



## TTT SED POLES

Ground Improvement can be achieved by installing driven or vibrated Radiata pine poles at close centres. TTT supplied 9.0m x 300mm Uglie Poles which were installed by pre-drilling 2.0m deep holes in both clay and silt, then standing the poles vertical and simply driving to ground level..

## Ground Improvement:

- Economical Ground Improvement can be achieved by the installation of TTT Poles at close centres.
- The distance between the poles varies and depends on the ground conditions. Usually the distance is calculated as five times the pole diameter.
- Installation is by pile driving or high frequency vibration.
- In dense, silty to sandy ground conditions TTT MultiPoles installed using high frequency vibration is the ideal solution. This method is rapid, results in minimal vibration being felt in surrounding areas, and the installation equipment has a small footprint.

## TTT Pole types:

TTT Products manufacture a comprehensive range of timber poles suitable for Ground Improvement:

- TTT SED Poles are naturally tapered, machine-peeled poles. Minimal wood is removed during processing so each pole retains its strength.
- 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 MultiPoles are incredibly versatile due to their unique hollow core. Available as TTT SED, TTT Uglie Poles, or TTT UniLogs.

## Ground Improvement projects:

- **Mainfreight site, Wellington**  
TTT 6.0m x 300mm SED Poles, were driven at 1.2m centres, to prevent lateral shift.
- **SH2 Bridge Abutments, Edgecumbe**  
TTT 12.0m SED Poles, were installed as a Ground Improvement solution to prevent lateral movement under earthquake loading.
- **Frucor site, Auckland**  
TTT 9.0m x 300mm Uglie Poles, driven at 2.0m centres.

### Ground Improvement projects using TTT Poles

Site	Engineer	Pole length (m)	H Class	Pieces per project
Frucor (Auckland)	Coffeys	9.0	H5	3,260
Manui Street (Auckland)	T & T	11.0 & 12.0	H5	2,286
Mainfreight (Wellington)	T & T	6.0	H5	1,000
Wellington Airport	Coffeys	6.0–9.0	H5	550
Waikato Mail Centre	T & T	11.0 & 12.0	H5	1,224
Favona Road (Auckland)	T & T	6.0–9.0	H5	1,216
Edgecumbe SH2 Bridge Abutments	HEB	12.0	H6	382



Installation by Markovina Pile Driving

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