

**KENASTON GARDENS CONDOMINIUM – TIE-BACKS**

PROPERTY: MONDCONSULT  
 CONTRACTOR: PILING EXPERTS LTD  
 SCOPE OF WORK: TIE-BACKS

**INTRODUCTION**

This Job Report is about the installation of temporary tiebacks to stabilize a temporary soldier pile and wood lagging shoring for Kenaston Gardens Condominium.

**SCOPE OF WORK**

SITE Canada performed the temporary tiebacks according to a third-party design. Two performance tests were executed before the execution of the rest of the production tiebacks.

The drill has been performed with a Hydraulic drill rig using air flush and a rotary 3-wing bit to drill with 152mm diameter.



The tie-backs are made with 4 strands of 0.6” diameter ASTM 1860 Mpa steel grade to resist a pull-out load of 600 kN applied with a Multi-strand Jack .



The assembly of the tiebacks has been made on the job site to deal easily with any change of dimensions of the free or bond length if there is any change in the Geotechnical conditions during the drilling operation.



The Geology of the soil is predominantly sandy soil but in some part of the boreholes till layer has been observed and the water level are deployed.

In such cases, it is necessary to change the drilling process by using a temporary casing to avoid contamination when grouting the bond length of the tie-backs.

The Grouting used is made up of Portland Cement mix with a Cement / Water ratio of 0.50 and a strength resistance of 30 Mpa at 7 days to permit the pull test and block the tie-backs at the design load in 7 days.

**QUANTITIES**

Tie-backs of 600 kN	45 units
Drilling	495 m

