

Client: Architen Landrell Associates / Opera Holland Park
Site: Temporary Canopy
Location: Opera Holland Park, London

Project Description

GTL Partnership were employed to provide helical (screw) piled foundations to support the new canopy spanning the existing Opera House. This was vital to the ongoing success of the Opera House, the new structure enabled the seating capacity to be increased by 23%.



The Challenge

As a Grade I listed building, Holland Park was to prove a challenge for the designers and installers. GTL's designs, however, ensured that not one pile, bolt or rope was fixed to the existing building, the vast structure and its supporting steelwork being entirely free standing with the exception of the stage area.

The Solution

GTL designed, supplied and installed a series of helical (screw) piles as ground anchors to accommodate the high tension loads created by the canopy. The helical (screw) piles were required because of the advantages they brought to this particular project.

Quick installation • No spoil • Reduced Environmental impact • Accurate pile placement, avoiding tree roots

The piles were installed to an average depth of 12m and were raked at various degrees. Precise positioning of the pile head was essential to connect and maintain alignment with the guy wires.



In conjunction with the canopy manufacturers GTL designed a connection detail to suit tolerances. In addition, two steel grillages were designed and installed to accommodate the stage structure. The grillages were designed to bridge the existing listed structure without damage or penetration.

