

Foundation Piling Limited

Piling- Techniques and Solutions



John Peterson – Technical Director

Site Investigation

Desk study

- historical maps
- site history
- local knowledge
- aerial photographs

Site Work

- boreholes & trial pits
- in-situ testing
- soil sampling

Laboratory Studies

- contamination testing
- laboratory testing

Reporting- the end product

- Site Investigation Report- factual/interpretative
- Geo-environmental report
- Slope stability considerations

Continuous Flight Auger Piling



Engineered Solutions Shire Piling

- Micro Piling System.
- Very Easy to Install.
- Limited capacity.
- Often used When Inappropriate
(Because of its low costs)

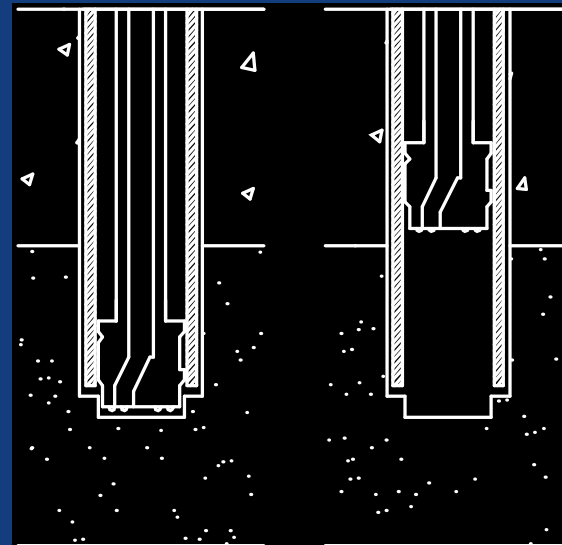
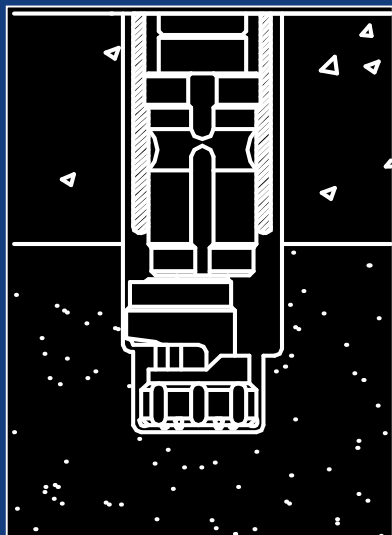
Drilled Piling

Drilled Mini Piles (up to 450 diameter)

Where rock is shallow, with clay above, a 'DTHH' Down The Hole hammer is used to advance a drilled hole, which is then concreted.

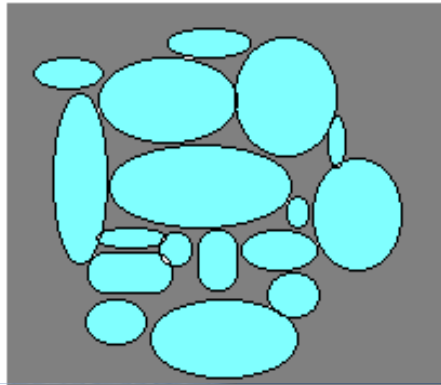
Where rock is deeper and overlaid by unstable soils, a permanent casing can be taken down with the drilling tool to keep the hole open whilst the pile is advanced- the ODEX system.

The Symmetrex/Drifter type can be used for large diameter.



Modify The Strength Or Properties

Calcite Improvement of Porous Soils



Loose granular particles



Particals covered with calcite bonding them together without significant loss of porosity

Calcite is injected into the ground in a saturated solution.

The calcite deposits itself on the soil particles strengthening and bonding them together.

Significant increase in soil strength with little loss of porosity.

Soil effectively petrified.

Where it takes One Million years for rock to be created

This system takes Eight HOURS