

## FLOOD INVESTIGATION

<b>Investigation Ref:</b>	<b>2014-INV-008</b>
<b>Location:</b>	<b>Harborough, Burton Overy, Main Street</b>
<b>Date of Flooding:</b>	<b>04/06/2014</b>
<b>Officer:</b>	<b>Edwin Knight</b>
<b>Approved:</b>	<b>Daniel Rawle</b>

### STATUTORY CONTEXT

Section 19 of the Flood and Water Management Act 2010 (FWMA) states that, on becoming aware of a flood which meets certain predetermined criteria, the Lead Local Flood Authority (LLFA) must undertake a flood investigation in order to determine the relevant flood risk management authorities involved and which flood risk management actions have been (or should be) taken to mitigate future flood risk.

### FLOOD INVESTIGATION CRITERIA

<b>Mandatory</b>	
Loss of life or serious injury	<input type="checkbox"/>
Critical infrastructure flooded or nearly flooded from unknown or multiple sources	<input type="checkbox"/>
Internal property flooding from unknown or multiple sources	<input type="checkbox"/>
<b>Discretionary</b>	
A number of properties have been flooded or nearly flooded	<input type="checkbox"/>
Other infrastructure flooded	<input checked="" type="checkbox"/>
Repeated instances	<input type="checkbox"/>
Investigation requested	<input checked="" type="checkbox"/>
Risk to health (foul water)	<input type="checkbox"/>
Environmental or ecologically important site affected	<input type="checkbox"/>
Depth/area/velocity of flooding a cause for concern	<input type="checkbox"/>

### SUMMARY OF IMPACTS AND FINDINGS

#### Source(s) of flooding

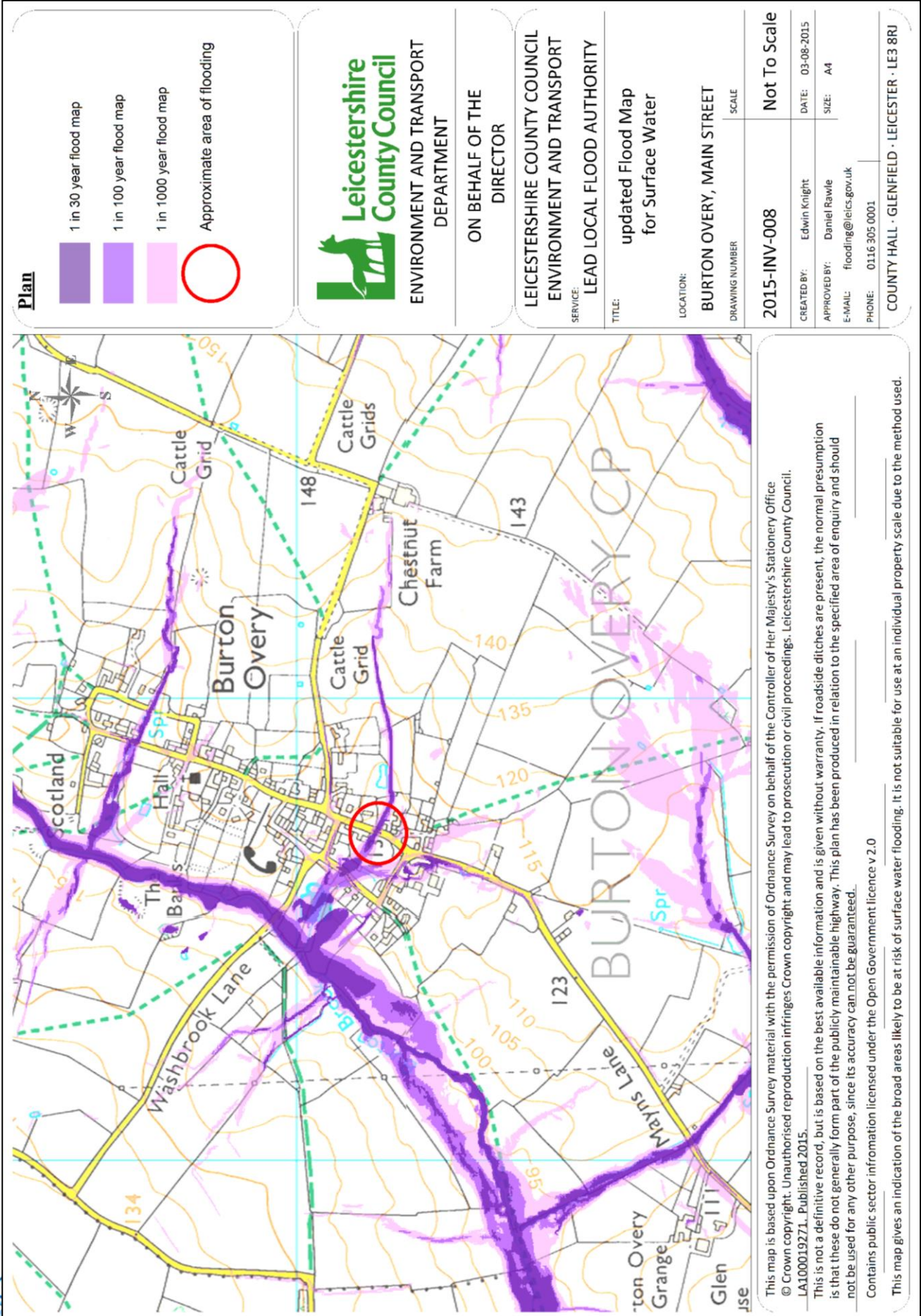
Ordinary Watercourse	Main River	Surface Water	Groundwater	Public Sewer	Canal	Land Drainage	Highway Drainage
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Impacts (number)

Residential	Business	Other Buildings	Roads	Critical Infrastructure
2	0	0	1	0



Updated Flood Map for Surface Water/ Approximate area of flooding



Further information; <https://www.gov.uk/prepare-for-a-flood>

## FINDINGS

### OVERVIEW

On the 4 June 2014 there was a short duration very intense rainfall event. At least two residential properties suffered external flooding with a depth of approximately 250mm, at times floodwater was running at a significant velocity. Ultimately the floodwater pooled within the road. Water was also seen pooling/flooding in various other locations around the village, including Beadswell Lane.

The primary cause of the flooding was believed to be due to a blockage within the culverted watercourse beneath Main Street, restricting the culverts normal capacity. The increase in rain was believed to have backed up through the system surcharging in a number of gullies upstream of the blockage, water was seen to be running from a pond and ordinary watercourse to the east of Main Street overland and pooling within the road, due to the restricted outfall the highway gullies were not able to cope with the quantity of water.

People and property were affected by the flooding as a result of the significant rainfall. The County Council spoke to the affected persons to establish and further quantify the physical effects of the flooding incident.

### HIGHWAY DRAINS

There are a number of gullies located on Main Street spacing and locations of the gullies are consistent with roads of this period. These highway gullies are connected into the culverted watercourse beneath Main Street.

### PUBLIC SEWER

Within the area immediately outside the affected properties there is a foul sewer;

- The foul sewer takes any foul water away to be treated and is not associated with the flooding in this location.

### WATERCOURSE

The unnamed ordinary watercourse originates at the pond to the east of the village; the pond collects water from the surrounding agricultural land, once the pond reaches a predetermined level the pond overflows via a weir arrangement into the watercourse and culvert as described above.

### RAINFALL

*'June was a warm and generally dry month, although convective thunderstorm activity accompanied above average temperatures. Scotland experienced its warmest June since 2003, and the Forth region registered its second warmest June on record (from 1910). The UK recorded 80% of the long-term average June rainfall, but some regional totals were significantly lower; Southern and North West England registered 49% and 56% of average, respectively.'*

Source: <http://nora.nerc.ac.uk/507823/>



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## **COMPLIANCE**

There is no evidence to suggest that any of the risk management authorities or stakeholders did not comply with either internal policy or any legal duties.

## **RECOMMENDATIONS**

### **LEAD LOCAL FLOOD AUTHORITY (LLFA)**

The LLFA will continue to monitor the locality and revisit when required, and continue to coordinate the management of flood risk and the interaction of Risk Management Authorities across Leicestershire.

### **HARBOROUGH DISTRICT COUNCIL (HDC)**

Harborough District Council continues to work closely with the LLFA to continue manage flood risk within the area.

### **LOCAL HIGHWAY AUTHORITY (LCC)**

The Highway Authority carried out remedial work on the culverts beneath Main Street and Beadswell Lane to re-establish the proper flow of water. Gullies and lateral connections in the area should also be checked to ensure that they are in good working order.

### **SEVERN TRENT WATER**

No recommendations are made for Severn Trent Water

### **RESILIANCE FORUM**

The partnership should consider arranging a further flood fairs within the area so that all communities within the Harborough area can find out about their flood risk and what actions they can take to protect themselves or their businesses.



## USEFUL CONTACTS

### ENVIRONMENT AGENCY

General enquiries 03708 506 506 (Mon-Fri, 8am – 6pm)  
Incident hotline 0800 80 70 60 (free phone, 24hours)

### SEVERN TRENT WATER

Emergencies 0800 783 4444 (24hours)  
Website: [www.stwater.co.uk](http://www.stwater.co.uk)

### LEICESTERSHIRE COUNTY COUNCIL (Highways)

Highways 0116 305 0001 (24hours)

### LEICESTERSHIRE COUNTY COUNCIL (Flooding)

Lead local flood authority 0116 305 0001 (Mon-Fri, 9am – 5pm)  
Email: [flooding@leics.gov.uk](mailto:flooding@leics.gov.uk)

### HARBOROUGH DISTRICT COUNCIL

Customer Services 01858 828282

## USEFUL LINKS

### OFWAT Guidance on sewers

[http://www.ofwat.gov.uk/consumerissues/rightsresponsibilities/sewers/prs\\_web\\_sewertransfer](http://www.ofwat.gov.uk/consumerissues/rightsresponsibilities/sewers/prs_web_sewertransfer)

### Environment Agency:

<http://www.environment-agency.gov.uk/homeandleisure/>

### Harborough District Council Website:

<http://www.harborough.gov.uk/>

### Leicestershire County Council Flood Risk Team:

<http://www.leics.gov.uk/flooding>

### Local Resilience Forum:

<http://www.localresilienceforum.org.uk/>

### Land Drainage Act 1991:

<http://www.legislation.gov.uk/ukpga/1991/59/contents>

### Water Resources Act 1991:

<http://www.legislation.gov.uk/ukpga/1991/57/contents>

### Highways Act 1980:

<http://www.legislation.gov.uk/ukpga/1980/66>

### Centre for Ecology and Hydrology:

<http://www.ceh.ac.uk/index.html>

