Case Study: Barrow in Furness WwtW Outfall

Temporary Wellpoint Dewatering

August, 2014

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Client: United Utilities

Principle Contractor: Farrans

Project Specifications

Construction of a new 2.4-kilometre-long sea outfall pipeline, across Roosecote Sands in Barrow in Furness. This outfall extension was to improve dispersion of the final effluent in the Walney Channel. The construction and installation of the pipeline required the ground conditions to be stable and dry.

Due to the high water table, tidal effect and nature of the ground conditions across the whole of the site, a simple opencut pipeline excavation would not be achievable.

Solution

Alba Dewatering Services Ltd. was tasked with designing a dewatering system that would allow the pipe laying contractor to increase productivity with the difficult site conditions.

The groundwater control systems design consisted of a wellpoint system being installed. All the wellpoints required a zone 2 filter media placing around the filter to increase the vertical permeability and avoid blockages with the movement of the tides.

All the suction pipes and discharge pipes were secured to the ground using 'U' shaped steel bars that allowed us to leave all the pipes in-situ during the tides and only remove the pump set, thus taking less time to set up and achieve drawdown of the water after the tide, allowing the contractors to increase production.

The job proved that through careful design, planning, innovation and collaboration, success with even the most challenging of conditions can be achieved.

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Profile: Alba Dewatering Services Ltd.

With over 30 years' experience in the design, supply and installation of groundwater control systems, Alba Dewatering Services are able to offer unmatched levels of knowledge and expertise with 'real world solutions' to your groundwater problems.

Our experience in the dewatering industry includes many projects designed and installed in the U.K and we have a considerable amount of experience designing and installing dewatering systems in North America, Europe, the Middle East and the Far East. We are centrally located in the UK, but are capable of fulfilling projects of all sizes around the world.

At Alba Dewatering Services we pride ourselves on our 'can-do' attitude. The customer always comes first for us, and we are confident that once you have used our services you won't need to look anywhere else!

Accreditations

Constructionline, Gold.

Achilles UVDB Silver +

CHAS Accredited Contractor

Builders Profile Safe Contractor

ISO 9001,14001 and 45001

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