CASE STUDY ETHAM AVENUE, DARLING POINT SYDNEY, NSW

PLATIPUS B4 ANCHOR SYSTEMS



CONTRACTOR	MCon Pty Ltd
SUB-CONTRACTOR	Access Piering Pty Ltd
ENGINEER	MYD Consulting Engineers Pty Ltd
LOCATION	Darling Point, Sydney
SYSTEM USED	Platipus B4 Anchor Systems



The Project

An existing masonry retaining wall, up to 2.5m in height and built in the 1970's, was showing signs of instability. Cirtex Australia with the Engineer, MYD Consulting, developed a remedial stability solution using Platipus anchoring systems that would minimise disturbance to the existing wall and eliminate the total dismantling, design and construction of a new retaining structure

Design

To stabilize the masonry retaining wall, 11no. Platipus B4 anchor systems were driven up to 5.4m from the wall face into an unknown sandy backfill. No Geotechnical or soils information was available but once the Platipus anchor systems were

installed to the required depths, they could be immediately tensioned, load locked and the 'Design' or 'Working' Load verified and confirmed. Design life requirement for the remedial works was 25+ years.

Installation

Coring through the 1m existing retaining wall took a total of 3 days to complete with the Platipus anchor installation and load testing taking a single day. Once the anchor systems were driven to the required depths, the anchors were tensioned and extended up to 300mm and 'Proof' loaded to 28kN (2.8 tons). All Platipus anchor systems were load locked against galvanized load plates with a small active load of 0.5kN

The Platipus anchoring systems were chosen and deployed for the following main features & benefits:

- No expensive demolition and the additional costs of design and construction of a new retaining structure
- No messy grouting, load uncertainty or delay in testing with immediate load verification
- Original retaining structure stabilized effectively and efficiently with minimal environmental impact
- With no, or minimal, Geotech or soils information available, Platipus anchor systems provide immediate load verification and thus design flexibility for anchor sizing and spacing





