

# Childrey Warren Trunk Main

**BROWNE**

## KEY PROJECT DETAILS

<b>Client</b>	SMB JV (Eight20)		
<b>Value</b>	£3.7m		
<b>Project Start</b>	May 2019	<b>Project Finish</b>	Feb 2020
<b>Location</b>	Childrey Warren, Wantage, Oxfordshire		
<b>Works</b>	Enabling works and installation of 6km of 450 PE trunk main by open cut and directional drilling. Associated works to upgrade to Hagbourne Booster Station		



During AMP4, low flow investigations were carried out for the Letcombe Brook, in the Wantage area, Oxfordshire. It was determined that the abstraction at Childrey Warren Water Treatment Works (WTW) was having an adverse impact on the river flows and local environment. Subsequent reviews identified the most sustainable long-term solution would be to cease abstraction at Childrey Warren WTW and to supplement the deficit in supply from a neighbouring resource zone. This resulted in an agreement with the Environment Agency that abstraction would cease by the end of AMP6 (March 2020).

To transfer water into the required supply areas J Browne has constructed a new 6.0km, 450mm HDPE SDR17 potable water trunk main between Lark Hill reservoir and Childrey Warren WTW. This pipe-laying follows on from two previous stages of the project successfully delivered by J Browne for SMB involving the pre-construction and enabling phase.

The project was in rural Oxfordshire and the route of the new pipeline passes in close proximity to the known site of a Roman Villa. There has been significant archaeological interest in the project and during the enabling works phase our project team were supported by a team of archaeologists who supervised the preparatory excavations

Among the important finds were 26 human skeletons believed to be from the Iron Age and Roman periods, and some likely to have been involved in ritual burials, along with evidence of dwellings

### The Project Works

We installed 6km of 450 PE potable water main. In addition to the open cut pipelaying the work included

three directional drilled crossings, up to 240m in length including one river crossing at Letchcombe Brook in an area of outstanding natural beauty (AONB). We worked closely with Natural England to ensure we carried out the works sympathetically and with the least possible impact on the area. The main section of work was delivered in the Summer which led to excellent productivity. This seasonal aspect was important as the soil type in the area is chalk which can be difficult to work in during wet periods.

J Browne has also carried out Civils and Pipework upgrades at the existing Hagbourne Booster Station. These works included the construction of a building extension to house a new MCC, and the installation of new 350mm diameter delivery and return pipework. We also delivered significant associated works at Larkhill Reservoir and Childrey Warren works including new kiosks, pipework alterations, flow meters and associated works.

### JB Assured

We delivered over 1000 joints without any defect thanks to a rigorous assurance process using our workflow management system Corona to manage construction at every stage and Control point to monitor joint integrity. The completion of these works will deliver benefits by ensuring:

- Better flow rates in the Letcombe Brook leading to a marked improvement in the local environment and biodiversity
- Improved security of supply to the region