



## Key achievements

- Predrilling for sheet piling in moraine. Replacement of soil with sand.
- Drilling with Ø610 mm casing. 80 points of around 1200 m in total.

### The project

Fundamentering AS (FAS) had been contracted by Implenia to establish the sheet piling pits for the new bridge, «Austvoll bru», near Flå. Due to difficult ground conditions with a lot of stones and moraine there was a need to predrill the ground before the sheet piling could continue. Keller were contracted to execute the predrilling in short notice.

### The challenge

The challenge in this project were mainly the drilling with large diameter and the consequently high friction forces outside and inside of the casing when the casing were filled with sand.

### The solution

The solution in the project were to use Kellers RM20 drilling rig to secure a good production and to have enough power and torque to be able to drill with large diameters and retract the casing. To solve the problem and make it possible to sheet pile later, a Ø610 mm casing were drilled down in the ground in different point all along the pit. When the casing were drilled down, it were filled with sand before it was extracted and reused. 80 points with a total of 1200 m were done in less than 2 weeks.

**Application**  
Foundation

**Technique**  
Large diameter piling

**Market**  
Infrastructure

**Client**  
Viken Fylkeskommune

**Main contractor**  
Implenia

**Geotechnical Designer**  
Rambøll

**Keller Companies**  
Keller Geoteknikk

### Contracting project manager

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