

References

Retention tanks in the Neptun Park housing estate



Uponor involvement

- ✓ SN8 DN2400 retention tank composed of 2 parallel lines (L = 30 m each) and a perpendicular section L = 57 m
- ✓ Tank assembly and simplified tank tightness tests with air in the profile performed by the Uponor Infra service group.

Adaptation to climate change with PE retention tanks

Uponor Infra has delivered PE SN8 DN2400 retention tanks with a total capacity of $V = 510\text{m}^3$ to the Neptun Park estate, which will collect stormwater from the estate area.

The Neptun Park estate is located approx. 100 m from the beach, in the immediate vicinity of the Ronald Reagan Seaside Park and numerous pedestrian and bicycle routes in the picturesque Gdańsk Jelitkowo, known for its recreational values. The estate is characterized by intimate low-rise buildings, referring to the pre-war buildings of Oliwa and Sopot, high standard of workmanship and a large amount of greenery. The last, fourth stage of the estate was built in 2015-2017, when 6 buildings were added, along with 184 apartments and commercial and service premises. Why was it necessary to expand the storm sewage system in a relatively new housing estate? In recent years, climate change has significantly influenced weather patterns, which is also observed in Poland. We are increasingly dealing with torrential rains, which, although shorter in duration, are much more intense. Two concrete retention tanks installed in the Neptun Park estate turned out to be simply insufficient during heavy rainfall.

Project Facts:

Location

Gdańsk, Poland

Completion

2024

Building Type

Municipal

Product systems

Storm water, Tailor made constructions

Partners

Investor:

Qualia Sp. z o.o.

Contractor:

Poleko Budownictwo Sp. z o.o.

Expansion of the storm sewage system right next to residential buildings

Uponor Infra has delivered PE SN8 DN2400 retention tanks with a total capacity of $V = 510\text{m}^3$ to the Neptun Park estate, which will collect stormwater from the estate. The parts of individual tank batteries were connected to each other using a tee and a DN2400 cross-piece. DN1200 SN4 centric chimneys with aluminum ladders were installed on the tanks. After installing the tanks, the Uponor Infra service group performed simplified tightness tests of the tanks, with air in the profile, which do not require filling the tanks with water. This shortens the time required for collection and eliminates the costs associated with filling and emptying such large tanks with water.

New PE retention tanks were placed in the free space between the blocks. One of the greatest advantages of Uponor Infra tanks is the ability to combine them into configurations of virtually any shape, which allows you to adapt them to the available space and project requirements.

This solution is particularly beneficial when installing in built-up areas, where it is necessary to take into account the existing underground infrastructure.

Conducting work right next to residential buildings was a big challenge. A key element was proper planning of the supply of tanks and the necessary equipment. Thanks to effective work organization, the task was completed with minimal impact on the residents' quality of life.

Retention tanks in the Neptun Park housing estate





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