



TTT UGLIE POLES

TTT Uglie Poles were used to achieve a Ground Improvement solution under abutments for 5 bridges on a new major expressway. The site was located in Huntly, Waikato.

Project background:

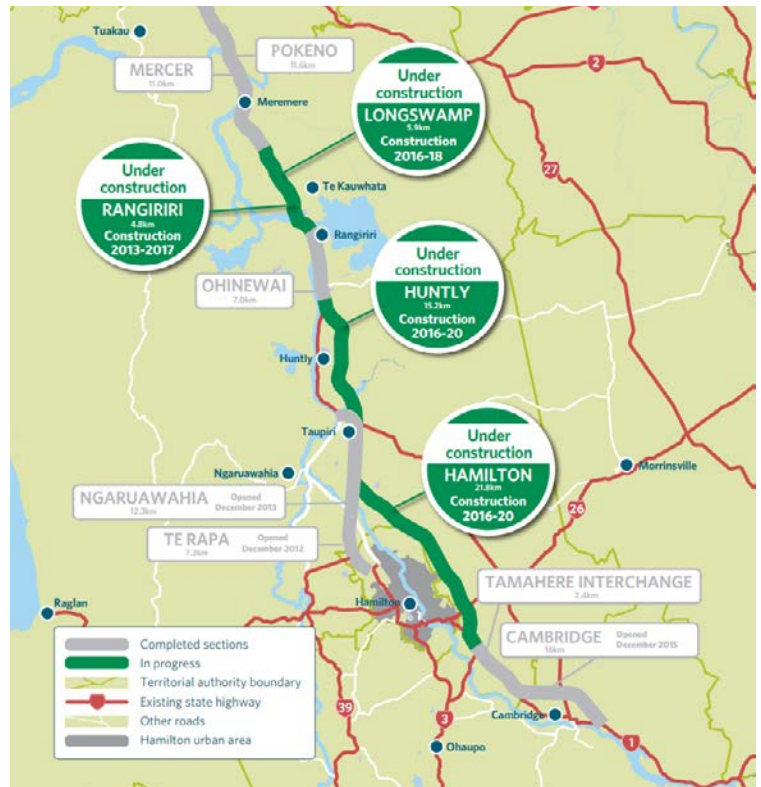
- A new major expressway, including 5 bridges, was being built.
- Ground Improvement needed to be carried out where the bridge abutments were to be constructed.
- The project was completed by the contractor in 2016.

Why use TTT Poles:

- The ground conditions were soft, silty, and peaty with liquefiable sand.
- Installation needed to be rapid so that stringent deadlines were met.
- The installation method needed to take into account the soft, peaty ground conditions which could not support heavy installation equipment.
- Poles, when compared with steel and concrete, are lightweight, easily handled, and installed using equipment with a lightweight footprint. In this case a 22 tonne digger was used rather than the typical 100 tonne crawler crane utilised by alternative ground improvement solutions.
- TTT Poles were identified by the contractor as being the most effective solution to achieve the required Ground Improvement solution to support heavy expressway bridge abutments.

How TTT Poles were used:

- TTT Uglie Poles were ordered by the contractor.
- TTT Uglie Poles are similar to SED poles but are debarked rather than peeled. They offer greater skin friction when used as piles, and are stronger than SED poles.
- TTT supplied in excess of 2400 pieces of Uglie Poles, 9.0-15.0m x 300mm SED.
- The poles were installed at 2.0m centres.
- The contractor installed the poles using high frequency vibration and pile driving methods.



Photos courtesy of Markovina Pile Driving