



CASE STUDY

PROJECT: Geotechnical Site Investigation and Analysis

LOCATION: Malta Freeport in Marsaxlokk, Malta

Client: Malta Freeport Corporation

Harrison Malta Environmental worked continuously with the Malta Freeport Corporation for more than 5 years during the planning and construction of the project.

Terminal 1 Extension

Harrison Malta Environmental carried out the geotechnical investigation, and analysis for the extension of Terminal 1. This was used in the foundation design where large diameter bored piles were utilised. Land was reclaimed from the sea and the Harrison Group introduced and specified the use of dynamic compaction to consolidate the rock fill.



Terminal 2

The geotechnical investigation involved drilling boreholes on land and over water, the results of this were used for the geotechnical design of the cofferdams, back fill, land reclamation and piles. The quay walls were designed incorporating interlocking steel sheet piled cofferdams, toed into the bed of a dredged channel. Vibro-compaction was utilised to infill the cofferdams with rock. A piled foundation was used for the crane rails. Alongside the geotechnical investigation, Harrison introduced site quality control systems on the site, and subsequently assisted the client with designing and obtaining certification for its' quality management systems in: design and construction, terminal operations and administration.

West Quay Terminal 2

The company carried out the first phase of works on the newly constructed west quay of the then proposed Terminal 2. A condition investigation and analysis was undertaken using rotary boreholes. As a result of this investigation the client made the decision to enlarge the design for Terminal 2.

