

Report of the Assistant Director (Communities, Culture & Public Realm)

## **Review of June 2016 Surface Water Flood Event**

### **Summary**

1. This report provides a report back, as requested by the Executive Member, on the Council's response to the surface water flooding that occurred in June this year.

### **Recommendations**

2. The Executive Member is asked to:
  - Note the actions carried out by the Council in response to the surface water flood event as set out in paragraphs 6 to 15.
  - Agree the future actions planned as set out in paragraphs 16 to 18.

Reason: To improve the management of York's gully assets and reduce the risk of future flooding.

### **Background**

3. Intense rainfall fell on York on 10 and 12 June 2016 (10mm and 13mm respectively were recorded during concentrated periods) leading to over 90 flooding complaints being received from a variety of sources and locations. A range of roads were badly affected by flood waters, 2 properties suffered from internal flooding and 2 garages were flooded.
4. Following these events the Council has carried out a thorough programme of work to address the issues. 64 individual reports of blocked gulleys/flooding were received. All work found to be necessary has been undertaken with 18 sites that proved more problematic having works ongoing to resolve outstanding issues. Further follow-up investigatory work involving parking suspensions is required at some of these sites.

5. Due to the intense nature of the rainfall involved in this event, highway and potentially property flooding would have been expected since the design capacity for drainage systems can be overwhelmed during intense, localised storms. National media sources indicate that issues were experienced across the country at that time. However, our investigations have shown that a lack of routine maintenance in past years has exacerbated the situation in York with around half the gulleys investigated found to be blocked with debris.

### **Summary of action taken in the worst effected locations**

#### **- Heworth Ward:**

6. Bell Farm Avenue – Almost all of the 23 gulleys in the street were found to be blocked or heavily silted up; the Yorkshire Water surface water sewer was also found to be blocked. All gulleys were cleansed. 6 require further work and Yorkshire Water are investigating their sewer.
7. Roache Avenue – Almost all of the 16 gulleys in the street were affected by blockages and the Yorkshire Water sewer requires further investigation. 2 gulleys require further work and contact has been made with Yorkshire Water.
8. Middleham Avenue – Builders' debris and hard debris was found in almost all of the 26 gulleys. All are now running after considerable works. The Yorkshire Water sewer requires further investigation.
9. Bad Bargain Lane – A surface water sewer, unrecorded by Yorkshire Water, was found to be blocked; this has been jetted by the Council to establish its route and cleanse it and the issue referred to Yorkshire Water. High levels of surcharge have been identified in the receiving surface water sewer and this has also been referred to Yorkshire Water. Half of the gulleys in the street were found to be blocked and these have been cleansed.

#### **- Hull Road Ward**

10. Etty Avenue – Two thirds of the gulleys were found to be blocked by litter, hard debris and building materials. These have been cleansed and all are now running.
11. Burlington Avenue – A third of the gulleys were blocked by litter and hard debris. The majority have been cleansed and the remainder will be cleansed following a parking suspension.

12. Wolfe Avenue – Almost all of the 13 gulleys were blocked. All have been cleansed.
13. Walney Road – The Yorkshire Water surface water sewer was found to be blocked and a length of un-recorded pipework has been investigated. All issues have been referred to Yorkshire Water for further investigation. Two thirds of the gulleys were found to be initially blocked.

- **Rufforth Ward**

14. Rufforth (south) – Existing problems at Rufforth have been alleviated by a range of works over the last year. The great majority of gulleys were running and have subsequently been maintained. Yorkshire Water have carried out cleansing works and root removal to their surface water sewer previously but this work has not been successful and the system has capacity problems in times of heavy rainfall. Survey and hydraulic modelling by the Council and Yorkshire Water have identified remedial works to a pond and receiving ditch system that could be used, with a connecting ditch, to bypass the problem area. Joint funding solutions are being discussed.

- **Guildhall Ward**

15. Huntington Road – Half of the gulleys were found to be blocked: debris and building materials around skips used for flood repair works were likely to be the cause. The majority were cleansed, parking restriction are required to complete the investigation.

**Future actions to improve drainage**

16. The gully cleansing programme agreed by the Executive Member in March this year is putting in place an effective programme of gully cleansing, reducing the risks of further surface water flooding. The programme is based on an annual cleanse for identified surface water hotspots with all other assets being cleansed proactively over an 8 year cycle. The programme, which is operated by two jetting tankers staffed by four personnel, ensures that gulleys are fully cleansed. It is clear from the number of blocked gulleys encountered in this flooding incident that previous gully cleansing operations were not effective and were likely driven on the quantity of work done rather than the requirement for it to be effective and deliver a cleansed asset. It is probable that operatives did not leave each asset in a running condition and only 'cosmetic' cleansing was

carried out. A reactive cleansing service is retained to address any additional issues as they arise.

17. At the same time, investigation work is being carried out into the current state of the 41,000 known gulley assets in the City of York Council area. Any gulleys that are found to remain defective following cleansing are classed as 'non-runners' and further investigation and, where necessary, structural works are undertaken, funded through capital budgets. A further tanker is allocated to these works. Works are managed by two Flood Risk Management Engineers reporting to the Flood Risk and Asset Manager.
18. To date, around 8,000 gulleys have been investigated and the results have been fed into an improved asset register which will be used to inform future gulley maintenance works. This will allow us to develop an intelligent programme based on asset needs rather than being driven solely by previous inspection dates and frequencies.
19. Whilst this represents significant progress we are being slowed down by the severity of the issues being uncovered with more than 50% of the surveyed network being found to be blocked and many of the blockages being significant. This is undoubtedly due to the lack of maintenance work carried out in past years, sometimes exacerbated by poor design making access for cleansing difficult. These gulleys cannot be made operational even with extensive cleansing and will require significant civil engineering work to restore them. This work is being programmed.
20. Until all the investigatory and remedial work is complete the gulley cleansing programme cannot be fully effective and there remains a risk of further flooding events such as occurred on 10 and 12 June. The administration has provided significant additional funding to progress this work with £125k of one-off capital funding for "drainage hotspots". Delivering works against the increased budgets is likely to take up the full capacity of the drainage team in this financial year; however, progress with the capital spend will be reviewed and reported to the Executive through the capital monitor reports. Should there be potential to accelerate the programme officers will advise accordingly with a view to recommending that capital funding from next year's rolling programme allocation is brought forward and / or unallocated revenue from the flood contingency funding, allocated to deal with the effects of the Boxing Day floods.

21. Officers will also bring forward recommendations for the future size of the capital rolling programme, through the budget process, in light of the ongoing drainage investigatory work as well as the outcomes of the flood enquiry which is to be held shortly.

### **Consultation**

22. This review has been carried out in response to a range of events. No further consultation has been undertaken at this stage.

### **Options and Analysis**

23. The principal options open to the Executive Member are to comment on the work undertaken to date and the future work planned.

### **Council Plan**

24. Improvement of the gulley management service assists with the priority of a Focus on Frontline Services.

### **Implications**

#### **Financial:**

25. Current available budgets are:

Gulley cleansing	£190k revenue funding
Gulley investigation & defects	£200k capital rolling programme
Drainage “hotspots”	£125k one-off capital funding
Improvement funding	£180k one-off capital funding

26. £125k flood contingency funding was made available in the aftermath of the Boxing Day floods. £50k of this has been allocated via Make it York and £50k to the flood enquiry leaving £25k.

27. **Equalities:** The review of the gulley management service has highlighted a range of ways in which the gulley cleansing service can be delivered to address wider benefits and will lead to a positive improvement for all residents and businesses in the council area.

28. There are no human resources, legal, crime and disorder, property, IT or other implications arising from this report.

### **Risk Management**

29. In compliance with the Council’s risk management strategy the main risks that have been identified associated with the areas of work covered by the policy proposed in this report are those which relate to legal and regulatory, i.e. relating to health and safety, and

physical, i.e. relating to hazards to assets and people. Measured in terms of impact and likelihood, the risk score has been assessed at 10 which equates to “Low”. This is acceptable but means that regular monitoring is required of the gulley maintenance arrangements.

### Contact Details

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	<b>Report Approved</b>	√	<b>Date</b> 22 August 2016
<b>Specialist Implications:</b> Jayne Close Principal Accountant			
<b>Wards Affected:</b>			<b>All</b> ✓

**Background Papers:** None

**Annexes:** None