PROJECT OVERVIEW
The Corwen Flood Alleviation Scheme was put in place to help protect 80 properties, businesses and the A5 trunk road. Flooding problems were associated with two watercourses, which drain the steep sided open hillside and flow through the town.

Flows were diverted into a new enlarged culvert and channel system through the town before discharging to the River Dee via a new outfall structure.

DESCRIPTION OF WORKS
The tunnel that formed a 110m long inverted syphon below the busy A5 trunk road was installed by pipe jacking using 1500mm diameter steel banded concrete jacking pipes. In addition to the pipe jacking works a 5000mm diameter, 9 metre deep caisson drive shaft and a 4000mm diameter, 9 metre deep caisson reception shaft were constructed.

Ground conditions were wet sand and gravel.

CO₂ SAVINGS
CO₂ savings of the pipe jacking element compared to open cut construction were 31% for the 1500mm diameter drive. Source:pipejackingco2calculator.com