



## HOWDEN Water Treatment Works Upgrading

Howden WTW is located in the Scottish Borders, 1km west of Selkirk on the River Ettrick. The treatment works receives raw water from four production boreholes and serves a population of 16,500.

Historically the treated water quality experienced PCV failures for coliforms, clostridium, turbidity and cryptosporidium and had been unable to achieve the design output of 16 ML/day. The upgrading work which was undertaken by the Biwater Leslie Joint Venture was developed to incorporate a new Package Membrane Filtration

Plant to address these performance issues. In construction terms, the project included a new steel-clad portal frame building to house the membranes and associated ancillary equipment.

Additionally, work was also carried out to improve the existing chemical dosing facilities and improve the performance of the existing production boreholes to support the new membranes. New pipelines, pumps and an MCC were also installed to both maximise the extraction from, and maintain control over each of the borehole.



**CLIENT**

**Scottish Water Solutions**

**CONTRACT VALUE**

**£3.83million**

**DURATION OF WORKS**

**November 2007– April 2009**