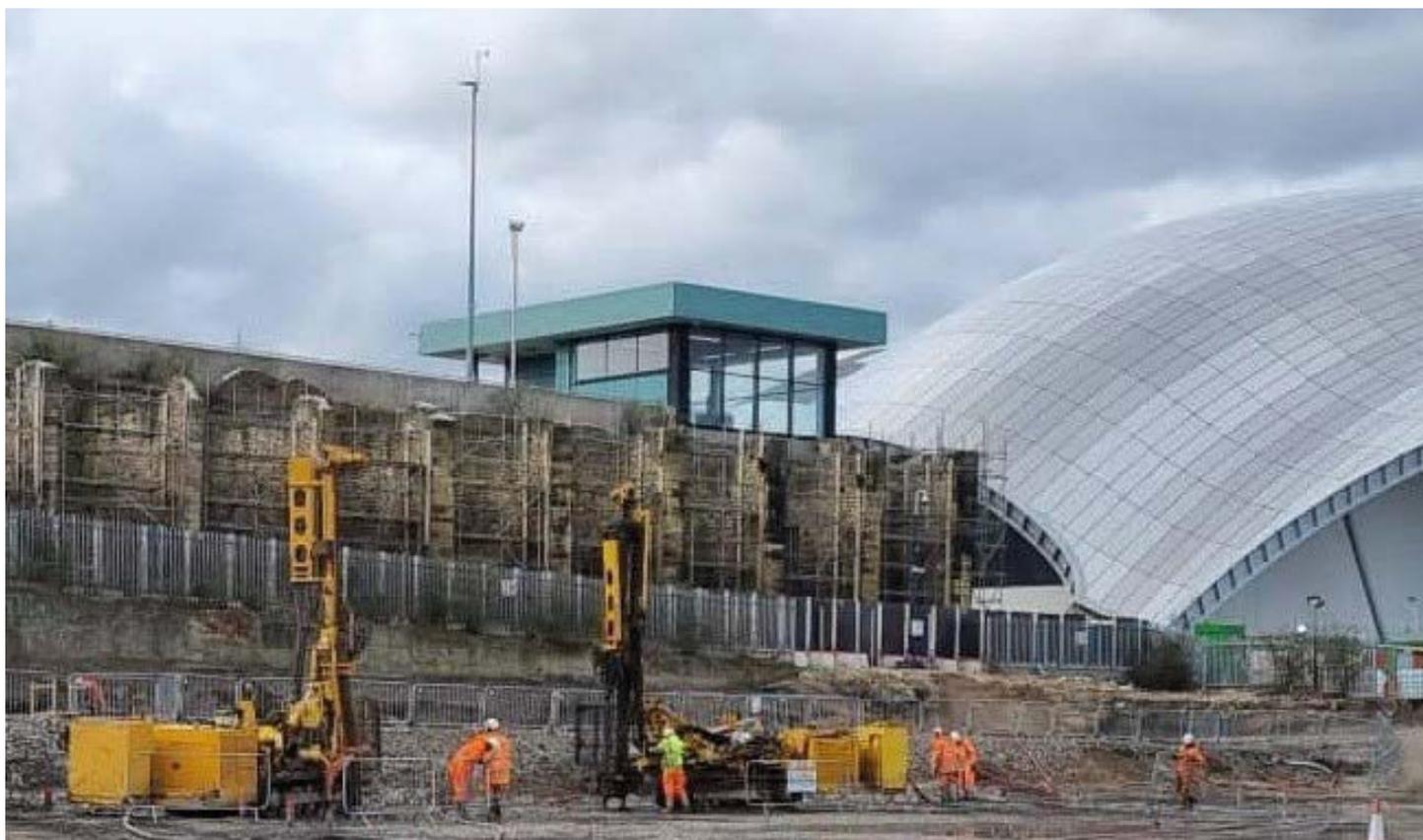


Gateshead Quays – Tyne and Wear



In Gateshead, Tyne & Wear, Bauer Technologies has been working with BAM Construction, on behalf of developer, Ask: PATRIZIA, on an arena complex that is set to transform Gateshead Quayside.

The plans for the scheme include a conference centre, retail premises and two hotels, alongside the 12,500-seat arena, which will replace the Utilita Arena in Newcastle. The site is located to the immediate east of the 'Sage' music venue and is bound by Hawks Road to the south, South Shore Road to the north, Maidens Walk to the west and Mill Road/Baltic Quays to the east.

The scope of Bauer's work was to drill, grout and stabilise previously worked coal measures on the South side of the River Tyne, and as part of these works there were a number of challenges, which Bauer Technologies was ideally suited to address, including the grouting of large voids, all within proximity to

Network Rail infrastructure - an enforced 50m exclusion zone.

Specifically, the works saw Bauer undertake 2150 vertical drillholes, at 3m centres, through five previously worked coal seams, to depths of up to 36 metres. Bauer pumped approximately 4000 tonnes of cement/PFA grout to all seams and voids by gravity pressure. It also required the drilling and grouting of 18 inclined investigation boreholes, 8 full core recovery test holes, 60 inclined boreholes (through existing worked seams), 2 inclined investigation boreholes adjacent to an existing well structure, 20 vertical holes, at close spacing to form gas curtain wall and 40 proof holes - including performing falling head tests.

All works undertaken by Bauer Technologies were conducted on time, to budget and to the complete satisfaction of the client.



Client:

Ask: PATRIZIA

Principal Contractor:

BAM Construction Ltd

Ground Engineering Contractor:

BAUER Technologies Limited

Contract Period:

14 February to 3 September 2022

Scope of Works:

- Drill, grout and stabilise previously worked coal measures on the South side of the River Tyne at Gateshead Quays. All works conducted under Coal Authority permit.