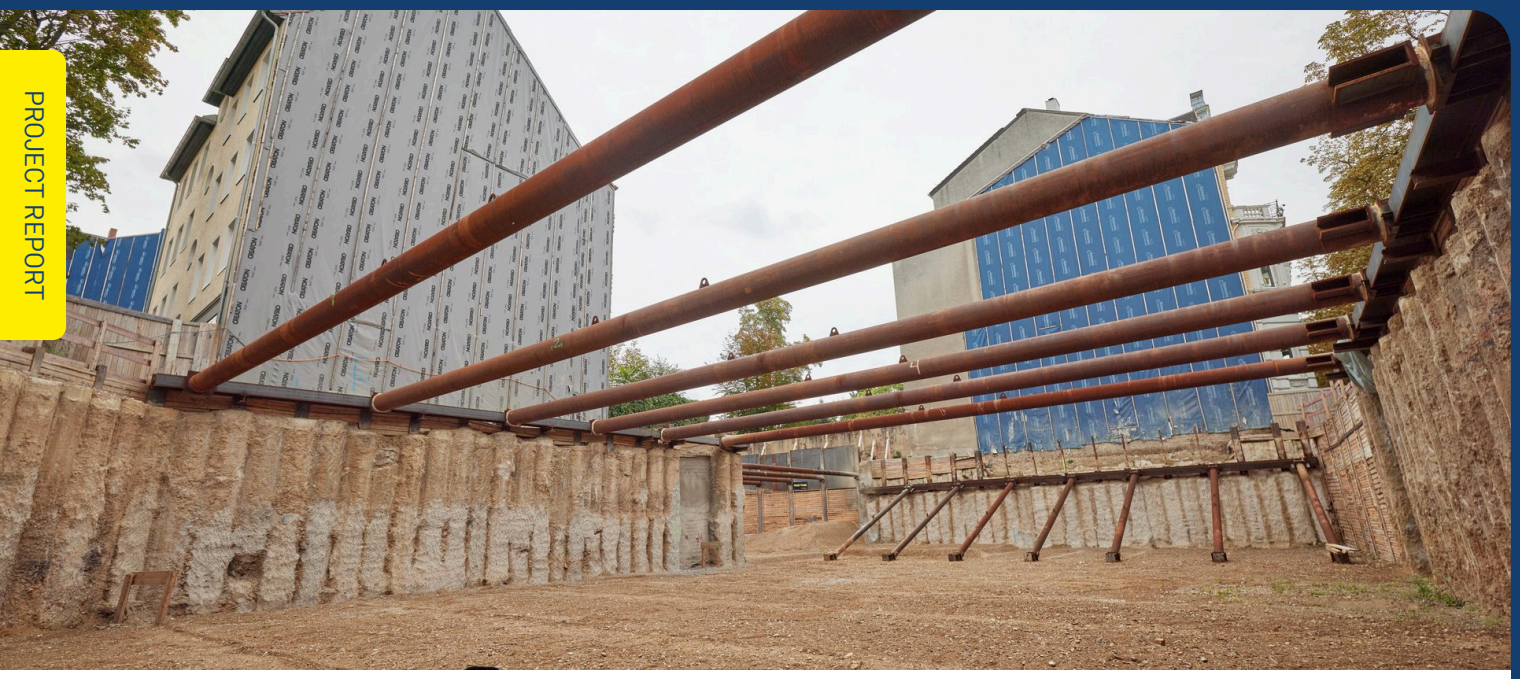
PROJECT REPORT



Bonn
Carré Nassestraße

Data and facts

Company	PORR Spezialtiefbau GmbH
Type	Turnkey construction pits
Runtime	09.2022 - 06.2023
Principal	Studierendenwerk Bonn

Project report online

www.porr.de

450 metres of excavation perimeter wall for the new Students' Union building

The construction project is situated in a historic part of the city characterised by dense development and established urban structures. A construction pit perimeter wall approximately 450 m long was constructed for the new Students' Union building. The construction pit reaches depths of up to 7.25 m and forms the foundation for the future building and technical areas.

Construction pit support for the new inner-city building

Various types of shoring were used to enclose the excavation pit. These included soldier pile shoring, bored pile walls as well as DSV underpinning in areas adjacent to existing buildings. The individual shoring systems were tailored to the ground conditions and the constraints of the inner-city site. Together, they form the basis for excavating the pit within the existing urban quarter.

Building between existing and new developments

During the course of the works, the construction pit was dug out in sections, back-anchorings were installed and internal bracing was fitted. In addition, the concrete floor slab for a lower-lying services area within the construction site was cast. During the construction period, additional ground investigations were carried out and new findings regarding the local subsoil conditions were incorporated into the subsequent execution of the works. At the same time, the works were coordinated to meet the requirements of the inner-city environment.

Accompanying measurement and monitoring measures

The construction works were accompanied by measurement and monitoring programmes. These included, amongst other things, vibration, noise and settlement measurements. Furthermore, the works were adapted to the local conditions of the urban quarter. The measured values were documented throughout the entire duration of the specialist civil engineering works.

Basis for the subsequent construction phases

With the completion of the excavation, the conditions for the subsequent structural works were established. Even before the Studentenwerk buildings began to take shape, construction pit walls, anchors, underpinning and technical areas were created beneath the surface to form the basis for the further development of the Carré Nassestraße.

Impressions

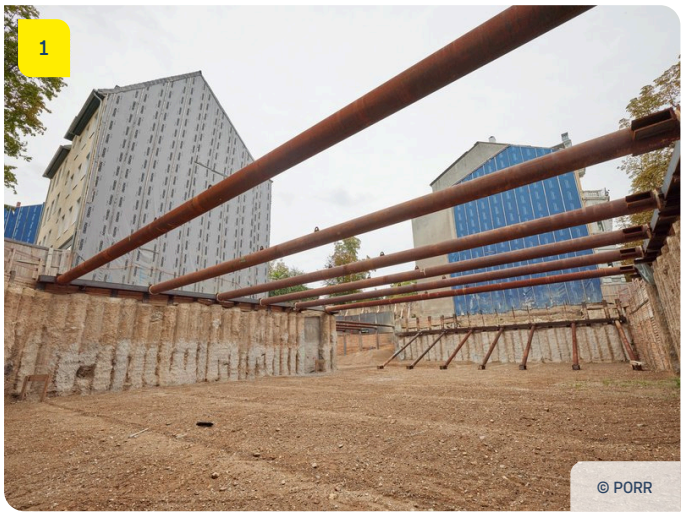


Image notes

1 **PORR Spezialtiefbau Studierendenwerk Bonn 2**

View of the completed construction pit with extensive internal bracing.

2 **PORR Spezialtiefbau Studierendenwerk Bonn**

Complex construction pits for the new building of the Bonn Student Union.

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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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