

EA SOUTH WEST



Hillfarrance

Flood defence scheme



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Hillfarrance flood defence scheme



The village of Hillfarrance - six kilometres west of Taunton, Somerset - lies on the floodplain of two watercourses.

The Hillfarrance Brook and Village Stream, both tributaries of the River Tone, have caused misery and disruption to villagers over many years.

Serious flooding has affected homes in 1984, 1985, 1999 and twice during the winter of 2000 when the Brook and Village Stream overtopped their banks.

In October and December 2000 more than 30 homes were flooded internally and the village was cut off by floodwater. The high risk of flooding resulted in the scheme being given special status by the Environment Agency and the Department for Environment, Food and Rural Affairs (Defra).

This leaflet describes the £2 million flood defence scheme, completed in 2003, to reduce the risk of flooding in the village.



▲ *The village in flood*

Scheme history

Prior to the village being given special status, numerous feasibility studies had been carried out - in 1990, 1992 and 1995. But they were not able to identify a scheme that could be economically justified or given priority in the capital programme.

In August 2001 the Environment Agency commissioned consultants Lewin Fryer and Partners of Bradford on Avon to carry out a further study. This identified a feasible solution by June 2002. Following consultation with villagers and other interested parties, the necessary approvals were granted by Defra in December 2002, allowing detailed design to begin. This was completed in April 2003 and construction, using the Agency's Framework Contractor, Mowlem Civil Engineering of Exeter, began in May 2003 and was completed in November 2003.

The scheme was officially opened by Adrian Flook MP in December 2003.

Options for a village flood defence scheme

Flood storage: an upstream flood storage reservoir was considered. Initially it was thought it would provide flood protection to other communities, as well as Hillfarrance. But the benefits proved to be not as great as they first appeared, and the cost of this option would have been more than £8 million.

Southern bypass channel: a bypass channel to the south of Hillfarrance was considered. This would have required a new culvert under the main line railway to the south east of the village and this option was therefore discounted.

Northern bypass channel - the chosen option: a 700-metre long bypass channel to the north of the village joining the Hillfarrance Brook to the floodplain area downstream. It takes floodwaters from the north of the village and discharges them safely into the Allerford Brook flood plain.

Hillfarrance flood defence scheme



▲ Excavation of the main channel



▲ Early earth works underway





▲ New culvert on Village Stream



Scheme construction

- Construction of a 700-metre long earth flood diversion channel linking the Village Stream and Allerford Brook to the north of the village, including earth flood embankments;
- Construction of a 320-metre long earth flood embankment, road ramp and throttle structures which restrict the flow of water downstream and divert flood flows into the new flood diversion channel;
- Construction of a road and footbridge over the new flood diversion channel;
- Minor improvements to the Allerford Brook between the village and River Tone - local dredging of the channels and construction of new pipe culverts to improve flows;
- Creation of new hedges and planting of trees along the length of the new flood diversion channel.



▲ New road bridge under construction



▲ A reconstruction of life in the Bronze Age

Archaeology

During construction of the Hillfarrance flood defence scheme exciting archaeological remains were uncovered.

Archaeologists, engaged by the Agency, found a pit at the boundary of what is thought to be a prehistoric field system. Excavations revealed pieces of pottery, burnt stone and worked wood including part of what is thought to be the carving of a human figure.

The 'figure' which is about 45 cm long and 12 cm in diameter at its widest point, consists of a forked piece of oak, shaped with a bronze axe. It had been placed upside-down and the 'legs' driven into the base of the pit and into underlying gravel. The top half of the 'figure' had been broken off in antiquity, leaving what may be representations of the lower limbs and the lower part of the torso. Radiocarbon dating has shown that the figure is approximately 3000 years old.

Hillfarrance flood defence scheme

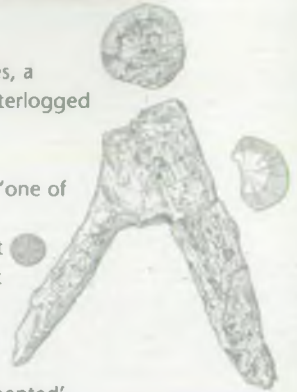


▲ 3,000 year old waterlogged wood in the base of the ditch



▲ The pit fully excavated

Professor Bryony Coles, a leading expert on waterlogged discoveries, from the University of Exeter, described the find as 'one of the more important and exciting of recent finds, particularly as it was found in the course of a careful excavation and its context is well-documented'.



Professor Coles also said the Hillfarrance find, although incomplete, had a number of similarities to known human-like figures from prehistoric Europe.

Support and funding

The £2 million scheme was jointly funded by the Wessex Regional Flood Defence Committee, Somerset Local Flood Defence Committee, Taunton Deane Borough Council with grant-aid from the Department for Environment, Food and Rural Affairs (Defra). Considerable help was given by the Hillfarrance Flood Action Group in providing information about the flooding history and mechanisms and in providing a forum for the discussion of scheme options.



▲ Exeter Archaeology's Finds Officer Graham Langman examines the Bronze Age figure

Illustrations courtesy of Exeter Archaeology

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