



## TTT SED POLES

TTT SED Poles were installed as a retaining wall to stabilise a steep bank that had slipped causing one side of the road to disappear. The site was located in Kaukapakapa, Auckland.



## Project background:

- A road in Kaukapakapa, Auckland was affected by a serious slip that had the potential to totally close the road.
- The site was located in difficult steep terrain.
- The project was completed by the contractor in 2017.

## Why use TTT Poles:

- The ground conditions were steep and slippery with hazardous loose slip material.
- The weather conditions were very wet.
- The site was very unstable and needed to be quickly stabilised to ensure the viability of the remaining section of road.
- Site access was restricted and the remaining road was potentially unstable so could not be compromised by heavy equipment or construction materials. Poles, when compared to steel and concrete alternatives, are lightweight, easily handled, and installed using equipment with a lightweight footprint.
- The customer required a fast installation solution as the road was closed during construction.
- TTT Poles were identified by the contractor as being the best solution that would satisfy the need for rapid installation using lightweight installation equipment and materials, resulting in minimal impact on the remaining section of road.

## How TTT Poles were used:

- TTT SED Poles were ordered by the contractor.
- TTT SED Poles are naturally tapered, machine-peeled poles. Minimal wood is removed during processing so each pole retains its strength.
- TTT supplied 10.0m x 350mm SED Poles.
- The SED Poles were installed at 1.2m centres.
- The contractor installed the poles from the 'top-down' meaning the poles were installed from above the slip site. The retaining wall was then completed and the road reinstated.
- The contractor installed the poles by first drilling holes, then concreting the poles into place.
- The 3.5m high retaining wall was completed in one week.



Photos courtesy of Markovina Pile Driving

