



Key achievements

- Shoring walls consisting of Steel Piles, Ground Anchors and Shotcrete to retain the excavation of up to 7m depth
- 391 Steel Piles (5950 m), 199 Ground Anchors (5400 m) and 1500 m² Shotcrete
- Ring-Bit system with Pilot bit used for Piles and Double Rotary Head system used for Anchor drilling

The project

The Follo Line Ski project is part of the new high-speed railway line between Oslo and Ski. After completion in 2022, Ski will have a modern transport hub with three platforms and a completely renewed station area.

To build the tracks north of the station a permanent retaining wall had to be built.

The challenge

- Difficult soil conditions including sensitive soft clay, moraine layers, large blocks and bedrock
- Extraordinary welding detail requirements for piles and anchor beams
- Complex site logistics and limited working space
- Presence of fully operational rail tracks along the wall
- Sequencing works to maximize the production (up to 3 drilling rigs concurrently on site)

The solution

- ✓ Double Rotary Head system to minimize disturbance of surrounding soil
- ✓ Welding plant to prefabricate the pile casings and anchor beams
- ✓ Spare equipment to keep the tight time schedule

Application

Retaining wall

Technique

Steel Piles
Ground Anchors
Shotcrete

Market

Railway

Client

Bane NOR

Main contractor

OHLA Norge

Contract Value

65 million NOK

Keller companies

Keller Geoteknikk
Keller Grundbau
Keller Grundläggning

Main contractor's Project Manager:

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Project start date:
March 2021

Project end date:
November 2021