Section 19 – Flood Investigation Report for South Anston, North Anston, Dinnington & Hellaby

Saturday 19th July 2014
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1.0 INTRODUCTION

1.1 Background

Rotherham Metropolitan Borough Council, as the Lead Local Flood Authority (LLFA), has a responsibility under Section 19 of the Flood and Water Management Act 2010 to investigate significant flood incidents in its area. Section 19 states:

1. On becoming aware of a flood in its area, a lead local flood authority must, to the extent that it considers it necessary or appropriate, investigate:

   a. Which risk management authorities have relevant flood risk management functions, and;
   b. Whether each of those risk management authorities has exercised, or is proposing to exercise, those functions in response to the flood.

2. Where an authority carries out an investigation under the above subsection it must:

   a. Publish the results of its investigation, and;
   b. Notify any relevant risk management authorities.

Risk Management Authorities (RMA) are defined in The Flood and Water Management Act 2010. In Rotherham, these are:

   o Lead Local Flood Authority – Rotherham MBC
   o The Environment Agency – Yorkshire & Northeast Region and Midlands Region
   o An Internal Drainage Board – Danvm are in Rotherham this is only applicable to Hound Hill Dike and part of Brook Dike in Wath-Upon-Dearne.
   o A Water Company - Yorkshire Water Services Ltd & Severn Trent Water Ltd
   o A Highway Authority – Rotherham MBC & Highways Agency

The LLFA Investigating Officer will investigate the cause, publish the findings on the Council web site and notify the relevant party. Private landowners have responsibilities in relation to land drainage and riparian ownership.

The LLFA Investigating Officer will determined whether an investigation should be carried out using the Flood Investigations Guidance detailed in Section 1.2, taking into account the available resources and significance of the event.

Investigation under the provisions of the Flood and Water Management Act this does not include scrutiny of the emergency response to a flooding
event. Investigations of this kind may take place under different provisions e.g. the Civil Contingencies Act or local authority scrutiny processes.

1.2 Flood Investigation Guidance

The Council’s Local Flood Risk Management Strategy states that if 5 or more residential properties are flooded internally then the appropriate investigations will be carried out. Internal flooding is defined for this purpose as flooding which affects the living areas and excludes porches, conservatories, integral garages etc. Flood incidents which do not meet the above criterion may still be investigated under Section 19 due to other considerations, such as recurring problems or where critical infrastructure is affected. The decision about whether an investigation will be carried out will usually be made within 24 hours of learning of the flood.

The Investigating Officer(s) should consider whether there have been any reported cases of personal injury, the nature of the injury, and the number of people injured. The determining factors also include the depth and velocity of flooding and/or the source of flooding.

Where it is determined that an investigation should be carried out, the Investigating Officer will attend the location and complete an investigation to establish which risk management authorities hold relevant flood risk management functions in relation to the flood event. The response time by the Investigating Officer will depend on the circumstances and safety considerations of the flood event. The Investigating Officer will notify any relevant risk management authorities to establish if they have or are intending to exercise their function in response to the flood.

Following the investigation, the Investigating Officer will complete a report on the results of the investigation, brief appropriate internal authorities, and then publish the report on the Council’s website.

The Investigating Officer will endeavour to keep the affected customer(s) informed throughout the process. Where the determination will not result in a formal investigation the Investigating Officer will attempt to assist the customer in identifying the source of flooding and advise accordingly.

Where a number of flood events are reported simultaneously, the reports will be prioritised according to the information received.

2.0 THE INCIDENT

2.1 When & Where?

On Saturday 19\textsuperscript{th} July 2014 there were widespread rain storms which affected many parts of the country, although individual storms were localised. The reports of internal flooding received were for the South Anston, North Anston, Dinnington & Hellaby areas, all of which are located in the south east of the borough. Reports of roads and gardens
floodings were received from throughout the borough, but were concentrated in the south east.

The properties were all affected by the same rainfall event, but are all in discrete locations, in catchments which are hydraulically independent from each other.

2.2 Rainfall

The rainfall during this event was a band of localised, intense but short duration storms. There rainfall amounts experienced during these types of events can have a large variation, across small distances. Rain gauge records, even if located within a few kilometres of the properties, may not be representative.

The relatively small number of properties affected suggests that the rain, whilst heavy, was not exceptional. The fact that most of the affected
properties have experienced similar flooding before, in some cases multiple times, supports this conclusion.

### 2.3 Affected Properties

<table>
<thead>
<tr>
<th>Address</th>
<th>Number Of Properties Flooded Internally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarsdale Street, Dinnington</td>
<td>1</td>
</tr>
<tr>
<td>Kevin Grove, Hellaby</td>
<td>1</td>
</tr>
<tr>
<td>The Square, Wales</td>
<td>1</td>
</tr>
<tr>
<td>Winnowing Barn Court, South Anston</td>
<td>1</td>
</tr>
<tr>
<td>Sikes Road, North Anston</td>
<td>1</td>
</tr>
<tr>
<td>Rackford Road, North Anston</td>
<td>1</td>
</tr>
</tbody>
</table>

For further information about the investigations into the flooding in each affected area, please contact the Streetpride Drainage Team.
3.0 IDENTIFICATION OF FLOOD RISK MANAGEMENT FUNCTIONS

3.1 Risk Management Authorities

Risk Management Authorities (RMA) have flood risk management functions according to the type of flooding as follows:

- Main Rivers - Environment Agency
- Ordinary Watercourses - LLFA
- Surface Water Flooding - LLFA
- Public Sewers - Water Company
- Highway Flooding - Highway Authority

The identification of a RMA as having these functions does not imply that the RMA has responsibility or liability for the flooding, or for taking any action beyond investigation.

The Risk Management Authorities which have flood risk management functions relating to this flooding incident are:

<table>
<thead>
<tr>
<th>Address</th>
<th>Risk Management Authorities With Relevant Flood Risk Management Functions</th>
<th>Risk Management Function Exercised or Proposed to be Exercised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarsdale Street, Dinnington</td>
<td>Rotherham MBC as LLFA, Rotherham MBC as Highway Authority, Severn Trent Water Ltd</td>
<td>Yes, Yes, Yes</td>
</tr>
<tr>
<td>Kevin Grove, Hellaby</td>
<td>Rotherham MBC as LLFA, Rotherham MBC as Highway Authority</td>
<td>Yes, Yes</td>
</tr>
<tr>
<td>The Square, Wales</td>
<td>Rotherham MBC as LLFA, Rotherham MBC as Highway Authority</td>
<td>Yes, Yes</td>
</tr>
<tr>
<td>Winnowing Barn Court, South Anston</td>
<td>Rotherham MBC as LLFA, Rotherham MBC as Highway Authority</td>
<td>Yes, Yes</td>
</tr>
<tr>
<td>Sikes Road, North Anston</td>
<td>Rotherham MBC as LLFA, Rotherham MBC as Highway Authority</td>
<td>Yes, Yes</td>
</tr>
<tr>
<td>Rackford Road, North Anston</td>
<td>Rotherham MBC as LLFA, Rotherham MBC as Highway Authority</td>
<td>Yes, Yes</td>
</tr>
</tbody>
</table>

3.2 Lessons and Actions

Most of the locations which were flooded have been affected before, but little information was readily available. Section 19 investigations such as this will provide records for the future. Investigations into minor flooding
incidents should also be recorded formally to ensure that any information gained is easily accessible to assist in management of flood risk. The Local Flood Risk Management Strategy sets out how it is proposed to record and map flooding, ordinary watercourses, drainage assets etc.

Several of the flooding incidents investigated for this report followed a similar pattern. Highway drainage systems were overwhelmed by the high intensity of the rain over a short period of time, which led to water flowing from the highway towards residential properties. The presence of dropped kerbs allows water to flow off the highway more often and in greater quantities. Flood routes around properties have been blocked by extensions, outbuildings, walls or raised driveways.

The procedures for approval of the installation of dropped kerbs or extensions which extend to the property boundary should be checked to better identify where these actions may increase flood risk. Minor alterations such as walls and driveways are generally not subject to any approval process. Providing information about possible overland flow routes to property owners could minimise flood risk by preventing these routes being obstructed.

Rotherham’s Section 19 policy states that investigations will be carried out if there are 5 or more properties flooded internally. However, the definition of internal flooding is unclear. During this event, several of the properties had peripheral parts such as inside toilets flooded and it is uncertain whether this should be classed as internal flooding. It is proposed that in future internal flooding will be defined as flooding above floor level in habitable rooms. The Planning Portal definition of a habitable room will be adopted. It states ‘any room used or intended to be used for sleeping, cooking, living or eating purposes. Enclosed spaces such as bath or toilet facilities, service rooms, corridors, laundries, hallways, utility rooms or similar spaces are excluded from this definition’.

During these investigations it became apparent that there was information about highway drainage systems recorded on easements held by the Council’s Land Terrier section. As part of the operation to map highway drainage assets, information about these easements will be added to the highway drainage records.

Possible improvements to the highway drainage as determined by the further investigations should be added to the highway drainage programme and considered with other schemes in accordance with the existing prioritisation procedures. Further consultation with Severn Trent Water Limited is required to check the suitability of the existing public sewers in some areas. In addition it is likely that downstream receiving drainage systems may require further investigation works to check that they are capable of accepting the surface water flows.