## //MAINTENANCE // REFURBISHMENT // NEW BUILD

**PROJECT** FLOOD ALLEVIATION SCHEME



A village in East Devon was subject to regular flood events due to the low capacity of the surrounding drainage ditches. Stonbury was contracted to complete a flood alleviation scheme at three locations around the village, protecting residential properties as part of a broader flood defence strategy.

A new channel and both temporary and permanent culverts were constructed at the first location, to divert floodwaters away from residential properties and allow for increased storage capacity to attenuate the flood water and allow it to dissipate more slowly. The channel was built across farmland and was connected to existing ditches up and downstream.

Once the excavation was complete, geotextile and erosion control matting layers were installed, along with graded stone, which was placed on the base of the channel to reduce the effects of erosion. To complete the initial works, fencing was installed around the channel with an adequate buffer zone to allow for safe access during future maintenance activities. At the second location, operatives trained in Street works were required to control traffic during the installation of a timber revetment to support the widened channel adjacent to the road. The works were downstream of a culvert which regularly flooded the adjacent road and comprised the excavation of a trench for the installation of timber posts set in a concrete footing.

The final location required the construction of a flood alleviation channel within the land of a residential property. The property also had two ponds which required a sweetening flow from the river to be maintained. New weir and dam structures were installed and finished with a concrete apron, silt traps and walls constructed of Flex MSE bags, which were subsequently planted up with native species.

During the construction process, the existing river flow was pumped around the works area. On completion, the new flood channel was connected into an existing ditch, which had been de-silted and re-profiled to increase capacity.