

Flood Investigation Report

Stour Way, Bedford

1. Introduction:

1.1. Background

The Flood and Water Management Act 2010, establishes unitary and upper tier authorities as Lead Local Flood Authorities (LLFAs). Section 19 of the Act gives LLFAs the duty to investigate a flood event when considered appropriate and to the extent it deems necessary. The LLFA will identify the relevant Risk Management Authority (RMA) and record any actions which have been taken or they are proposing to action in response to the flood event.

When an investigation is carried out under section 19 of the Act, the LLFA will publish the results of the investigation and notify any relevant risk management authorities.

1.2. Risk Management Authority Responsibilities

Table 1.1 shows RMAs responsible for managing the flood risk from different sources that the BBC investigation procedure applies to.

Flood Source	Environment Agency	Lead Local Flood Authority	Drainage Authority	Water Company	Highway Authority
		Bedford Borough Council		Anglian Water	Bedford Borough Highways
Main River	✓				
Surface Water		✓			
Surface Water <i>(on or coming off the highway)</i>					✓
Sewer flooding				✓	
Ordinary Watercourse			✓		
Groundwater		✓			
Reservoirs	✓				

2. Flood Incident, Extent and Impact:

Following heavy and continuous precipitation, properties at Stour Way experience extensive flooding in the gardens and garages. The most recent flooding event occurred on 13th July 2012 threatening properties of Stour Way and flooding three garages. Previous flood incidents of a similar nature have occurred in 2005 and 2008.

3. Likely Cause of Flood Incident

To understand the likely cause of the flood incidents, Bedford Borough Council, Highway Authority and Anglian Water worked together.

During prolonged, intense rainfall there is excessive surface water run off from the adjacent, saturated fields, which runs down the Hawk Drive track, along an alley way, into Stour Way. The excess runoff exceeds the capacity of the gullies in Stour Way which have only been designed to cater for the surface water catchment of the street.

Initially it was considered that the culvert and ditch system running from the pond behind Hawk Drive and the ditch north of 7 Stour Way was blocked causing backing up of the system and overflowing of water into Stour Way. However, this has since been found to not be directly causing the flooding issue. However, to ensure the free flow of water from the pond, through culverts and to the ditch, maintenance and clearance of the culverts and ditches is required by the relevant landowner and authority.

To intercept the surface water runoff before it reaches Stour Way, it is proposed to divert water from Hawk Drive track to the adjacent pond with a series of grips and a new shallow ditch to the pond. This should alleviate the flooding in Stour Way.

4. Responsible Risk Management Authority

It has been identified that the responsibility for the culvert and ditch running from the pond falls upon the private landowner. Anglian Water is responsible for the culverts at the downstream end of the ditch, and therefore responsible for their periodic maintenance.

5. Recommended Action

Table 5.1 highlights the recommended actions by Bedford Borough Council for the responsible RMA and a suggested timescale of responses required to confirm that the RMA is aware of the flood incident and is taking appropriate action.

Table 5.1: Recommended actions for the responsible authorities and timescale for a response required.

Responsible Authority	Action	Timescale for response required
Anglian Water	Removal of any obstruction to the headwall grills of the culvert	Complete
Anglian Water	Establish a cyclical maintenance regime to ensure regular removal of the culvert grills	Ongoing
Anglian Water	Alter the channel width at the downstream end, install re-designed grids to collect debris and allow the free flow of surface water	September 2013
Highway Authority	Ensure Stour Way gullies are clear and free flowing	Complete
Highway Authority	Remove debris from Hawk Drive ditches, and construct a system to divert water from Hawk Drive track to the adjacent pond to intercept surface water runoff	Complete
Private landowner	To clear the twin concrete pipes (culverts)	Complete
Private Landowner	Clear and ensure the free passage of water through the open ditch	Complete
Private	Establish a maintenance regime for the piped	Complete

Landowner	and open ditch	
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6. Next Steps

The next steps for the LLFA are to ensure the report is forwarded to the RMA's and landowners identified in table 5.1 and that these authorities are aware of their flood risk management responsibilities. The LLFA will follow up with the authorities to determine progress against the recommended actions.