

Project Location:

Baja California, México.

Main Contractor:

MMB

Client:

VPD

Project period

Nov. 2012 – Mar. 2014

Method Applied:

800 units of offshore Stone Columns, up to 10 m deep, diameter 1.00 m, installed in an offset rectangular grid of 2.25 m.

Technical Requirements:

Stone Columns installed utilizing the Dry Bottom Feed method. In order to satisfy the specifications, three test patterns were proposed, after which CPT testing was carried out to verify the densification re-sults.



The Boleo Marine Terminal, located at Santa Rosalia, Baja California Sur. The facilities consisted of a 350m wharf and four mooring dolphins. The wharf and dolphins were supported on driven open-ended pipe piles found-ed a specified length into sedimentary bedrock. The granular soil above the bedrock was susceptible to liquefaction and ground treatment was specified. As this portion of the project was design build.

By monitoring each Stone Column in-stalled, the BMS data allows the Ge-otechnical Engineer to assess the quali-ty of the installation. Should any change be required in the installation method based on the BMS data, the change can be initiated immediately.

In the cab of the crane was locat-ed the computer monitoring sys-tem. This system allows the crane operator to construct the column in the specified method. By means of the BMS data and the computer monitoring system all Stone Columns were installed and could be approved by the Geotechnical Engineer on a dai-ly basis. This is a marked improvement in the quality control of the installation of Stone Columns.



Quality Control Testing:

Cone Penetration Tests (CPTs), supported by digital process data from Vibro rigs.

Betterground GmbH

Hassenham 8
D-84419 Schwindegg
Germany
Tel: +49-8082-2713135
Tel: +49-89-76776194-0
Fax: +49-89-76776194-20

Email: info@betterground.com
Web: www.betterground.com