



**ECS Engineering Services has rebuilt the front façade of the main hall of Short Ferry Water Pumping Station on the River Witham, including replacing the aging steel frame windows with aluminium ones that open and close automatically to control ventilation.**

Located near Fiskerton in Lincolnshire, on the River Witham and run by the Environment Agency, the Short Ferry pump hall is about 50 years old. A survey of the fabric of the building had shown that although generally in good condition, it was in need of some modernisation and refurbishment.

## EA River Witham pumping station gets facelift



Case Study: 066  
EA River Witham  
pumping station gets  
facelift



Following a recent survey there were significant concerns relating to the structural integrity of the front façade. After considering several options it was decided to demolish the existing façade and the construction of a new, modern solution. As a result, the Environment Agency placed a contract with ECS Engineering Services to demolish and rebuild the frontage and replace the windows with modern automated double-glazed units. Appointment of ECS allowed the EA to utilise a multi skilled engineering company at Short Ferry with its project management, steel fabrication and structural design abilities all available in house. "We provided critical information to the Environment Agency so that it could secure

planning permission," recalls Neil Denman, one of the ECS' estimating engineers who worked on the project. "We also worked with a firm of architects on the visual aspects of the project and with the supplier of the aluminium framed double glazing units."

Denman again: "We replaced the old single skin brickwork of the lower walls with a cavity wall in block, filling the cavity with insulating foam. We also installed new upper panels, with our in-house fabrication department manufacturing bespoke steel supports for the panels. We made sure the panels were highly insulated so that with the double-glazed windows the whole pump hall became much more thermally efficient."

Sensors were installed to monitor the humidity and temperature within the hall and to open and close the windows to optimise ventilation. This helps to control condensation and damp and thus keeps the building in good condition. The controller is also programmed so that it will open the windows in the event of fire and there is also a manual override allowing the windows to be opened or closed if necessary. Denman concludes: "At all stages of the project we worked closely with the architects to make sure the end result was visually similar to the old façade and in keeping with the surrounding buildings. Our team has worked hard to renovate the building and deliver the project on time."

**Landustrie** 

**InfraCore** 

**CE**

**NICE** 

**UVDB**

**empowered by Achilles**

**UVDB verify**  
UTILITIES VERIFICATION & ASSESSMENT SCHEME

**ECS**

Engineering Services 

Water Control  Site Services   
Environmental  Fabrications 

**HAS**  
Accredited Contractor  
www.has.gov.uk

**BM TRADA**  
CERTIFICATION

**RoSPA**  
Member