

# Widenmayer City Palace, Munich

#### Data and facts

Company	PORR Spezialtiefbau GmbH
Туре	Turnkey construction pits, Underpinning
Runtime	04.2019 - 12.2020
Principal	Eisbach Palais Projektgesellschaft mbH

Project report online

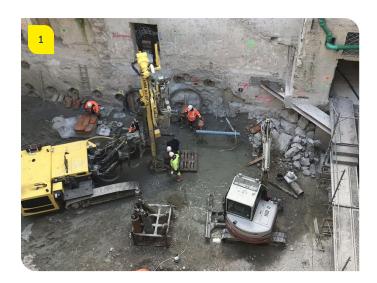
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### Inner-city location and protection of listed buildings

it was replaced by a new building designed in the same architectural style as the two existing buildings. At the same time, a fully automatic multi-parking system for 36 cars was built. The foundation base of the underground car park is lower than that of the neighbouring buildings. The adjacent foundations were therefore underpinned by up to 11m in jet grouting. Around 230 jet-grouted columns with a diameter of 1.80m, an average borehole length of approximately 14m and average nozzle lengths of approximately 8m were required for this purpose in the Munich Quaternary gravels, Tertiary sands and marls. The work was carried out in the cramped courtyard of the existing buildings with a clear headroom, as well as under a limited clear headroom of 3m. The Tertiary soil strata contained layers of conglomerate and old tree trunks, which posed a particular challenge for the construction site. The underpinning was anchored back with two temporary layers of stranded steel anchors (about 100 anchors, each 4 x 0.6", approximately 1,600m in total), which were manufactured in our own factory in Colbitz, in the course of the earthworks and milling for the jet grouting. As the second layer of anchors was below the groundwater level, it had to be constructed and sealed against groundwater pressure. Exposed basement walls were secured with approximately 300m of Stump-Franki Gewi nails (20mm single corrosion protection, approximately 50 nails). Special permission was granted for the groundwater to be discharged into the Eisbach via four drawdown wells. Micro-piles with Stump-Franki GEWI steel support elements (approximately 300m GEWI with 50m single corrosion protection, around 30 units) were installed below the base of the construction pit and anchored in the reinforced concrete floor slab in order to permanently secure the structure against uplift.

## **Impressions**





### Image notes

1

Stadtpalais Widenmayer, Munich

The foundation base of the underground car park is deeper than that of the neighbouring buildings. For this reason, the adjacent foundations were underpinned up to 11 metres in the DSV.

2

Stadtpalais Widenmayer, Munich

The DSV columns have a diameter of 1.80 metres.

Do you have questions about the project or would you like to learn more? Feel free to contact us for further information.

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