FLOOD ALLEVIATION SCHEME PROJECT MARLOW

CLIENT GALLIFORD TRY, BLACK AND VEATCH JV

DURATION 8.5 MONTHS | VALUE £350,000

PROJECT INVOLVEMENT

DRILLING LARGE DIAMETER OF WELLS, UNDERTAKING PUMPING TESTS, PERMANENT INSTALLATION OF AN AREA FLOOD ALLEVIATION DEWATERING SYSTEM

INTRODUCTION

In 2017, Project Dewatering Limited (PDL) were appointed by the Galliford Try, Black and Veatch JV to install and commission a permanent dewatering system in Marlow, Buckinghamshire. The permanent dewatering system was a part of the Marlow Flood Alleviation Scheme, the objective of which is to control groundwater levels in the upper aquifer and so prevent flooding in the area.



THE WORKS

Project Dewatering drilled and developed 16 No. 6-8 m deep large diameter pumping wells. The wells were drilled at multiple locations across the town, by a cable percussion method using a Sennebogen drilling rig with a basal oscillating clamp and clamshell auger. This drilling technique was used as the most efficient method for installation of large diameter wells. The boreholes were developed and fitted with submersible pumps, each delivering up to 30 l/s. In total 18 No. pumping tests were carried out to measure the yields of individual wells and confirm the understanding of the local hydrogeological conditions. The operation of the system is fully automated with the pumps arranged in groups, each being triggered by borehole/sump water level sensors. In addition a SCADA telemetry system allows the system to be operated remotely.



EXTRACT | MONITOR | CONTROL