

FIDDLEFORD MANOR HYDRO TURBINE

Client: Potential Energy

Value: £160,400

Duration: 16 weeks

Project Detail

This project was for the installation of a concrete channel structure for a new Archimedes Screw Turbine at Fiddleford Mill, near Fiddleford Manor in Dorset.

Suttle Projects were contracted to carry out the related civil engineering works, including the installation of a concrete channel structure and a new reinforced concrete eel pass.

The works started with the laying of a crushed concrete road protection to enable access across wetland pasture areas, for machinery. Two steel beam component bridges were then assembled to span the leat channel at two points to gain access to the site.

A new eel pass and salmon ladder construction were carefully added to an existing bypass weir spillway structure, flowing in parallel to the turbine channel. Approximately 60 L604 clutch sealed sheet piles were installed to form sealed cofferdams to the turbine channel works. A further 24 2.5m L603 sheet piles were added to support the embankments for the bridges. Suttles' model of experience in sensitive water courses, and self-delivery of piling, gave useful economies and programme control for the client.





The excavation and removal of spoil for the concrete channel construction followed, and the new reinforced concrete construction for the turbine and bypass channel was completed. The new turbine was then lifted into place and backfill of the concrete structure and withdrawal of the sheet pile cofferdam, utilising Movax equipment, were undertaken.

