

Severe flooding in the Conwy Valley (Dyffryn Conwy) in February 2004 and January 2005 caused damage to residential and commercial properties in both Llanrwst and Trefriw.



Following these flood events, the then Environment Agency Wales (EAW) initiated a flood alleviation scheme to address flooding issues in these communities; The Conwy Flood Alleviation Scheme was jointly funded by the Environment Agency Wales and The Welsh Assembly Government.

The River Conwy flows through the valley, discharges into the Irish Sea and is tidally influenced up to the village of Trefriw. The valley has experienced seven floods in the last 12 years, with the three worst events occurring in 2004, 2005 and during the scheme construction in November 2009.

The scheme included the construction of demountable flood defences, concrete defence walls, earth embankments, lowering of existing flood defences, road

realignment and associated works.

Natural Resource Wales (NRW) are the now the Flood Risk Management Authority for the flood defence assets in Llanrwst and whilst responsible for providing flood protection to property and people in this vicinity, it also ensures that any flood defence installations are fit for purpose.

The Integrated Engineering team for North/Mid Wales, who are

responsible for the maintenance, repair and testing of flood defence assets, commissioned a piece of work to evaluate the effectiveness of the existing flood defence system and made recommendation for its replacement.

The replacement barrier was specified in order to maintain the standard of protection afforded by the Conwy Valley Flood Alleviation Scheme 2009, therefore NRW wished to replace the existing 'Dutch Dam' flood defence barrier at Conwy Terrace, Llanrwst, with a demountable flood barrier, to be used by the NRW Integrated Workforce in the event of rapidly rising water levels to protect people and property from flood water.

Sector:
Flood

Location:
Llanrwst, Conwy

Client:
Natural Resource Wales

Main Contractor:
IBS Engineered Products Ltd

Product/s:
Demountable Flood Wall

Size:
12m x 1.5m



IBS Engineered Products was awarded the c. £55,000 contract to design, supply and install the part pre-installed demountable flood barrier.



Specifically, IBS Engineered Products was required to deliver a full turnkey package, including civils design, site surveying, full design and calculation package for the new 12m long x 1.5m high demountable flood wall, as well as the removal and modification of existing barrier system components. IBS also provided on-site fabricating, pull-out testing, concreting, mechanical fixing, tarmac surfacing and anti-slip anchor plates that were set into the modified concrete foundation.

IBS sub-contracted the installation works to one of their trusted partners, Floodsafe Projects, who were able to complete the works one day ahead of the three-week site programme, even after additional works being included by the client.

A fantastic example of a complete end-to-end solution, the project was completed on budget, ahead of programme and to the complete satisfaction of the customer.

