

Appendix F

Flood-defence Schemes

There are currently five flood-defence schemes under development in the Avon Valley. These are:

- Salisbury, including Wilton and Harnham
- Downton
- Fordingbridge
- Ringwood
- Christchurch Harbour and riverside
- Salisbury/ Wilton/ West Harnham.

Schemes were completed for both Wilton and West Harnham in 1991. In Wilton, 15 properties were protected by the construction of raised earth embankments along the rivers Nadder and Wylde, including a floodgate on the Nadder. West Harnham saw 400 m of raised earth banks incorporating a hydrobank to the south of the River Nadder, with automated sluice gates at Harnham Mill, protecting over 25 properties. These defences were tested in winter 2000, when the whole area was affected by flooding from the rivers Avon and Nadder.

As a result of this flooding, it was decided that a study was required to assess the effectiveness of these recent schemes, and also for possible improvements throughout the Salisbury area. This study is currently at the investigation stage, and has identified a further 200 properties that could be protected if the proposed improvement scheme goes ahead. This is now planned for 2004/5 in two phases, the first being Salisbury west walk and town centre, and the second being at Harnham.

Improvements throughout the area are being evaluated along both the Avon and the Nadder. Catchment-wide alleviation schemes being considered include:

- Increasing river channel capacity by enlarging/ improving flow characteristics
- Upstream storage of flood waters.

Downton Flood Alleviation Scheme

During winter 2000, over 40 properties in Downton were flooded, and vital road connections were flooded for several weeks. This was caused by a number of different sources: the main River Avon, ordinary watercourses such as the New Court Carrier and Bunny, plus highway drains, sewers and groundwater.

Following liaison between Salisbury District Council and the Environment Agency (EA), the best course of action was decided to divert floodwater away from the village as fast as possible. Work in advance of the main scheme was conducted in winter 2001 to clear river channels of debris, plant growth and silt. Culverts were checked and cleared, and some re-profiling of fields was undertaken to allow floodwater to flow freely. In all, 17 separate schemes were identified. The main scheme for the area involves:

- Creating flood banks through the area, along the Avon
- Creating a two-stage channel on the River Avon
- Collector drains and surface water pumping
- Improving water channels
- Defences to the west of Newcourt Carrier.

The project is currently undergoing the design stages. Construction work is due to take place during 2003 and 2004, with the project to be completed by 2005 at a total cost of £1.5 million.

Fordingbridge

Fordingbridge saw flooding in 1995 and 1999, but most severely in winter 2000, when it was affected by a combination of fluvial flooding and overland flow caused by the River Avon, Swetsford Water and Ashford Water, as well as surface runoff and subcharged sewers. Almost 60 of properties were affected, the A338 Southampton Road was dramatically flooded and properties along it suffered severe flooding.

The project for the area is currently at the option appraisal stage, with consideration being given to:

- Improvements to the East Mills Gauging Station, building due for 2003
- Construction of earthbanks
- Dredging and channel works
- Flood berms
- Reservoir storage.

The project passed through the design stages in 2002, with construction due to start during 2003, continuing throughout 2004 and beyond to a total cost of approximately £1 million.

Ringwood

The winter floods of 2000 were the worst the area had seen in 72 years. Previous flood events in 1995 and 1999 were eclipsed, with over 25 properties being affected by flooding. The causes were the River Avon and Bickerley Mill stream, as well as surface water runoff and subcharged sewers.

Following liaison between New Forest District Council, Hampshire District council and the EA, the best course of action was decided to be a combination of several flood defence options to include:

- Building of floodbanks and walls
- Reducing the flow of water into the Bickerley Mill stream.

Initial approval for the project was given in August 2001, design stages took place during 2002, and construction will commence in 2003/4.

Christchurch Harbour (Sailing Club) and Riverside

The Lower Stour Flood Alleviation Scheme was completed in 1992/93, with over 900 properties protected by 5.3 km of improvements, including the dredging of silt from channels, clearing bridge arches and the construction of 1.7 km of flood walls and 2.3 km of earth banks. This was followed in 1998 by the Lower Avon scheme, protecting over 100 more properties with 300 m of flood walls.

Due to technical difficulties and landowner resistance at the time the schemes were completed, the area around Christchurch Harbour Sailing Club and Riverside Park were left unprotected and are still prone to flooding. Winter 2000 flooding saw over 10 properties affected. This was caused primarily by the River Stour, the River Stour Estuary and tidal flooding.

This scheme is currently at the early stages and is undergoing investigation. At present the area surrounding the sailing club has no major schemes planned. Some local improvements have been suggested but are unlikely. The area of Riverside Park is due for further investigation.