

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 were contracted to complete a flood alleviation scheme at 3 locations around the village, protecting residential properties as part of a wider flood defence strategy.

The largest section of the works comprised the construction of a 250m x 6m wide channel across farmland, including the construction of temporary and permanent culverts. The channel connected to existing ditches up and downstream, diverting flood waters away from residential properties and allowing for an increased storage capacity to attenuate the flood water and allow it to dissipate more slowly.

After the excavation was complete, geotextile and erosion control matting layers were installed, with graded stone placed on the base of the channel to reduce the effects of erosion.

Following completion of the channel works, fencing was installed around a buffer zone to allow for regular maintenance. 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 25m trench for the installation of timber posts set in a concrete footing.

The final location required the construction of a 150m flood alleviation channel within the land of a residential property. The property also had 2 ponds which, after being desilted as part of the works, needed a sweetening flow from the river to be maintained. New weir and dam structures were installed. These consisted of a concrete apron with silt traps plus walls constructed of Flex MSE bags, which were subsequently planted up with native species.

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