

APPENDIX AA

SECTION 19 REPORT – RETFORD – STORM BABEL, OCTOBER 2023

Introduction

Section 19 of the Flood and Water Management Act 2010 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 (RMAs) have relevant flood risk management functions.
 - (b) Whether each of those RMAs has exercised, or is proposing to exercise, those functions in response to the flood.
2. Where an authority carries out an investigation under subsection (1) of Section 19 it must:-
 - (a) Publish the results of its investigation.
 - (b) Notify any relevant RMAs.
3. The objective of this report is to investigate which RMAs had relevant flood risk management functions during the flooding in October 2023 and whether the relevant RMAs have exercised, or propose to exercise, their risk management functions (as per section 19(1) of the Flood and Water Management Act 2010).
4. The Risk Management Authorities for this area of Nottinghamshire are the Environment Agency (EA), Bassetlaw District Council (BDC), Nottinghamshire County Council (NCC) as Lead Local Flood Authority (LLFA), VIA East Midlands Ltd as Highways Authority on behalf of NCC, Severn Trent Water Ltd. (STW) and the Isle of Axholme Internal Drainage Board (IOAIDB).
5. It should be noted that this duty to investigate does not guarantee that flooding problems will be resolved and cannot force others into action.

Background

6. Retford is a town within the District of Bassetlaw, Nottinghamshire. It has a population of approximately 23,740 people according to the 2021 census.
7. On the 20th October, during Storm Babet, Retford suffered a flood event caused by sustained heavy rainfall. 103.2mm of rainfall was recorded at the Worksop rain gauge, with 75.4mm of this on the 20th alone, which is approximately 9.5km from Retford (Figure 1). Consequently, 123 residential properties and 4 businesses were subject to internal flooding with more suffering flooding to gardens and outbuildings.
8. This storm came after a prolonged period of persistent rain which had saturated the ground resulting in flooding of roads and properties quicker than they would following a dry period.

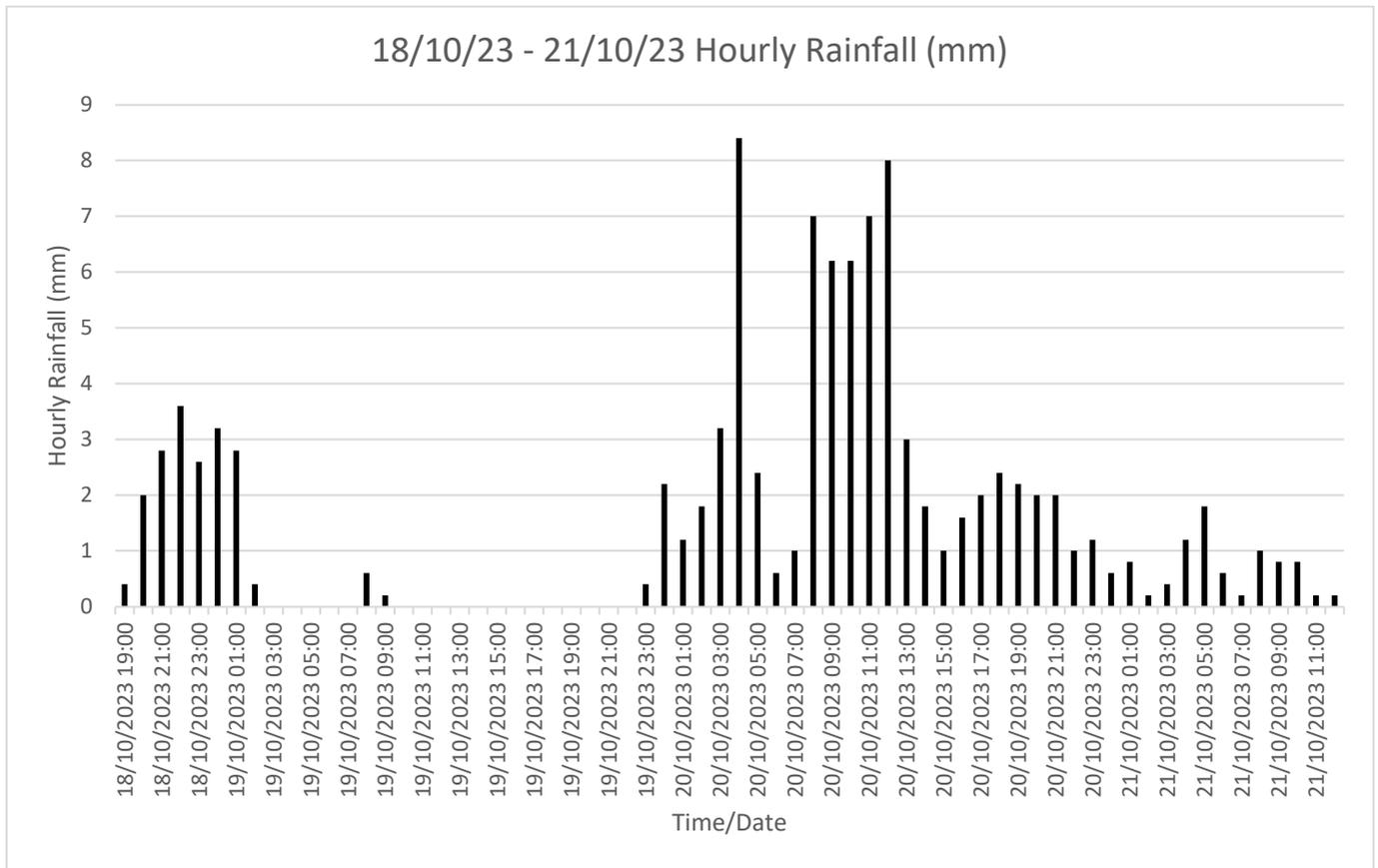


Figure 1. Worksop Hourly Rainfall 19:00 18th October – 12:00 21st October 2023. Data supplied by the Environment Agency.

9. A location map of Retford is shown in Figure 2. The areas affected were: (Internally flooded property numbers given in brackets)

- Blackstope Lane (12)
- Claters Close (2)
- Darrel Road (25)
- Grove Lane (10)
- Hallcroft Road (1)
- Leverton Road (5)
- Maun Close (10)
- Meden Way (26)
- Poulter View (5)
- Station Terrace (1)
- Sunningdale (3)
- Thrumpton Close (15)
- Victoria Road (2)
- West Street (1)
- Whitehall Court (9)

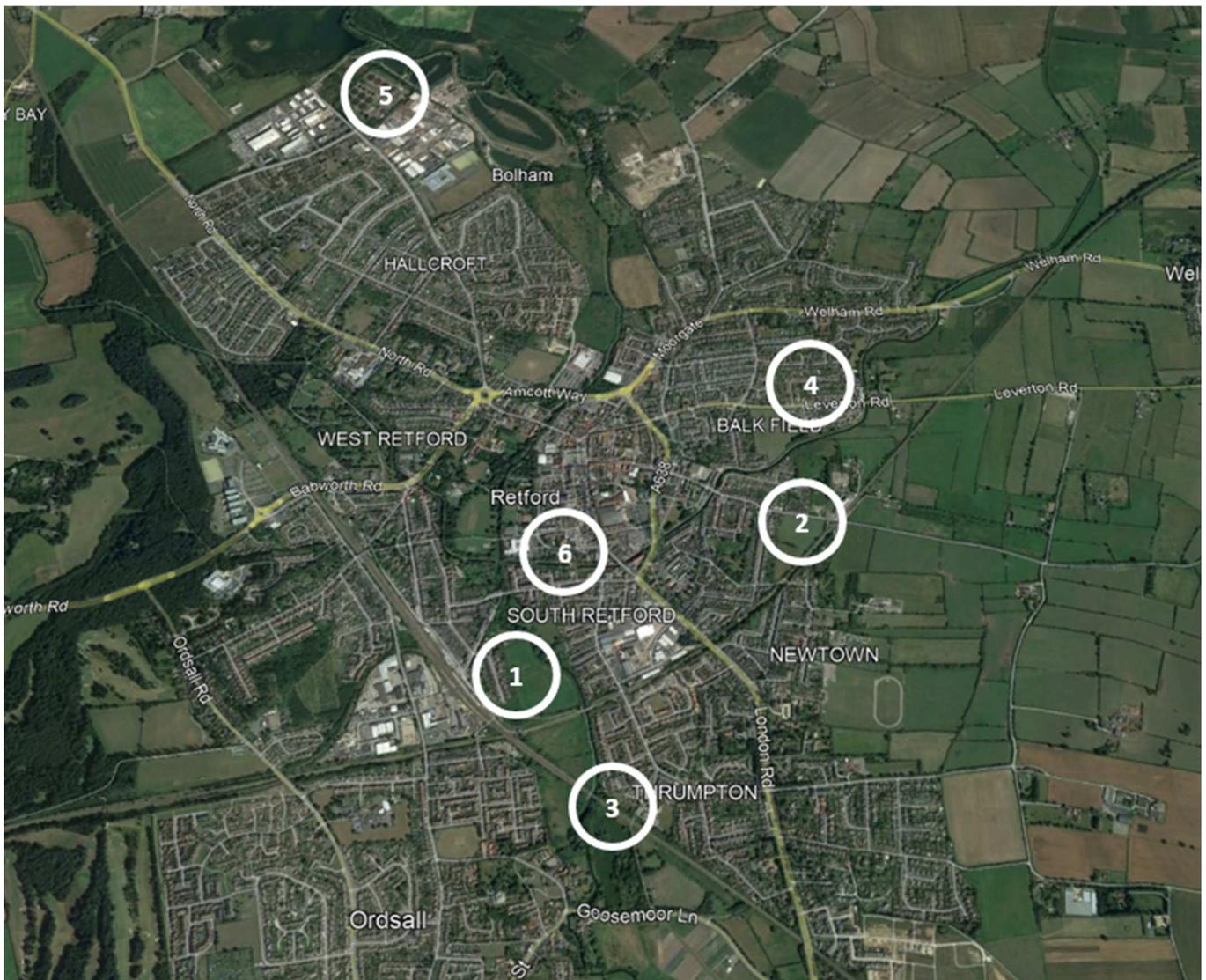


Figure 2. View of Retford flood affected areas. 1. Darrel Road and Victoria Road 2. Blackstope Lane and Grove Lane. 3. Maun Close, Meden Way, Poulter View, Station Terrace, Thrumpton Close and Whitehall Court 4. Claters Close and Leverton Road 5. Hallcroft Road 6. West Street.

Summary of flooding and its causes

Darrel Road and Victoria Road

- 10. The Carr Dyke (IDB managed watercourse) and River Idle (main river) are both located to the east of Darrel Road and Victoria Road and flow in a northerly direction, as shown in Figure 3. Due to the sustained heavy rainfall during Storm Babet, levels in the Carr Dyke rose until this watercourse came out of banks and begun to flood gardens and outbuildings.
- 11. The River Idle also rose in response to the sustained heavy rainfall, rising through the 20th, 21st and early morning of the 22nd of October. At its peak the River Level gauge at Ordsall recorded a new record level of 1.79m (shown in figure 4.), substantially higher than the previous highest level on record of 1.65m set in June 2007.

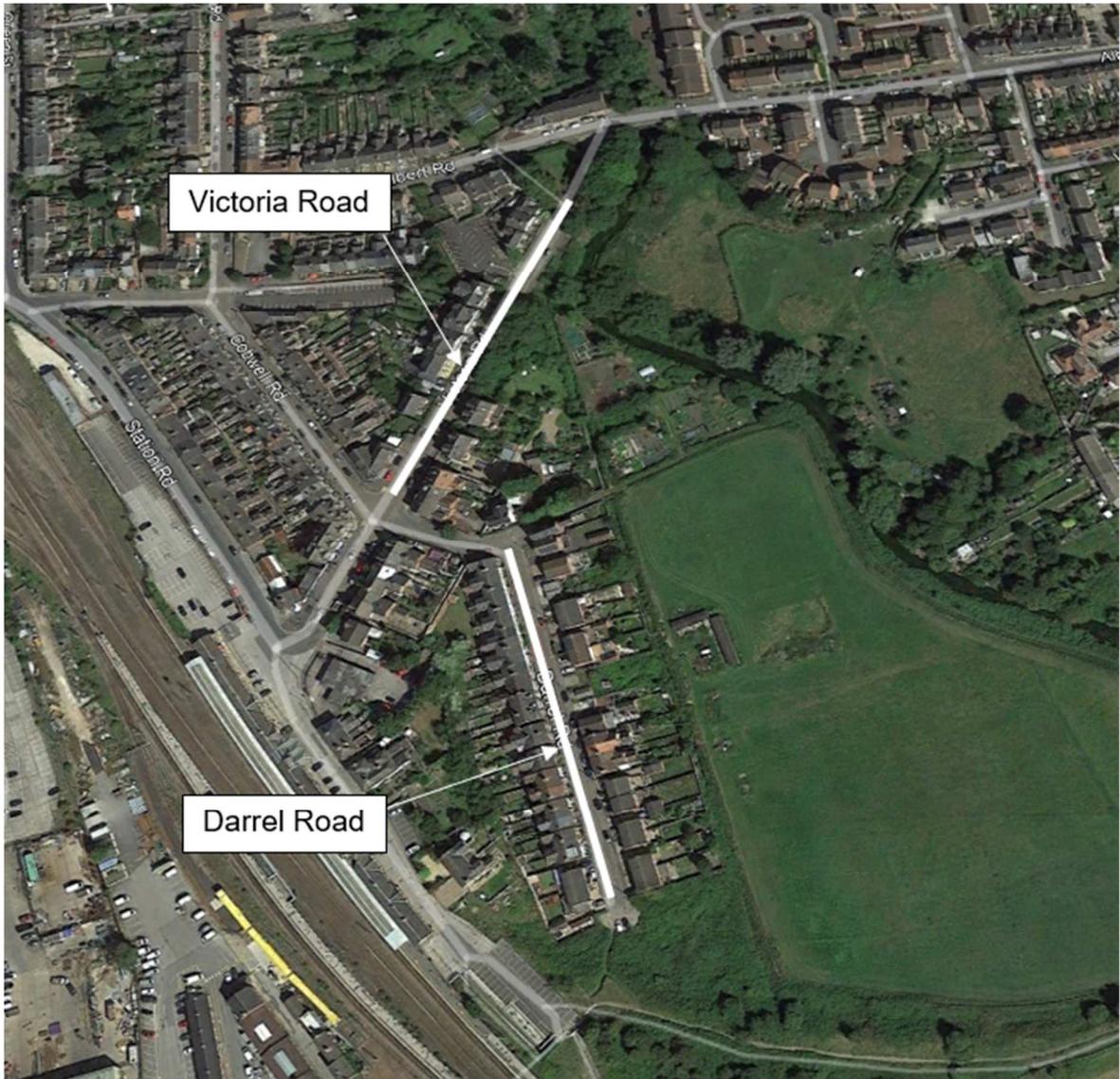


Figure 3. Darrel Road and Victoria Road.

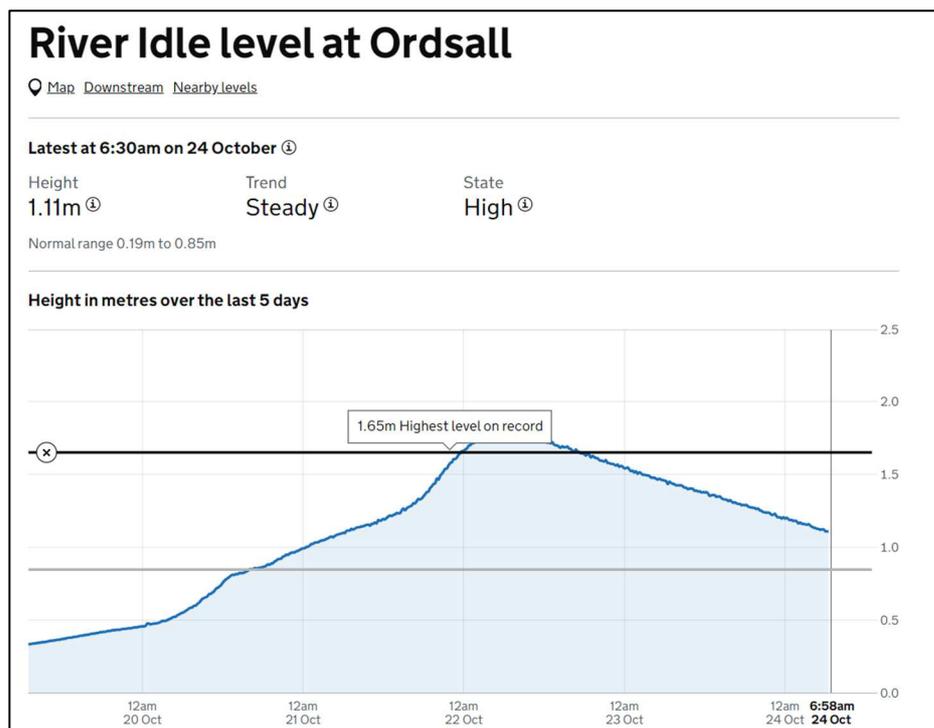


Figure 4. River Level gauge data for the River Idle at Ordsall.

12. As a result the River Idle overtopped its banks, filling adjacent fields to the south of the railway line and flowing into the Carr Dyke via a culvert under the railway embankment, overtopping a throttle installed here, and over a lower area of land just to the north of the railway bridge.
13. While the Fluvial Flood Risk Mapping (Figure 5) broadly indicates this trend of flooding, it should be noted that not the entire field to the east of Darrel Road was flooded during the event. The additional flood flows from the River Idle, combined with the already high water levels in the Carr Dyke, resulted in water levels to rise along the western edge of the field and rear gardens, which increased enough to cause internal flooding to properties. As a result, twenty-five residential properties suffered internal flooding on Darrel Road and two residential properties suffered internal flooding on Victoria Road with more properties suffering from external flooding.

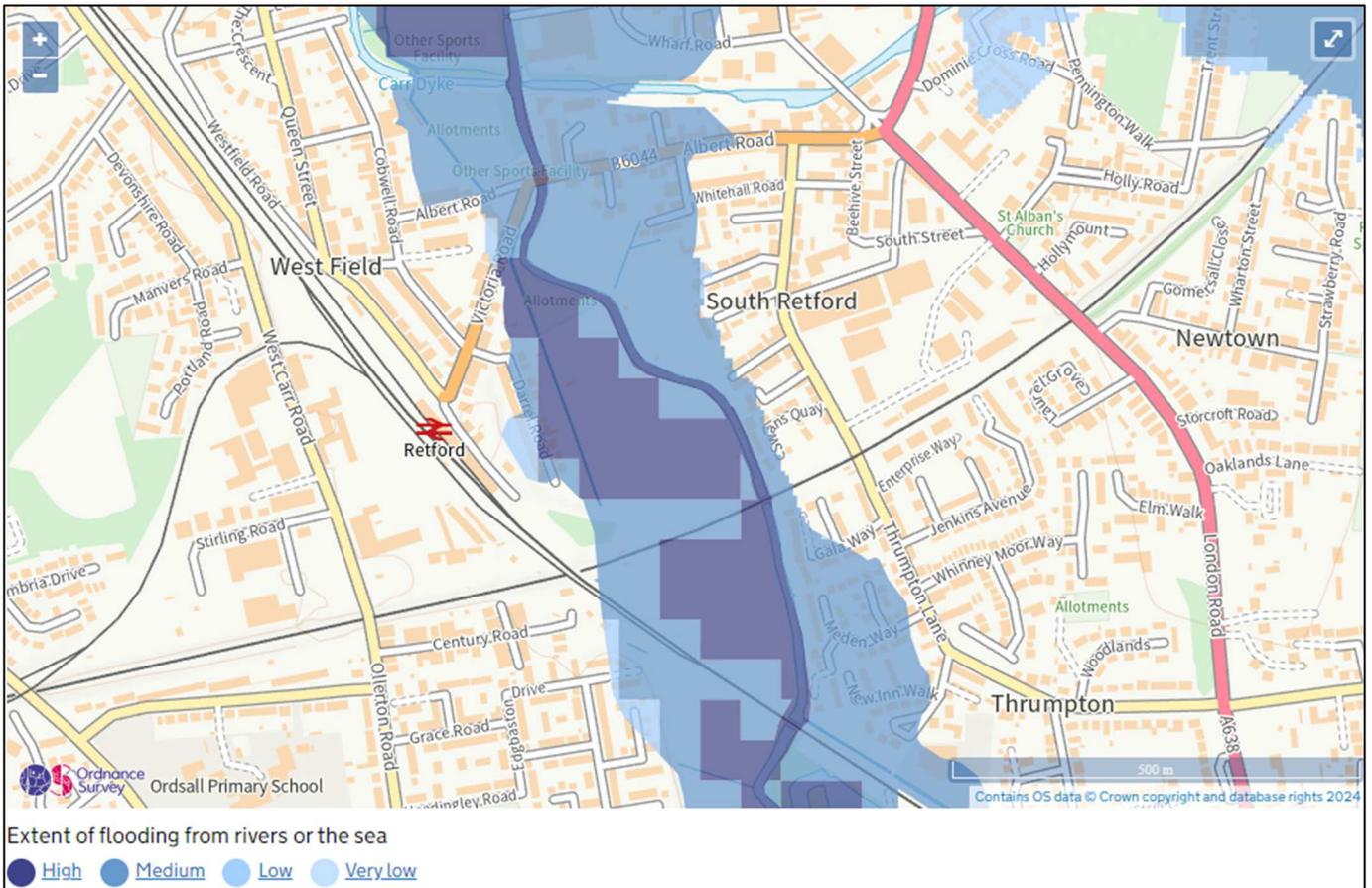


Figure 5. Fluvial Flood Risk Mapping. Data provided by the Environment Agency.

Blackstope Lane and Grove Lane

- 14. Blackstope Lane and Grove Lane, shown in figure 6, are located on the eastern edge of Retford between the Chesterfield Canal and the Retford to Gainsborough railway line. The Retford Beck originates to the south-east of Retford and flows in a generally northerly direction, until it reaches Grove Lane where it heads west. This and an un-named watercourse on Blackstope Lane receive runoff from land to the east of Retford and convey this under the Chesterfield Canal to its outfall into the River Idle. Due to the rising land to the east of Retford these watercourses respond quickly to heavy rainfall. This has caused flooding on Blackstope Lane and Grove Lane on previous occasions.
- 15. In anticipation of the forecasted rainfall the Environment Agency deployed pumps which were operated 24 hours a day for 5 days. During Storm Babet however the heavy sustained rainfall caused these watercourses to rapidly rise and despite the pumping efforts, overwhelm the culverts on Grove Lane and Blackstope Lane. As a result, twelve residential properties were internally flooded on Blackstope Lane and eight residential properties and two business properties were internally flooded on Grove Lane.



Figure 6. Blackstope Lane and Grove Lane

- 16. Figure 7 shows the Flood Risk Mapping for this area, which generally correlates with the flooding observed.

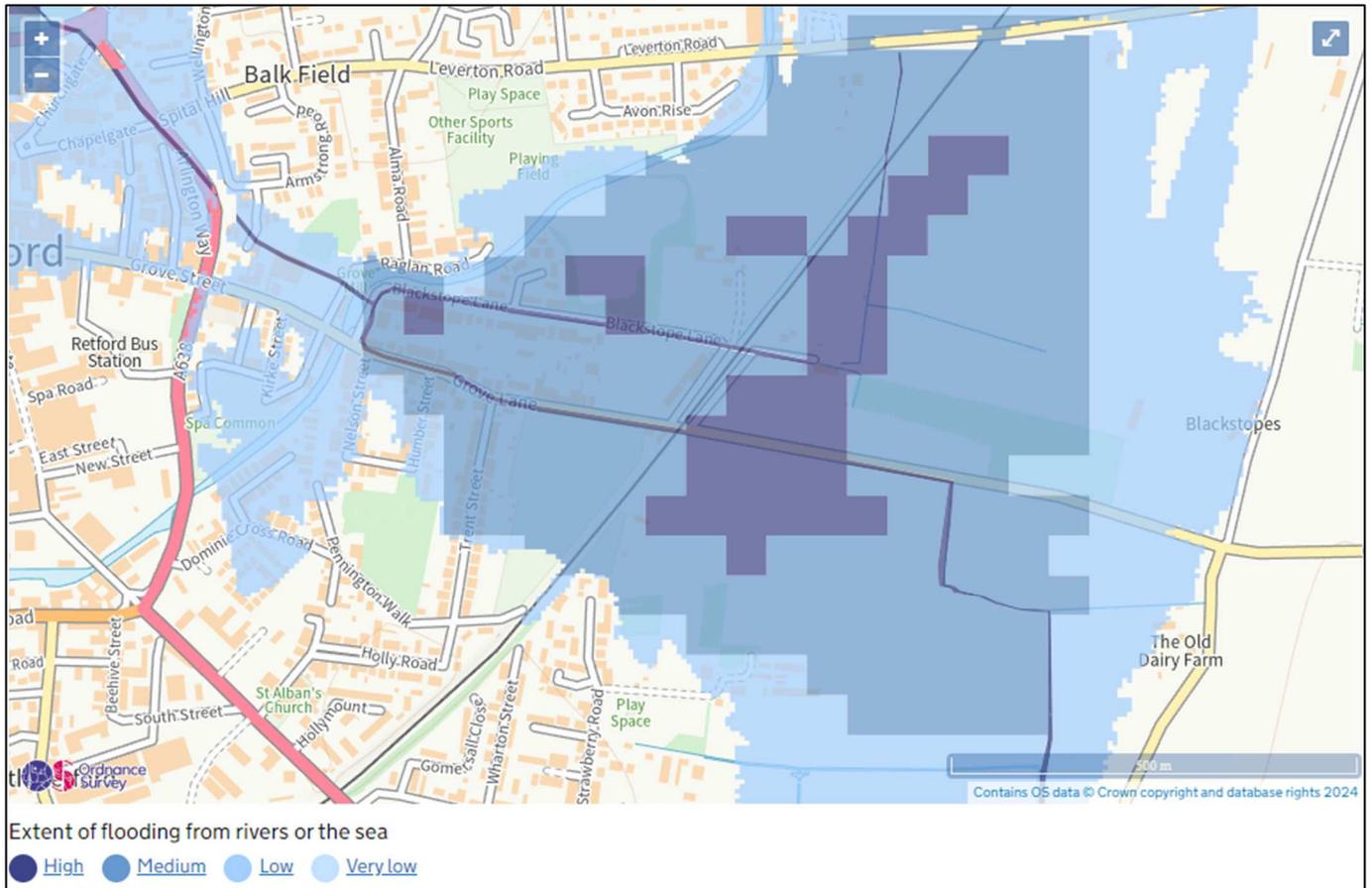


Figure 7. Fluvial Flood Risk Mapping. Data provided by the Environment Agency.

Maun Close, Meden Way, Poulter View, Station Terrace, Thrumpton Close, Whitehall Court

17. The below streets are all located in the Thrumpton area of Retford, identified in Figure 8. Internally flooded property numbers are given in brackets.

- Maun Close (10)
- Meden Way (26)
- Poulter View (5)
- Station Terrace (1)
- Thrumpton Close (15)
- Whitehall Court (9)

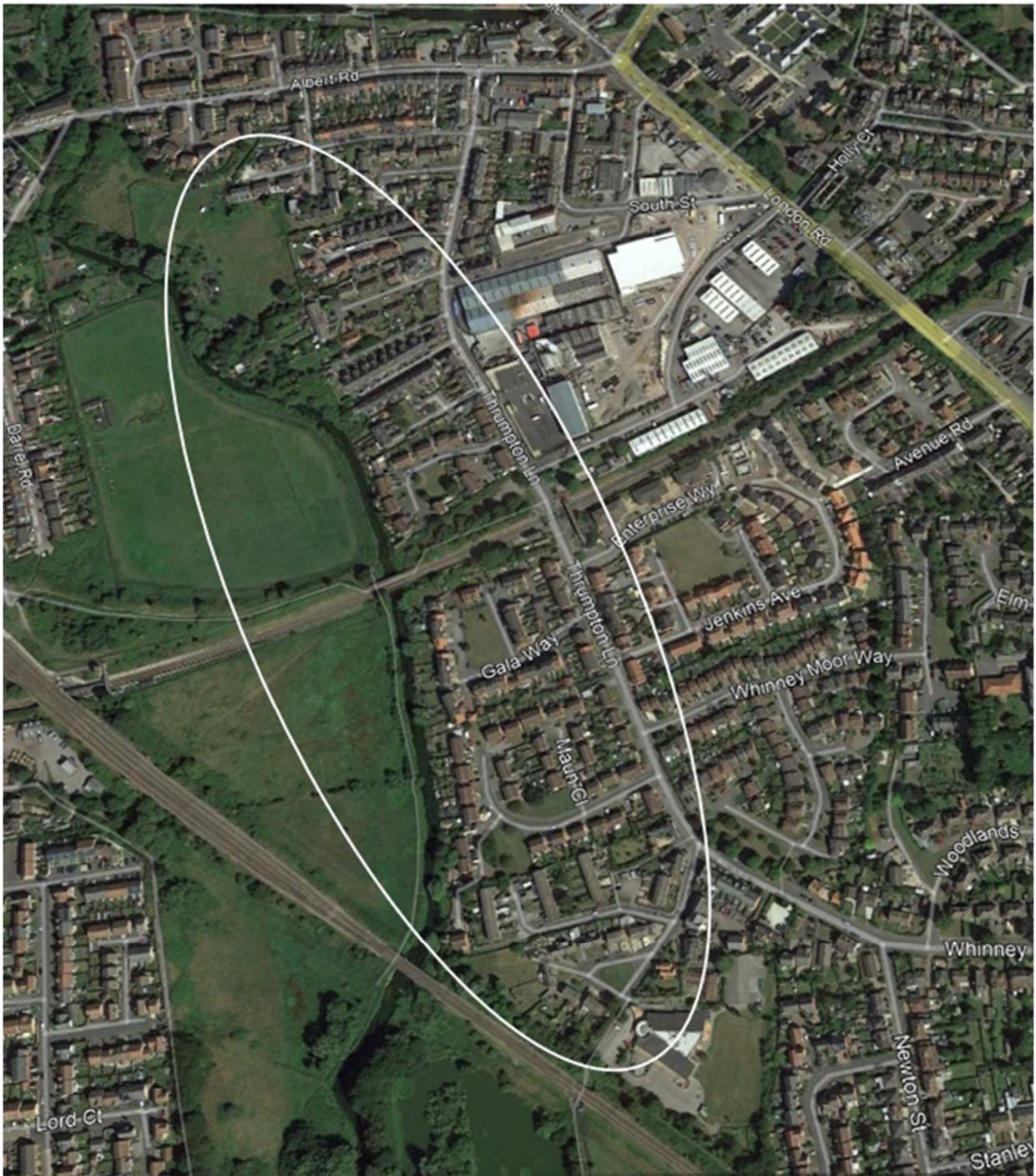


Figure 8. *Maun Close, Meden Way, Poulter View, Station Terrace, Thrumpton Close, Whitehall Court*

18. The River Idle runs to the east of this area. The sustained heavy rainfall saw the river level rise through the 20th, 21st and early morning of the 22nd of October. At its peak the River Level gauge at Ordsall recorded a new record level of 1.79m (shown in figure 4.)
19. As a result, the River Idle overtopped its banks and a section of flood wall causing internal flooding, also resulting in a section of flood wall being damaged on Poulter View. It is also understood that as a result of the high levels in the River Idle, and subsequent overtopping, that the highway drainage would have been unable to outfall, and would then have subsequently been overwhelmed by flood water from the river.
20. Figure 9 shows the predicted fluvial flood risk for the area which correlates with the flooding observed in this area.

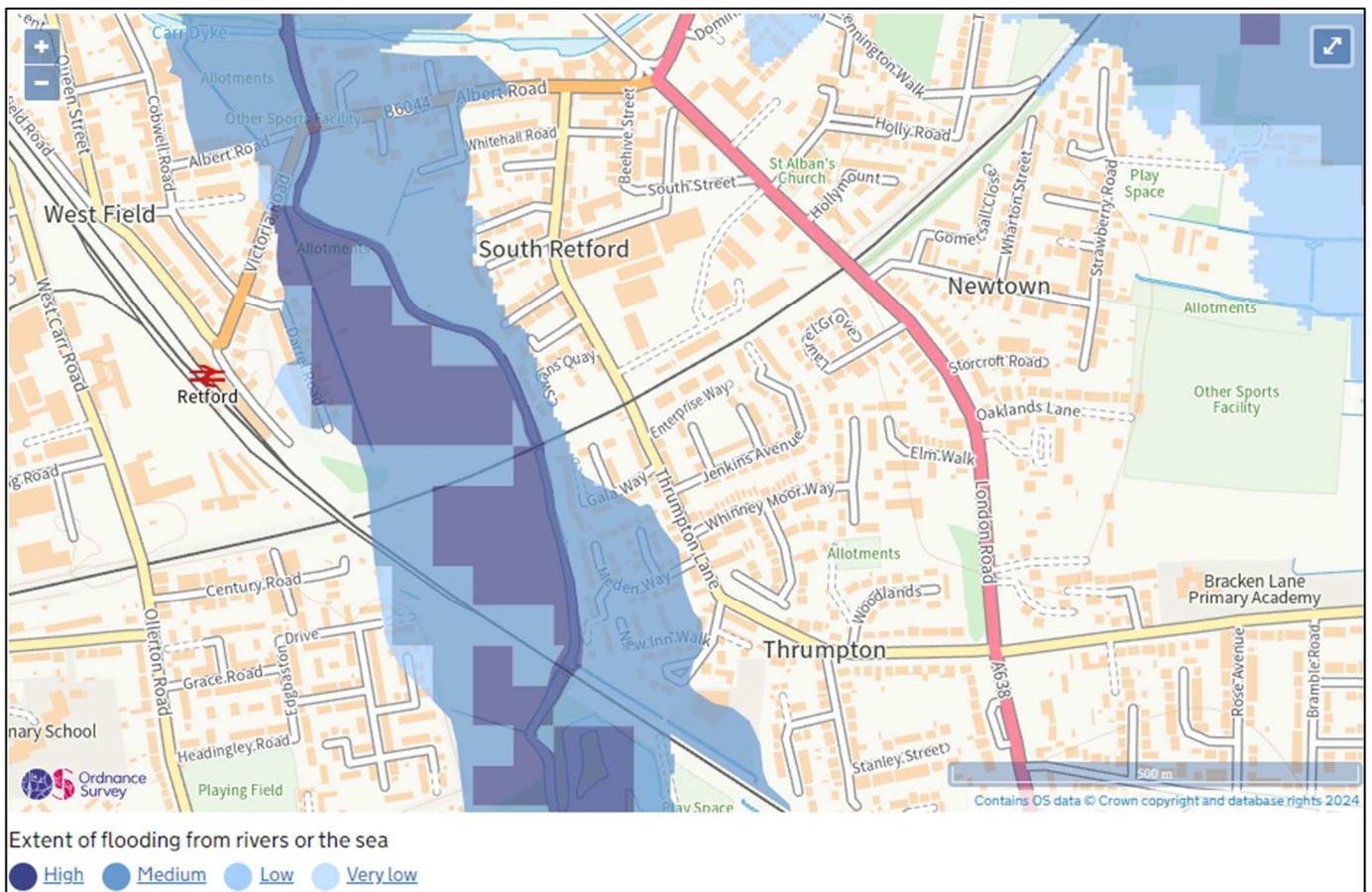


Figure 9. Fluvial Flood Risk Mapping. Data provided by the Environment Agency.

Claters Close and Leverton Road

21. Claters Close and Leverton Road are located in the north east of Retford, to the west of the Chesterfield Canal. Two residential properties on Claters Close and five residential properties on Leverton Road suffered internal flooding due to surface water running down the highways towards properties.
22. This surface water flooding correlates with the predicted surface water extents as shown in figure 11 below. There is also understood to be interaction with a Severn Trent pumping station in the area which may have contributed to the flooding and will need to be assessed to fully understand the cause of the flooding in this location.



Figure 10. Claters Close and Leverton Road



Figure 11. Surface Water Flood Risk Mapping. Data provided by the Environment Agency.

Hallcroft Road

- 23. Hallcroft Road is located in the north of Retford, shown in Figure 12, and has the River Idle to the east. Due to the sustained heavy rainfall, levels rose until the river came out of banks, filling the adjacent lakes. River levels continued to rise and as a result one business property suffered internal flooding.

24. River levels recorded at the gauge at Ordsall reached a new record level of 1.79m (shown in figure 4.). Figure 13. Shows the predicted fluvial flood risk for this area, which correlate with the observed flooding.



Figure 12. Hallcroft Road.

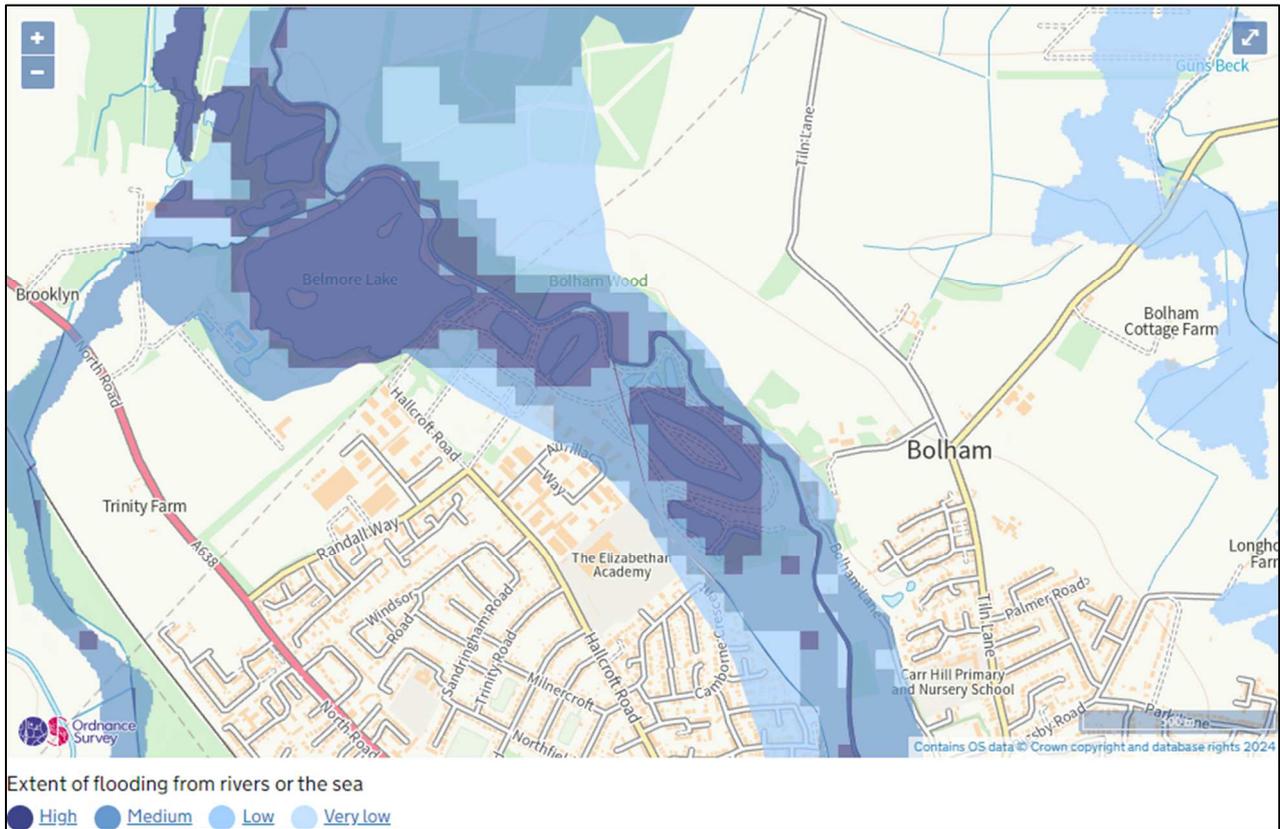


Figure 13. Fluvial Flood Risk Mapping. Data provided by the Environment Agency.

West Street

25. One business property suffered internal flooding on West Street as a result of Storm Babet. The River Idle is located approximately 125 metres to the west, which due to the sustained heavy rainfall recorded a record level of 1.79m at the gauge at Ordsall (shown in figure 4.).
26. As a result, the river burst its banks and flooded onto Wharf Road and Chancery Lane. This reached levels where it also flowed onto West Street.

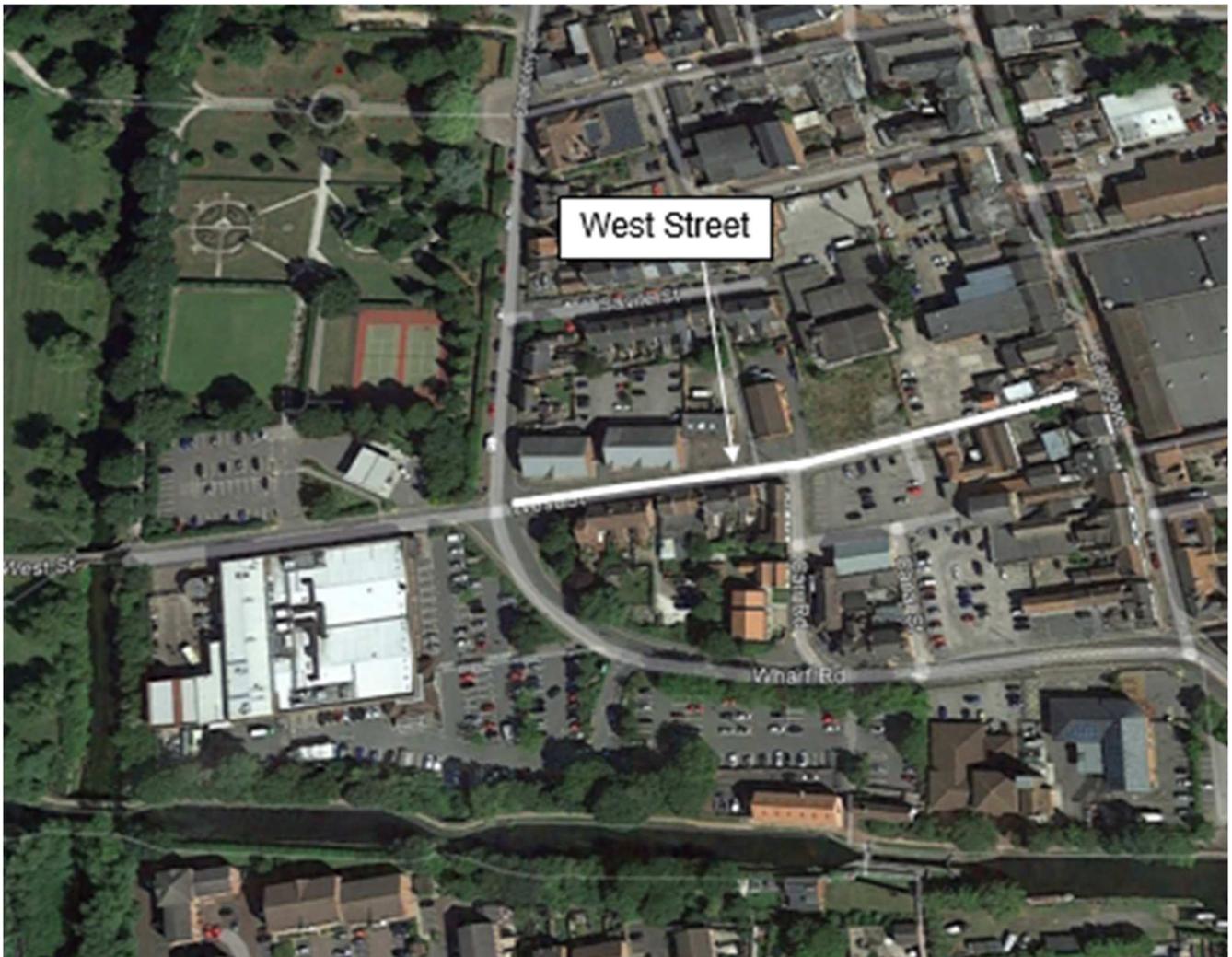


Figure 14. West Street

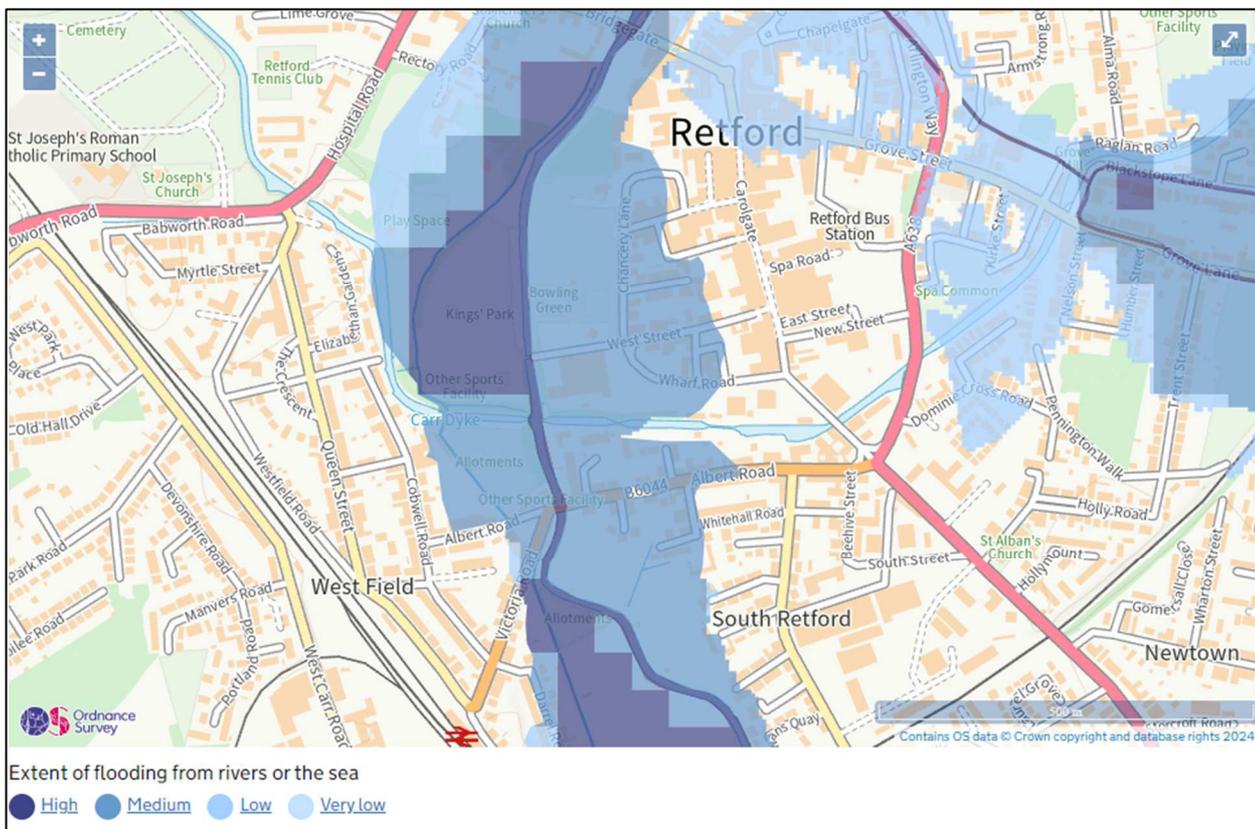


Figure 15. Fluvial Flood Risk Mapping. Data provided by the Environment Agency.

Risk Management Authorities and their responsibilities

27. Nottinghamshire County Council.

a) Lead Local Flood Authority.

- i. Investigate significant local flooding incidents and publish the results of such investigations.
- ii. Play a lead role in emergency planning and recovery after a flood event.
- iii. As the Lead Local Flood Authority, we have a new duty to determine which risk management authorities have relevant powers to investigate flood incidents to help understand how they happened, and whether those authorities have or intend to exercise their powers.
- iv. By working in partnership with communities, Lead Local Flood Authorities can raise awareness of flood risks.
- v. Lead Local Flood Authorities should encourage local communities to participate in local flood risk management.

b) Emergency Planning.

- i. If a flood happens, all local authorities are 'category one responders' under the Civil Contingencies Act. This means they must have plans in place to respond to emergencies and control or reduce the impact of an emergency.

c) Highway Authority (NCC/VIA East Midlands Ltd).

- i. Maintenance of the public highways including highway drainage assets.

28. Bassetlaw District Council.

- a) Category one responder under the Civil Contingencies Act. This means they must have plans in place to respond to emergencies and control or reduce the impact of an emergency.

29. The Environment Agency.

- a) Category one responder under the Civil Contingencies Act. This means they must have plans in place to respond to emergencies and control or reduce the impact of an emergency.

30. Severn Trent Water Ltd. (STW).

a) Maintenance of the public sewerage system.

b) As a water and sewerage company, STW manage the risk of flooding from their water supply and sewerage facilities. This includes:

- Surface water sewers – these carry rainfall and surface water away from properties to watercourses.
- Foul water sewers – these carry wastewater away from properties to be treated.
- Combined water sewers – these drain both wastewater and surface water from properties along with run off from highways.
- Managing the impact of flooding to their networks by ensuring their systems have the appropriate level of resilience to flooding.

- Engage with RMAs on how water and sewerage company assets impact on local flood risk.
- STW are Category 2 responders under the Civil Contingencies act, providing emergency response and supporting the management of flooding events.

31. Isle of Axholme Internal Drainage Board (IOAIDB).

- Has a duty to manage flood risk and land drainage within areas of special drainage need in the Trent Valley.
- Has permissive powers to undertake work to provide water level management within their area.
- Undertake works to reduce flood risk to people and property and manage water levels for local needs including the maintenance of rivers, drainage channels, outfalls and pumping stations.

Risk Management Authority Responses to Flood

32. The following lists the actions taken by each RMA in response to the flooding both in the immediate aftermath as well as in the longer term:

33. Nottinghamshire County Council.

Officers from across the County Council played a key role in the response to the Major Incident that had significant impacts across the county. The following lists the key actions taken by Nottinghamshire County Council:

- Initiated its Community Flood Recovery Grant to support individuals affected by internal flooding as a short-term recovery aid.
- Attended site after flooding occurred to verify scale of internal flooding, offer support, guidance and advice to affected residents and businesses.
- Information gathered on site was fed back to relevant RMA's and partners.
- Collated flood impact data from other RMA's and partners and published verified data on Resilience Direct.
- Visited flood affected residents and businesses to establish sources and mechanisms of flooding and severity of flood impacts.
- Chaired and attended Strategic / Tactical / Recovery Coordination Group meetings initiated by the Local Resilience Forum.
- Provided 24-hour support through the Emergency Planning team.
- Carried out relevant actions requested by Strategic / Tactical / Recovery Coordination Groups.
- Initiated and led the Section 19 Flood Investigation, including liaison with relevant RMA's, parish councils, community groups, affected residents and businesses.
- Leading on procurement and delivery of DEFRA Property Flood Resilience Repair Grant Scheme.
- Liaised with and supported existing community flood signage schemes during the flooding.
- Delivered sandbags to affected areas and communities.
- Closed 77 roads across Nottinghamshire to promote road safety and avoid additional flood damage to at risk areas.
- Supported District and Borough partners by sharing resources during the emergency response.
- Utilised existing communication channels to update the public, partners and Elected Members with key messages during the event.

34. Bassetlaw District Council

- a) Provided emergency response support for management of the flooding event including:
 - i. Participation in all LRF Strategic Co-ordination Group, Tactical Coordination Group, Communications Cell and Recovery Coordination Group meetings.
 - ii. Active deployment of sandbags and aquasacs to vulnerable premises and residents.
 - iii. Provision of community resilience stores enabling access to sandbags and aquasacs.
 - iv. Public communication of key messages at different phases of the incident, including warn and inform and recovery.
 - v. Provision of a rest centre at Retford Leisure Centre.
 - vi. Provided temporary accommodation to affected residents in need
- b) Provided skips, caged vans and staffing support to residents to dispose of flood damaged property.
- c) Cleansing of significant detritus from roads, car parks and paths.
- d) Rehoused affected tenants from Council properties.
- e) Undertook repairs to affected Council housing properties.
- f) Promoted and administered Business Recovery Grant and Business Rates Relief schemes.
- g) Promoted and administered the Community Recovery Grant and Council Tax Discount schemes.
- h) Worked in Partnership with Nottinghamshire County Council in relation to the verification and administration of the Property Flood Resilience Grant Scheme.
- i) Actively engaged in the section19 Flood Investigation.

35. The Environment Agency.

- a) The Environment Agency warned and informed the community of Retford and partners by issuing a Flood Alert for the River Idle in Nottinghamshire Flood Alert on 19/10/202 and a Flood Warning for the River Idle at West Retford and Ordsall on 21/10/2023.
- b) The Environment Agency issued a Severe Flood Warnings for the River Idle at West Retford and Ordsall on 22/10/2023 and the River Idle at Retford, Eaton and Gamston on 22/10/2023.
- c) The Environment Agency instigated flood patrols on 19/10/2023 to operate structures in accordance with incident response procedures. The Environment Agency cleared blockages in the area before and after the peak flows when it was safe to do so, installing flood gates at Ordsall.
- d) The Environment Agency installed pumps on 19/10/2023 at Grove Lane and Blackstope Lane in anticipation of the forecasted rain. These were operated 24 hours a day for 5 days when the flood water receded, pumping 399,120m³ in partnership with the Fire and Rescue Service.
- e) The Environment Agency liaised with Nottinghamshire Police and Fire and Rescue Services to evacuate residents as conditions worsened.
- f) The Environment Agency coordinated community information officers and surveyors to gather information and visit affected communities to understand the impact of flooding on affected communities and collect data.
- g) The Environment Agency along with partner organisations, have been working with Bassetlaw District Council extensively since Storm Babet with further detail outlined in the next section.

36. Severn Trent Water Ltd.
- a) At the time of writing this report, Severn Trent has received reports of flooding in this area and are completing ongoing investigations into the source of flooding.
 - b) Severn Trent actively engaged with the Section 19 Flood investigation.
37. Isle of Axholme Internal Drainage Board.
- a) The IDB is working closely with lead partners to identify and deliver appropriate solutions including supporting funding applications and with engineering and design expertise.
 - b) In all parts of the IDB districts the regular annual maintenance regime has been and will continue to be delivered to reduce risk and identify potential risk areas.

Additional Information and Future Actions

38. All the Risk Management Authorities involved in this event are committed to continuing the investigations into the causes of this incident. Those investigations may identify further actions not listed below.
39. As the Lead Local Flood Authority we have witnessed and have experience of how flooding devastates communities. The most vulnerable in the community will be our priority. Nottinghamshire County Council will continue to work closely with partners and communities to identify ways of proactively reducing the risk, likelihood and consequences of future flooding events.
40. The Environment Agency will review and make improvements to the pumping strategy for Retford.
41. The Environment Agency will organise a multi-agency drop in event for Retford & Ordsall.
42. The Environment Agency are investigating options for upstream flood storage that may benefit both Ordsall and Retford in reducing flooding from the River Idle.
43. In agreement with Bassetlaw District Council, the Environment Agency intends to deliver a package of recovery works and intermittent revenue projects. These will take place in the 2024/2025 Financial Year and subsequent years following. The proposed works include:
- Retford Beck culvert renewal / replacement for Grove Lane and Blackstope Lane.
 - River Idle/Carr Dyke modelling of interactions between watercourses. Working with IDB.
 - River Idle de-silts through town centre and downstream.
 - River Idle conveyance and tree works through town centre and downstream.
 - Thrumpton/Poulter View wall repair.
44. NCC will discuss its Flood Warden / Road Closure training programme with community volunteer groups.
45. The Flood Risk Management team will look at the suitability of its Property Flood Resilience Programme for communities affected by Storm Babet and will take recommendations through the Cabinet Member later this year for consideration.
46. NCC will work with its partners to look at ways of strengthening the enforcement of riparian responsibilities alongside developing our asset inspection process.

47. Bassetlaw District Council participated in the LRF Storm Babet Debrief and learning review meeting which identified a number of future actions.
48. Bassetlaw District Council has undertaken an internal review of the response to Storm Babet which identified a number of future actions.
49. Following a motion to Bassetlaw full Council on 25 January 2024 a resolution was passed to establish a working group reporting into Cabinet to focus exclusively on flooding, to ensure continued focus and scrutiny.
50. Bassetlaw District Council will work with partners to lobby for a change in government policy regarding the Environment Agency funding framework to enable more flood alleviation schemes to be delivered locally.