Shaft 26, Newark

Installing steel sheet piles for sewer and water system upgrade.



AARSLEFF

Severn Trent is investing £60 million over the next four years to upgrade Newark's sewerage and water system to help protect homes from sewer flooding. The scheme will provide a reliable water source for decades to come. In 2016, Nick Wallace from Severn Trent explained that more than 12 miles of old piles will be replaced with new, larger ones.

In May 2017, Aarsleff worked on Oueens Road in Newark, to facilitate the replacement of a tunnel with a 1.5 metre diameter one. There, we installed 28No sheet piles.

As part of the same scheme, and for the same client, Aarsleff were awarded the contract to construct a sheet piled cofferdam Newark on Harcourt Street. Aarsleff installed 46 No. sacrificial steel sheet piles, with pile width 600mm and 12.0m in length. There was a retained height of 10.2m, forming the overall cofferdam. Again, Aarsleff's work will facilitate the replacement of an old water course.

As Aarsleff were piling in the middle of a residential street, it drove the sheet piles using an ABI leader rig with pre-augering taking place in advance of main works where it utilised a Silent Hydro pile press to reduce the noise and vibration. A 50-tonne capacity crawler crane was employed, operating at a maximum 6m radius to unload and handle piles and hammer.

Aarsleff's Senior Technical Estimator Ashley Carter said: "It is a great endorsement of Aarsleff's work that we have been awarded our second contract for the same scheme in Newark, just 7 months later. There are around 400 homes in Newark that are currently at risk of flooding, demonstrating just how important sheet piling projects like this are in future-proofing our infrastructure and communities.







Scope of Works

46 No Steel Sheet Piles Pre-Auger

Conractor

BNM Alliance, a joint venture that has been formed by North Midland Construction Plc and Barhale plc

Equipment

ABI rig Silent Hydro pile press

Construction period

11th December 2017 - 20th February 2018

Aarsleff Ground Engineering Ltd, is the UK trading arm of Danish contracting giant Per Aarsleff A/S, and is one of the UK's leading piling and geotechnical design and installation specialist contractors; actively promoting early consultation to ensure each scheme can be Value Engineered to give clients the best service, quality design, safety and value. Aarsleff's strategy and philosophy of investment into the future has resulted in its wholly owned subsidiary Centrum Pile Ltd having the most advanced precast pile production facilities in the UK, producing segmentally jointed precast concrete piles to BS En12794 to Class 1A.

Contact

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