PIPE INSTALLATION BY GUIDED AUGER BORING ON A VERY DEMANDING SCHEME | CASE STUDY

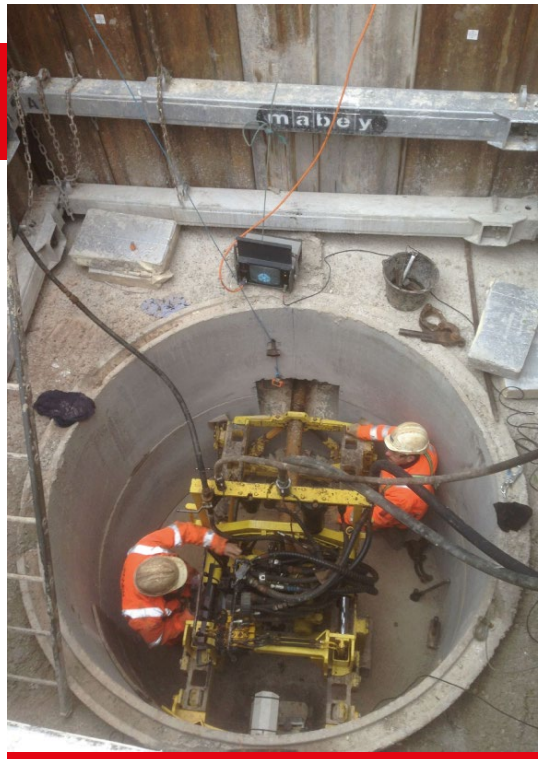
PROJECT CLIENT:
THAMES WATER UTILITIES LTD

PIPE DIAMETER:
DN300

MAIN CONTRACTOR:
EIGHT 2O

PIPE MATERIAL:
VITRIFIED CLAY

LOCATION:
MARLBOROUGH WTW



PROJECT OVERVIEW

The Works form part of the construction of a run to waste pipeline between the Marlborough WTW and a new soakaway borehole. Included in the works was a section which crossed under a CLH-PS fuel pipeline All works including the construction of shafts, and pipe installation was to be undertaken by a sole contractor. A Cappagh Construction/Allen Watson JV was formed to meet the contract specification.

DESCRIPTION OF WORKS

All personnel had to meet the requirements of the eight 2O Orientation and Thames Water Passport this included all persons being CPCS certified for the activities they were to undertake, and all operators were required to undertake a full medical.

Cappagh Construction undertook the construction of the drive and exit shafts and following pipe installation coupled the pipelines through the drive shafts and back fill the excavations. AWL undertook all the guided auger boring activities.

Cappagh Construction constructed the caisson shaft at depth ranging between 4- 6 metres with the reception shafts constructed by using a 3-metre trench box with road plates at the front and back of the box.

AWL used its own GAB 85v guided auger bore machine with optical electronic navigation for all the installation of 3 drives which ranged in length between 30 and 80 metres. Ground conditions changed from clay with chalk deposits to chalk with a high level of flint, which required the full 18,000Nm of rotary torque developed by the GAB 85v machine to rotate the flight augers in the hard ground encounted.

A third pipeline needed to pass beneath a CLH-PS fuel pipeline. To ensure that the ground movement beneath the CLH-PS pipeline was inside the acceptable limits the pipeline had to be exposed and monitored by authorised personal while the installation of the jacking pipes took place.

Following installation, the pipelines were connected and fully tested in accordance with EN610.

CLIENTS REMARKS

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AWL is a competent contractor who have great experience in GAB works which can be seen first-hand from their management right the way through to their project team working on-site. Both Management and Workforce at AWL have a co-operative approach to working with the Client, which made working with AWL a very rewarding experience on a very demanding scheme, I look forward to working with them again in the future.

Kind regards

James Reapy
eight 2O Site Agent

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