

SOFT GROUND SOLUTIONS

BY



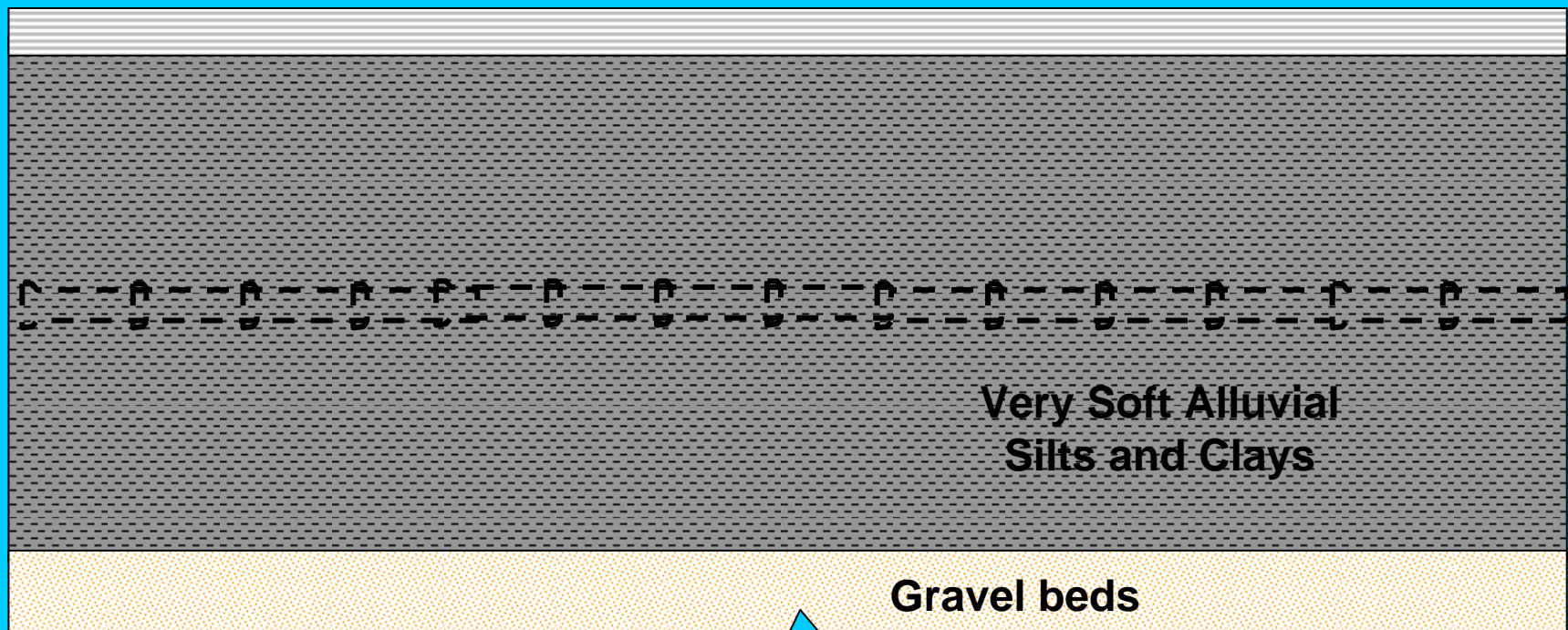
Pipe Line Construction In Deep Soft Ground :- Soil Mixed Solution

Line of proposed Pipe Line through Marsh land, Peat Bog and along the path of an existing drainage ditch

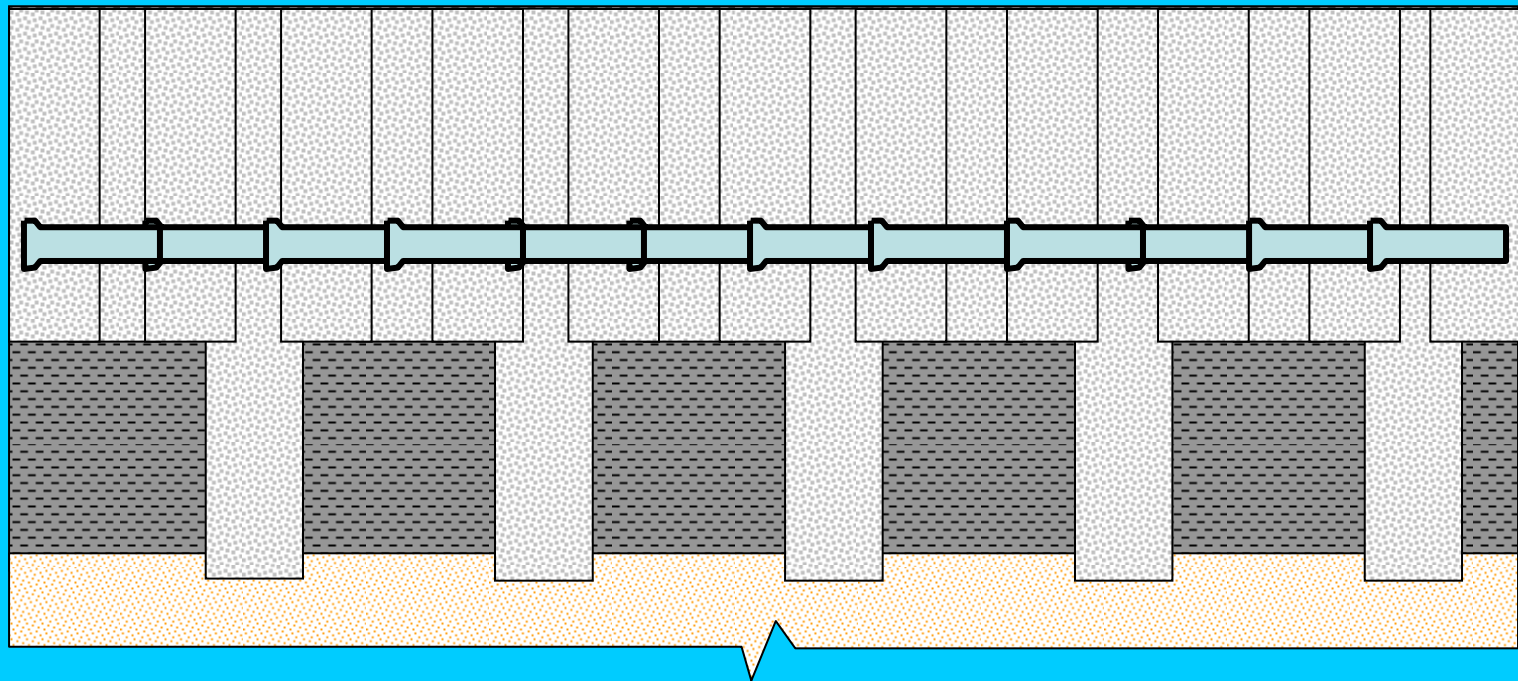


Proposed pipeline to be installed through deep soft Alluvium.

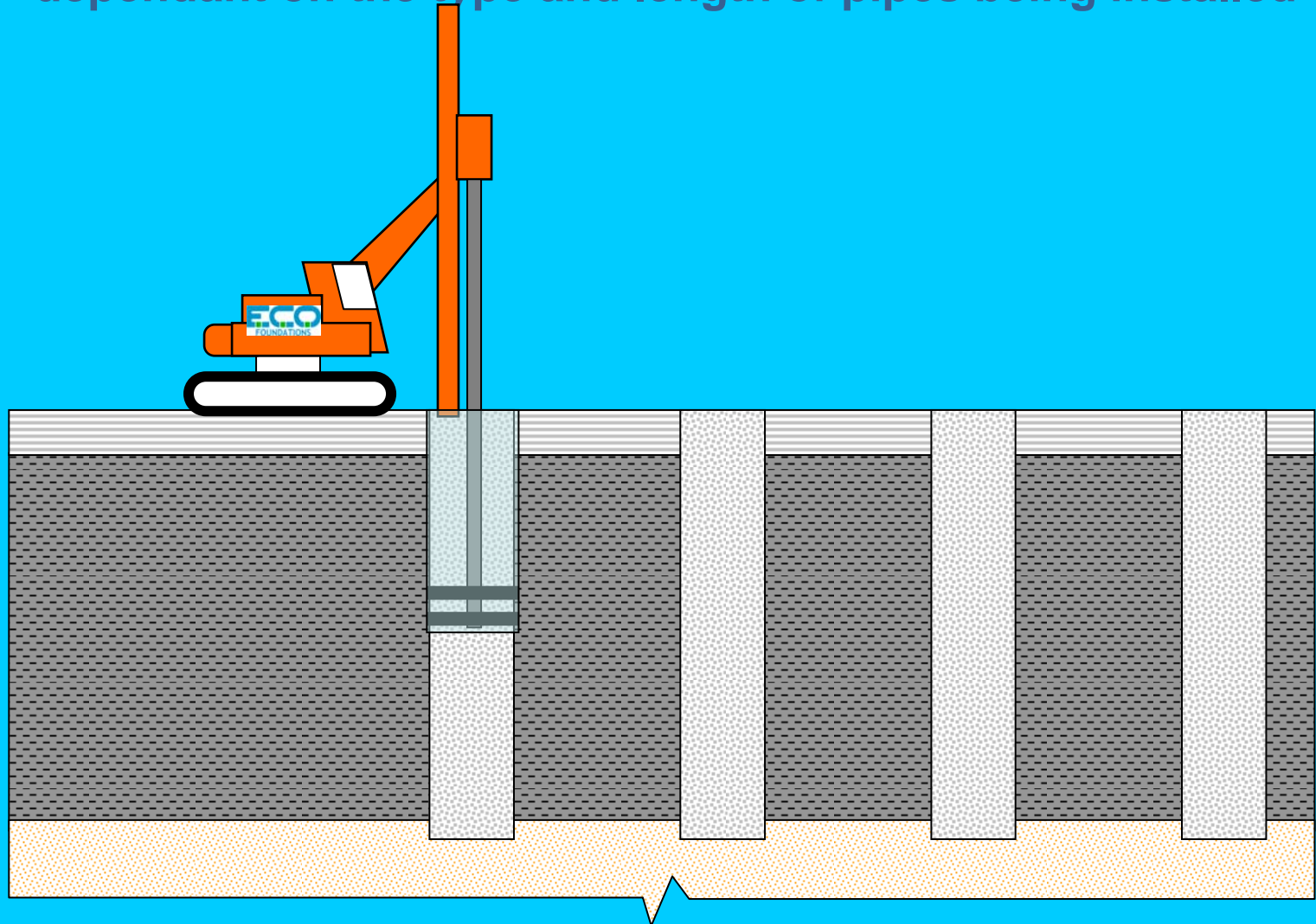
Ideal for the use of Soil Mixed Columns (SMC) to provide ease of excavation, support and bedding to the new pipeline.



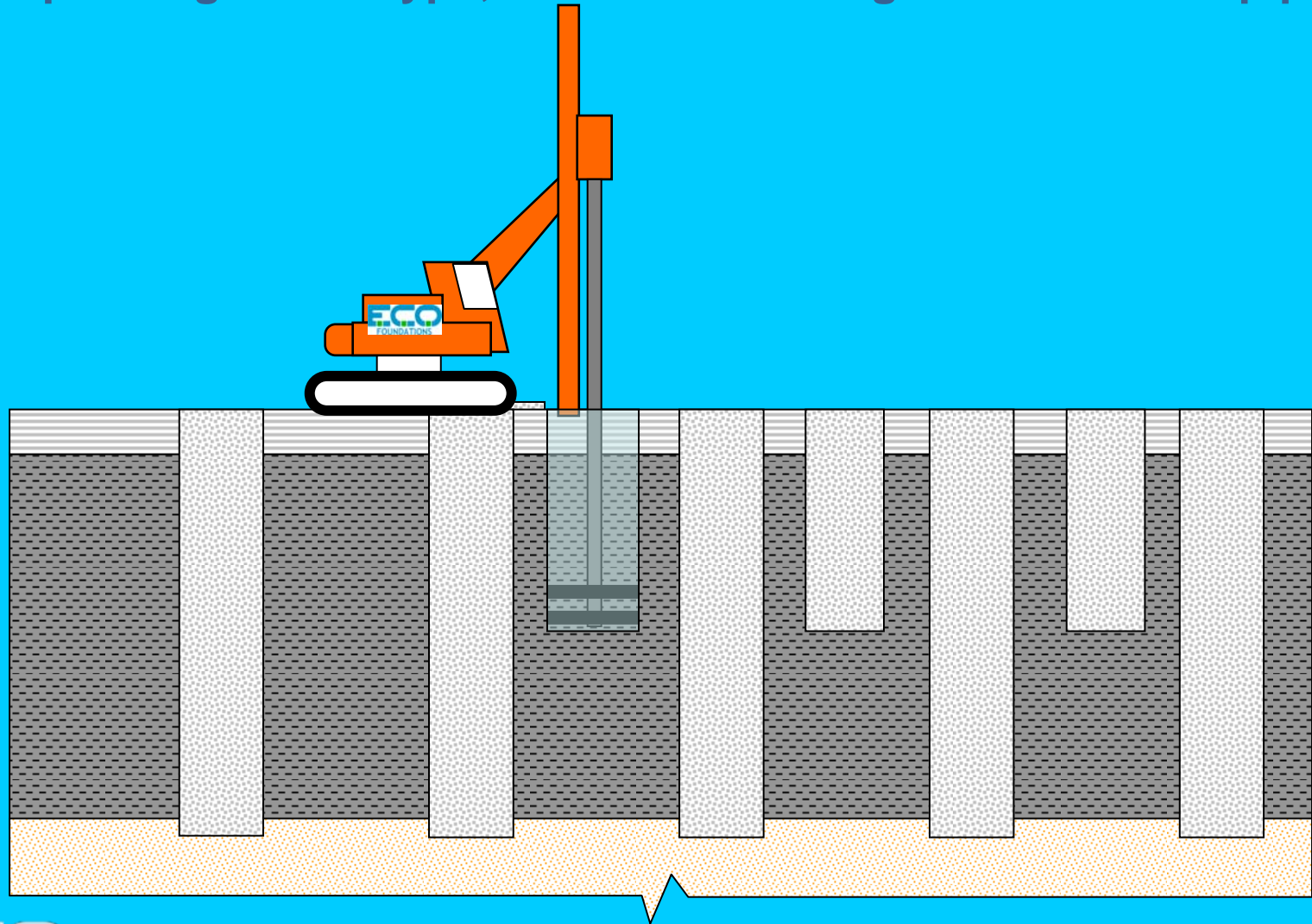
Turning the trench line into a solid material provides suitable support and several other advantages



Stage 1:- Installation of main support columns are generally spaced at between 3 – 3.5 times the main column diameter dependant on the type and length of pipes being installed



Stage 2:- Installation of shallow internal columns to a minimum depth = invert level + 1/2 the spacing between main support columns depending on the type, diameter and length of individual pipes

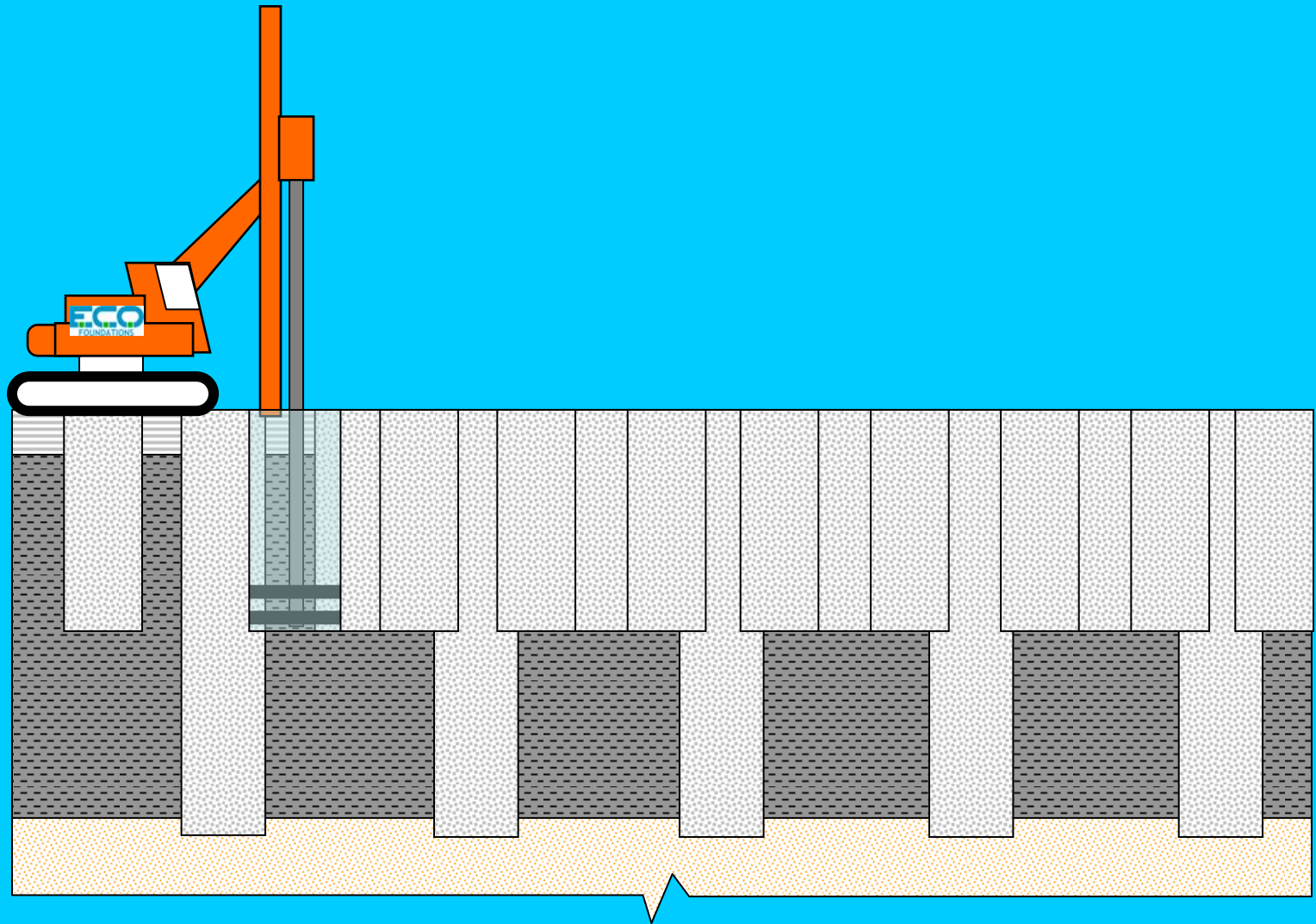




**2.0m diameter SM
Columns 20m deep**



Stage 3:- Intermediate columns are installed last so as to over lap main support column and central column.



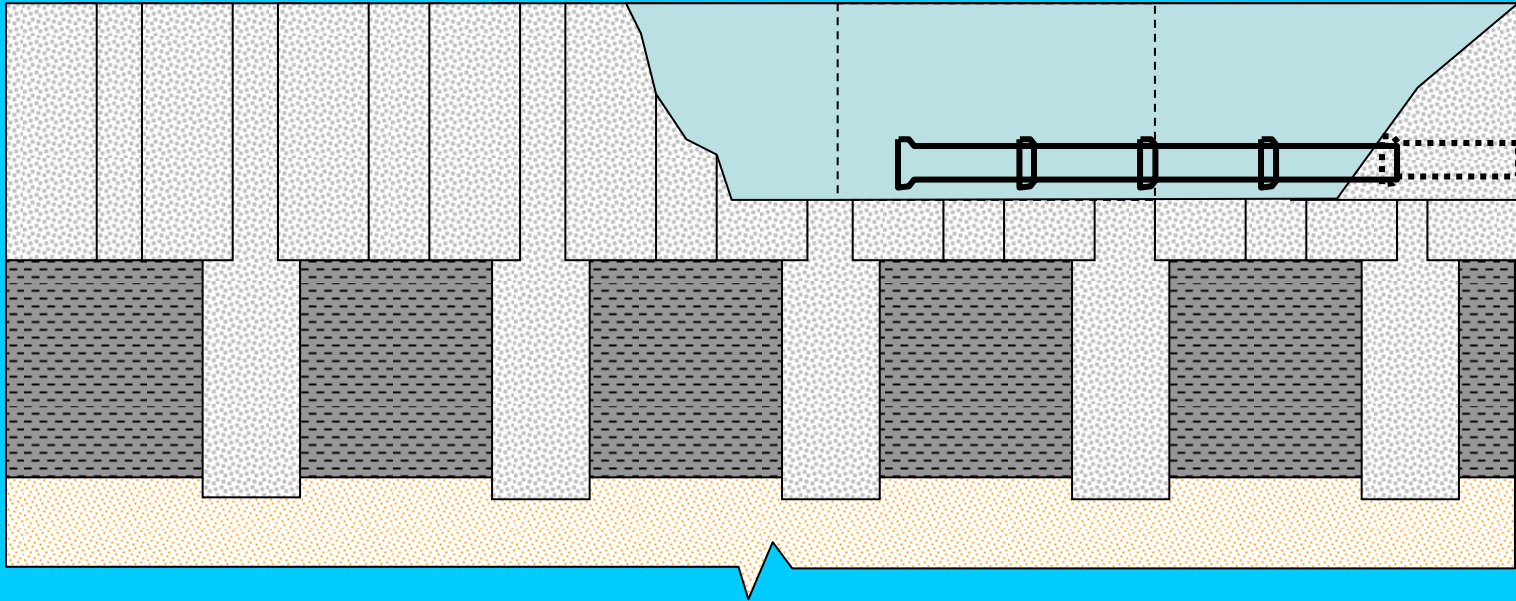


Excavation through soil mixed material provides stable support for service & drainage runs.

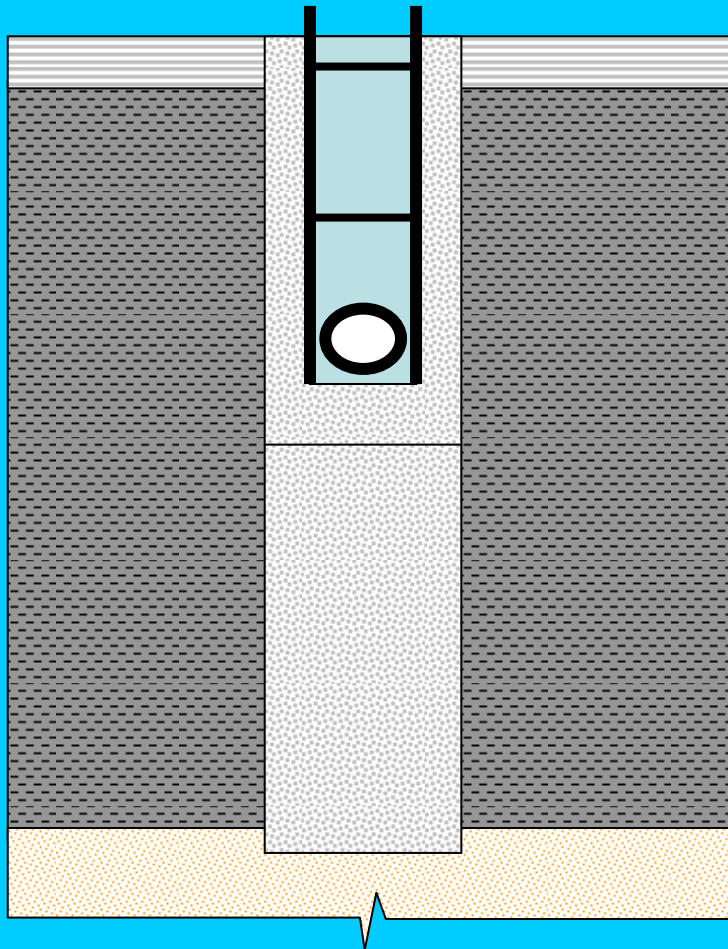


Pipe Line Construction Stage

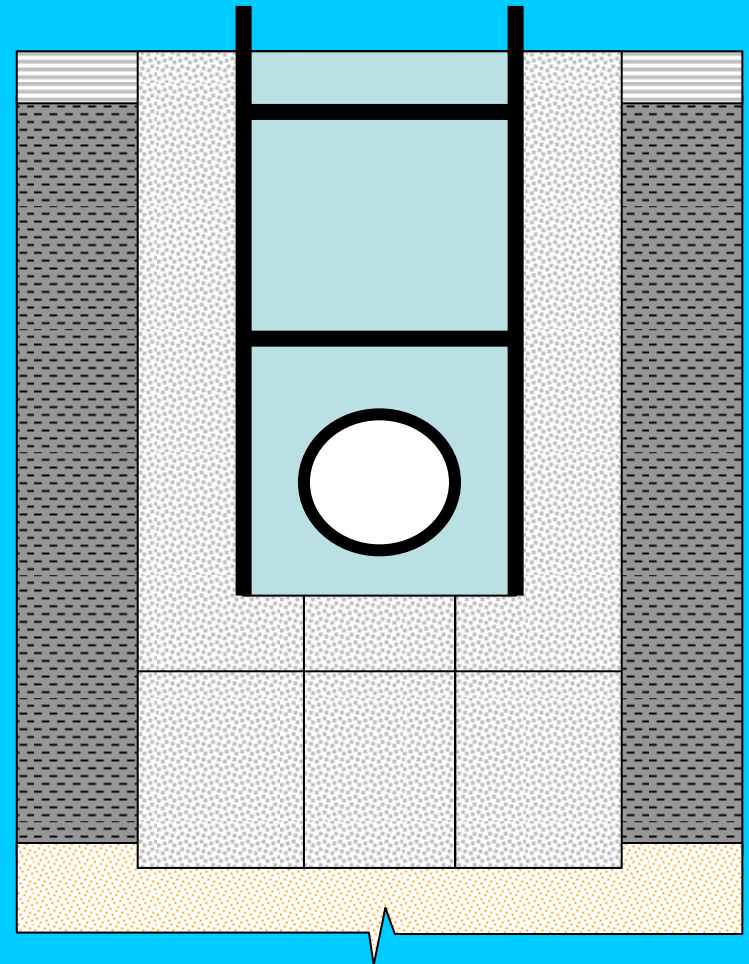
Excavation through the soil mixed material provides dry stable ground and a suitable bedding supported for the pipe line. Use of a trench box is always recommended.



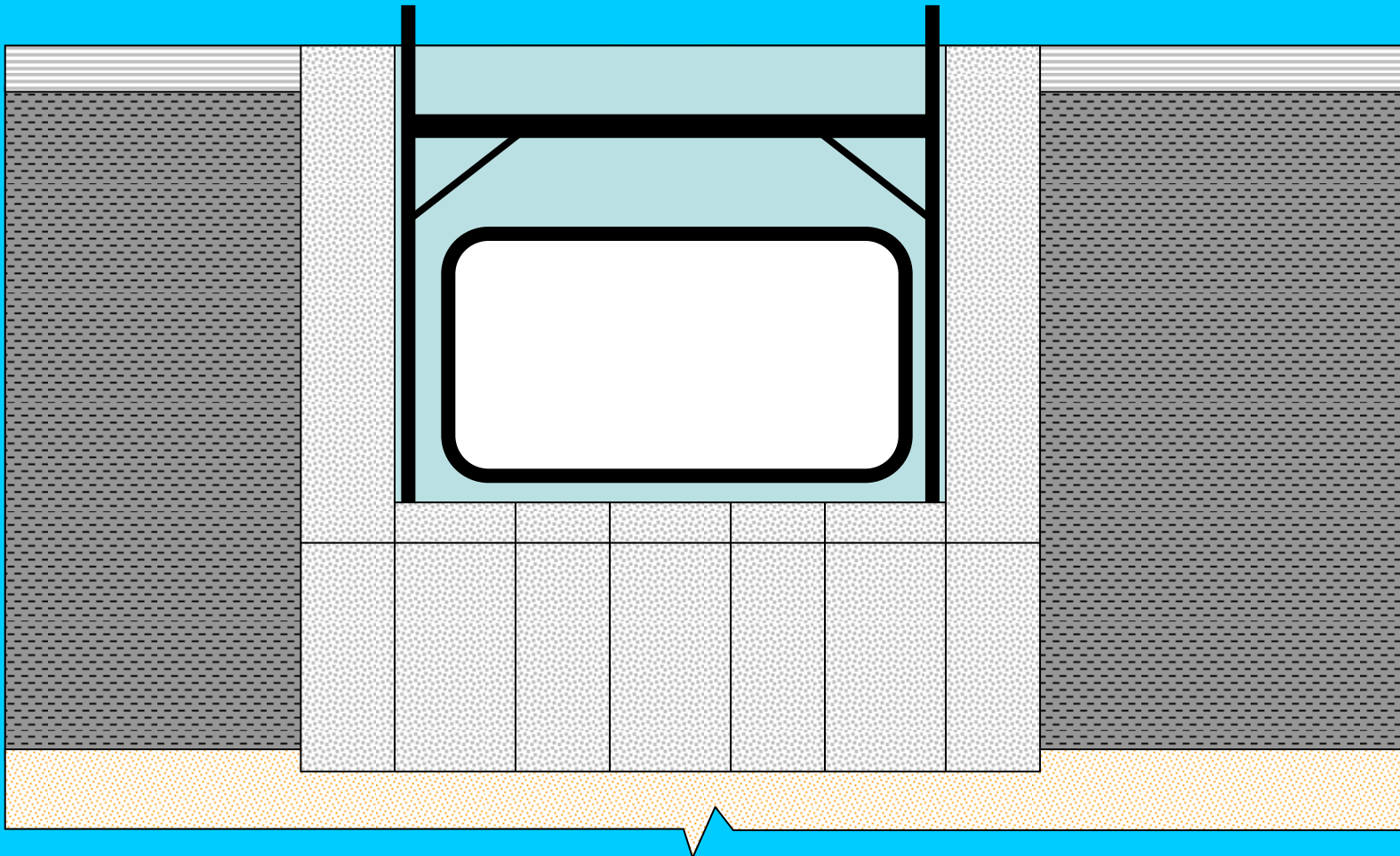
2.0m Diameter SMC can be used to install up to a 600mm diameter pipe.



Larger diameter pipes at deeper invert levels may well need double or triple column width



Construction of a large diameter pipe line or culvert would need several rows of SMCs



Advantages of SMC to pipe line construction in Very Soft Ground

- Support to pipeline.
- Simple excavation through dry SM ground.
 - Suitable foundation for pipe line.
 - Suitable backfill material.
- Dry trench during pipe installation.
- Suitable for trench box excavation.
 - Safer working environment.
 - Faster production.
 - Cost efficient

Economical and Eco Friendly

For more detailed information please contact

Robert McGall

Managing Director

Eco Foundations Limited

**Avonbrook House 198 Masons Road Stratford Enterprise Park
Stratford-upon-Avon Warwickshire CV37 9LQ**

Tel: 01789 295020 Fax: 01789 268350

enquiries@eco-foundations.co.uk

www.eco-foundations.co.uk