

## Vienna Underground – Construction Lots U2/19 & U2/20

### Client:

Wiener Linien GmbH und Co KG

### Country:

Austria

### Duration:

April 2016 to January 2029

### Services:

Submission design  
Tender design  
Execution design

### Project objectives

Extension of the U2 underground line in the context of Vienna's largest climate protection and infrastructure project

### Project description

The extension to Vienna's U2 underground line involves the construction of five new deep stations consisting of station tubes, connecting tunnels, cross galleries and shafts along the 6-km-long stretch between "Rathaus" station and the new terminal at Matzleinsdorfer Platz. The stations "Reinprechtsdorfer Straße" (Construction Lot U2/19) and "Pilgramgasse" (Construction Lot U2/20) are deep underground stations. At their edges, both construction Lots connect with Construction Lot U2/17 (track tunnels). The shafts for the stations are built using the cut and cover method combined with bored piles. The tracks run in single-track tunnels with a separation of 35 m to 45 m (Construction Lots U2/19) and 66 m to 69 m (Construction Lot U2/20). The vertical distance between the ridge of the tunnel and the building foundations is approx. 10 m to 16 m. Settlement compensation is planned in some zones in order to control the settlement of buildings, supply lines and roads.

As a result of the high water level and permeable layers of gravel below the invert in Construction Lot U2/19 it is planned to lower the groundwater by building filtering wells from the surface and from the tunnel.

In Construction Lot U2/20 one station tube passes below the existing U4 underground railway and the channel carrying the Wien River.

### Project data

Cross section:

Station tubes: approx. 95 m<sup>2</sup>

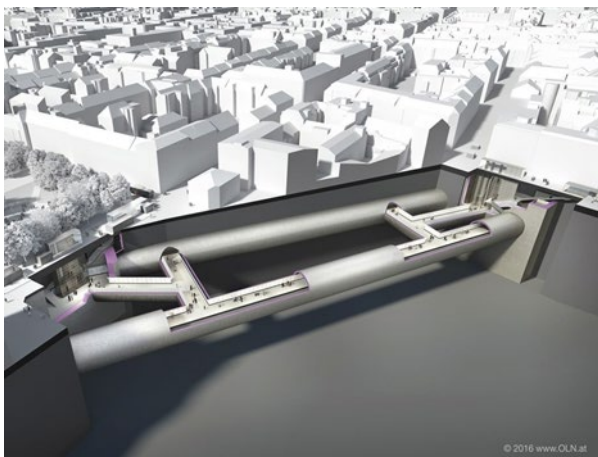
Cross galleries: 75 m<sup>2</sup>

### Project specifics

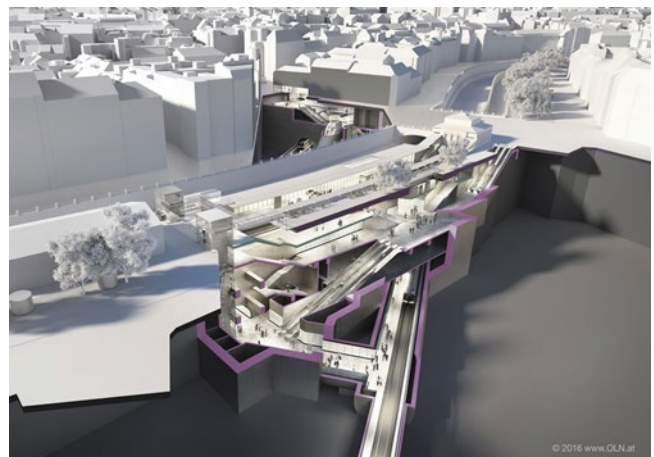
The tunnel will be driven from the station shafts through rigid clay and dense sand and below densely built-up areas.

### Services

Geotechnical design, submission design, structural design, execution design, tenders/bases for the calculation of costs



U2/19 Reinprechtsdorfer Straße



U2/20 Pilgramgasse