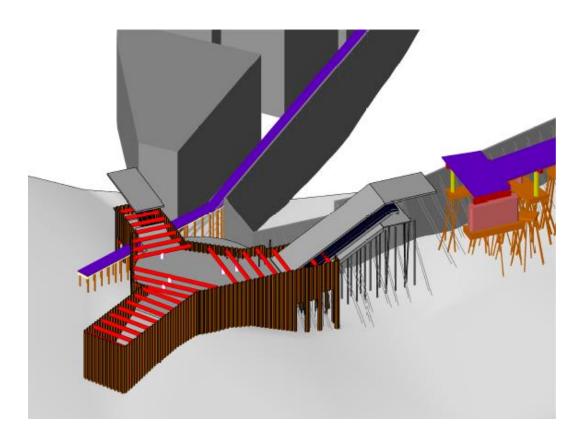


Project identification

Metro Arenastaden, Stockholm

Type of project

Station - cut&cover



Client WSP

In co-operation with

Project assignment

Structural and geotechnical contribution to the preliminary design of the construction of the underground northern ticket hall of the Arenastaden in Stockholm

Country

Sweden

Project duration

2014-2015

Construction cost

N.a.

(excl. VAT)

Location

Stockholm

Project phase

preliminary design

Consultancy fee € 210.000,=

(excl. VAT)

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Project identification

Metro Arenastaden, Stockholm

Type of project

Station - cut&cover

Project description

TEC was involved in the extension of the Stockholm subway project, TUB A. The TEC design team worked in close collaboration with WSP who was the main consultant for this project. TEC was involved in the design of the Northern ticket hall of station Arenastaden for the System Handling Phase. The station will connect Stockholm's existing underground network to new developments in the Solna area, including the stadium (Arena) and Mall of Scandinavia.

Most of the alignment of the extension is situated in hard rock, the northern ticket hall of Arenastaden is in soft, sensitive clay up to 16 m deep. For this reason specific geotechnical and structural expertise from within TEC was involved. We started with an integrated team within WSP with several options for this construction pit. Based on the trade-off TEC made, an architecturally pleasing circular ticket hall was selected. The pit has a proposed diameter of approx. 40 meters and a depth of 15-20 meters (up to the hard bedrock). The connection to the metro station and the surface level is made through escalator shafts within rectangular pits.

Scope of work

TEC contribution to the design was:

- Structural and geotechnical design by the use of PLAXIS
- Design drawings in REVIT

For this purpose TEC worked close together with the design team of WSP in Stockholm.