



Project Case Sweden, 2016 – The Swedish Ica Stores new Headquarters in Arenastaden, Solna



Project scope

- Pre-drilling for jet-grouting between sheet pile wall and bedrock for the construction of a larger office building that will be hosted by, among others, Swedish ICA Stores new Headquarters – inauguration in autumn 2018
- Number of holes: ~600
- Depth: 5-22 m, 16-72 ft.
- Scope of drilling/total meters: ~3 000 m, 9 840 ft.
- Why water-propelled drilling? - Due to long experience from the technology being the most suitable and sensitive one, the main designing engineer prescribed drilling with water. The proximity to the railway with intense traffic implicates special demands on ground foundation. This is since the baseplate is to be cast 4 m below ground level, whilst the soil excavation must not influence the water table in the railway area. If any influence, this possibly would mean a risk for unwanted movements in soil and railway track. For this reason, an impervious sheet was created around the area to be excavated.

Equipment & geology

- Hammer model/sizes: WAI 40i
- Drill bit/Casing system: Ø115 mm, 4.5”
- Pumps: Hercules-Trevi’s own pump from WOMA, 300 lit/min @180 bar
- Water source: Public water mains
- Drill rig from Soilmec
- Geology: Fill, clay and seabed down to bedrock

Main stakeholders

- Commissioner/Contractor: Fabege/NCC
- Main designing engineer for performance contract: Golder Associates
- Contractor for jet-grouting: Hercules-Trevi Foundations

Project & drilling results

Drilling as planned.



Photo: Johan A. Lundberg

Based on the article “Stort jobb för Hercules i Arenastaden”, published in the Magazine Grundligt 2.16, with courtesy from Hercules Grundläggning

