



# British Precast Drainage Association

Publications from the British Precast Drainage Association (BPDA):

BPDA was formed in 2017 from the integration of the Concrete Pipeline Systems Association (CPSA) and the Box Culvert Association (BCA).

Information published by both CPSA and BCA will be rebranded and replaced as BPDA in due course. New material will be branded BPDA.

All CPSA and BCA web traffic will be redirected to the new BPDA web site at [www.precastdrainage.co.uk](http://www.precastdrainage.co.uk)

## **FPMcCann precast concrete rainwater attenuation tanks help manage storm water runoff from new housing development in Shropshire**

A series of precast concrete rainwater attenuation tanks will help manage the storm water runoff from new housing development built to provide the funds that allowed villagers to buy, restore and run their local pub.

The construction of a new housing development in the village of Neenton Shropshire has enabled the villagers to fund the renovation of their local pub, The Pheasant, which had been unoccupied since 2006.

The development by Shropshire Housing Group of seven new homes has been built on land to the rear of the pub. Five of the homes were sold at a profit with the funds used to buy the pub, pay for its refurbishment and construct a new conservatory/community room to provide a place for villagers to meet. The remaining two homes were added to the existing stock of the social landlord and made available to the rural community under a shared ownership scheme.

Storm water attenuation was critical in controlling the rate of rainfall run-off from the new housing development. The homes were built by KITWE Developments along a crescent-shaped access road. Rainfall run-off is attenuated by two underground concrete tanks constructed from sections of large diameter precast concrete pipes manufactured by CPSA member company FP McCann.

Together the tanks hold 120m<sup>3</sup> of runoff, which is sufficient capacity to meet the planning requirement that the tank's capacity had to be sufficient to cater for a 1 in 100 year storm event plus 30% additional capacity to allow for increased run-off as a result of climate change.

The larger of the two tanks is located at the rear of the properties. It is constructed from 16 sections of standard Easi-Flex 2.5m long, 1200 mm diameter precast concrete pipes. It also features 'special' endcap units with pipe socket holes cored in various diameters to suit the different diameters of the inlet and outlet pipes. Access to the tank is via two 3000mm wide manhole chambers, one at each end of the cylindrical tank.

The smaller 750mm diameter tank constructed from precast concrete pipe sections is situated under the site access road. It features an 1800mm manhole access chamber at each end.

Ken Dalton, KITWE's managing director says: "We worked very closely with the FP McCann team to establish the most efficient and cost effective attenuation system to match the site's drainage requirements. In our opinion the precast concrete option was the most flexible and practical solution for such a large storm water tank".

Construction of the new development finished in September 2015. The pub, which is run by the community, opened at the end of last year.

To check out the pub go to [www.pheasantneenton.co.uk](http://www.pheasantneenton.co.uk)

To see what other precast concrete drainage solutions are available go to: [www.concretepipes.co.uk](http://www.concretepipes.co.uk)

To find out what KITWE are up to go to: [www.kitwedevelopments.co.uk](http://www.kitwedevelopments.co.uk)

