

ONE ON RAWBONE, DE WATERKANT

Cape Town, South Africa



Project Facts

Product

Lateral Support, Odex Piles

Market

Residential

Client

Fifty 8 Twelve (Pty) Ltd.

Engineers

Sutherland Engineers

Scope of Works

640m² lateral support, 28 no. foundation piles

About the project

The contract scope for the ONE On R development included demolition, bulk earthworks, lateral support, and dewatering. A key requirement of the project was the preservation of an on-site heritage building, which significantly limited working height and access during demolition and foundation construction. Within this restricted environment, the team was required to install 28 foundation piles, each 250 mm in diameter, inside the existing structure.

Challenges

Preserving the heritage building created tight overhead and spatial constraints that impacted both demolition and piling activities. Working inside the structure introduced additional challenges: excessive noise, dust, reduced visibility, and the presence of engine fumes. These conditions made conventional drilling methods impractical and required specialised equipment and enhanced safety measures.

Solution

To meet these constraints, the team deployed the compact Comacchio MC 3D hydraulic drilling rig with a separate power pack, ideal for confined, low-overhead environments. This rig enabled efficient installation of 250mm piles to depths of 13.5 m and significantly accelerated the foundation programme. Site working conditions were improved with additional lighting and extraction fans, while crews were equipped with appropriate PPE, including dust masks, ear-muffs, and safety goggles. This integrated approach ensured safe operations, protected the heritage structure, and maintained productivity within the restricted working space.