Section 19 Flood Investigation Report

Sanford on Thames

Date: 4th March 2025

Section 19 Flood Investigation Report:
Date of Flood Incident: 5th September 2024

Based upon a flood investigation report prepared by

South Oxfordshire District Council (February 2025)

Revision Schedule

Version	Date	Details	Author	Checked	Approved
1	10/02/2025	Draft Section 19 Flood Investigation Report	Leigh Travers (South Oxfordshire District Council)	David Bell (South Oxfordshire District Council)	C Mills (Oxfordshire CC)
2	16/01/2026	Accessibility Review	Leigh Travers (South Oxfordshire District Council)	David Bell (South Oxfordshire District Council)	C Mills (Oxfordshire CC)

Executive Summary

This Section 19 Flood Investigation Report has been issued by Oxfordshire County Council (OCC) in its capacity as Lead Local Flood Authority (LLFA). It is based upon an investigation by Oxfordshire County Council and South Oxfordshire District Council (SODC). The draft report was shared for comment with Thames Water (TW).

It was deemed necessary to complete a formal investigation as the flooding of 5th September led to flooding of 6 residential homes within the Fox Furlong/Pheasant Walk area of Sandford-On-Thames.

As such the flooding met one of the OCC thresholds for undertaking a formal investigation:

- Internal flooding (excluding to basements) to five or more residential properties or businesses within and area of 1km2

This investigation has reviewed the flooding that occurred internally and externally to 6 residential homes on the 5th September 2024. A subsequent flood occurred on the 23rd September 2024, however the number of properties flooded on this subsequent occasion is unknown.

It has been concluded that flooding of Fox Furlong and Pheasant Walk was a result of obstructions, primarily a car bumper within the culverted ordinary watercourse traversing beneath Parish Council land. These obstructions resulted in the surcharge of a manhole within Parish Council land, with surface water from this manhole cascading onto adjacent residential properties. A photograph of the surcharging manhole within Parish Council land and removed car bumper/wood obstructions can be seen in Appendix C.

A trash screen fitted to the entrance of the culverted watercourse within Parish Council land was paid for by Oxfordshire County Council. This trash screen was fitted on 28th January 2025. A photograph of the installed trash screen can be seen in Appendix B. The ownership and ongoing maintenance of the trash screen sits with the Parish Council as confirmed by the Parish Clerk.

The watercourse a tributary of the River Thames is defined on mapping systems between The Littlemore Clinic and the River Thames.

An overview of the open and closed watercourse network between the A4074 and the boundary of Pheasant Walk, with outline details on ownership as well as the point at which it becomes a designated Water Authority Thames Water surface water sewer can be seen in Appendix A.

The recommendations to mitigate the impacts of flooding in the future to both areas can be seen in the table below.

Main Recommendations

Recommendation	Lead Stakeholders	Consulting stakeholders
The culverted watercourse was partially surcharged when the trash screen was fitted suggesting further minor obstructions could be insitu within the culverted watercourse. The Parish Council have been advised to work with adjacent riparian owners to arrange for the culvert to be cleaned and CCTV surveyed.	Parish Council and landowners	South Oxfordshire District Council (SODC)
The maintenance of the recently fitted trash screen on the entrance of the culverted watercourse. This trash screen is owned and maintained by the Parish Council.	Parish Council	South Oxfordshire District Council (SODC)
The monitoring, maintenance and any remedial works to the culverted watercourse.	Landowners/riparian owners	South Oxfordshire District Council (SODC)
The monitoring, maintenance and any remedial works to the open ordinary watercourse besides the A4074.	Oxfordshire County Council Highways (OCC)	Oxfordshire County Council Highways (OCC)
The monitoring, maintenance and any remedial works to the Water Authority Thames Water surface water sewer within Pheasant Walk.	Thames Water (TW)	Thames Water (TW)
Consideration of practical Property Flood Resilience (PFR) measures to mitigate internal flooding of the residential properties. Guidance on PFR measures can be viewed through Ciria document (C790F) and a link to this document is provided below: https://www.ciria.org/ItemDetail?iProductCode=C790F&Category=FREEPUBS	Property owners	Oxfordshire County Council (OCC)

A flood group to be set up within the estate.	Property owners	Oxfordshire County Council (OCC)

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1. INTRODUCTION

1.1. Lead Local Flood Authority (LLFA) Investigation

Section 19 of the Flood and Water Management Act (F&WMA) 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
   c. proposing to exercise, those functions in response to the flood.

2) Where an authority carries out an investigation under subsection (1) it must: -
   a. publish the results of its investigation, and
   b. notify any relevant risk management authorities.

The LLFA have set criteria which determines when a S19 report is required. The criteria is set out below, with the relevant criteria for this particular S19 report being highlighted below.

LLFA/OCC Criteria

- Internal flooding (excluding to basements) to five or more residential properties or businesses within and area of 1km2

- Internal flooding of a business premises employing more than 10 people within an area of 1km2

- Internal flooding (excluding to basements) of at least one property or business for one week or longer

- Flooding of one or more items of critical infrastructure, which could include hospitals, health centres, clinics, surgeries, colleges, schools, day nurseries, nursing homes, emergency services (police, fire, ambulance) stations, utilities and substations

Caused a transport link to be impassable:

- Motorways, trunk roads, Class A and B highway closures shall all be investigated.

- Class C highways – 10 hours or more unless the route is the only means of access, or is primary route for critical infrastructure then reduce to 4 hours.

- Class U highways – 24 hours or more unless the route is the only means of access, or is primary route for critical infrastructure then reduce to 4 hours.

- All rail link closures shall be investigated.

Any flooding event that a risk management authority deems significant but does not meet the agreed thresholds should be put forward to the Agency flood group meeting for consideration.

1.2. Site Location and context

The Village of Sandford-On-Thames is located approximately 6.59 km to the south east of Oxford City Centre.

According to Environment Agency flood maps for fluvial and pluvial flooding, all land besides the watercourse until it reaches the river Thames flood plain is shown to lie within fluvial Flood Zone 1 and generally has a negligible susceptibility to pluvial flooding. The area shown to contain a partially connected pluvial flow path would appear to correspond with the watercourse.

The figures below outline the flood maps for the area:

► What the flood map shows

Figure 1 Environment Agency Fluvial Flood Map for Planning

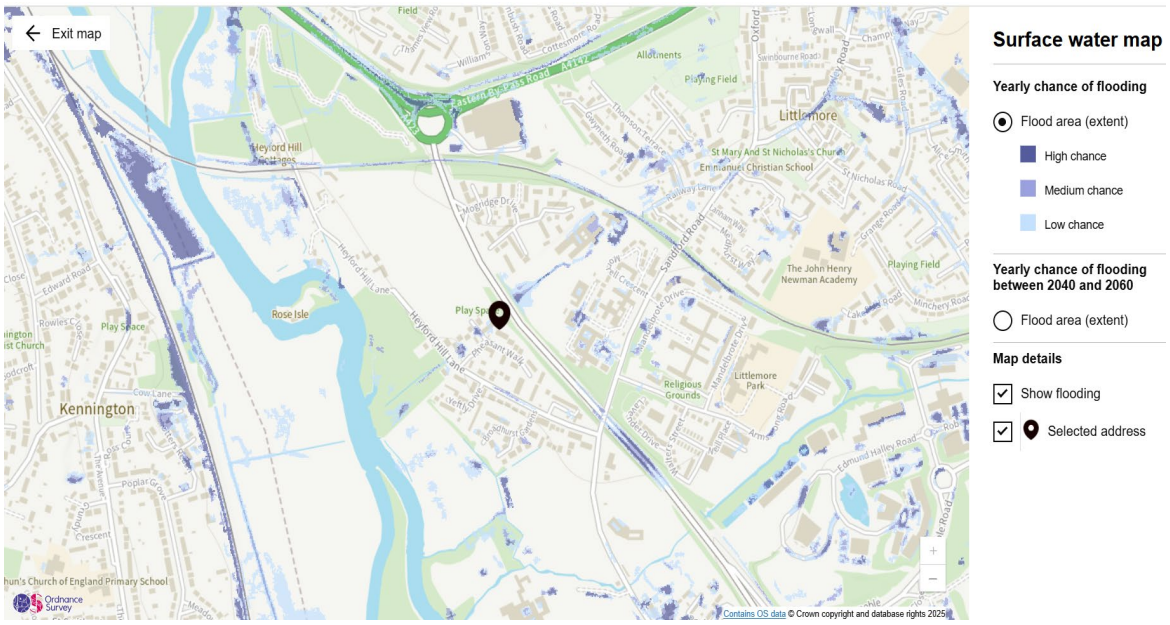

Figure 2 Environment Agency Pluvial Flood Map for Planning

2. RECENT FLOOD ISSUES AND INVESTIGATION

2.1 Summary of September 2024 floods

The flooding on both occasions in September was caused by obstructions namely a car bumper within the length of culverted watercourse that traverses beneath Parish Council land.

2.2 Previous flood events

According to a property owner, the same source of flooding occurred in January 2024. This record has not been verified and given the findings of this investigation there are no proposals to investigate this potential incident any further.

2.3 Flooding in September 2024 outline timeline

- According to residential homeowners who were impacted by the flooding, the culverted watercourse surcharged the manhole within Parish Council land on the morning of the 5th September 2024. Over a short period of time, the surface water from the surcharged manhole cascaded over land following the lower topography and into residential homes, peaking at approximately 0.15 m depth.

- Unfortunately, due to incorrect interpretation over the ownership of the culverted watercourse, the Water Authority Thames Water were approached to investigate the flooding. This led to delays with resolving the issue because

Thames Water are only responsible for the drainage network when it reaches the Fox Furlong highway. Please refer to the layout within Appendix A.

- Once Thames Water had attended and informed residents that responsibility for the watercourse sits with private landowners, an enquiry was sent through to Oxfordshire County Council who escalated to South Oxfordshire District Council to investigate.

- Having reviewed the enquiry and watercourse, South Oxfordshire District Council contacted the Parish Council advising of riparian responsibilities and requesting that they arrange for a drainage survey and maintenance company to attend. This request was actioned but due to the flooding across the County at the time, they were not able to remove the obstruction initially. Following this, South Oxfordshire District Council contacted a drainage maintenance company on the 25th September 2024 and arranged for attendance on the morning of the 26th September 2024. By 10:00 am in the morning of the 26th September 2024 the car bumper and wood debris was removed from the culvert and the flow of the watercourse restored.

3. CONCLUSIONS

This investigation has reviewed the source of flooding that occurred to residential properties within Fox Furlong and Pheasant Walk on the 5th and 23rd September 2024. The flooding is artificial in nature.

Obstructions primarily a car bumper trapped within the length of culverted watercourse that traverses beneath the Parish Council land was the cause of the flooding within the aforementioned areas. The resulting flooding peaked at approximately 0.15 m depth.

A trash screen paid for by Oxfordshire County Council and transferred with agreement to the Parish Council has been installed on the culvert entrance to reduce the risk of a similar event occurring in the future.

A list of recommendations in order of priority have been included. However, there must be focus given to the first recommendation because the culvert was partially surcharged during installation of the trash screen.

4 RIGHTS AND RESPONSIBILITIES

4.1 Communities and Residents

Communities may consist of the Town or Parish Council, Flood Forum, Community Group and affected residents, amongst others.

Communities and residents who are aware that they are at risk of flooding should take action to ensure that they and their properties are protected.

Community resilience is important in providing information and support to each other if flooding is anticipated. Actions taken can include subscribing to MET Office email alerts for weather warnings, nominating a Community Flood Warden, producing a community flood plan, implementing property level protection and moving valuable items to higher ground. Finally, individual households can create their own personal flood plans, such as collating important documents for quick removal from the property, torches, waterproof clothing etc.

Oxfordshire County Council has produced a number of flood guides covering various subjects, some of which relate to this type of flood incident. The relevant guides have been identified and are available at: www.oxfordshirefloodtoolkit.com

4.2 Lead Local Flood Authority (LLFA)

As stated within the introduction section, OCC as the LLFA has a responsibility to investigate flood incidents under Section 19 of the F&WMA.

The LLFA also has a responsibility to maintain a register of assets which have a significant effect on flooding from surface runoff, groundwater or ordinary watercourses (non-Main River) as detailed within Section 21 of the F&WMA. The register must contain a record about each structure or feature, including the ownership and state of repair. OCC is also required to keep a record of flooding hotspots across the county.

OCC's practices relating to third party assets is to notify third party owners of their asset forming part of a flood risk system, and assist by advising those third party owners on the condition of their assets and their maintenance responsibilities.

As Lead Local Flood Authority, OCC will be looking for support from other risk management authorities, communities and individual home owners to ensure flood incidents are reported, and any assets which have a significant effect on flood risk are recorded on the asset register.

While OCC can suggest possible causes of flooding, and make recommendations to ensure flood risk is mitigated as far as possible, the F&WMA does not provide OCC with the mandate or funding to act on identified causes of flooding or force risk management authorities to undertake any recommended actions.

4.3 Highway Authority (Oxfordshire Highways)

Oxfordshire Highways have a duty to maintain the highway under Section 41 of the Highway Act 1980 but subject to the special defence in Section 58.

New highway drainage systems are designed to Highways England's Design Manual for Roads and Bridges (Volume 4, Section 2). They are only required to be

constructed to drain surface water runoff from within the highway catchment rather than from the wider catchment.

There are historic drainage systems in historic highways which can become the responsibility of the Highway Authority due to dedication, as opposed to adoption. These drainage systems may not have been designed to any standard.

Oxfordshire Highways undertake regular highway drainage cleansing. Identify and develop a detailed plan of their assets.

If flooding occurs OCC will assess the capacity of the highway assets and identify any areas with insufficient capacity for draining runoff from the highway. Where this leads to flood risk to properties improvement works should be considered.

Oxfordshire highways should assess the suitability of third party drainage systems accepting discharge from Highway Drainage systems and report any unsatisfactory areas to the relevant Risk Management Authorities.

4.4 Water Authority - Thames Water Utilities (TW)

Water and sewerage companies are responsible for managing the risks of flooding from surface water, foul water or combined sewer systems. Public sewers are designed to protect properties from the risk of flooding in normal wet weather conditions. However, in extreme weather conditions there is a risk that sewer systems can become overwhelmed and result in sewer flooding.

Sewerage undertakers have a duty, under Section 94 of the Water Industry Act 1991, to provide sewers for the drainage of buildings and associated paved areas within property boundaries. Since the 1st October 2011 the majority of private sewers and lateral drains in England and Wales were transferred into public ownership, meaning they are now the responsibility of the relevant sewerage undertaker.

A public sewer is a conduit, normally a pipe that is vested in a Water and Sewerage Company or predecessor, that drains two or more properties and conveys foul, surface water or combined sewage from one point to another, and discharges via a positive outfall.

There is no automatic right of connection for other sources of drainage to the public sewer network. Connection is therefore discretionary following an application to connect.

4.5 South Oxfordshire District Council (SODC)

District Councils have powers under Section 14 of the Land Drainage Act 1991 (LDA) to undertake flood risk management works on ordinary watercourses (non Main River) where deemed necessary.

Under Section 20 of the LDA, District Councils have the powers to (by agreement of any person and at that person's expense) carry out any drainage work which that person is entitled to carry out. Agreement may not be required in certain emergency or legally upheld situations.

South Oxfordshire District Council also has delegated authority from OCC/LLFA to serve notice on persons requiring them to carry out necessary works to maintain the flow of ordinary watercourses under Section 25 of the LDA and receives funding from the LLFA to do this.

The District Council is the Planning Authority and has a role in Building Control and the Building Regulations.

4.6 Land Owners and Developers

Land owners are responsible for the drainage of their land and controlling any movement of sediment from their land. Legally, owners of lower-level ground have to accept natural land drainage from adjacent land at a higher level. The exception to this is where the owner of the higher level land has carried out "improvements" such that the runoff from the land cannot be considered "natural".

Agricultural practices by land owners can be considered as "improvements" to the land, so that cultivation of crops or other land uses can take place. Mitigation works are required on improved land to account for the change in natural land drainage and changes to surface water runoff this can create.

Land owners and developers are responsible for working with the Local Planning Authority to ensure that their development is completed in accordance with the planning permission and all conditions that have been imposed.

Advice for developers is available on the Oxfordshire Flood Toolkit.
www.oxfordshirefloodtoolkit.com/planning/developers/

5 RECOMMENDATIONS

5.1 General

Listed below are the recommendations emanating from this formal Section 19 Flood Investigation Report. All the actions are initial recommendations that require discussing in detail to determine their true feasibility.

It is important to note that it is for the relevant responsible body or persons to assess each recommendation in terms of the legal obligation, funding, resource implications, priority and cost/benefit analysis of undertaking such action.

The recommendations may be included within the action plan linked to the Local Flood Risk Management Strategy or in the relevant risk management authority's future work programmes, as appropriate.

Authorities should work together to look into funding opportunities to carry out the listed actions. There are multiple funding sources which could contribute to schemes and improvement works going forward. The majority of schemes will require elements of partnership working and contributions to be successfully funded. They are likely to need to provide multiple benefits such as improving flood resilience whilst also managing water levels, reducing drought risks, helping nature recovery as well as climate adaptation.

There are several funding options available which can be explored through multi agency working groups such as,

- Flood & Coastal Erosion Risk Management (FCERM) ○ Flood Defence Grant in Aid (FDGiA)
- Local Levy Regional Flood and Coastal Committee (RFCC)
- DEFRA Natural Flood Management Funding
- Woodland Creation Grants
- Agricultural & Environmental Schemes (Countryside Stewardship)
- Funding sources relating to development and regeneration, such as section 106 agreements, Community Infrastructure Levy (CIL) and New homes bonus
- Non-government organisations and charitable trusts
- Community fundraising and events
- Lotteries (Heritage Lottery Fund, Big Lottery, Arts Council
- Volunteering
- Nature for Climate Fund
- Grants from other government departments, such as BEIS, MHCLG, DfT, DfE (for example, Flood Resilient Schools)
- UKRI – the research councils funding
- Business in the community
- Green recovery challenge fund
- Partnership funding (for example, contributions from partners, local authorities, businesses and communities etc.

5.2 Main Recommendations

Recommendation	Lead Stakeholders	Consulting stakeholders
The culverted watercourse was partially surcharged when the trash screen was fitted suggesting further minor obstructions could be insitu within the culverted watercourse. The Parish Council have been advised to work with adjacent riparian owners to arrange for the culvert to be cleaned and CCTV surveyed.	Parish Council and landowners	South Oxfordshire District Council (SODC)
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A flood group to be set up within the estate.	Property owners	Oxfordshire County Council (OCC)

6 DISCLAIMER

The findings of the report are based on a subjective assessment of the information available by those undertaking the investigation and therefore may not include all relevant information. As such it should not be considered as a definitive assessment of all factors that may have triggered or contributed to the flood event.

Any recommended actions outlined in this FIR will be for the relevant responsible body or persons to assess in terms of resource implications, priority and cost/benefit analysis of the proposal. Moving forward, these may be included in the Action Plan linked to the Local Flood Risk Management Strategy or in the relevant risk management authority's future work programme as appropriate.

The opinions, conclusions and any recommendations in this Report are based on information provided to South Oxfordshire District Council and Oxfordshire County Council.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the time of preparation and South Oxfordshire District Council and Oxfordshire County Council expressly disclaims responsibility for any error in, or omission from, this report arising from or in connection with those opinions, conclusions and any recommendations.

The implications for producing Flood Investigation Reports and any consequences of blight have been considered. The process of gaining insurance for a property and/or purchasing/selling a property and any flooding issues identified are considered a separate and legally binding process placed upon property owners and this is independent of and does not relate to the information in this report highlighting flooding to properties at a street level.

South Oxfordshire District Council or Oxfordshire County Council do not accept any liability for the use of this report or its contents by any third party.

ACRONYMS

SODC South Oxfordshire District Council
OCC Oxfordshire County Council
TW Thames Water
FIR Flood Investigation Report
F&WMA Flood and Water Management Act 2010
LLFA Lead Local Flood Authority
WRA Water Resources Act 1991

USEFUL LINKS

Highways Act 1980:
www.legislation.gov.uk/ukpga/1980/66/contents
Water Resources Act 1991:
www.legislation.gov.uk/ukpga/1991/57/contents
Land Drainage Act 1991:
www.legislation.gov.uk/ukpga/1991/59/contents
EA - Prepare your Property for Flooding:
How to reduce flood damage Flood protection products and services
www.gov.uk/government/publications/prepare-your-property-for-flooding
EA - Long term flood risk service:
https://www.gov.uk/check-long-term-flood-risk
Oxfordshire County Council Flood and Water Management Web Pages: www.oxfordshirefloodtoolkit.com
https://www.oxfordshire.gov.uk/residents/fire-and-public-safety/emergency-planning/community-resilience

Flood and Water Management Act 2010
http://www.legislation.gov.uk/ukpga/2010/29/contents

USEFUL CONTACTS

Oxfordshire County Council (Flood Risk Management Team)
Email: floodmanagement@oxfordshire.gov.uk
Website: Oxfordshire County Council – Flood Toolkit (oxfordshirefloodtoolkit.com)

Thames Water
Emergency Tel: 0800 316 9800 (select option 1)
Website: www.thameswater.co.uk/help-and-advice/bursts-and-leaks/report-a-leak- orburst-pipe

South Oxfordshire District Council
General Tel: 01235 422422
Email: engineering.services@southandvale.gov.uk

APPENDICES

Appendix A – Overview of land drainage system and features in the area

Appendix B – Photograph of installed trash screen

Evidence of surcharge at inlet. This would indicate obstructions within the watercourse downstream. Therefore, pipework throughout private ownership and if necessary, of Thames Water surface water sewer should be cleaned and surveyed at the earliest opportunity.

Appendix C - Photographs of obstructions removed