



SAINT GOBAIN GLASS FACTORY

Permanent dewatering solution to the rising groundwater issues at a glass manufacturing facility within a Groundwater Protection Zone

Groundwater investigation, dewatering system design, installation and abstraction to comply with environmental regulations

Saint Gobain Glass required a permanent solution to rising groundwater issues at its glass manufacturing facility. Stuart Wells applied for all the necessary permissions with the Environment Agency and designed a permanent dewatering system. This consisted of a series of 6no x 50m deep abstraction wells around the furnace perimeter to control the groundwater level in the Sherwood Sandstone.

The abstracted groundwater was transferred via a pipeline to a series of 31no recharge wells located on the site boundary and injected back into the Sherwood Sandstone aquifer.



Objective

Saint Gobain Glass (SGGUK) contacted Stuart Wells looking for a permanent solution to the rising groundwater issues at their glass manufacturing facility. The facility's location within a Groundwater Protection Zone would require careful coordination with the local Environmental Agency (EA) to ensure both long-term groundwater engineering and the groundwater environment protection were reached.



Solution

The project involved the submission and approval of an initial Groundwater Investigation Consent (GIC) to conduct a pumping test. This provided crucial data to finalise the design which included permanent abstraction wells with the abstracted groundwater transferred to recharge wells at the site boundary, where it was re-injected back into the same aquifer.

Services	<u>Pumping Testing</u> <u>Deep Well Dewatering</u> Groundwater Transfer Licence Application
Location	Eggborough, North Yorkshire
Industry	Manufacturing