inc.

Geopier Designer:

Farrell Design-Build Companies, Inc.