Flood Investigation Report

Storm Henk

2nd January 2024

Countesthorpe

CONTENTS

LIST OF FIGURES

LIST OF PHOTOGRAPHS

5 COUNTESTHORPE

Countesthorpe is a village located 9km south of Leicester, in Blaby District.

5.1 LOCAL DRAINAGE CONTEXT

A reach of open channel Ordinary Watercourse flows in a northerly direction across the fields to the south of Mennecy Close, as shown in Figure 5-1. The watercourse continues to flow northwards adjacent to Mennecy Close behind several properties on the western side of Waterloo Crescent, before entering a 900mm dia. culvert south of the junction between Mennecy Close and Waterloo Crescent. The culvert then conveys the water along an unverified route northward. This ordinary watercourse drains the upper catchment of Countesthorpe Brook, and this upper catchment is predominantly rural with slowly permeable, seasonally wet soils (impeded drainage).

Countesthorpe Brook, an EA-designated main river, proceeds northwards and converges with the River Sence upstream of Blaby Bridge along Leicester Road at Ordnance Survey national grid reference (OSNGR) SP 56785 98405. The responsible agency for managing the risk from Main Rivers is the EA. Details relating to RMA responsibilities for both Ordinary Watercourses and Main Rivers can be found in Section 21 of the main Storm Henk report.

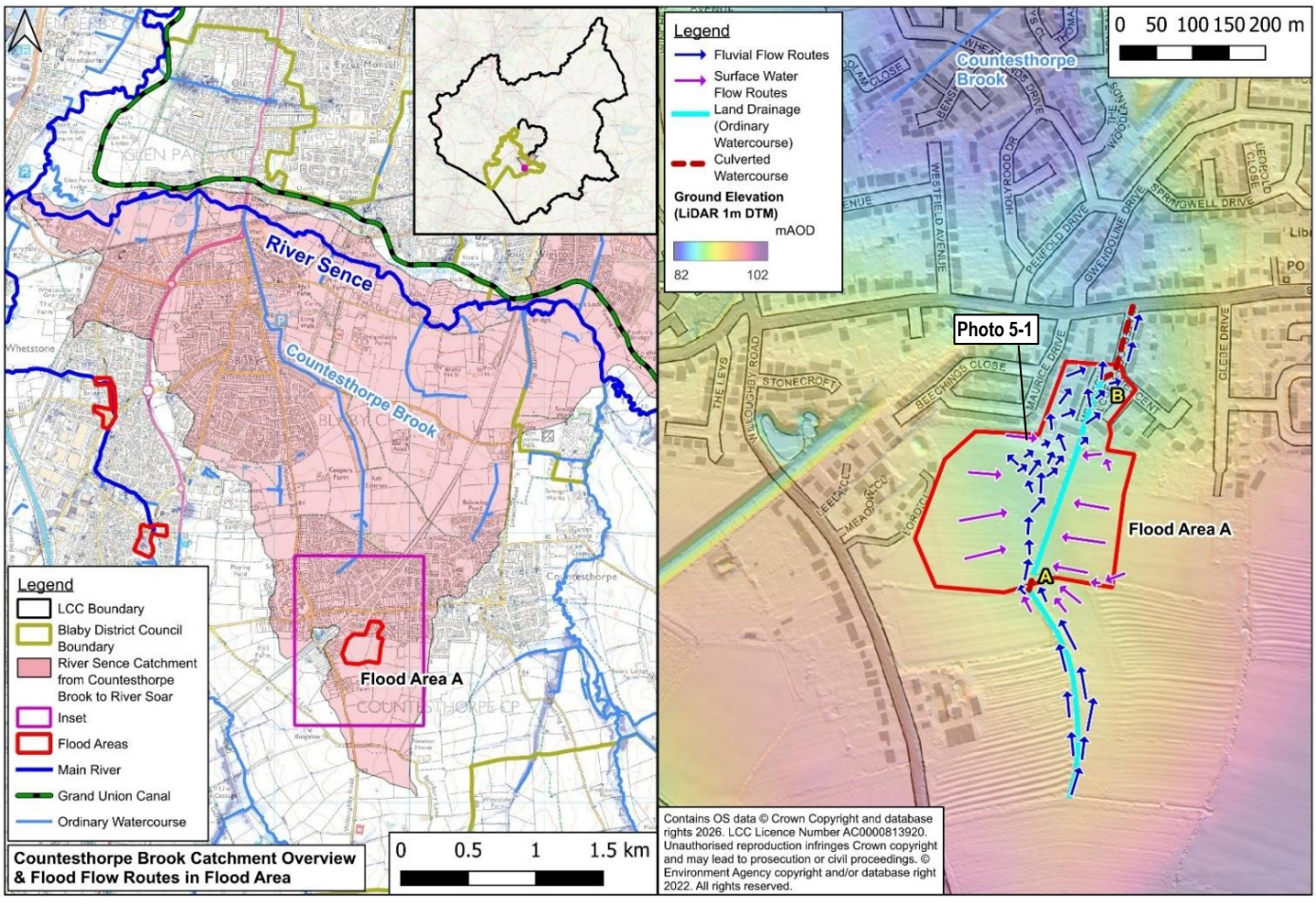

Figure 5-1: Countesthorpe Location Plan, relevant Watercourse Catchment and Flow Routes through Flood Area A (INSET 13)

5.1.1 FLOOD HISTORY

Historical reports show that Countesthorpe has a history of experiencing flooding and its impacts. Records show serious flooding events recorded as far back as 14th June 1855. Most prior local reports indicated flooding from the watercourses and River Sense, which limited the extent of flooding to roads and agricultural fields in historically major events that impacted South Leicestershire in 1922, 1956 and 1980.

In recent years, major flooding incidents were reported in 2008, when several major roads were reported flooded, including Foston Road, Cosby Road, Winchester Road and Peatling Road. Further severe events in 2012, 2016, 2019 and 2020 have also caused highway flooding and indicated (but unconfirmed) internal property flooding.

The UK Centre for Ecology & Hydrology's Flood Estimate Handbook (FEH) Web Service[1] provides strategic-level catchment mapping. This identifies that Countesthorpe Brook drains a catchment of approximately 3.03 km^2 to its confluence with the River Sence north of Blaby downstream of the A426, and 0.73km^2 to its appearance downstream of Station Road, as illustrated in Figure 5-2. The website, however, does not define a smaller discrete catchment to its headwater spring south of Mennecy Close. This upper catchment is drained by land drainage ditches (unmapped Ordinary Watercourses).

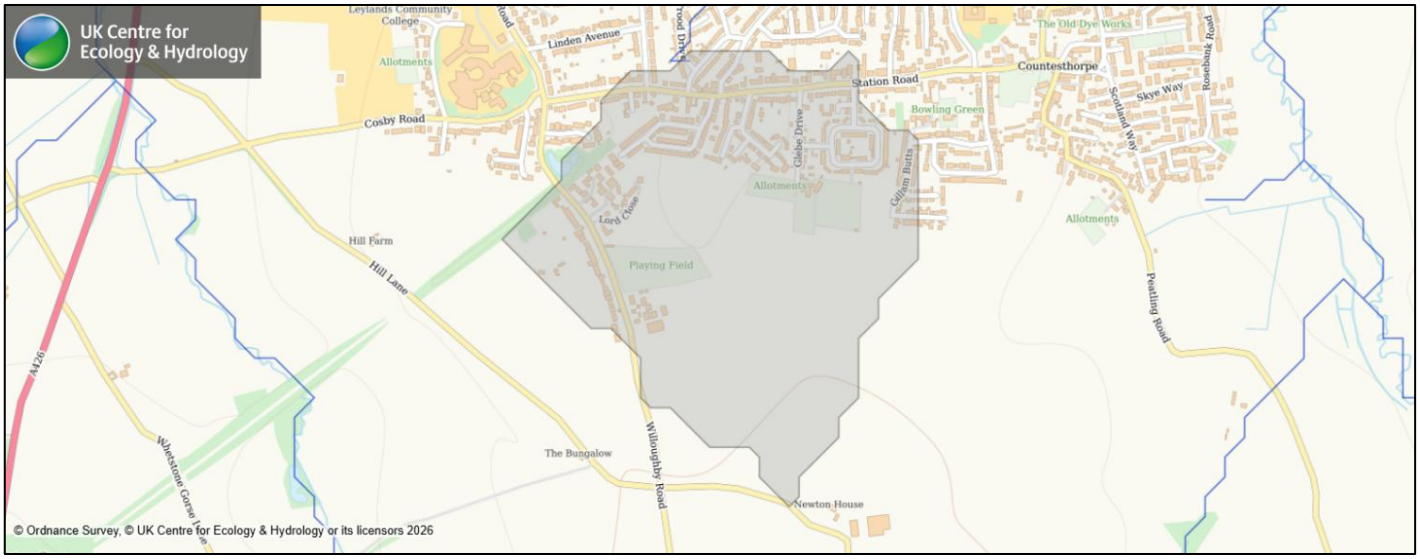

Figure 5-2: Countesthorpe Brook FEH Web Service Catchment Extents downstream of Station Road

5.1.2 HYDROMETRY

There are no known river flow gauges on the relevant watercourse within this upper catchment area.

5.1.3 FLOOD WARNINGS

There are no EA Flood Warning Areas along the Ordinary Watercourse or covering the Countesthorpe Flood Area.

[1] [1] Centre for Ecology & Hydrology (2026) FEH Web Service https://fehweb.ceh.ac.uk/Map

5.1.4 NATIONAL SCALE PREDICTIVE FLOOD MAPPING

The EA provides flood risk mapping nationally for both rivers and surface water as detailed within Section 2.7.6 of the main Storm Henk report. The EA's Flood Zone map (NaFRA2), illustrated in Figure 5-3 shows the area to be within Flood Zone 1 (low risk). However, the broadscale modelling technique used in the national Flood Map for Planning to define the flood extents (where no detailed modelling has been undertaken) does not generate outlines for catchments smaller than 3km^2, and therefore has not been generated for this watercourse catchment due to the small size. This does not necessarily mean there is no river flood risk.

The EA's Risk of Flooding from Surface Water (RoFSW) map (NAFRA2), shown in Figure 5-3, does however identify areas at high, medium and low risk through the centre of the Flood Area, proceeding from the fields into Mennecy Close.

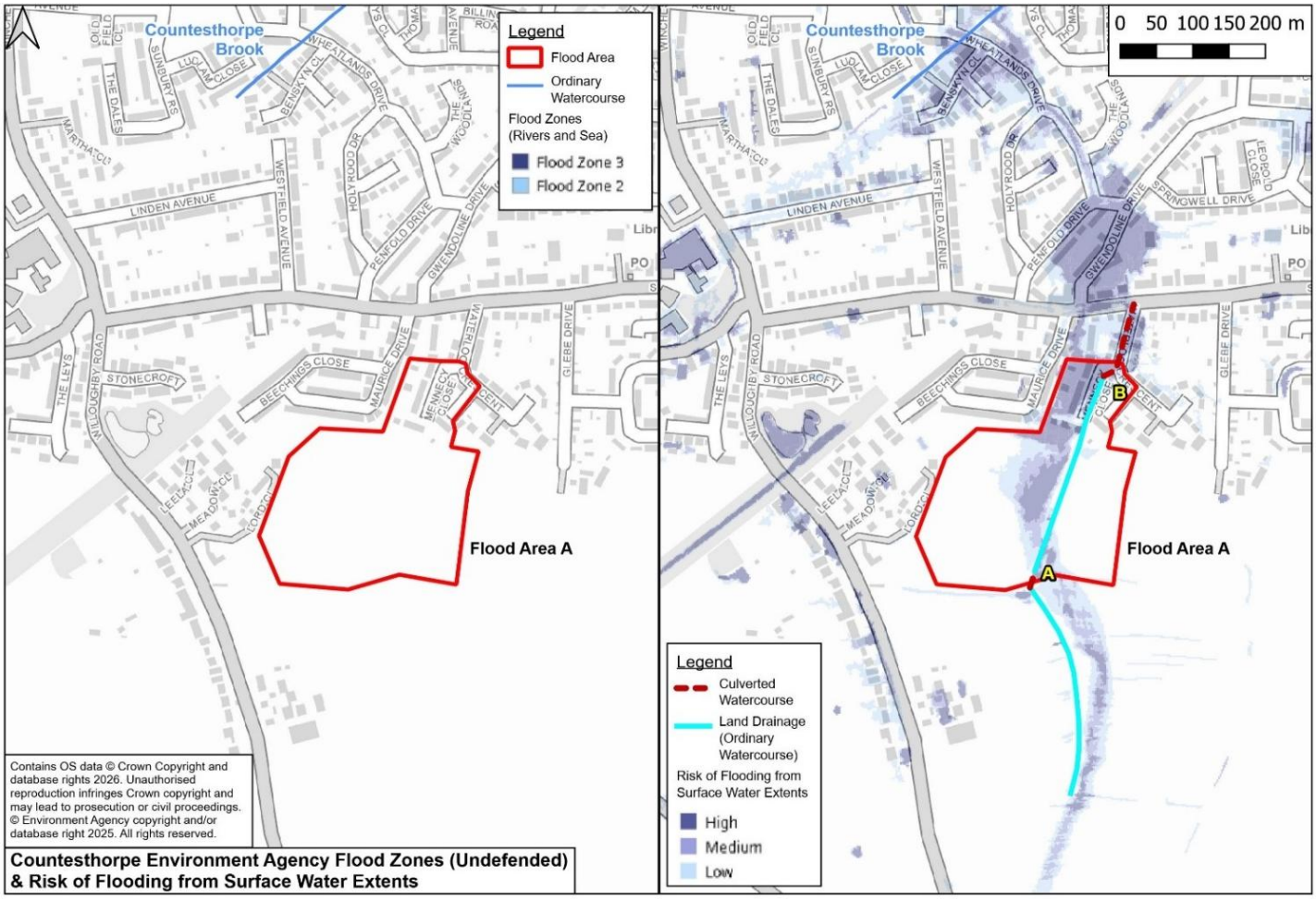

Figure 5-3: Countesthorpe Flood Map for Planning Flood Zones[2] and Risk of Flooding from Surface Water Extents[3] in Flood Area A (INSET 13)

[2] Environment Agency (2026) Flood Map for Planning – Flood Zones https://flood-map-for-planning.service.gov.uk/map
[3] Environment Agency (2026) Risk of Flooding from Surface Water map. https://check-long-term-flood-risk.service.gov.uk/map

5.2 WHAT HAPPENED AND WHY?

WHO OR WHAT WAS AFFECTED?

9 properties reported as internally flooded

At least 19 properties were reported as externally flooded.

During Storm Henk, the flooding issue centred on Mennecy Close, at the current southern edge of the village. Rainwater was described by residents as running off from the fields located to the south of Mennecy Close. Due to the significant amount of rainfall falling on an already saturated catchment, it is understood that the capacity of the drainage network became overwhelmed by this surface water runoff. The watercourse flowing north through the fields was unable to cope with the sheer volume of water, resulting in the banks overtopping back into the fields.

A culverted field access over the watercourse (Location A on Figure 5-1), between the two fields also reportedly became overwhelmed with the volume of water. This caused water to back up and overtop the culvert parapet/upstream face onto the bridge deck.

Photograph 5-1: View from Mennecy Close - Overland floodwater flowing north towards Mennecy Close after flowing out of bank at Location A

Due to the local ground elevations (topography), these exceedance flows were unable to re-enter the watercourse on the northern side, and instead, followed the lower-level contours of the field in a separate surface water flow route parallel to the land drainage channel. These flow routes, illustrated in Figure 5-1, proceeded northwards towards Mennecy Close and pooled and entered properties, causing internal flooding. The flow routes coincide with the modelled substantial surface water flow path identified in the EA's RoFSW (NaFRA2) map shown in Figure 5-3, but the observed extents were smaller than those identified as at high risk of surface water flooding.

Flooding was reported to have occurred to properties at around 14:00 hours on 2nd January 2024. Floodwater followed the local topography, flowing around houses and onto Mennecy Close, where it quickly overwhelmed the highway drainage system, inundated gardens and driveways, and eventually exceeded property thresholds.

Anecdotal reports were made of possible restrictions in the STW surface and foul water sewers, preventing the drainage network on Mennecy Close from continuing to work effectively or efficiently. A review of STW public sewer records identified the following assets of relevance to this investigation:

- a 225mm dia surface water sewer running northwards beneath Mennecy Close and through the rear gardens of properties along The Vineries, which connects to a 300mm dia surface water sewer beneath Station Road;
- a 225mm dia combined sewer running through the rear of gardens on the south side of Waterloo Crescent Properties before crossing under the Mennecy Close junction. This proceeds to connect into a 225mm dia foul sewer running northwards beneath the northern extent of Waterloo Crescent, which connects into a 225mm dia foul sewer beneath Station Road; and
- A 225mm foul sewer which begins at a chamber between Numbers 4 and 7 on Mennecy Close and proceeds through the rear gardens of properties along The Vineries and connects into a 225mm dia combined sewer beneath Station Road.

Residents reported that they lifted a foul sewer manhole cover at the entrance to a private road on Mennecy Close. It was reported that the chamber appeared to be blocked, with no signs of being able to drain. These residents were able to unblock the pipe, and having done so, the water level on the street/in gardens then began to fall. It was also reported that a Gas Utility Company van attended site and assisted by over-pumping water into this manhole as well to lower the standing waters on Mennecy Close. ***Lifting and over-pumping into public sewer chambers are not recommended, as this could increase the risk of foul sewer flooding and pollution, as foul sewers are not designed to accommodate large volumes of surface water flow. It also poses a serious health and safety risk.***

Flood water was also reported to have been seen flowing out of Mennecy Close and onto the junction of Station Road, extending as far as the entrance of Gwendoline Drive. There are anecdotal reports of potential residential and commercial property flooding in this area. These remain unconfirmed at this time as no formal reports were shared with the LLFA.

Typically, road drainage networks are designed to accommodate limited rainfall events on the contributing area of the highway itself, but not for any additional volumes of overland flow originating from land adjacent to the highway, as occurred here, or overtopping onto them from watercourses. As flood water recedes into surface water or combined drainage systems, it can naturally draw in flood debris and sludge into them, particularly around gully grates and manholes. This can appear that the systems are blocked and that this was the initial cause of the flooding. This is generally not the case. With no photographs available before or during the event, it has not been possible to verify the presence or source of such a blockage.

It is therefore determined that the most likely cause was debris washed down during the event, and the volume overwhelmed the whole local drainage system. If the blockage was within a foul sewer, it would have been unrelated to the flooding.

A 900mm dia watercourse culvert proceeding under the northern extent of Mennecy Close (Location B on Figure 5-1) was reportedly unable to cope with the volume of water. This caused flows to back up along the channel. The depth of flow was enough to cause low-level garden flooding here. The exact route of this culvert is unconfirmed. Still, it is believed to continue roughly northwards beneath highways and private land, following the course of a former open channel, as illustrated in historical mapping that has since been incorporated beneath the road network. It potentially outflows into Countesthorpe Brook north of Ridleys Close, continuing out of Countesthorpe. There appears to be no evidence of this culvert having been incorporated into the STW sewer network. Although the culvert appeared to be surcharged, there is no evidence at this point that the culvert directly exacerbated the flooding, as the property flooding in Storm Henk was driven mostly by the surface water runoff, which, due to the local ground elevations (topography), could not re-enter the brook.

5.3 WHAT HAS BEEN DONE?

A summary table of the actions undertaken by the relevant RMAs across Leicestershire is provided in Section 2.7 of the main Storm Henk report. A summary table of actions and any relevant next steps specific to Countesthorpe is provided in Section. 5.4.

Whilst the actions from this investigation will help to reduce flood risk, communities should also take steps to be prepared for future flooding, especially with climate change increasing the risk of occurrence. More information can be found in Section 21.8 of the main Storm Henk report.

Please note that this report covers the immediate actions relevant to Storm Henk only. This location was also severely impacted by the flooding event on 6th January 2025. Any action which was superseded by that event, or which is requested as a result of that event, will be covered within that investigation.

5.4 COUNTESTHORPE ACTIONS

The following actions will be monitored by the Leicestershire County Council (LCC), as the Lead Local Flood Authority (LLFA), through their local coordination role. This action plan is live and will be subject to change as actions are progressed.

Actions taken during and in the immediate aftermath of the event, such as the closure of roads and the set-up of rest centres, are not detailed. Further details on RMAs and their roles, and how they work in partnership, can be found in the Leicestershire Local Flood Risk Management Strategy.[4].

5.4.1 LONG-TERM ACTIONS (12 MONTHS +)

ACTION	ACTION DETAIL	LEAD RMA	CURRENT STATUS
Drainage Network Investigations	Investigations of the wider drainage network for both the foul and surface water systems in and around Mennecy Close to confirm they are flowing and free of obstructions.	STW	Completed
Storm Henk Flood Recovery Framework Grants	BDC administered £500 residential grants, £2,500 business grants, council tax exemptions and business relief. Two grants were awarded from a possible eleven eligible properties. Formal communication was sent to properties formally reporting their flooding on two occasions. With the scheme promoted at both Drop-in Sessions and the Parish meeting. The scheme was formally closed to applicants in September 2025.	BDC LCC LLFA	Completed Completed

[4] Leicestershire County Council (2024) Leicestershire Local Flood Risk Management Strategy - https://www.leicestershire.gov.uk/environment-and-planning/flooding-and-drainage/lead-local-flood-authority/flood-risk-management

ACTION	ACTION DETAIL	LEAD RMA	CURRENT STATUS
Flood Drop-in Sessions	Multi-agency drop-in sessions accessible to Countesthorpe have been coordinated by LCC LLFA and attended by RMAs in March 2024, October 2024, and March 2025. Events in Blaby were well attended by residents of Countesthorpe.	LCC LLFA BDC EA LCC Local Highways Authority (LHA)	Completed
Consideration and Review of Flood Warnings	The EA confirm that they cannot provide direct flood warnings for Countesthorpe as the flooding here is surface water and there is no eligible flow gauge within the vicinity.	EA	Completed
Highway Asset Inspection and Maintenance	Additional cleansing followed Storm Henk. Cleansing frequency had been reviewed and confirmed to be the highest priority (every 10 months) at Mennecy Close, Station Road, Waterloo Crescent, Willoughby Road, and Cosby Road.	LCC LHA	Ongoing

ACTION	ACTION DETAIL	LEAD RMA	CURRENT STATUS
Riparian Watercourse and Culvert Investigation	LCC LHA completed the inspection of chambers and sections within highway control. Including dye testing to confirm connectivity and cleansing of sections within the vicinity of Mennecy Close. No issues on visible sections and no evidence of silting/damage to the structure was found. LCC LLFA issued riparian letters to homeowners of the open sections of the watercourse to remind them of their maintenance duties, ready for winter. Culvert to be added to the asset register and to be considered for further investigation.	LCC LHA LCC LLFA	Completed Ongoing
Enhanced Scrutiny of Planning Proposals	LCC LLFA has contacted BDC (Local Planning Authority) to request further time to review the newest version of the draft Local Plan, as more details on housing allocations have been put forward, including new parcels of land south of Mennecy Close. LCC LLFA to work with BDC to ensure any surface water drainage and possible flood mitigation is considered appropriately for any prospective development upstream of Mennecy Close.	LCC LLFA BDC LCC LLFA	Ongoing Ongoing
Immediate Humanitarian Support and Assistance	BDC coordinated immediate assistance actions following Storm Henk. Actions conducted and completed by BDC include additional welfare checks to vulnerable residents, a comprehensive mechanical road sweep of all affected roads, and bulky waste removal.	BDC	Completed