Town and Country Planning Act 1990

PLANNING PERMISSION

Name and address of applicant
Apres-Estates Ltd
C/O Agent

Name and address of agent (if any)
Colliers CRE (J Best)
Milner House
14 Manchester Square
London
W1U 3UP

Part I - Particulars of application

Date of receipt of Application: 04/12/2000 Application No: P/00/02521/2

PROPOSED: Exteral alterations to industrial, warehouse and office premises.

AT: Syston Mill, Mill Lane, Syston

Part II - Particulars of decision

In pursuance of its powers under the Town and Country Planning Act, 1990, the Charnwood Borough Council grants permission for the carrying out of the development referred to in Part I hereof in accordance with the application and plans submitted subject to the following conditions:

1. The development shall be begun not later than 5 years from the date of this permission. [DT01]
   REASON: To comply with the requirements of Section 91 of the Town and Country Planning Act, 1990.

2. No development shall be commenced on the site until such time as a schedule of the types and colours of elevation and roofing materials to be used in the development have been submitted for the approval of the local planning authority. Only such materials as may be approved shall be used in the execution of the development. [MA04]
   REASON:In the interests of the appearance of the development and of the locality.

Note(s) to Applicant:
(a) The applicant is advised that the provision of any additional carparking or service areas is likely to require the submission of a formal application for planning permission.

(b) The applicants attention is drawn to the requirements and advice of the Environment Agency in the attached copy letter.

Date: 29th January 2001 Proper Officer of the Council:

IT IS IMPORTANT THAT YOU SHOULD READ THE NOTES ON THE REVERSE SIDE OF THIS FORM

Our ref: LT\2000\006476\001
Your ref: P/00/02521/2

Date: 15th January 2001

ENVIRONMENT AGENCY

Mr J Hale
Director Of Planning & Building Control
Charnwood Borough Council
Southfield Road
Loughborough
Leics
LE11 2TN

Dear Sir

IMPROVEMENTS TO EXISTING INDUSTRIAL, WAREHOUSE AND OFFICE PREMISES
SYSTON MILL, MILL LANE, SYSTON

Thank you for referring the above application which was received on 13th December 2000.

The Agency has no objections, in principle, to the proposed development but recommends that if planning permission is granted the following planning conditions are imposed:

CONDITION:
There should be no raising of ground levels nor storage of material on site, which is located within the floodplain of the River Wreake.

REASON:
To ensure that there will be no increased risk of flooding to other land/properties due to impedance of flood flows and reduction of flood storage capacity.

COMMENTS

The 1 in 100 year flood level at this site is 50.48 metres above Ordnance Datum.

Attached is a plan showing that the Agency has a pedestrian and vehicular right of way (granted in our lease of 22nd December 1983) for access to the gauging station at the

Cont/d..

Environment Agency
Environment Agency, Lower Trent Area, Trentside, Scarrington Road, West Bridgford, Nottingham NG2 5FA
Telephone : 0115 9455722 Fax : 0115 9817743

northern end of the site. Access is required 24 hours a day, any improvements to the site must take into account the need for the Agencys access.

Yours faithfully

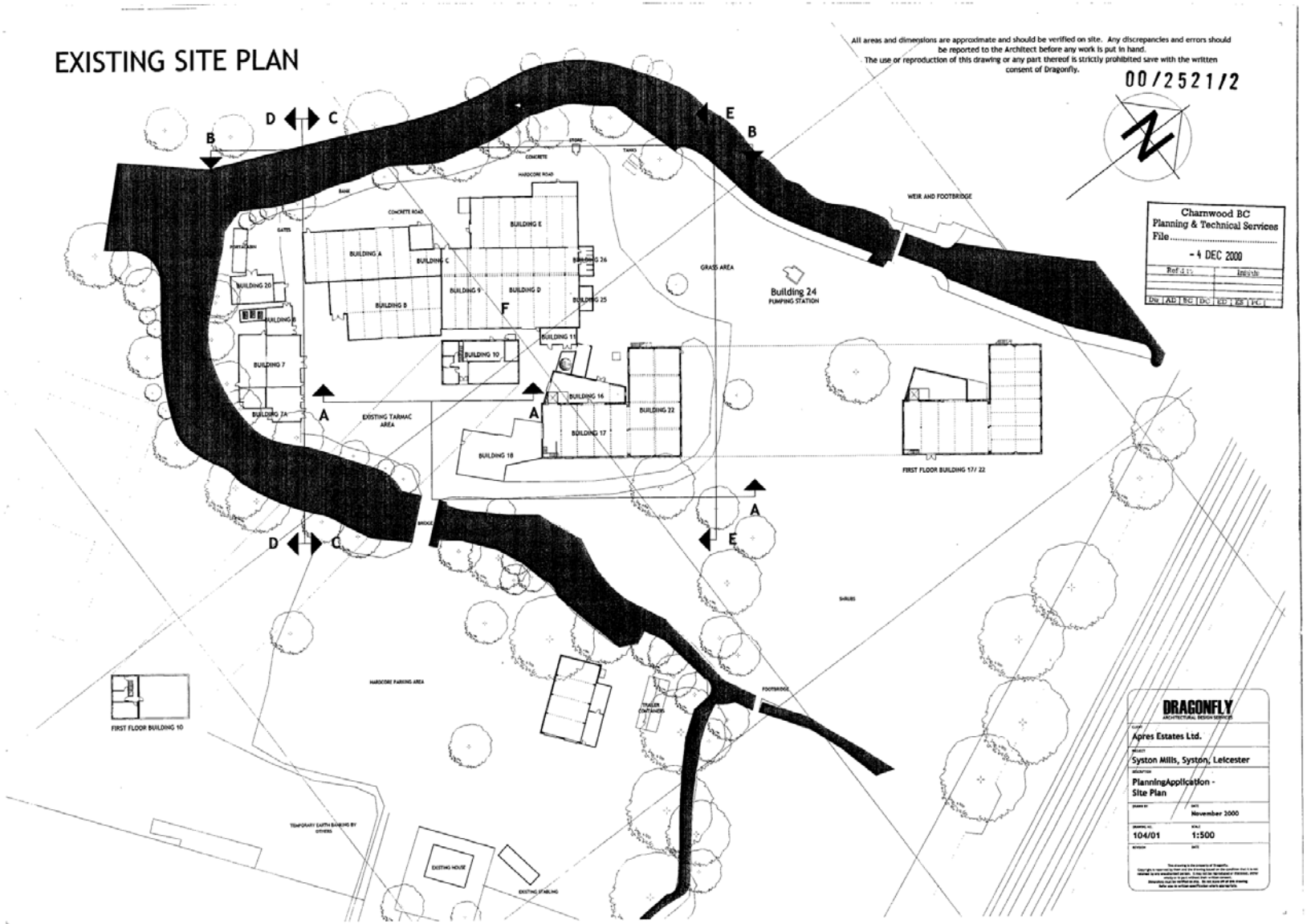
[redacted]

Erica Marshall
Area Customer Services Manager

Please ask for: Geoff Platts
Direct Line 0115-8463622
e-mail: geoff.platts@Environment-Agency

EXISTING SITE PLAN

00/2521/2



DRAGONFLY
ARCHITECTURAL DESIGN SERVICES

CLIENT	Apres Estates Ltd.
PROJECT	Syston Mills, Syston, Leicester
DESCRIPTION	PlanningApplication - Site Plan
DRAWN BY	DATE: November 2000
DRAWING NO. 104/01	SCALE: 1:500
REVISION	DATE

FILE NOTES 00/2521/2

Site visit 16/1.

Only a couple of the existing buildings appear to be occupied at the moment. Buildings generally in good condition although clearly in need of refurbishment. Site in countryside and been used for industrial purposes for many years. Discussed proposals with Guy Longley and he does not see any conflict with existing/emerging policies on the basis that buildings are there and that the proposals are for improvements/refurbishment.

Sally Eden's comments not relevant as they appear to ~~relate to restoring the site not part of this application~~ go beyond the confines of this particular application. If further areas are needed for car parking they will need to be subject of fresh application - perhaps a note to applicant will suffice.

[redacted] 16/1.

Land at Syston Mill, Mill Lane, Syston, Leicestershire, LE7 1NS

Flood Risk Assessment

January 2025

Prepared for:

Wealth Property Limited

www.jbaconsulting.com


JBA
consulting

Document Status

Issue date	January 2025
Issued to	Wealth Property Limited
BIM reference	OPU-JBAU-XX-XX-RP-Z-0001-S3-P01-FRA
Revision	S3-P02
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Reviewed by	Olivier Saillofest BEng MSc CEng MCIWEM C.WEM Technical Director
Authorised by	Peter Rook BSc MSc MCIWEM C.WEM FGS Principal Analyst

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Contract

JBA Project Manager	Peter Rook BSc MSc MCIWEM C.WEM FGS
Address	35 Perrymount Road, Haywards Heath, RH16 3BW
JBA Project Code	2024s1819

This report describes work commissioned by Manpreet Nagpal on behalf of Wealth Property Limited, by an instruction dated 03 December 2024. The Client's representative for the contract was Julie Mc Laughlin of Marrons.

Grace Sheppard, Imogen Barnsley and Peter Rook of JBA Consulting carried out this work.

Purpose and Disclaimer

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The conclusions and recommendations contained in this Report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. Information obtained by JBA has not been independently verified by JBA, unless otherwise stated in the Report.

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Abbreviations

AEP ..... Annual Exceedance Probability
BGS ..... British Geological Survey
CBC ..... Charnwood Borough Council
CFMP ..... Catchment Flood Management Plan
DTM ..... Digital Terrain Model
EA ..... Environment Agency
FFL ..... Finished Floor Levels
FRA ..... Flood Risk Assessment
FRP ..... Flood Response Plan
LFRMS ..... Local Flood Risk Management Strategy
LiDAR ..... Light Detection And Ranging
LLFA ..... Lead Local Flood Authority
LPA ..... Local Planning Authority
mAOD ..... meters Above Ordnance Datum
NGR ..... National Grid Reference
NPPF ..... National Planning Policy Framework
OS ..... Ordnance Survey
OS NGR ..... Ordnance Survey National Grid Reference
PPG ..... Planning Policy Guidance
RoFSW ..... Risk of Flooding from Surface Water mapping
SFRA ..... Strategic Flood Risk Assessment

Executive Summary

Background and site context

JBA Consulting were commissioned by Wealth Property Limited (the “Appellant”) to undertake a Flood Risk Assessment (FRA) in relation to land at Syston Mill, Mill Lane, Syston, Leicestershire.

The Appellant has submitted an appeal against the issuing of an Enforcement Notice by Charnwood Borough Council.

The land is located at Syston Mill in Syston, Leicestershire, and the Appellant’s landholdings extend to approximately 7.6ha hectares in size. The River Wreake (EA Main River) flows in a westerly direction along the northwestern boundary. An unnamed tributary (ordinary watercourse) of the River Wreake divides the land in a north westerly direction, towards the confluence of the two rivers on the northwestern boundary.

The site topography is relatively flat, with elevations ranging between approximately 48.2m AOD in the southwest of the site and 50.2m AOD in the northeast.

Flood risk

The EA's Recorded Flood Outline dataset identifies three previous flooding events within and surrounding the site. Fluvial flooding from the River Wreake was recorded in 1977, 1998 and 2000. Only the 1977 event is indicated to have affected the existing buildings and there is low confidence in the accuracy of this extent.

The EA's Flood Map for Planning indicates that the site is entirely within Flood Zones 2 and 3 (defined as land having between 0.1% and 1% annual probability of river flooding). The majority of the site is also within Flood Zone 3a (defined as land having 1% or greater probability of river flooding), with a small proportion of land in the north of the site outside this extent.

The SFRA Flood Zones maps show similar extents than those from the Flood Map for Planning. The Flood Zone 3b extent (land assessed as having a 3.3% or greater annual probability of flooding) is largely predicted to remain within the channel of the unnamed ordinary watercourse. The Flood Zone 3b extent does not affect areas of the site where existing buildings are located.

Defended outputs from the EA's Lower Wreake and tributaries (2015) hydraulic model have also been used to assess fluvial risk to the site. The 1% AEP plus 30% climate change defended scenario (as updated in the SFRA) is the design flood event and its model outputs have been used to assess the impact of climate change at the site. During the design flood event, flooding is predicted across the majority of the site, with minor 'dry islands' within the centre and north of the site. Flood depths are more

significant in the south of the site (up to 2.5m), and within the channel of the unnamed watercourse. Less significant depths of up to 1m are predicted in the north of the site.

Flood levels for the design flood event are determined to be:

- **49.84mAOD** north of the ordinary watercourse; and
- **49.82mAOD** to the south of the ordinary watercourse.

The EA's Risk of Flooding from Surface Water mapping indicates that the site is at low risk of pluvial flooding. During the 3.3% and 1% AEP's, surface water flooding is limited to the channels of the River Wreake and its unnamed tributary. Extents are more significant during the 0.1% AEP event, with additional surface water pooling in the southwest of the site. It should be noted that none of the existing buildings are affected.

The site is considered to be at low risk of groundwater and sewer flooding.

The site is within the 'wet day' and 'dry day' reservoir extents. However, as reservoir failure is unlikely, the risk of reservoir flooding is low.

Recommendations

To mitigate flood risk to the development, implementation of the following measures is recommended:

- The existing site is being used for commercial and industrial purposes and is considered 'less vulnerable' under the NPPF. The buildings are the most vulnerable aspect of the development and are situated entirely in Flood Zones 3a and 2 which is a compatible use. Consequently, the site already adopts a sequential approach to managing risk.
- A safe emergency route of access and egress will not be available during the 1% plus CC and 0.1% events, due to significant flooding of Mill Lane to the southeast of the site. As safe access and egress is not provided, a Flood Response Plan must be produced for the site management and users to enable safe evacuation prior to the onset of a flood event.
- The site is covered by the EA's Flood Warning and Alert Service. Site users must be registered with this service to receive early warning of imminent flood hazard. The Flood Warning Service will inform site occupants of flood risk, giving them time to evacuate the area if necessary.
- A Flood Warning and Evacuation Plan must be prepared for the site which should highlight the extent of the floodplains surrounding the site and the safest route of escape in the event of extreme flooding occurring. This could be addressed through a suitably worded planning condition should the Ground (a) appeal be granted.
- The Environment Agency has commented that the development would need to demonstrate that the proposals are flood resilient and do not increase flooding

elsewhere. The potential hazard posed by vehicles must be addressed in a Flood Warning and Evacuation Plan.

- The development already incorporates principles of flood resilient design such as placing electrical infrastructure 1.5 – 2.5m above existing floor levels. This approach is in accordance with EA standing advice on preparing an FRA which requires flood risk/ resilience measures to protect a property at a minimum of 600mm above the design flood level.

Overall development at this site is compliant with NPPF and this FRA demonstrates that flood risk is capable of being managed appropriately. Consequently, flood risk should not be a ground for refusal for the Ground (a) appeal.

1 Introduction

1.1 Terms of reference

JBA Consulting were commissioned by Wealth Property Ltd to undertake a Flood Risk Assessment (FRA) for an existing industrial/ commercial site at Syston Mill, following the issue of an enforcement notice by Charnwood Borough Council (E/21/0183) in relation to an alleged breach of planning control. Wealth Property Limited has issued an appeal (APP/X2410/C/24/3354976) against this enforcement notice.

Reason 6 for issuing the Enforcement Notice relates to Flood Risk and states:

There is a potential for flooding of the Land due to its location being in Flood Zone 3a and 3b. Without a flood risk assessment for the whole development; supported by a sequential test for the siting of caravans only; an assessment of the risks of flooding cannot be made. There is no evidence from the landowners or tenants to confirm that such a report is available, and no report has been forwarded to the Local Planning Authority for consideration. Therefore, it is considered, the development is contrary to The Charnwood Strategic Flood Risk Assessment 2014; to Policy CS2, CS16 of the Charnwood Local Plan 2011- 2028 Core Strategy 2015: Policy EV/1 of the Borough of Charnwood Local Plan 2004; and the Environmental Objective 7 and Policies DS5, CC1, CC4, EV6 of the submitted Charnwood Local Plan 2021-2037 and the provisions in paragraphs 165 -175 of the NPPF.

This FRA addresses the concerns of the LPA and provides information on all aspects of flood risk pertaining to the site in accordance with the revised National Planning Policy Framework (NPPF, 2024) and associated Planning Practice Guidance (PPG) relating to development and flood risk. It also considers the flood risk mitigation relevant to the nature of the proposed development and the Flood Zone classification of the site.

The flood risk to and from the site has been determined from publicly available information and a review of the site topography.

1.2 FRA requirements

It is a requirement for development applications to consider the potential risk of flooding from various sources to a proposed development over its lifetime and any possible impacts on flood risk elsewhere as a result of the development.

Where appropriate, the following aspects of flood risk should be addressed and the extent to which the development is designed to deal with flood risk:

- the nature and expected lifetime of the development and the extent to which the development is designed to deal with flood risk;
- the area liable to flooding from various sources;

- the probability of the current and future flood risk;
- the extent and standard of existing flood defences and their effectiveness over time;
- the likely depth of flooding;
- the rates of predicted flows;
- the likelihood to impacts on other areas, properties, and habitats; and
- the effects of climate change.

The level of flood risk to the site has been determined based on open license flood risk datasets provided on the Defra Data Services website by the Environment Agency. This includes the Flood Map for Planning, LIDAR Digital Terrain Model (DTM) and flood history datasets.

2 Study Area

2.1 Site characteristics

The land comprises the former "Syston Mill", an industrial complex of industrial, warehouse and office buildings; areas of hardstanding, car parking; and vehicle sales; and agricultural land located to the north-west of the town of Syston in the south of Charnwood Borough Council. It is understood that Syston Mill is a historic industrial site and previously operated as a shoe sole manufacturing business, which was the primary use of the site until 1989.

The River Wreake (a tributary of the River Soar) flows in a south westerly direction along the northwestern boundary. A tributary of the River Wreake (an unnamed watercourse) flows in a north westerly direction through the centre of the site. The confluence of the River Wreake and the unnamed watercourse is present along the northwestern site boundary. See Table 2-1 for additional site information.

The location of the site is shown in Figure 2-1.

Table 2-1: Summary of site details

Site Name	Land at Syston Mill, Syston
Site area	7.6 ha
Existing site use	Commercial, Industrial and agricultural
OS NGR	SK 61526 12343
County	Leicestershire
Country	England (NPPF applies)
Local Planning Authority	Charnwood Borough Council
Lead Local Flood Authority	Leicestershire County Council

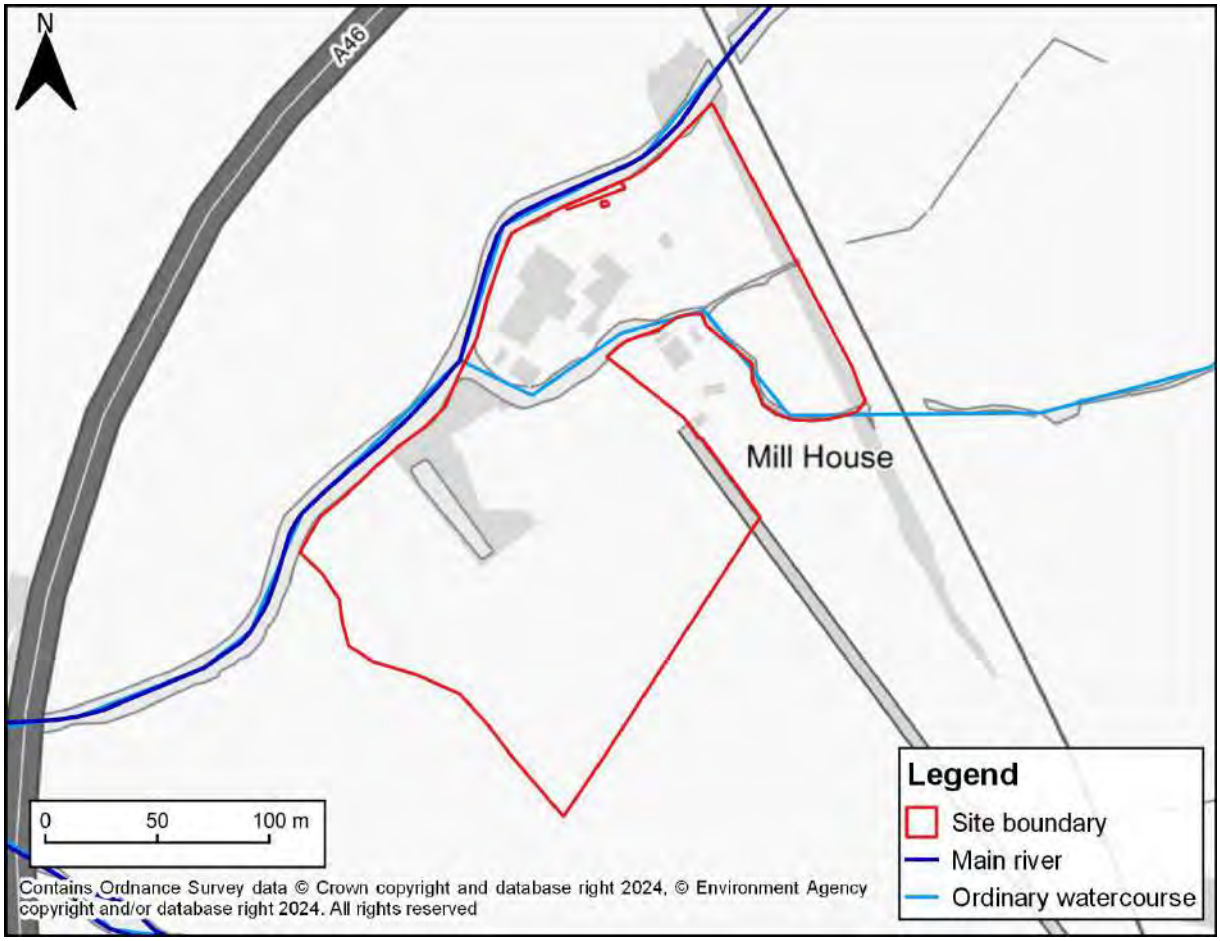


Figure 2-1: Site location plan

2.2 Existing development

JBA undertook a site visit on 10 December 2024 and confirmed a number of separate use classes including B2, B8, E and Sui Generis uses. Overall, the current site can be characterised as commercial/ industrial in its use.

2.3 Topography

A site-specific topographic survey was completed by SV Surveying LTD in 2024, a copy of which is included as Appendix A. The survey indicates that ground levels fall between 48.2m above ordnance datum (AOD) and 50.2m AOD. Land is relatively flat across the site, with slightly steeper elevations in the northeastern part of the site.

The Environment Agency's (EA's) 2022 LiDAR DTM dataset has also been used to provide a topographical visualisation of the wider area and is shown in Figure 2-2.

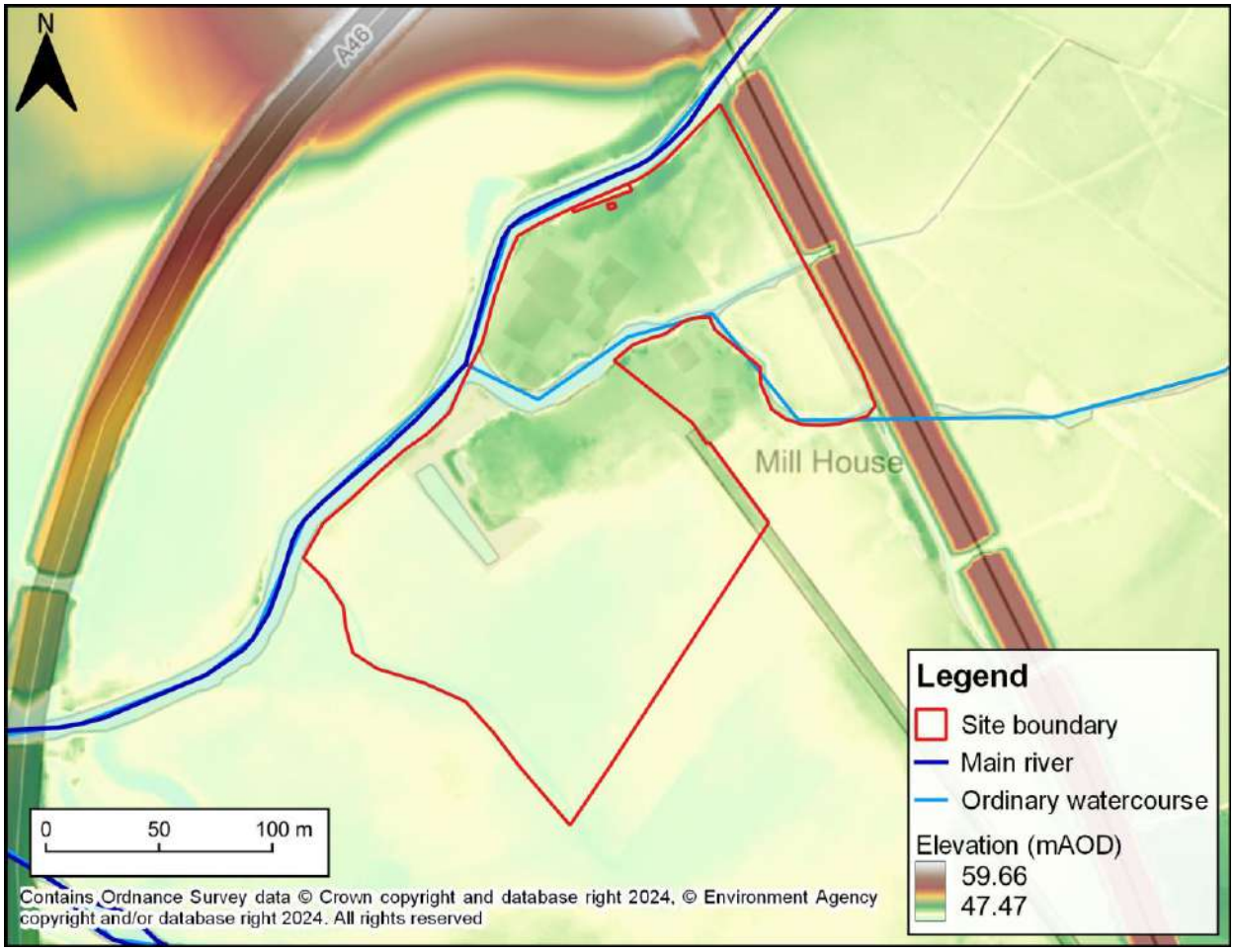


Figure 2-2: LiDAR Digital Terrain Model

2.4 Geology

British Geological Survey (BGS) data indicates that the majority of the site is underlain by the Branscombe Mudstone Formation (Mudstone), with the northern part of the site underlain by the Edwalton Member (Mudstone). Overlying superficial deposits of Alluvium (clay, silt, sand and gravel) are present.

BGS Boreholes SK61SW70 and SK61SW75, which are in close proximity to the site, confirm that clay, sand and gravel deposits are present beneath the site.

At the time of writing, it is understood that a ground investigation is currently being undertaken although the results are not currently available.

2.5 Hydrogeology

Hydrogeological information was obtained from the online Magic Maps service. These maps indicate that the site is underlain by a Secondary A superficial aquifer. The maps also indicate that the site is underlain by a Secondary B bedrock aquifer.

The site is not located within a Groundwater Source Protection Zone (SPZ).

2.6 Watercourses and defences

EA and Ordnance Survey (OS) mapping have been used to identify the locations of watercourses within and around the development site.

The River Wreake (EA Main River) flows along the northwestern site boundary, in a south westerly direction. The unnamed watercourse (tributary of the River Wreake) flows in a north westerly direction through the centre of the site, towards its confluence with the River Wreake (located along the northern site boundary). The River Wreake subsequently flows towards its confluence with the River Soar, which is approximately 2km northwest of the site.

The Environment Agency operate a flow gauge (Syston Gauge) on the River Wreake in the northern part of the site with data available on Hydrology Data Explorer. This has been used to inform the understanding of flood risk in this FRA. The EA Spatial Flood Defence dataset indicates the presence of natural high ground along both banks of the River Wreake, directly north of the site. This has a Design Standard of Protection (SoP) of 1 in 1 years.

Figure 2-3: Surrounding watercourses shows the various river and watercourses surrounding the site.

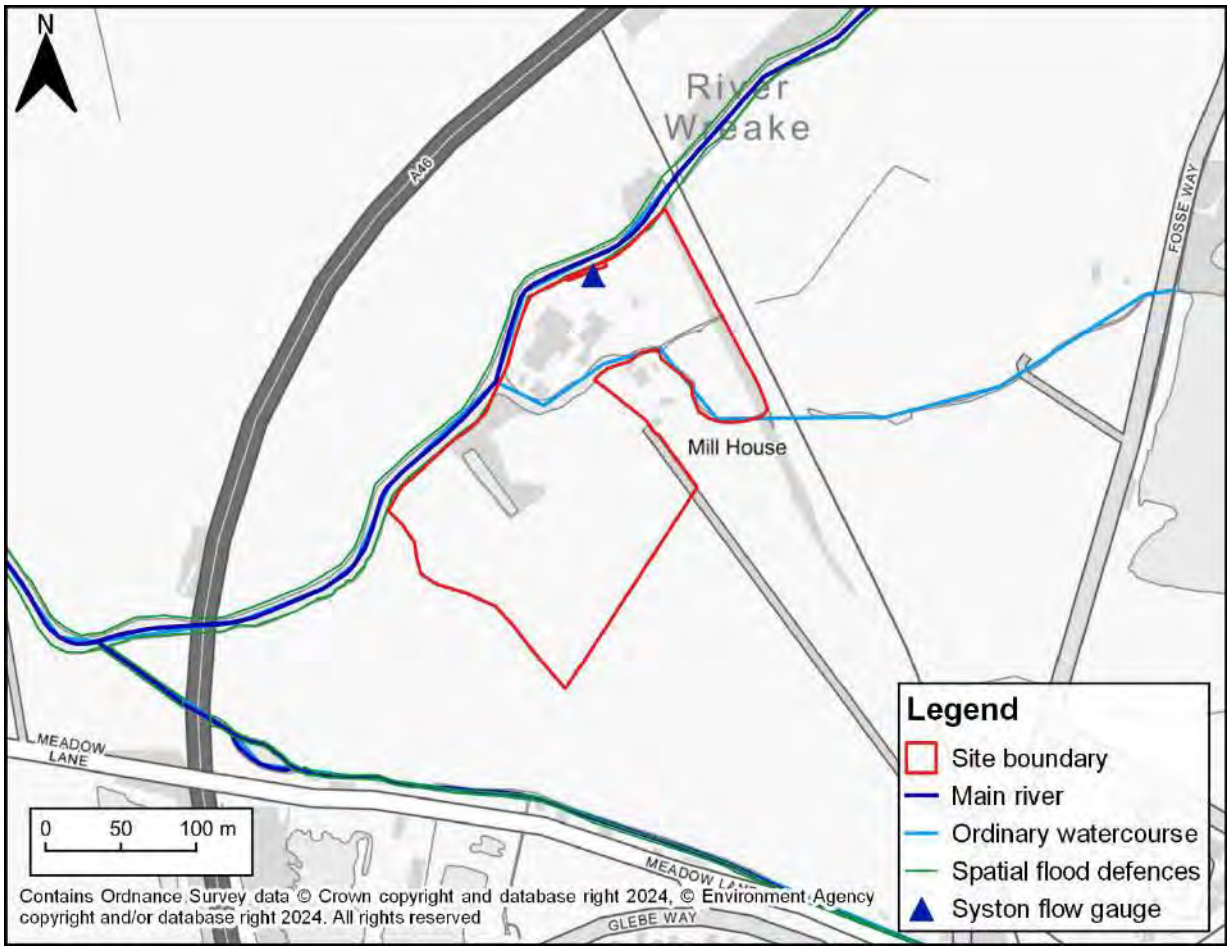


Figure 2-3: Surrounding watercourses

3 Planning Policy and Flood Risk

3.1 Planning context

The NPPF was introduced by the Department for Communities and Local Government in March 2012 and was most recently revised in December 2024. The revised NPPF considers flood risk to developments using a sequential characterisation of all sources of flood risk, based on planning zones and the EA Flood Map. The revised NPPF is supported by the PPG, originally published in March 2014 and most recently updated in August 2022, which gives additional information on the assessment of flood risk. The main study requirement is to identify the flood zones and vulnerability classification relevant to the proposed development, based on an assessment of current and future conditions.

3.2 Development sites in flood zones

The EA states that the flood risk is a function of:

- "The likelihood of a particular flood happening, best expressed as a chance or probability over a period of one year. For example, 'There is a 1 in 100 chance of flooding in any given year in this location'.
- "The impact or consequences that will result if the flood occurs."

The EA has developed a Flood Map which shows the risk of fluvial and tidal flooding in England for different return period events, assuming no flood defences. This map provides the basis for the assessment of flood risk and development suitability under the NPPF. This map is divided into flood zones which indicate the probability that land in each zone has of flooding from fluvial or tidal sources, as outlined in Table 3-1.

Table 3-1: Flood Zone classifications

Flood Zone	Definition
Zone 1: Low Probability	Land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1% AEP).
Zone 2: Medium Probability	Land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1% AEP) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% – 0.1% AEP) in any year.
Zone 3a: High Probability	Land assessed as having a 1 in 100 or greater probability of river flooding (>1% AEP) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5% AEP) in any year.

Flood Zone	Definition
Zone 3b: Functional Floodplain	This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise: • land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or • land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding). Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency.

3.3 Sequential and exception tests

The NPPF requires that the Sequential and Exception Tests be applied when choosing the location of new development and the layout of the development site. The Sequential Test aims to promote development in low flood risk areas considering all sources of flooding. The Exception Test is used where no suitable development areas can be found in low-risk zones.

The Sequential Test should be applied to identify suitable sites which are at low risk from all sources of flooding, avoiding medium and high-risk areas where possible. If no suitable areas can be identified in low-risk areas, then sites with the lowest flood risk should be considered next. If development is necessary within a medium or high-risk zone, an exception test may be required to demonstrate the need for the development in that location and plans to mitigate the flood risk. The requirement for the application of the Exception Test is outlined in Section 3-4.

3.4 Development classification

Table 3-1 shows how Flood Zones are defined (as based on Table 1 of the PPG). Annex 3 of the NPPF shows the classification of flood risk vulnerability in relation to a proposed development type. Table 3-2 (reproduced from Table 2 of the PPG) shows the compatibility of these flood zones and vulnerability classifications.

Table 3-2: Flood risk vulnerability and flood zone 'incompatibility'

Flood Zone	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test Required	✓	✓	✓
Zone 3a	Exception Test Required	X	Exception Test Required	✓	✓
Zone 3b	Exception Test Required	X	X	X	✓

Notes:
✓ Exception Test is not required
X Development should not be permitted.

In its Enforcement Notice, the LPA alleges that the site is in use for the siting of caravans, which are in residential use. The Appellant has advised that caravans have, in the past, been sited to the north of the mill buildings but have since been removed and is not a use that is to be progressed in the future. The Appellant has also confirmed that there is no residential use on the land. JBA's site visit on 10 December 2024 saw no evidence that the site was used for siting of caravans.

The existing site consists of commercial and industrial uses which are classified as 'less vulnerable' under the NPPF. This classification of development is considered compatible with Flood Zone 2 and 3a, as shown in Table 3 2.

3.5 Climate change allowances

The NPPF and supporting PPG on Flood Risk and Coastal Change explain when and how flood risk assessments should be used. This includes demonstrating how flood risk will be managed now and over the development's lifetime, taking climate change into account.

On 19 February 2016, the EA released new guidance on climate change allowances to support the NPPF. The guidance was last updated on 27 May 2022. The climate changes allowances are predictions of anticipated changes for the following:

- peak river flow allowances for each river basin district;
- peak rainfall intensity;
- sea level rise; and
- offshore wind speed and extreme wave height.

3.5.1 Peak river flows

The guidance provides advice on which peak river flow allowances, based on management catchments, should be used for FRAs for sites in all Flood Zones.

As the land is used for commercial and industrial uses, the lifetime of the development is considered to be 75 years and therefore the central climate change allowance for the 2080s epoch (2070– 2115) has been considered.

In the Soar Management Catchment, this equates to an allowance of +28%, as shown in Table 3-3. The 1 in 100-year event plus climate change is also known as the design flood.

Table 3-3: Peak river flow allowances for the Soar Management Catchment

Allowance	Total anticipated for the 2020s (2015-2039)	Total potential change anticipated for the 2050s (2040-2069)	Total potential change anticipated for the 2080s (2070-2115)
Central	14%	16%	28%
Higher central	18%	21%	37%
Upper end	28%	35%	60%

3.5.2 Peak rainfall intensity

The guidance also provides advice on which peak rainfall intensity allowances, based on management catchments, should be used. Development with a lifetime between 2061 and 2100 should use the central allowances. In the Soar Management Catchment, this equates to an allowance of +25% for the 3.3% AEP event and +25% for the 1% AEP event.

Table 3-4: Peak rainfall intensity allowances for the Soar Management Catchment

AEP	Epoch	Central Allowance	Upper End Allowance
3.3%	2050s (2023-2060)	20%	35%
3.3%	2070s (2061-2125)	25%	35%
1%	2050s (2023-2060)	20%	40%
1%	2070s (2061-2125)	25%	40%

Note: In some locations the allowance for the 2050s epoch is higher than that for the 2070s epoch. If so, and development has a lifetime beyond 2061, use the higher of the two allowances.

3.6 Policy review

3.6.1 Charnwood Local Plan Core Strategy (2015)

The Charnwood Local Plan (2011 – 2028) was adopted on 09 November 2015 and forms the basis for planning policy in Charnwood at the time of writing this FRA. With regard to flood risk policy, this has been superseded with policies in the submitted Charnwood Local Plan 2021 – 2037.

3.6.2 Local Plan (2021 - 2037)

The Draft Charnwood Borough Council Local Plan (2021 - 2037) sets out a vision and a framework for the future pattern, scale and quality of development in Charnwood. Once adopted, this new local plan will form part of the development plan and replace the Charnwood Local Plan Core Strategy (2015).

Policy CC1 specifically outlines Flood Risk Management, stating that the council will manage flood risk by directing development to areas with the lowest risk of flooding. Examples of how the council plan to achieve this include:

- Applying the Sequential Test and Exception Test where necessary
- requiring a sequential approach to layout is taken within the site, with the highest vulnerability development being located within the lowest flood risk zone(s)
- ensuring that major development proposals in Flood Zone 1 and any developments in Flood Zones 2 and 3, or within an area at risk of surface water flooding, are accompanied by a site-specific flood risk assessment
- ensuring that, where appropriate, all major developments incorporate sustainable drainage systems, in accordance with Policy CC2.

3.6.3 Charnwood Borough Council Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) is undertaken by the Local Planning Authority to assess the current and future flood risk within their administrative boundary and to determine the impact development may have on flood risk. The most recent Charnwood Level 1 SFRA was published in 2018, and subsequent Level 2 SFRA was published in 2021.

The findings of the Level 1 SFRA highlight that Syston is at risk of fluvial flooding from the River Wreake, which flows to the north of the settlement, and the Barkby Brook, a tributary of the Wreake which runs through the middle of the town. It is evident that land east of the A46 and land west of the railway line (encompassing the site) falls within Flood Zone 3.

The LPA states that the entire site falls within Flood Zone 3a and 3b, whilst this is correct based on the 2014 SFRA the more recently published 2018 SFRA provides updated hydraulic modelling demonstrating that the site is partially in Flood Zones 3b,

3a and 2. This FRA considers the 2018 SFRA to provide the 'best available data' for the site.

3.6.4 Leicestershire County Council Local Flood Risk Management Strategy

The Leicestershire County Council Local Flood Risk Management Strategy (LFRMS), updated in February 2024, provides the principles, objectives and measures by which local flood risk will be managed.

The strategy identifies a list of 5 objectives, including:

- Assets, Watercourses and Catchments
- Encouraging Sustainable Development
- Flood Preparedness, Response and Recovery
- Better Understanding Flood Risk
- Local Projects

The strategy does not contain any specific information or policies relating to the site.

3.6.5 River Trent Catchment Flood Management Plan

The River Trent Catchment Flood Management Plan (CFMP), published in 2010, provides an overview of the flood risk in the River Trent catchment and sets out a plan for sustainable flood risk management over the next 50 to 100 years.

The site falls within Sub area 9 (Upper Soar and Upper Anker), which includes the areas of Leicester and Loughborough. The CFMP indicates that flooding in this area results from lack of capacity in the river channels and the floodplains becoming inundated.

The plan highlights that preferred policy option for this sub area is Policy 4, which includes: Areas of low, moderate or high flood risk where flood risk is being managed effectively, but further action may be required to keep pace with climate change. Examples of actions to implement the preferred policy option include:

- Assess long-term opportunities to move development away from the floodplain and create green corridors though parts of Leicester;
- Return watercourses to a more natural state, increasing biodiversity and opening river corridors, through urban areas of Leicester; and
- Working with others to minimise disruption to people and communities caused by flooding, taking into account future climate change and urban growth

4 Assessment of Flood Risk

4.1 Historic flooding

The EA's Historic Flood Map and Recorded Flood Outlines datasets have been reviewed to assess previous flooding at the site. This dataset identifies that three flooding events have previously been recorded within and surrounding the site, as shown in Figure 4-1.

The EA has noted that this dataset has a number of limitations:

- Recorded Flood Outlines show flooding to the land and do not necessarily indicate that properties within the historic flood extents were flooded internally.
- Recorded Flood Outlines are not suitable for identifying if an individual property will flood.
- The pattern of flooding in the area may have changed so this may now flood or not flood under different circumstances.

The first recorded flooding event occurred in late February 1977 and was caused by channel capacity exceedance of the River Wreake due to a lack of raised defences. This event caused widespread flooding across the entirety of the site. An additional event was recorded in April 1998, caused by fluvial flooding of the River Wreake. Mapping indicates the parts of the site was impacted but these do not include the built development, which is situated on higher ground.

Site management have stated that the site has not previously flooded and with consideration to the age of the 1977 event, we have low confidence that this extent is accurate. We also note that the EA has chosen not to incorporate this extent in the Flood Map for Planning. The Charnwood Borough Council Level 1 and 2 SFRA's and other policy documents provide no indication of previous flooding at the site.

Consequently, there is low confidence in the accuracy of these datasets in informing present and future flood risk to the site.

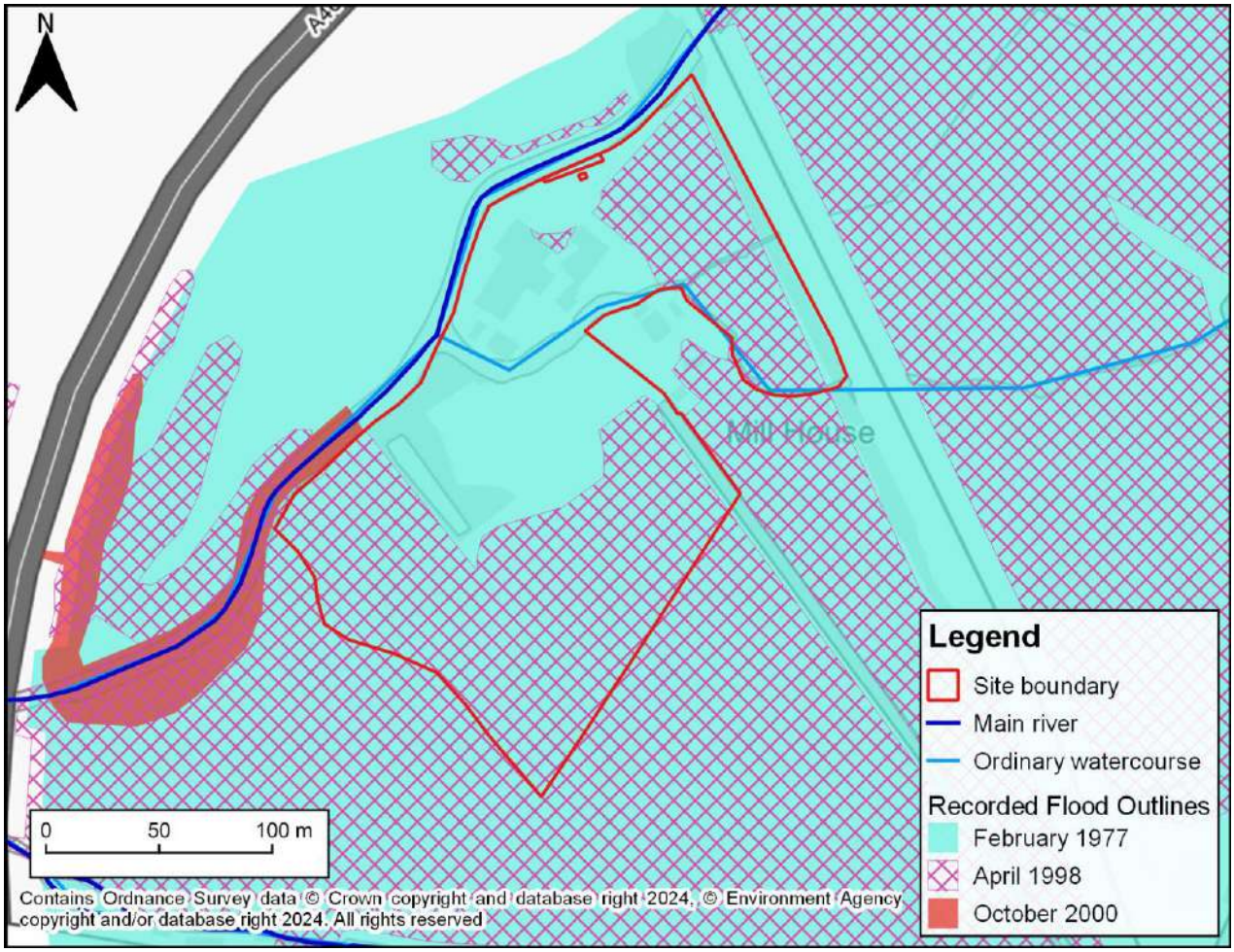


Figure 4-1: EA Recorded Flood Outlines

4.2 Tidal flood risk

The site is located significantly inland and is not at risk of tidal flooding.

4.3 Fluvial flood risk

4.3.1 Flood Map for Planning

The EA Flood Map for Planning has been reviewed to assess risk of flooding from fluvial and tidal sources. The majority of the site is within Flood Zone 3 (land assessed as having 1% or greater probability of river flooding). However, many of the buildings are situated on higher ground and falls within Flood Zone 2 (defined as land having between 0.1% and 1% annual probability of river flooding). The EA's 'Reduction in Risk of Flooding from Rivers and Sea due to defences' dataset indicates that the site is not within an area benefiting from defences.

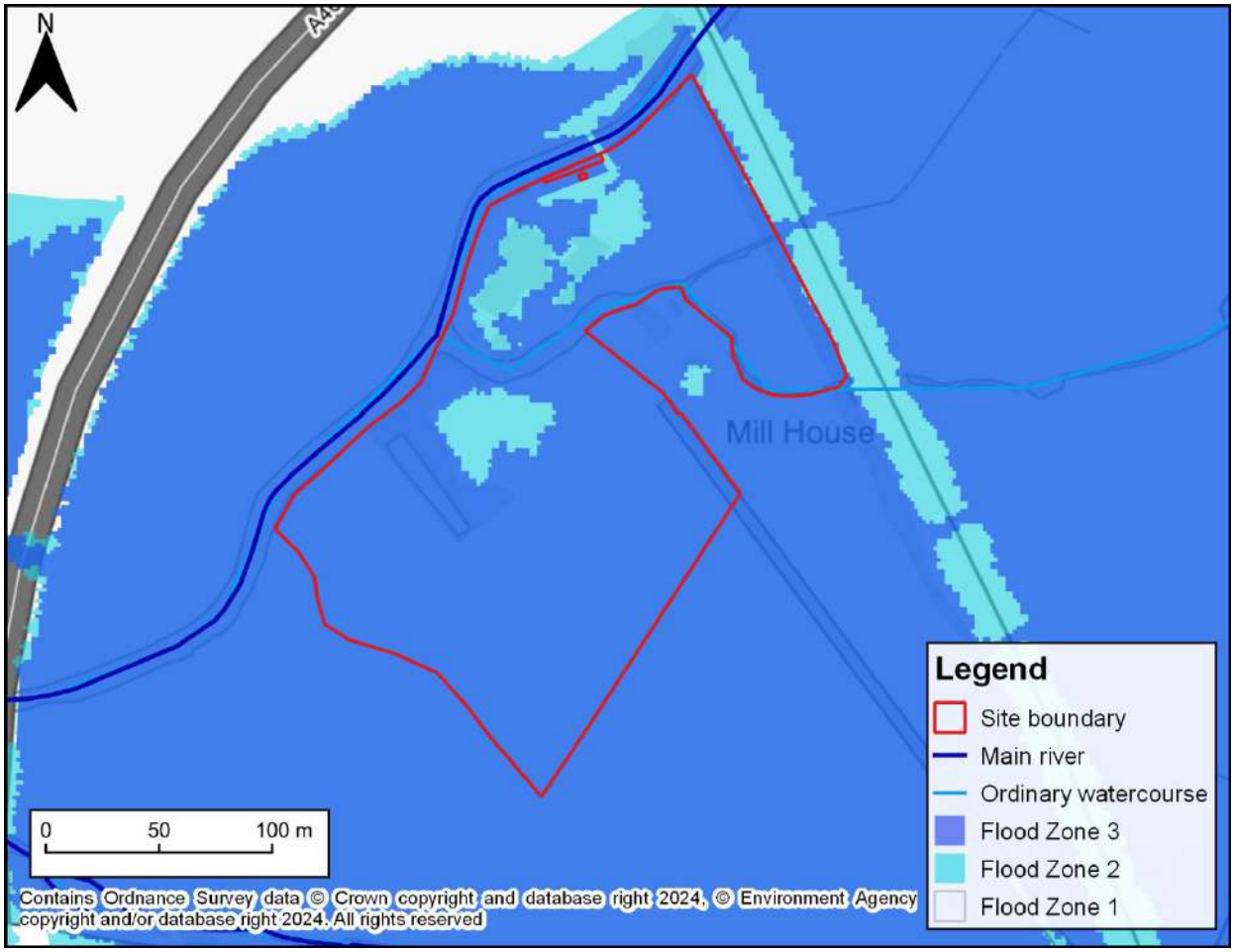


Figure 4-2: Flood Map for Planning

4.3.2 SFRA Flood Zones

The Charnwood Borough SFRA (2018) flood zones have also been reviewed to assess fluvial flood risk at the site. Figure 4-3: SFRA Flood Zones shows that the entirety of the site is within Flood Zones 2 and 3a. Flood Zone 3a covers the majority of the site, with minor areas in the north and centre of the site within Flood Zone 2. However, the Flood Zone 3b extent (land assessed as having a 3.3% or greater annual probability of flooding), is predicted to impact the western part of the site, where topographies are slightly lower. In the eastern part of the site, the Flood Zone 3b extent remains within the channel of the unnamed watercourse.

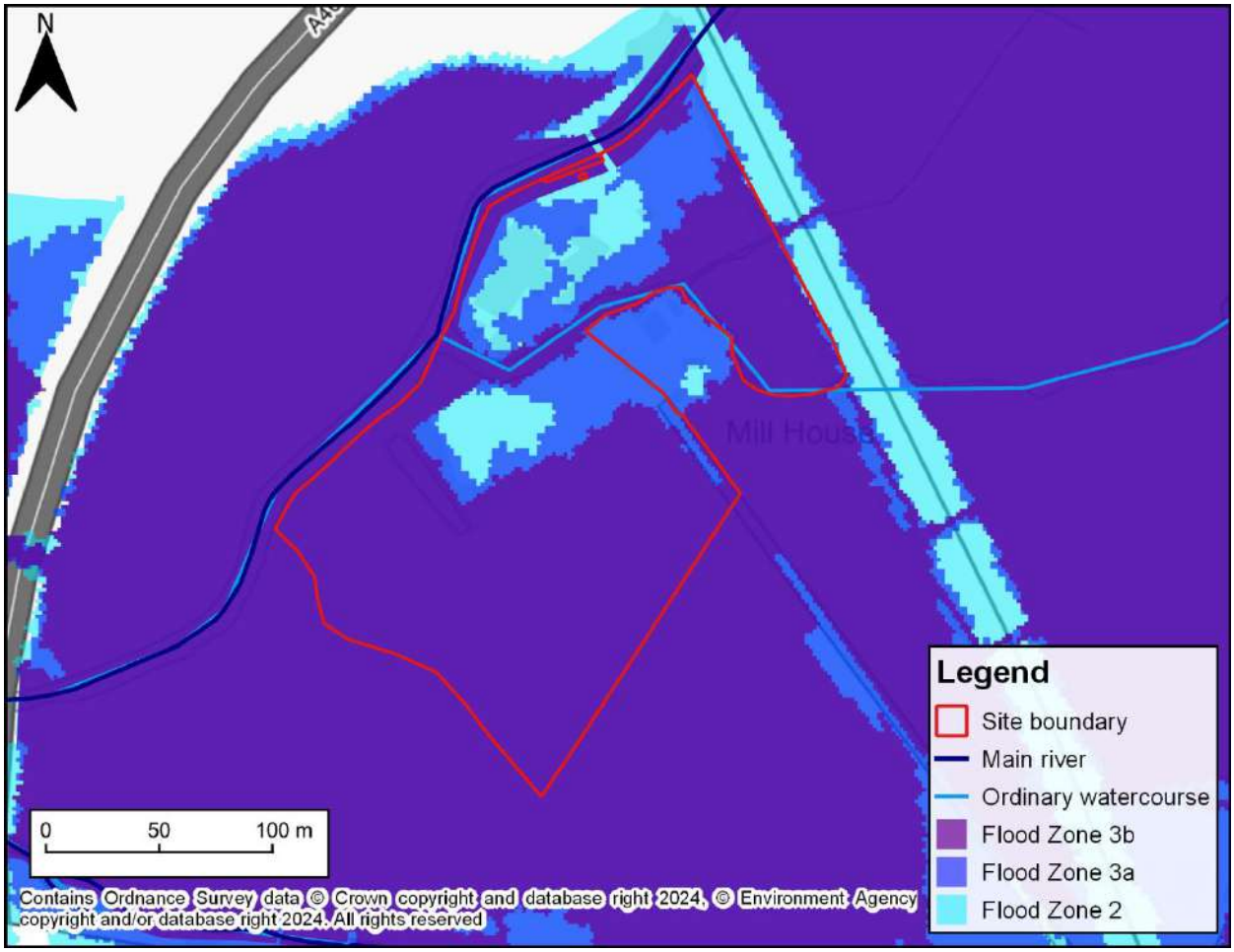


Figure 4-3: SFRA Flood Zones

4.3.3 Lower Wreake and tributaries model (2015)

The Lower Wreake and tributaries hydraulic model (2015) was provided by the EA as part of a Product 4 and 6 data request to inform this FRA. It is understood this model was re-run for the purposes of the SFRA for the latest climate change allowances at the time. The defended 3.3%, 1%, 1% plus CC and 0.1% AEP events have been used to assess fluvial flood risk at the site.

Since the publication of the SFRA the definition of Flood Zone 3b has changed from the 1 in 20 year event (5% AEP) to the 1 in 30 (3.3% AEP) which is larger extent. Whilst the EA accepts in its comments in the enforcement report to the LPA that the SFRA provides a definitive extent of Flood Zone 3b, we have nevertheless undertaken additional analysis to understand the extent of this.

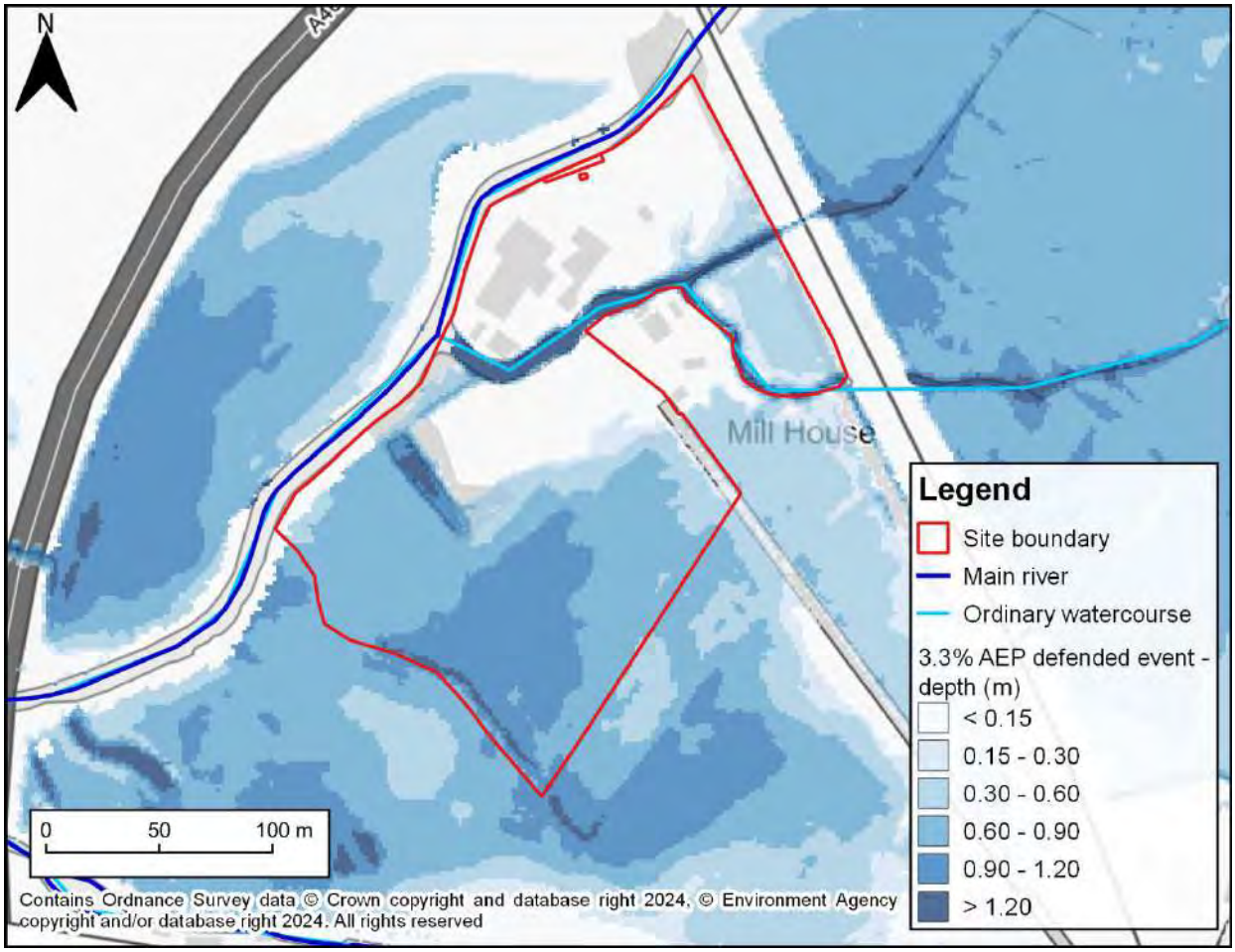


Figure 4-4: Depth mapping for the 3.3% AEP event

During the defended 3.3% AEP event, flood extents are shown to inundate the western part of the site, with depths of over 1m. Additionally, flood extents are predicted within the watercourse channel and along the eastern boundary. During the 1% AEP event, flooding is slightly more extensive, with greater flooding extents in the northeast of the site. Flood depths range between 0 and 2.5m, with maximum depths predicted within the channel of the unnamed watercourse. Depths of between 1 and 1.5m are predicted in the southwest of the site. During the 0.1% AEP event, the entirety of the site is affected, with depths of over 2.5m predicted in the southeast, and within the watercourse channel to the north. Elsewhere, depths are relatively significant, reaching 1m across the majority of the site.

During the 1% AEP + 30% climate change event (design flood), flood extent covers the majority of the site, as shown in Figure 4-5: Depth mapping for the 1% AEP + 30% climate change event. Minor areas in the centre and north of the site remain unaffected or with very shallow flood depths typically <300mm. In channel flood depths of over 2.5m are predicted within the unnamed watercourse to the north of the site. Elsewhere, the most significant depths (between 1.5 and 2m), are predicted in the southwest of the site, with less significant depths (between 0 and 1m) predicted in the north east.

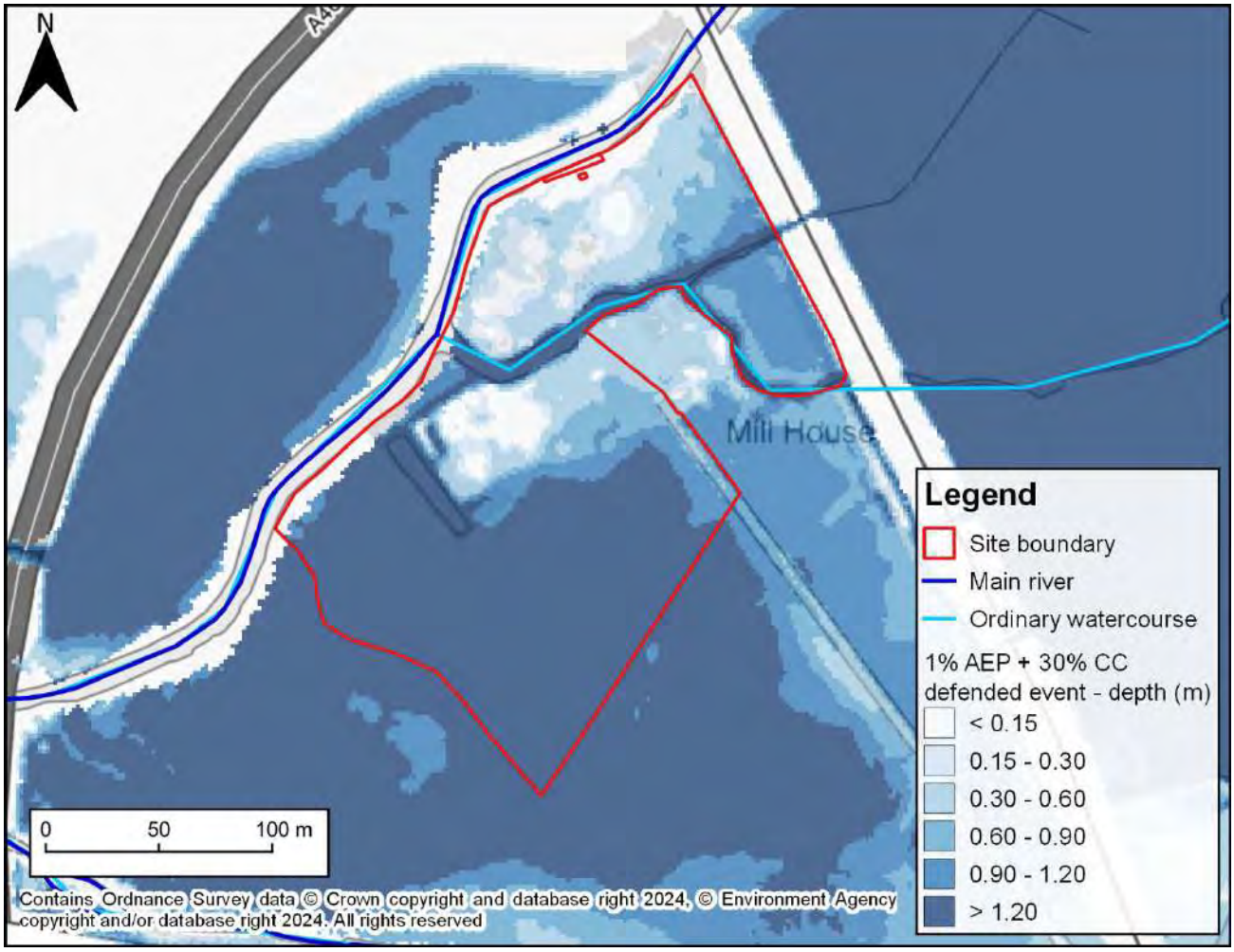


Figure 4-5: Depth mapping for the 1% AEP + 30% climate change event

Based on the hydraulic model outputs provided by the EA, the design flood level for the site is determined to be:

- **49.84mAOD** north of the ordinary watercourse; and
- **49.82mAOD** to the south of the ordinary watercourse.

4.3.4 Observed flows and percentile calculations

JBA conducted a site visit on 10th December 2024. During this site visit, bank full flows were observed, Stage and flow data from the Syston gauge was used to derive flow percentile calculations, to put this observation into context with the core question being to understand how often these flows are exceeded

Figure 4-6: Photos taken during site visit on 10th December 2024. Left: Ordinary Watercourse proximal to site. Centre: confluence of the Ordinary Watercourse and the River Wreake. Right: River Wreake (Main River)

Percentile flows are a way to describe river flow and level compared to their typical range. It therefore describes whether the target flow and level were unusually low or high. The results of the analysis are shown in Table 4-1 with the full analysis in Appendix C.

Table 4-1: Results of percentile calculations

Data	Percentile
Flow data – daily	98.9
Flow data – 15-minute	98.9
Level data – daily	99.2
Level data – 15-minute	99.2

This demonstrates that flows at the time of the site visit were very high. The 98th percentile indicates that flows have only exceeded this level 2% of the time throughout the period of record. Similarly, the level calculations demonstrate that the water level at this site has only been exceeded 1% of the time throughout the period of record. The probability exceeding these levels and flows at this site are very low. River levels were recorded as 2.92m from the gauge (against a datum) during the site visit, and the National River Flow Archive website indicates that the bank full stage is regarded as 3.90m. Given that flows and levels are within the 98th percentile, this indicates that there is a very low probability of out of bank flows at the location of the gauge.

4.4 Surface water flood risk

Surface water flooding arises when rain falling on saturated ground flows overland, following the local topography. Overland flow can pose a risk to both the development site and land surrounding the development site. In the former case, overland flow may originate from the site itself or from adjoining land at a higher elevation from which flow migrates onto the development area. In the latter case, existing developments at a lower elevation may be subject to flooding due to overland flow originating from the site and migrating towards lower areas. The layout of the proposed development needs to reflect and, where necessary, mitigate against the risks.

The Risk of Flooding from Surface Water (RoFSW) dataset has been used to determine the potential extents of pluvial flooding at the site (Figure 4-7).

The majority of mapped surface water flooding is indicative of low points in the LiDAR data which includes the River Wreake and unnamed watercourse. Flooding is more extensive during the 0.1% AEP event, with a significant surface water pool in the southwest of the site which is undeveloped land.

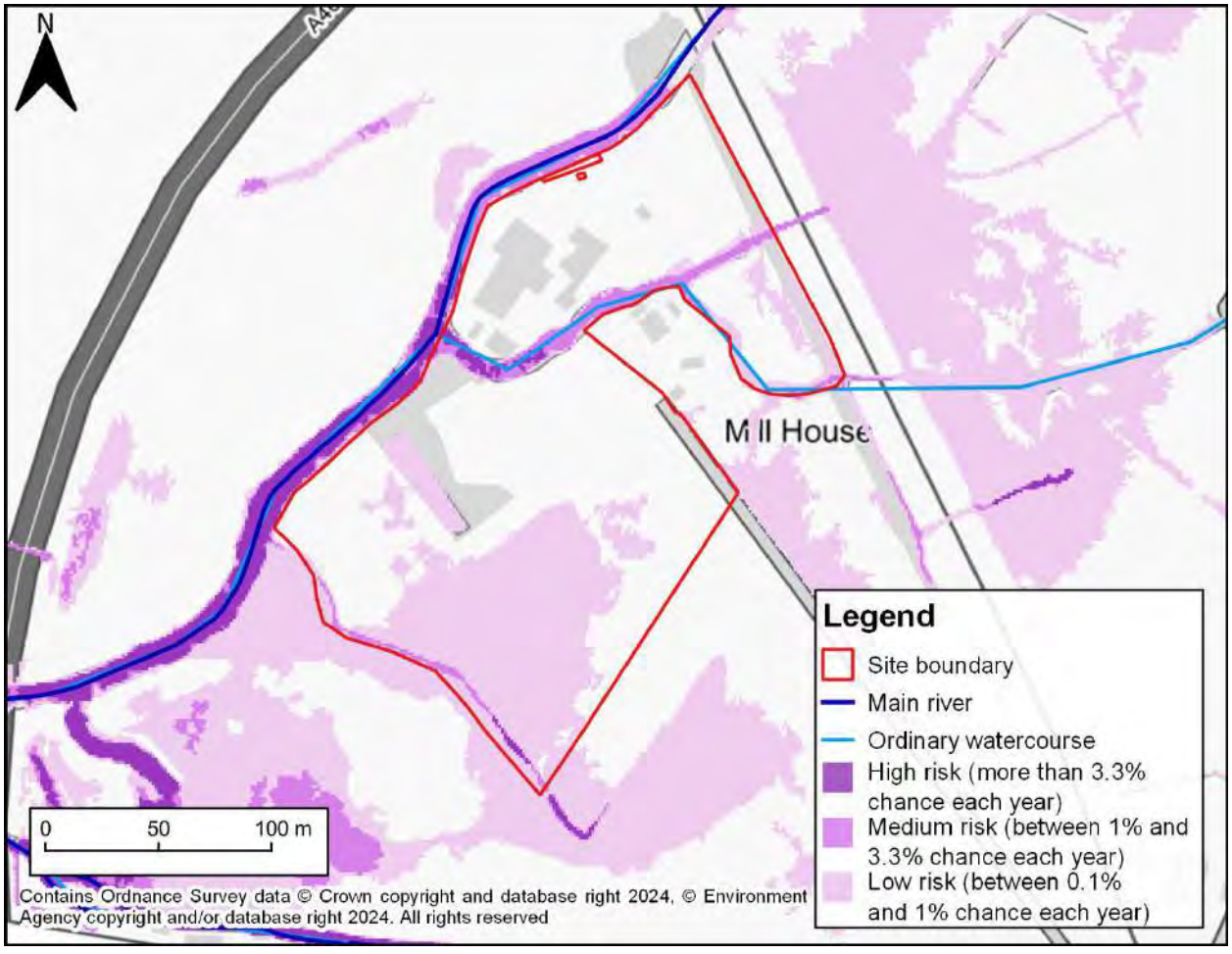


Figure 4-7: Risk of flooding from surface water mapping

It should be noted that none of the existing buildings are affected by surface water flooding and overall, the site is at low risk of pluvial flooding.

4.5 Groundwater flood risk

Groundwater flooding occurs when the water table rises above ground level, particularly after prolonged rainfall events. This is most likely to occur in low-lying areas that are underlain by permeable bedrock and superficial geologies. Unlike other forms of flooding, groundwater flooding does not pose a significant risk to life but can cause serious damage to property.

British Geological Society mapping indicates that the site is underlain by mudstone (relatively impermeable strata) and overlying superficial deposits of clay, silt, sand and gravel (which have variable permeability).

The JBA 5m Groundwater Map has been reviewed to assess the risk of groundwater emergence during a 1 in 100 year (1% AEP) event. This mapping indicates that there is minimal risk of groundwater flooding at the site.

Groundwater flood risk to the site is low.

4.6 Sewer flood risk

Sewer flooding can occur when drainage systems become overwhelmed by heavy rainfall or when pipes become blocked. The Charnwood Borough Council Level 1 SFRA indicates that Syston (post code area LE7 1) is at a high risk of sewer flooding, with 24 properties identified as being at risk of sewer flooding in the Severn Trent Flood Risk Register.

However, there are no records of sewer flooding at the site and it is unclear whether the site is served by the public sewer network. Therefore, flood risk from sewers is considered to be medium on the basis of limited information.

4.7 Reservoir flood risk

The EA's Risk of Flooding from Reservoirs Map shows where water may go in the unlikely event of failure of a large, raised reservoir as classified under the Reservoirs Act 1975. The mapping shows two flooding scenarios, a ‘dry day’ scenario that estimates the flood extents assuming that the failure occurred when rivers were at normal levels and a ‘wet day’ scenario that predicts the flood extents if a river were already experiencing flooding.

It is important to note that the entire site is within the ‘fluvial contributions’ extent. This indicates that the site would already flood from fluvial sources during the extreme event modelled for the ‘wet day’ scenario.

Figure 4-8 illustrates that the majority of the site would be affected during the ‘dry day’ scenario, with two areas (in the northeast and centre of the site) unaffected. During

this scenario, the Brentingby Flood Storage Reservoir poses a risk to the site. Should a reservoir breach event coincide with extreme ‘wet day’ conditions, the entirety of the site is predicted to be inundated, with land east and west of the site also affected. The Bretingby Flood Storage Reservoir and Scalford Brook Reservoir pose a risk to the site during the 'wet day' scenario.

It is important to note that the entire site is within the ‘fluvial contributions’ extent. This indicates that the site would already flood from fluvial sources during the extreme event modelled for the ‘wet day’ scenario.

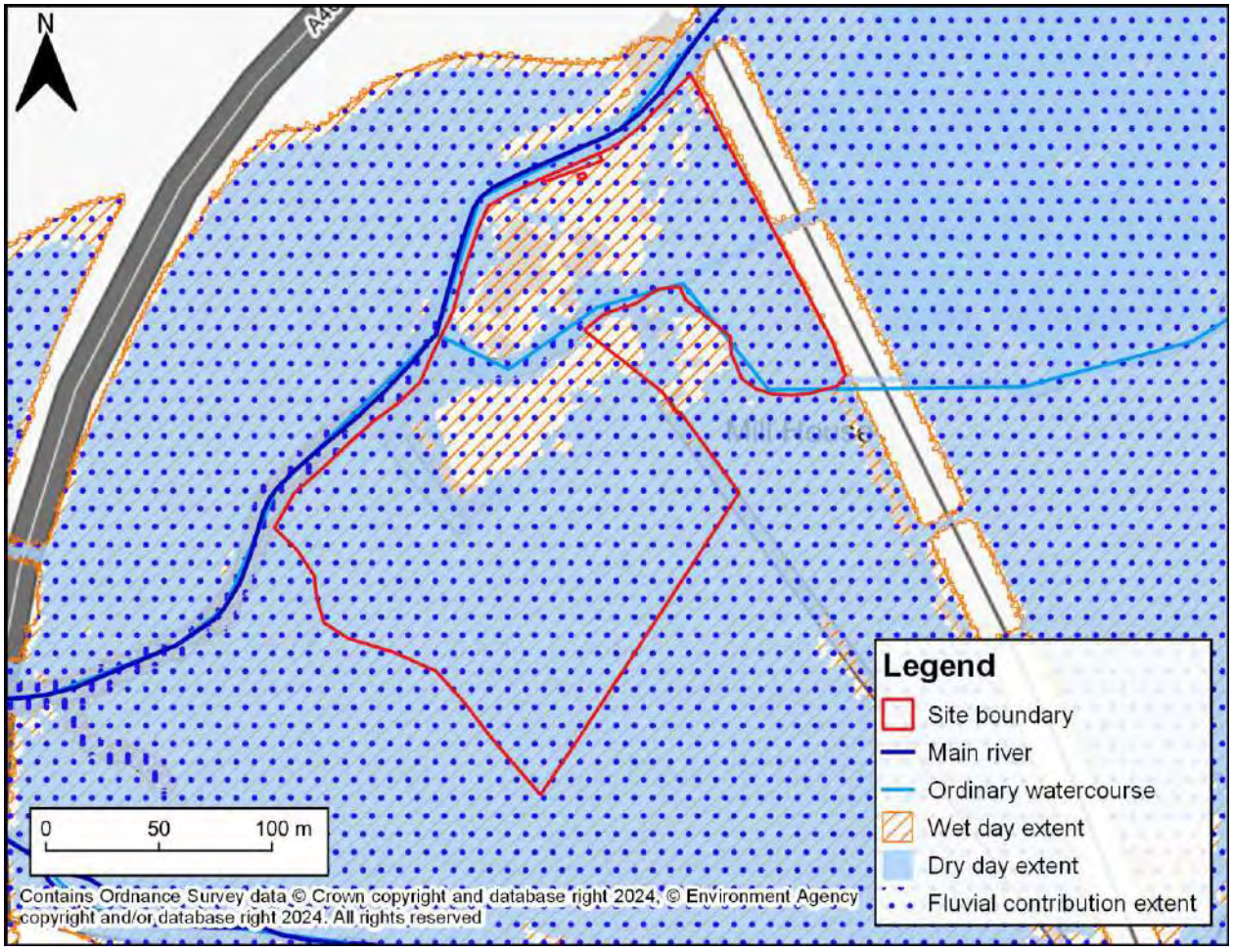


Figure 4-8: Risk of flooding from reservoirs mapping

The regulated nature of reservoir management means that a failure event is very unlikely. It should also be noted that reservoir failures are rare and there has been no loss of life in the UK from reservoir flooding since 1925.

Overall, the probability of a reservoir breach and subsequent flooding of the site is very low. However, if this was to occur, the impacts to the site would be significant.

4.8 Canals

The Grand Union Canal flows north through the town of Syston, where it joins the River Wreake, approximately 450m west of the western site boundary. The Charnwood Borough Council Level 1 SFRA highlights the potential interaction between the Grand Union Canal and other watercourses in the area, including the River Wreake and River Soar. There have been two incidents of breach on the Grand Union Canal within the Charnwood Borough, however, these did not in proximity to the site.

Given that the site is 450m west of the Grand Union Canal and the low number of flooding incidents within the borough, the risk of flooding from canals is considered to be very low.

5 Flood Mitigation Measures

5.1 Environment Agency position

The Environment Agency has provided comments on flood risk at this site which indicates how it would have responded if consulted on a planning application. Fundamentally the EA response:

- Acknowledges that 'less vulnerable' development could be permitted within Flood Zone 3a
- Notes that the extent of Flood Zone 3b defined in the Charnwood SFRA provides the definitive extent of the functional floodplain

Table 5-1: EA comments and how these have been addressed

EA Comment	How this is addressed
The absence of a flood risk assessment for this site would be a reasonable reason to object	This document provides an NPPF compliant Flood Risk Assessment for the entire site
The applicant would need to assess the 28% climate change allowance based on national guidance, but the Environment Agency does not have this data available.	The Lower Wreake and tributaries model assesses the 1 in 100 +30% CC flood event and was prepared for the Charnwood SFRA. Whilst a 28% allowance has not been modelled, the 30% allowance used in this FRA provides a suitably conservative proxy to assessing this
The applicant would need to demonstrate that the proposals are flood resilient and ensure flood risk is not increased elsewhere	Flood resilience design is incorporated into the site with specific measures outlined in Section 5.6.
The storing of vehicles and equipment at this location would increase the risk of damage to property and measures should be put in place to mitigate this risk. This could include the moving of vehicles to an area of lower flood risk on receipt of a flood warning.	A recommendation of this FRA is for the development of a Flood Warning and Evacuation Plan – this could be secured through a suitably worded planning condition if the Ground (a) appeal is granted.
Detailed topographical survey data should be provided though to demonstrate that the wider site levels are above the 1 in 20 year flood height.	Detailed topographical survey data has been provided and assessed through this FRA. This indicates that the wider site levels are above both the 1 in 20 and 1 in 30 year flood levels.

5.2 Site use and sequential approach

This FRA concludes that the site use complies with the NPPF as the site is 'less vulnerable' development that is a compatible use with land in Flood Zone 3a and Flood Zone 2.

Whilst parts of the site are within Flood Zone 3b, the site layout adopts a sequential approach consistent with both NPPF and PPG by situating the most vulnerable aspects of the development (commercial/ industrial buildings) in the areas of lowest

risk (Flood Zones 2 and 3a) within the context of the overall site. None of the buildings are situated within Flood Zone 3b which hydraulic modelling indicates does not flood out of bank.

5.3 Safe access and egress

Safe access and egress is available via Mill Lane, heading in a south-easterly direction towards Fosse Way and has been assessed against the 0.1% AEP event as required in national guidance. In the event of a flood warning being received the proposed evacuation route would be to proceed along Mill Lane and towards Syston to the south where dry land is available.

In the 1% AEP event, flooding depths are slightly lower (less than 0.5m). The ADEPT and EA 'Flood risk emergency plan for new development' guidance document states that some emergency vehicles may be able to cope with flood depths in excess of 0.3m. This would indicate that safe access and egress may be possible for emergency vehicles during the 1% AEP event due to low depths along the majority of the access road. However, the emergency services should be contacted as part of the production of any flood warning and evacuation plan to confirm this.

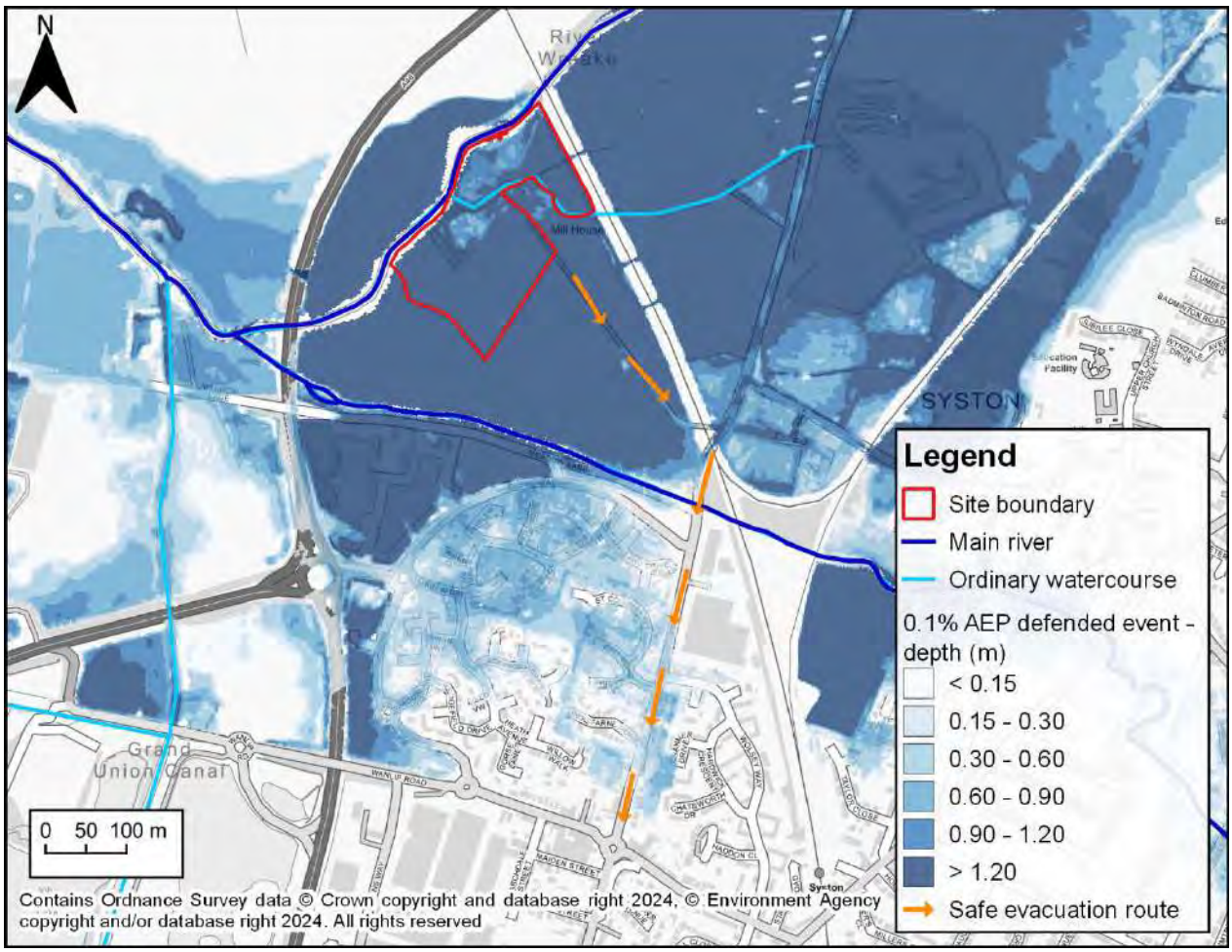


Figure 5-1: Safe evacuation route in the fluvial 0.1% AEP event

In the design flood event (1% AEP + 30% CC), depths of between 0.5 and 1m are predicted along Mill Lane, although safe refuge would be available in the existing buildings. Significant depths of over 1.5m are predicted during the 0.1% AEP event. It is likely that safe access and egress will be impeded during these scenarios due to significant flood depths predicted and safe refuge may not be available at the site.

Flood hazard outputs were not made available as part of the data request from the EA. Nevertheless this is likely to be significant based on the modelled depths. **Consequently, a Flood Warning and Evacuation Plan must be produced for site management and users to enable safe evacuation prior to the onset of a flood event.**

More information can be found in Section 5.4.2.

5.4 Flood warning and evacuation

5.4.1 Flood alert and warning

Where a development or its main route of access is located within a flood risk area, the NPPF recommends that Flood Warning Plans are put in place for managing the flood risk to the development and, if necessary, support the evacuation of the site. Given the size of the site and range of different site occupants, site management must sign up to the EA's flood alert and warning services. The EA's flood warning and alert services are free services that are frequently updated and accessible for 24 hours of the day. In order to register for this service or find out if a flood warning or alert has been issued for the area of interest, the following telephone number and website should be used:

- 0345 988 1188
- https://www.gov.uk/sign-up-for-flood-warnings

If a flood event is forecast, alerts and warnings are issued using a set of four easily recognisable codes as shown in Table 5-1. Generic advice and examples of actions to be taken on receipt of the alert of warning are also shown in Table 5-1.

Table 5-1: EA Flood Alert and Warning codes

Flood Code	What it means	What to do
 Flood Alert	Flooding is possible, be prepared	Be prepared to act Prepare a flood kit of essential items Monitor local water levels and the flood forecast on the website
 Flood Warning	Flooding is expected, immediate action is required	Move family, pets and valuables to a safe place Turn off gas, electricity and water supplies if safe to do so

Flood Code	What it means	What to do
		Put flood protection equipment in place
 Severe flood warning	Severe flooding and danger to life	Stay in a safe place with a means of escape Be ready should you need to evacuate Co-operate with the emergency services Call 999 if you are in immediate danger
Warning no longer in force	Warning has been removed in the last 24 hours	Be careful. Flood water may still be around for several days and could be contaminated If you've been flooded, ring your insurance company as soon as possible

Figure 5-2 shows that the development site is located within the River Wreake and Soar for riverside properties near Syston and Birstall Flood Warning Area (034FWFWRRIVSYST), and the River Wreake in Leicestershire Flood Alert Area (034WAF404). The location of the site within the warning area reaffirms the recommendation that site owners should sign up to these warnings and alerts. By receiving a warning, it is hoped that there will be sufficient lead time between the receipt of flood warning and flooding occurring, giving time for the site management team to disseminate information to tenants and visitors or to initiate an evacuation if considered necessary.

In the interest of safety for site occupants, the site management must sign up the EA's Flood Alert and Flood Warning services.

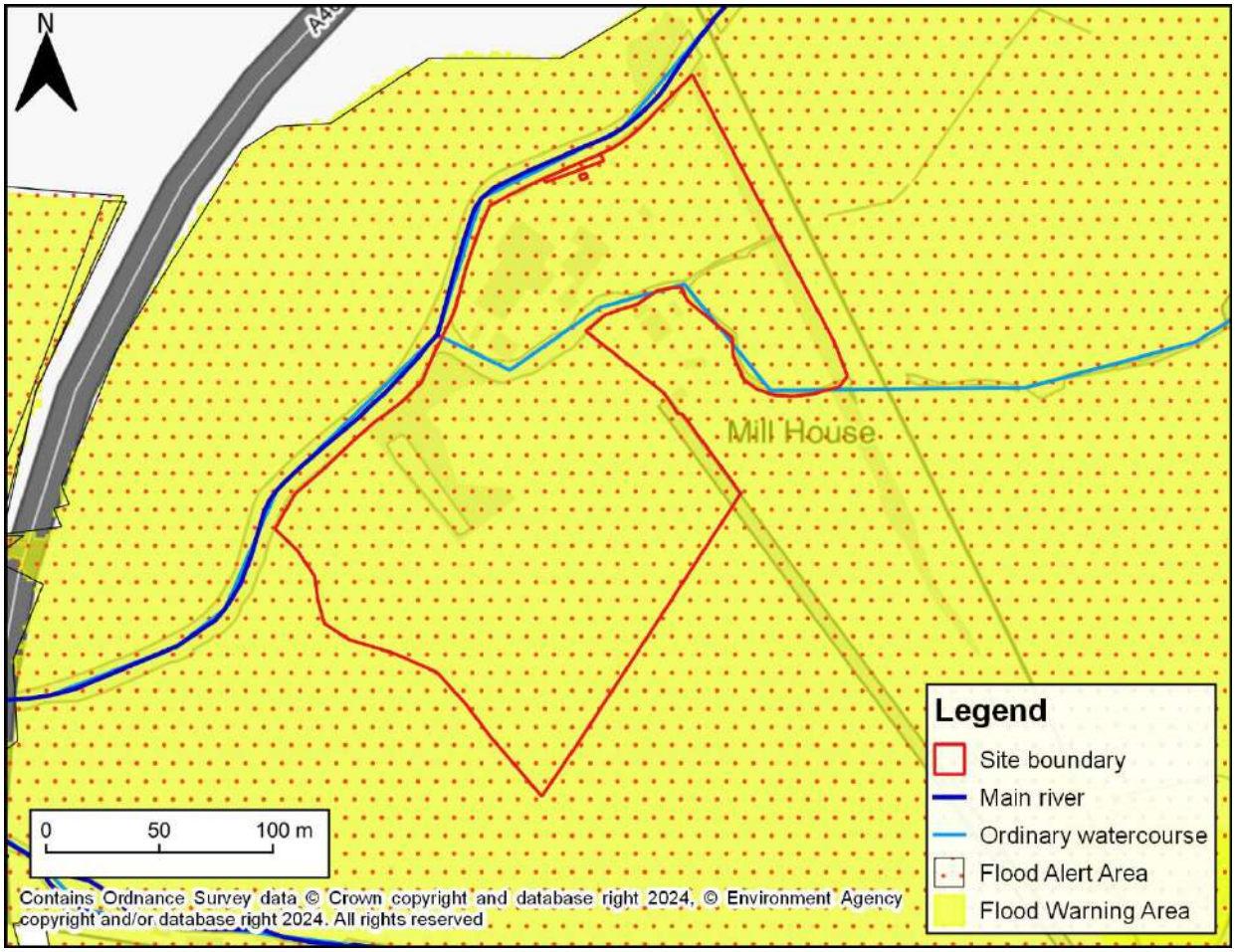


Figure 5-2: Flood Warning and Alert Area

5.4.2 Flood Warning and Evacuation Plan

Both the EA and LPA have expressed that a plan to evacuate site occupants and address the potential hazard of vehicles stored at the site should be prepared. This FRA concludes that a Flood Warning and Evacuation Plan must be developed for site users, which should highlight the extent of the floodplains surrounding the site and the safest route of escape in the event of extreme flooding occurring. This plan should:

- Identify available flood warning systems and local triggers which will be used to active the flood response plan;
- Prepare procedures for the different levels of flood warning and local triggers available, including procedures for on and off-site evacuation; and
- Consider the depths, velocity and rate of onset of flooding.
- Consider the potential risks of vehicles to become a hazard during a flood event and how this could be addressed.

It is recommended that the preparation of a Flood Warning and Evacuation Plan could be addressed through a suitably worded planning condition should the Ground (a) appeal be granted.

5.5 Permitting and consenting

The Environment Agency has commented that development should not take place within 8m of a main river, which at this site is the River Wreake. The EA requires certain activities to require permission in the form of a Flood Risk Activities Permit that is separate to planning. These include:

- erecting any temporary or permanent structure in, over or under a main river, such as a culvert, outfall, weir, dam, pipe crossing, erosion protection, scaffolding or bridge
- altering, repairing or maintaining any temporary or permanent structure in, over or under a main river, where the work could affect the flow of water in the river or affect any drainage work
- building or altering any permanent or temporary structure designed to contain or divert flood waters from a main river
- dredging, raising or removing any material from a main river, including when you are intending to improve flow in the river or use the materials removed
- diverting or impounding the flow of water or changing the level of water in a main river
- quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
- any activity within 8 metres of the bank of a main river, or 16 metres if it is a tidal main river
- any activity within 8 metres of any flood defence structure or culvert on a main river, or 16 metres on a tidal river
- any activity within 16 metres of a sea defence structure
- activities carried out on the floodplain of a main river, more than 8 metres from the river bank, culvert or flood defence structure (or 16 metres if it is a tidal main river), if you do not have planning permission (you do not need permission to build agricultural hay stacks, straw stacks or manure clamps in these places)

Additionally, for activities involving the ordinary watercourse at the site which discharges into the River Wreake, Ordinary Watercourse Land Drainage Consent may be required from Leicestershire County Council as LLFA with further guidance available on its website.

5.6 Flood resistance and resilience measures

The Environment Agency has commented that the development would need to demonstrate that the proposals are flood resilient and do not increase flooding elsewhere.

5.6.1 Vehicle storage

The EA has identified that the storage of vehicles at the site could pose a potential hazard, both in terms of damage caused by these vehicles in fast moving flood water and the potential risk that these could cause a blockage and exacerbate flood risk during an extreme event. Measures to either remove the vehicles to an area of lower flood risk or prevent their mobilisation by flood water should be detailed in the Flood Warning and Evacuation Plan.

5.6.2 Flood resilient design

It is acknowledged that this FRA considers the risk of flooding to an existing site, there are a number of flood resilience measures already incorporated into the design of the site which includes:

- Solid concrete floors across all units.
- Floor and wall coverings across all units are decoratively unfinished making repairs and recovery easier in the event of flooding.
- Raised electrics, with the mains connection point, sockets, switches and plugs maintained at a height of 1m above floor level.
- Meters are maintained at heights of 1.5m-1.8m above internal floor level and the installation of sub meters on site have been ensured to comply with this. This also ensures that the meters are out of contact with water in the case of flooding.
- All shutter electrics are placed at heights of between 1.5m – 2.5m above internal floor levels. In the case of flooding this would allow shutters to be operational and enable safe exit.

The design flood level has been determined to be 49.84mAOD north of the ordinary watercourse where the existing buildings are located. Taking the lowest ground level along the existing buildings of 49.71mAOD, electrics placed at 1.5 – 2.5m above internal floor levels would be situated at 51.21 – 52.21mAOD at minimum and **1.37 – 2.37m above the design flood level**.

This approach is in accordance with EA standing advice on preparing an FRA which requires flood risk/ resilience measures to protect a property at a minimum of 600mm above the design flood level.

6 Conclusions and Recommendations

6.1 Conclusion

- JBA Consulting were commissioned by Wealth Property Limited undertake a Flood Risk Assessment (FRA) for an existing industrial/ commercial site at Syston Mill, following the issue of an enforcement notice by Charnwood Borough Council (E/21/0183) in relation to an alleged breach of planning control.
- The River Wreake (EA Main River) flows in a westerly direction along the northwestern boundary. An unnamed tributary (ordinary watercourse) of the River Wreake flows through the centre of the site in a north westerly direction, towards its confluence with the River Wreake which is located on the northwestern boundary.
- The site can be defined as ‘less vulnerable’ in accordance with Annex 3 of PPG as the uses of the site can be defined as commercial or industrial and a compatible use with land in Flood Zone 2 and 3a.
- The EA's Recorded Flood Outlines dataset identifies three previous flooding events, within and surrounding the site. Fluvial flooding from the River Wreake was recorded in 1977, 1998 and 2000 although there is low confidence in the accuracy of this data.
- The EA's Flood Map for Planning indicates that the majority of the site is within Flood Zone 3a (defined as land having 1% or greater probability of river flooding), with a small proportion of land in the north of the site outside this extent (Flood Zone 2).
- The Flood Zone 3b extent (land assessed as having a 3.3% or greater annual probability of flooding) is largely predicted within the channel of the unnamed watercourse, as well as in the southwest of the site. Satellite imagery suggests that the Flood Zone 3b extent does not affect areas of the site where existing buildings are located.
- Defended outputs from the EA's Lower Wreake and tributaries (2015) model have also been used to assess fluvial risk to the site. The 1% AEP plus 30% climate change output (updated in the latest SFRA) is the design flood event and has been used to assess the impact of climate change. During this event, flooding is predicted across the majority of the site, with minor 'dry islands' within the centre and north of the site. Flood depths are more significant in the south of the site (up to 2.5m), and within the channel of the unnamed watercourse. Less significant depths of up to 1m are predicted in the north of the site.
- The site is considered to be at low risk of surface water, groundwater and sewer flooding.
- The site is within the 'wet day' and 'dry day' reservoir extents. However, as reservoir failure is unlikely, the risk of reservoir flooding is low. The site is 450m away from the nearest canal and risk of canal flooding is considered very low.

6.2 Recommendations

To mitigate flood risk to the development, implementation of the following measures is recommended:

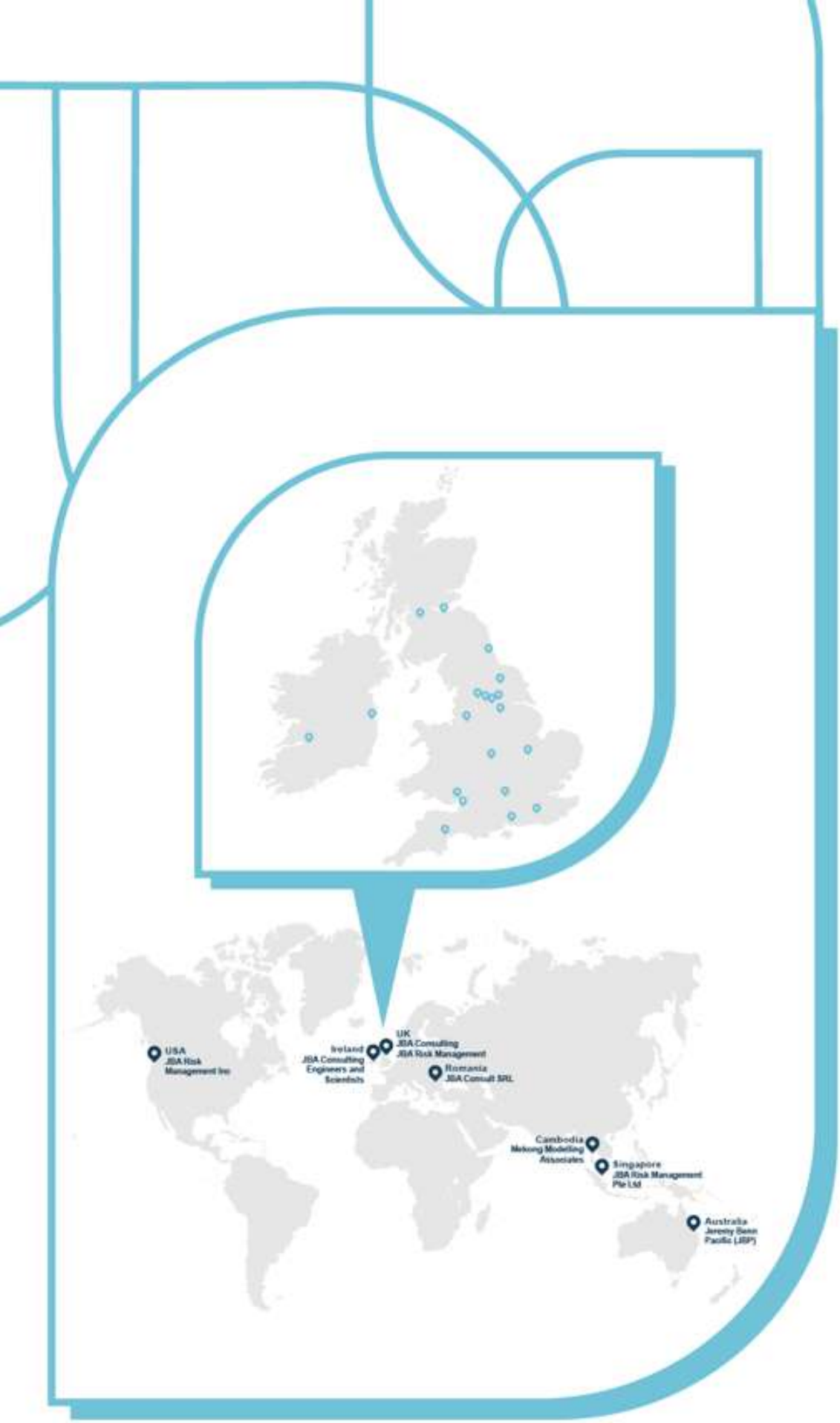
- The existing site is being used for commercial and industrial purposes and is considered 'less vulnerable' under the NPPF. The buildings are the most vulnerable aspect of the development and are situated entirely in Flood Zones 3a and 2 which is a compatible use. Consequently, the site already adopts a sequential approach to managing risk.
- A safe emergency route of access and egress will not be available during the 1% plus CC and 0.1% events, due to significant flooding of Mill Lane to the southeast of the site. As safe access and egress is not provided, a Flood Response Plan must be produced for the site management and users to enable safe evacuation prior to the onset of a flood event.
- The site is covered by the EA's Flood Warning and Alert Service. Site users must be registered with this service to receiver early warning of imminent flood hazard. The Flood Warning Service will inform site occupants of flood risk, giving them time to evacuate the area if necessary.
- A Flood Warning and Evacuation Plan must be prepared for the site which should highlight the extent of the floodplains surrounding the site and the safest route of escape in the event of extreme flooding occurring. This could be addressed through a suitably worded planning condition should the Ground (a) appeal be granted.
- The Environment Agency has commented that the development would need to demonstrate that the proposals are flood resilient and do not increase flooding elsewhere. The potential hazard posed by vehicles must be addressed in a Flood Warning and Evacuation Plan.
- The development already incorporates principles of flood resilient design such as placing electrical infrastructure 1.5 – 2.5m above existing floor levels. This approach is in accordance with EA standing advice on preparing an FRA which requires flood risk/ resilience measures to protect a property at a minimum of 600mm above the design flood level.

Overall development at this site is compliant with NPPF and this FRA demonstrates that flood risk is capable of being managed appropriately. Consequently, flood risk should not be a ground for refusal for the Ground (a) appeal.

A Topographic Survey

B Environment Agency Correspondence

C Percentile flow calculations



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A Topographic Survey

N

Notes

This plan should only be used for its original purpose. SV Surveying Ltd accepts no responsibility for this plan if supplied to any other party other than the original client.

All dimensions / levels should be checked on site prior to design and construction.

Drainage information (where applicable) has been visually inspected from the surface and should be treated as approximate only.

Tree information (where applicable) has been surveyed from ground level and therefore should be treated as approximate only.

Contours are drawn at 0.2m intervals

The survey has been fixed to a GPS OSGB 1936 using the active GPS network.

Legend:

Building Canopy / Overhang	Trig	Trig Pillar	
Buildings / walls	RidgL	Ridge Level	
Kerb line	EaveL	Eave Level	
Concrete edge	DPC	Dpc Level	
Centre Line	FL	Floor Level	
Barrier	SoffL	Soffit Level	
Hedge	CBs	Control Box	
Security Fence	LP	Lamp Post	
Fixed Fence	SP	Sign Post	
Open Fence	PP	Post	
Overhead Powerline	FS	Flag Staff	
Chambers	MA	Gas Marker	
Survey Station & Name	EP	Electric Post	
Bench Mark	TP	Telegraph Post	
Temporary Bench Mark	InvtL	Pipe Invert	
Tree / Sapling	GU	Gully	
Area Of Undergrowth	RP	Rodding Point	
	BT	Bt Cover	
	CO	Cover Unknown	
	EC	Electricity Cover	
	FH	Fire Hydrant	
Gate	GAS	Gas Cover	
	SV	Stop Valve	
Inspection chamber	TV	Tv Cover	
Cover level	WM	Water Meter	
Invert level	SH	Definitia Shocon	
Pipe invert (diameter)	Bol	Bollard	
Gully	SS	Sub Stop	
Back Gully	EK	Earthing Rod	
Manhole	Sns	Post Box	
	MS	Mile Stone	
	TL	Traffic Light	
	GV	Gas Valve	
	PEG	Peg	

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Project
GALAXY REAL ESTATE
SYSTON MILL INDUSTRIAL

Drawing
TOPOGRAPHIC SITE SURVEY

Scales	Drawn/Paper Size
1:250	JP/A0
Survey Date	Drawing No
31-10-24	24349-24-01

DO NOT SCALE

Member of the ices

N

P1	414438	312381.852	1.737
P2	415 5.642	312 38.852	1.676
2783	41 .8642	312378.152	1.867
2782	41 .8148	312383.757	2.2 5

Notes

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All dimensions / levels should be checked on site prior to design and construction.

Drainage information (where applicable) has been visually inspected from the surface and should be treated as approximate only.

Tree information (where applicable) has been surveyed from ground level and therefore should be treated as approximate only.

Contours are drawn at 0.2m intervals

The survey has been fixed to a GPS OSGB 1936 using the active GPS network.

Legend:

	Building Canopy / Overhang	Trig	Trig Pillar
	Buildings / walls	Ridg	Ridge Level
	Kerb line	Eave	Eave Level
	Concrete edge	DPC	Dpc Level
	Centre Line	FL	Floor Level
	Barrier	Soff	Soffit Level
	Hedge	TBo	Control Box
	Security Fence	LP	Lamp Post
	Panel Fence	BP	Sign Post
	Open Fence	post	Post
	Overhead Powerline	FS	Flag Staff
	Chambers	MA	Gas Marker
△ 87961	Survey Station & Name	EP	Electric Post
BM	Bench Mark	TP	Telegraph Post
		invt	Pipe Invert
TBM	Temporary Bench Mark	GU	Gully
		BP	Building Point
	Tree / Sapling	BT	Bt Cover
		CO	Cover Unknown
	Area Of Undergrowth	EC	Electricity Cover
		FH	Fire Hydrant
		GAS	Gas Cover
	Gate	SV	Stop Valve
IC	Inspection chamber	TV	Tv Cover
CL	Cover level	WM	Water Meter
IL	Invert level	BB	Bollisha Beacon
3no Ø5.25	Pipe invert (diameter)	Bol	Bollard
Gy	Gully	BS	Bus Stop
Rg	Back Gully	EN	Earthing Rod
MH	Manhole	Box	Post Box
		MS	Mile Stone
		TL	Traffic Light
		GV	Gas Valve
		PEG	Peg

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Project

GALAXY REAL ESTATE SYSTON MILL INDUSTRIAL

Drawing

TOPOGRAPHIC SITE SURVEY

Scales	Drawn/Paper Size
1:250	JP/A0
Survey Date	**Drawing No**
31-10-24	24349-24-02

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B Environment Agency Correspondence

REF: **EMD 390415**

Date: 02/01/2025

Dear **Peter Rook,**

Thank you for contacting us regarding the product data for the land at SK6150212325, you have been provided with the following information.

This data is provided to you under the Environment Agency Conditional licence.

Product Type	Model
Product 5	• River Wreake and Tributaries, CH2M Hill, 2015 • River Soar, AECOM, 2022 • Lower River Soar, JBA, 2012
Product 6	• River Wreake and Tributaries, CH2M Hill, 2015 • River Soar, AECOM, 2022 • Lower River Soar, JBA, 2012
Product 7	• River Wreake and Tributaries, CH2M Hill, 2015 • River Soar, AECOM, 2022 • Lower River Soar, JBA, 2012

- To access the data provided you will need to set up a Quatrix profile and enter your email and password.
- Please be aware that access to this data transfer will expire on **13/02/2025**. We advise you to save the data you require elsewhere as soon as possible.

Yours sincerely

Customers & Engagement Officer,
East Midlands

Environment Agency

Product 4: Flood Risk Data Package for
Land at SK6150212325

EMD 390415 **Date: 02/01/2025**

Flood Map for Planning: The Flood Map for Planning is now classed as Open Data. As such it can be downloaded free of charge under an open data licence from the following addresses:

- https://data.gov.uk/publisher/environment-agency
- https://flood-map-for-planning.service.gov.uk/

This location is within Flood Zone 3.

The flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties.
- refer to the probability of river and sea flooding.
- ignore the presence of defences,
- do not take into account potential impacts of climate change.
- The Flood Map for Planning on Gov.uk was last updated in November 2023. The next update will be published in Spring 2025 as part of our new National Flood Risk Assessment, NaFRA2.
- Our new National Flood Risk Assessment will improve the quality and consistency of our national flood risk products due to better methods and input data. This means there will be some changes to flood risk information in many areas when the new data is published.

Zone 1: Low Probability	Land having a less than 0.1% annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map for Planning – all land outside Zones 2, 3a and 3b)
Zone2: Medium Probability	Land having between a 1% and 0.1% annual probability of river flooding; or land having between a 0.5% and 0.1% annual probability of sea flooding. (Land shown in light blue on the Flood Map)
Zone 3a: High Probability	Land having a 1% (1 in 100) or greater annual probability of river flooding; or Land having a 0.5% or greater annual probability of sea. (Land shown in dark blue on the Flood Map)
Zone 3b: Functional Floodplain	• land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or • land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding). • Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. • (Not separately distinguished from Zone 3a on the Flood Map)

Probability	Percentage chance of flooding each year
1 in 2 year	50%
1 in 5 year	20%
1 in 20 year	5%
1 in 50 year	2%
1 in 100 year	1%
1 in 1000 year	0.1%
Surface Water Flooding	
1 in 30	High Risk
1 in 100	Medium Risk
1 in 1000	Low Risk

Updated Climate Change Guidance: On 19th February 2016, the 'Flood risk assessments: climate change allowances' was published on www.gov.uk website. It has replaced previous guidance Climate Change Allowances for Planners. The climate change guidance can be found at: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

The climate change allowances for this location are:

- **28% (central)**
- **39% (higher central),**
- **60% (upper)**

Modelled Information: River Wreake and Tributaries, CH2M Hill, 2015

Node point reference	Location	50% (1 in 2 year) modelled level (mAOD)	50% (1 in 2 year) modelled flow (m^3/s)	20% (1 in 5 year) modelled level (mAOD)
WD35AU	SK 61309 12242	48.91	35.03	49.06
WA32	SK 61420 12362	48.99	38.05	49.10
WA31	SK 61519 12478	49.20	40.64	49.29
WD29	SK 61537 12486	49.19	40.64	49.29

Node point reference	Location	20% (1 in 5 year) modelled flow (m^3/s)	10% (1 in 10 year) modelled level (mAOD)	10% (1 in 10 year) modelled flow (m^3/s)
WD35AU	SK 61309 12242	35.45	49.18	35.61
WA32	SK 61420 12362	38.91	49.21	39.38
WA31	SK 61519 12478	45.97	49.37	49.75
WD29	SK 61537 12486	45.97	49.36	49.75

Node point reference	Location	5% (1 in 20 year) modelled level (mAOD)	5% (1 in 20 year) modelled flow (m^3/s)	4% (1 in 25 year) modelled level (mAOD)
WD35AU	SK 61309 12242	49.37	35.72	N/A
WA32	SK 61420 12362	49.39	39.58	N/A
WA31	SK 61519 12478	49.50	58.58	N/A
WD29	SK 61537 12486	49.49	58.58	N/A

Node point reference	Location	4% (1 in 25 year) modelled flow (m^3/s)	2% (1 in 50 year) modelled level (mAOD)	2% (1 in 50 year) modelled flow (m^3/s)
WD35AU	SK 61309 12242	N/A	49.66	35.90
WA32	SK 61420 12362	N/A	49.67	40.01
WA31	SK 61519 12478	N/A	49.74	78.74
WD29	SK 61537 12486	N/A	49.72	78.74

Node point reference	Location	1.33% (1 in 75 year) modelled level (mAOD)	1.33% (1 in 75 year) modelled flow (m^3/s)	1% (1 in 100 year) modelled level (mAOD)
WD35AU	SK 61309 12242	49.72	35.92	49.77
WA32	SK 61420 12362	49.73	40.38	49.78
WA31	SK 61519 12478	49.79	80.42	49.83
WD29	SK 61537 12486	49.77	80.42	49.81

Node point reference	Location	1% (1 in 100 year) modelled flow (m^3/s)	0.67% (1 in 150 year) modelled level (mAOD)	0.67% (1 in 150 year) modelled flow (m^3/s)
WD35AU	SK 61309 12242	35.95	N/A	N/A
WA32	SK 61420 12362	40.59	N/A	N/A
WA31	SK 61519 12478	81.59	N/A	N/A
WD29	SK 61537 12486	81.59	N/A	N/A

Node point reference	Location	0.5% (1 in 200 year) modelled level (mAOD)	0.5% (1 in 200 year) modelled flow (m^3/s)	0.1% (1 in 1000 year) modelled level (mAOD)
WD35AU	SK 61309 12242	50.24	36.02	50.84
WA32	SK 61420 12362	50.25	42.16	50.94
WA31	SK 61519 12478	50.26	86.47	50.86
WD29	SK 61537 12486	50.25	86.47	51.13

Node point reference	Location	0.1% (1 in 1000 year) modelled flow (m^3/s)	1% + 20% flow (1 in 100 year plus climate change) modelled level (mAOD)	1% + 20% flow (1 in 100 year plus climate change) modelled flow (m^3/s)
WD35AU	SK 61309 12242	101.00	49.81	35.93
WA32	SK 61420 12362	61.89	49.82	40.64
WA31	SK 61519 12478	128.50	49.86	82.68
WD29	SK 61537 12486	128.50	49.84	82.68

Please note: The flows provided represent **in channel flow only** and do not consider flow on the floodplain.

All data is discussed as metres above Ordnance Datum (mAOD). This is based on the Ordnance Datum Newlyn in Cornwall. Tide gauges have been used over time to calculate a mean sea level datum point. This point is marked as height zero on maps in Britain. For more information please see: Ordnance Datum Newlyn reaches 100 years | Blog | Ordnance Survey

Defence Information Flood defence data in routinely updated and freely available at: AIMS Spatial Flood Defences (inc. standardised attributes) - data.gov.uk and AIMS Asset Bundle - data.gov.uk.

There are no Environment Agency maintained raised defences in this area.

Historic Information: We have records of historic fluvial flooding at this location in 1977, 1998 and 2000. Please note that we may or may not hold the original records in question. We do not make any claim as to the reliability of recorded flood extents or that all flood events in the area have been recorded. Please also be aware that flood defences may have been built after these historic flood events. Note - This information relates to the area the above-named property is in and is not specific to the property itself - it ***does not*** provide an indicator of flood risk ***at individual property level***.

Surface Water & Drainage: The Environment Agency (empowered under the Water Resources Act 1991) concentrates on the major elements of the drainage system, managing flood risk arising from designated "main rivers" and the sea. The Flood & Water Management Act (2010) has given Lead Local Flood Authorities (LLFAs) responsibility for the management of local flood risk, which includes surface runoff, groundwater, and flooding from ordinary watercourses (smaller rivers and streams). The LLFA for this area is **Leicestershire County Council,** and we recommend that you contact them with concerns about any flooding issues for this area.

Further information and maps for surface water, ordinary watercourses, and reservoir flooding can be found here:
https://www.gov.uk/check-long-term-flood-risk ; Reservoir flood maps: when and how to use them - GOV.UK (www.gov.uk)

Open Data Information: Many datasets are now classed as Open Data and as such can be downloaded free of charge under an open data licence from the following address: https://data.gov.uk/publisher/environment-agency

Permitting Information: Under the Environmental Permitting (England and Wales) Regulations 2016, any permanent or temporary works in, over or under a designated main river will require an Environmental Permit for Flood Risk Activities from the Environment Agency. Any permanent or temporary works within 8 metres of the top of bank of a designated main river, or landward toe of a flood defence may require an Environmental Permit for Flood Risk Activities from the Environment Agency. In addition, any permanent or temporary works within the floodplain of a designated main river may also require an Environmental Permit for Flood Risk Activities. To find out whether your activity requires a permit or falls under a relevant exclusion, exemption or standard rule please follow this link: https://www.gov.uk/guidance/flood-risk-activities-environmental-permits. The Environment Agency require access to the watercourse and free movement up to 8m from the river bank/ defence for maintenance purposes.

Please note that a permit is separate to and in addition to any planning permission granted.

Strategic flood risk assessments: We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site-specific flood risk assessment. This should give you information about the potential impacts of climate change in this catchment areas defined as functional floodplain flooding from other sources, such as surface water, ground water and reservoirs. This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

Flood Risk Assessment Advisory: All guidance on how to complete a full site specific Flood Risk Assessment (FRA) can be found here: Flood risk and coastal change - GOV.UK (www.gov.uk). Furthermore, information on how to use modelling for FRA's can be found here: Using modelling for flood risk assessments - GOV.UK (www.gov.uk). In addition, professional assistance can be provided by our planning officers, by contacting planning.trentside@environment-agency.gov.uk.

Flood risk assessment data

Location of site: 461493 / 312287 (shown as easting and northing coordinates)
Document created on: 2 January 2025
This information was previously known as a product 4.
Customer reference number: BY611K7T8C6W

Map showing the location that flood risk assessment data has been requested for.

How to use this information

You can use this information as part of a flood risk assessment for a planning application. To do this, you should include it in the appendix of your flood risk assessment.

We recommend that you work with a flood risk consultant to get your flood risk assessment.

Included in this document

In this document you'll find:

- how to find information about surface water and other sources of flooding
- information on the models used
- definitions for the terminology used throughout
- flood map for planning (rivers and the sea)
- past floods
- flood defences and attributes
- information to help you assess if there is a reduced flood risk from rivers and the sea because of defences
- modelled data
- climate change modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Surface water and other sources of flooding

Use the long term flood risk service to find out about the risk of flooding from:

- surface water
- ordinary watercourses
- reservoirs

Or you can contact your Lead Local Flood Authority for further information.

Your Lead Local Flood Authority is Leicestershire County.

For information about sewer flooding, contact the relevant water company for the area.

About the models used

Model name: River Soar, Aecom, 2022
Scenario(s): Defended fluvial, defences removed fluvial, defended climate change fluvial
Date: 17 May 2021

Model name: River Wreake and Tributaries, CH2MHill, 2015
Scenario(s): Defended fluvial, defences removed fluvial, defended climate change fluvial
Date: 1 January 2015

Model name: Upper Lower River Soar, JBA, 2012
Scenario(s): Defended fluvial, defended climate change fluvial
Date: 1 January 2012

These models contain the most relevant data for your area of interest.

Terminology used

Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occuring in any one year, is described as 1% AEP.

Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

Flood map for planning (rivers and the sea)

Your selected location is in flood zone 3.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

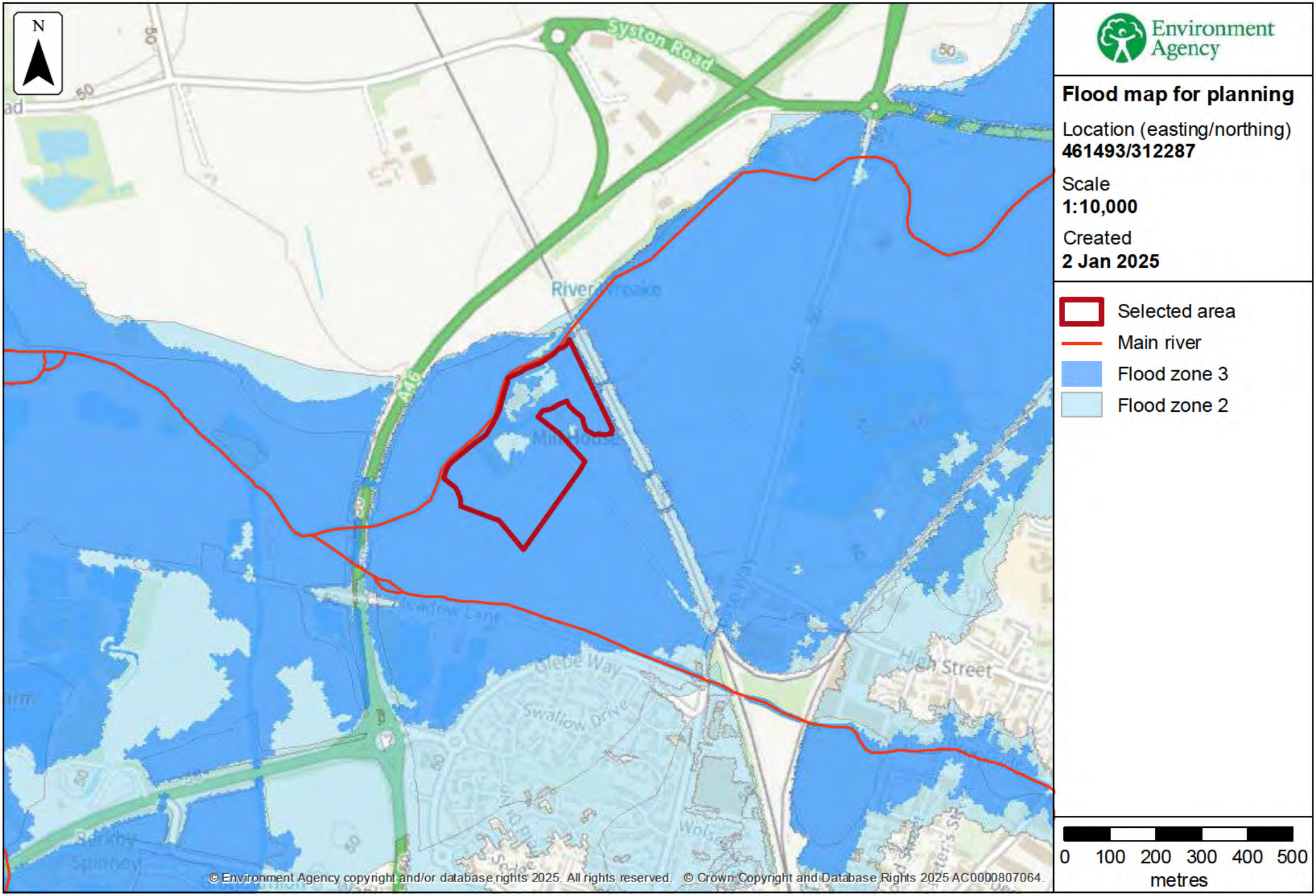
Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change

The flood zones are not currently being updated. The last update was in November 2023. Some of the flood zones may have changed, however all source data is included in the models below.


N
Syston Road
A46
River Brook
Meadow Lane
Glebe Way
Swallow Drive
High Street
Flood map for planning
Location (easting/northing)
461493/312287
Scale
1:10,000
Created
2 Jan 2025
Selected area
Main river
Flood zone 3
Flood zone 2
0 100 200 300 400 500
metres
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Past floods

Past flood events included in this document

The recorded flood outlines included in this document are for areas of land local to your site location that have been flooded by any of these sources:

- ephemeral water
- main rivers
- ordinary watercourses
- the sea

Data limitations

The outlines do not include flooding from:

- drainage where rainfall has led to surface water ponding or overland runoff
- artificial, water-bearing sewer, water supply and wastewater treatment pipelines

Changes to flood defences

The defences (also known as assets) that were in place may also have changed. For example, assets may have been built more recently than the last recorded flood outline.

What the recorded flood outlines dataset is

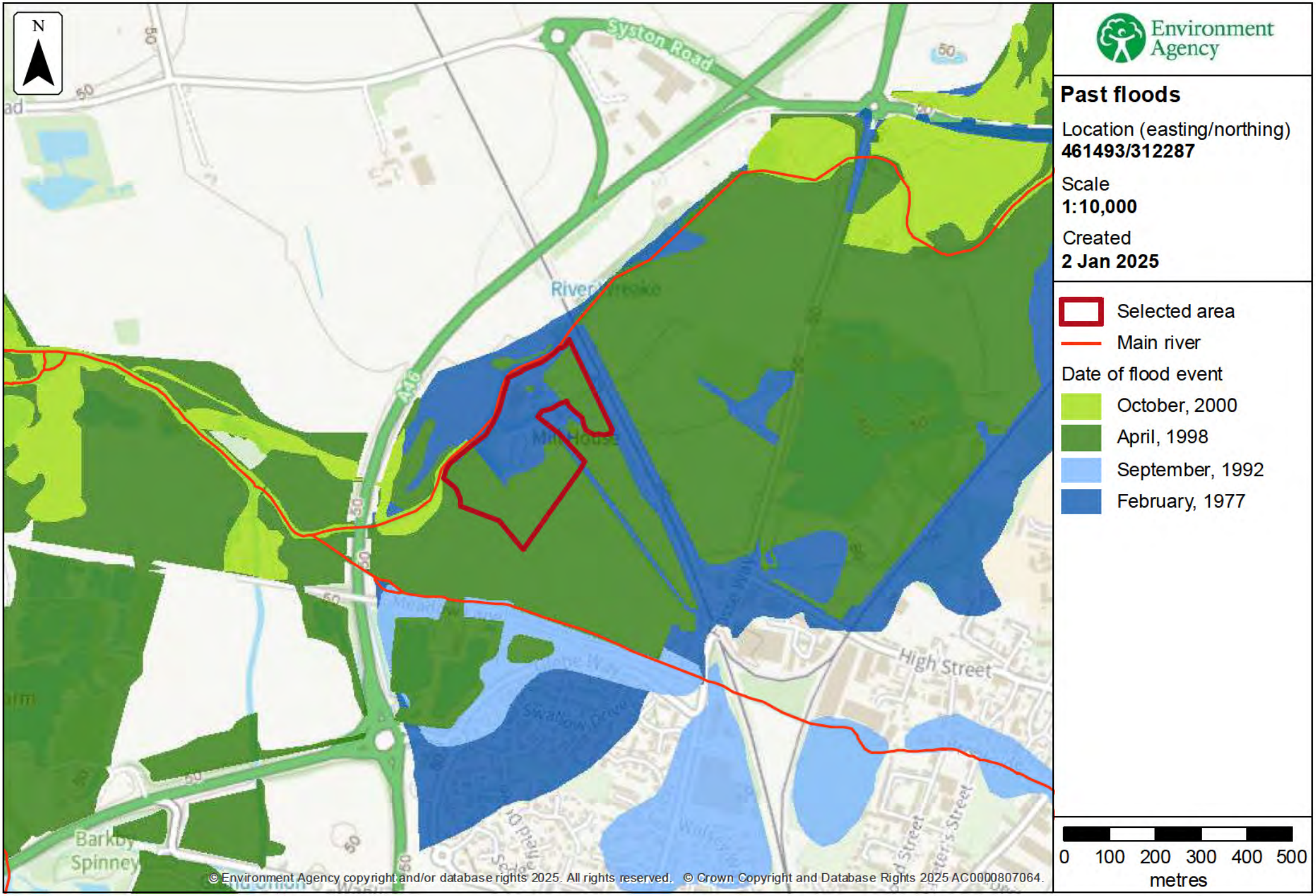
The recorded flood outlines are a geographical information system (GIS) data layer that show our verified records of areas that have flooded in the past from:

- rivers
- the sea
- groundwater
- surface water

Download the complete recorded flood outlines dataset, which includes data quality flags for outlines recorded after April 2020. This indicates the confidence we have in an outline.

Get flood information from other organisations

Contact Leicestershire County Lead Local Flood Authority (LLFA) and your drainage board to get information about past flooding caused by surface water or drainage systems.


N
Syston Road
A46
High Street
Barkby Spinney
Environment Agency
Past floods
Location (easting/northing)
461493/312287
Scale
1:10,000
Created
2 Jan 2025
Selected area
Main river
Date of flood event
October, 2000
April, 1998
September, 1992
February, 1977
0 100 200 300 400 500
metres
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Data on past flood events

Start date	End date	Source of flood	Cause of flood	Affects location
31 October 2000	31 October 2000	main river	channel capacity exceeded (no raised defences)	Yes
11 April 1998	11 April 1998	main river	channel capacity exceeded (no raised defences)	No
10 April 1998	10 April 1998	main river	channel capacity exceeded (no raised defences)	Yes
September 1992	September 1992	main river	channel capacity exceeded (no raised defences)	No
23 February 1977	28 February 1977	main river	channel capacity exceeded (no raised defences)	Yes

Flood defences and attributes

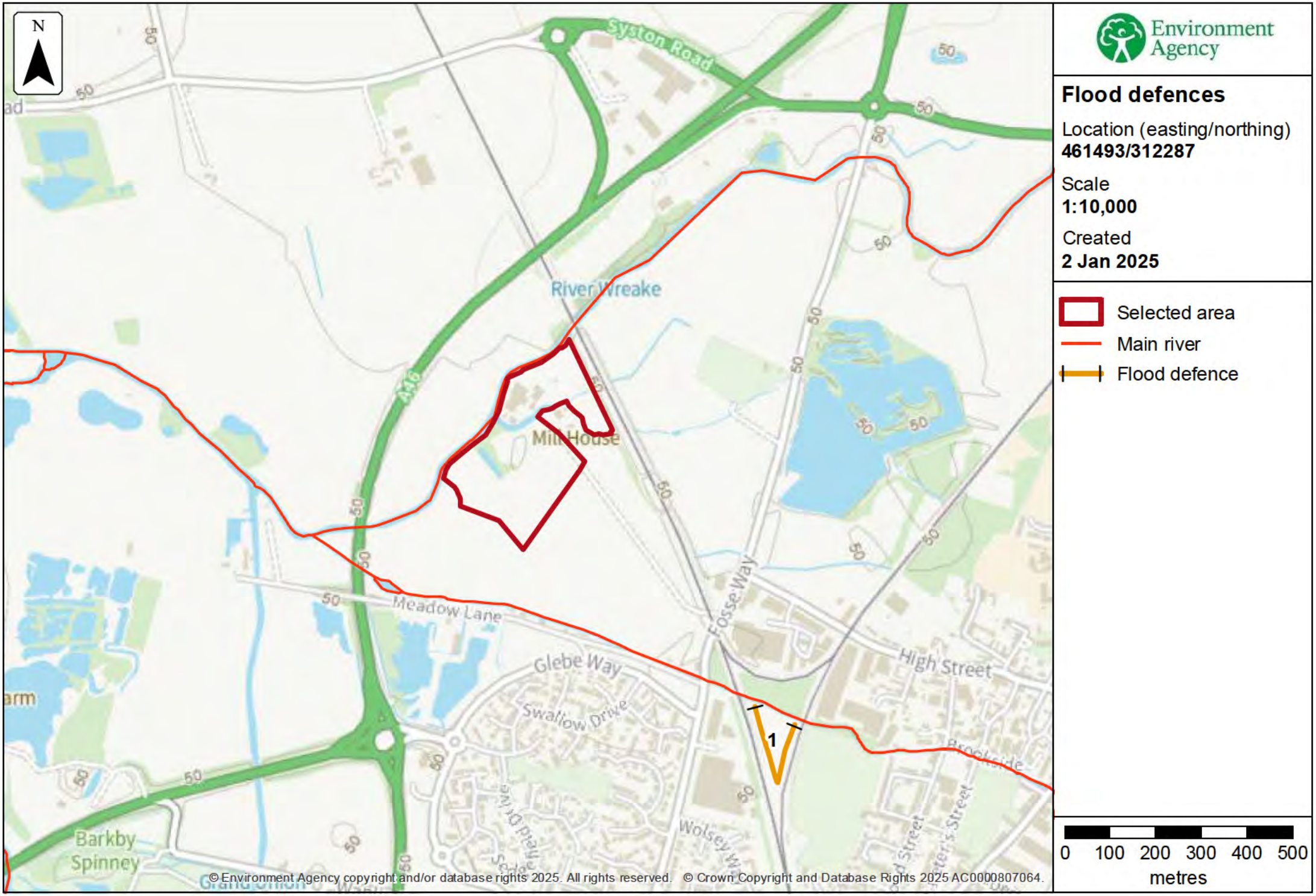
The flood defences map shows the location of the flood defences present.

The flood defences data table shows the type of defences, their condition and the standard of protection. It shows the height above sea level of the top of the flood defence (crest level). The height is In mAOD which is the metres above the mean sea level at Newlyn, Cornwall.

It's important to remember that flood defence data may not be updated on a regular basis. The information here is based on the best available data.

Use this information:

- to help you assess if there is a reduced flood risk for this location because of defences
- with any information in the modelled data section to find out the impact of defences on flood risk



Environment Agency

Flood defences

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

- Selected area
- Main river
- Flood defence

0 100 200 300 400 500
metres

Flood defences data

Label	Asset ID	Asset Type	Standard of protection (years)	Current condition	Downstream actual crest level (mAOD)	Upstream actual crest level (mAOD)	Effective crest level (mAOD)
1	126222	Engineered High Ground					

Any blank cells show where a particular value has not been recorded for an asset.

Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios
- modelled node point map(s) showing the points used to get the data to model the scenarios and table(s) providing details of the flood risk for different return periods
- map(s) showing the approximate water levels for the return period with the largest flood extent for a scenario and table(s) of sample points providing details of the flood risk for different return periods

Climate change

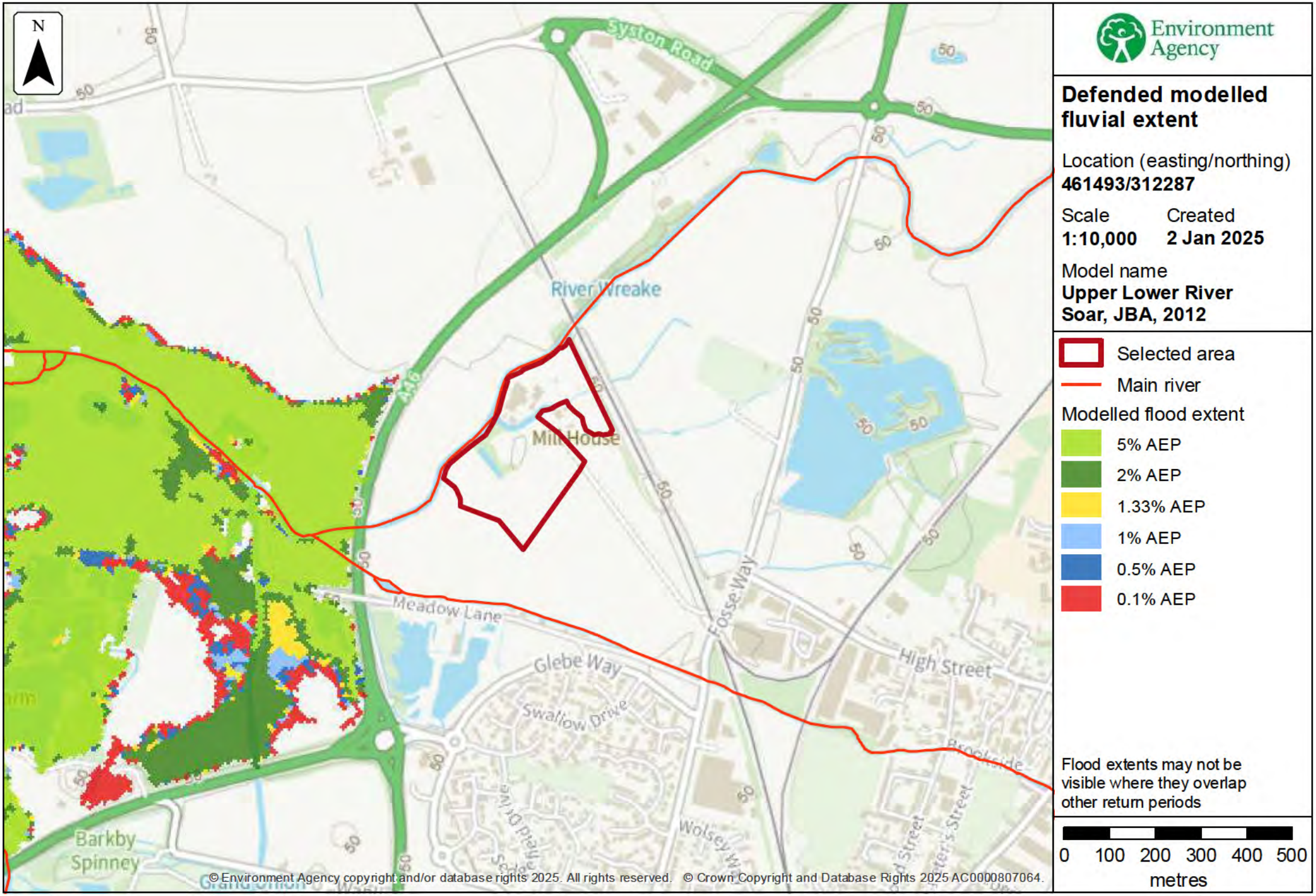
The climate change data included in the models may not include the latest flood risk assessment climate change allowances. Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

Modelled scenarios

The following scenarios are included:

- Defended modelled fluvial: risk of flooding from rivers where there are flood defences
- Defences removed modelled fluvial: risk of flooding from rivers where flood defences have been removed
- Defended climate change modelled fluvial: risk of flooding from rivers where there are flood defences, including estimated impact of climate change



Environment Agency

Defended modelled fluvial extent

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
Upper Lower River Soar, JBA, 2012

- Selected area
- Main river

Modelled flood extent

- 5% AEP
- 2% AEP
- 1.33% AEP
- 1% AEP
- 0.5% AEP
- 0.1% AEP

Flood extents may not be visible where they overlap other return periods

0 100 200 300 400 500
metres

Environment Agency

Defended modelled fluvial extent

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
River Soar, Aecom, 2022

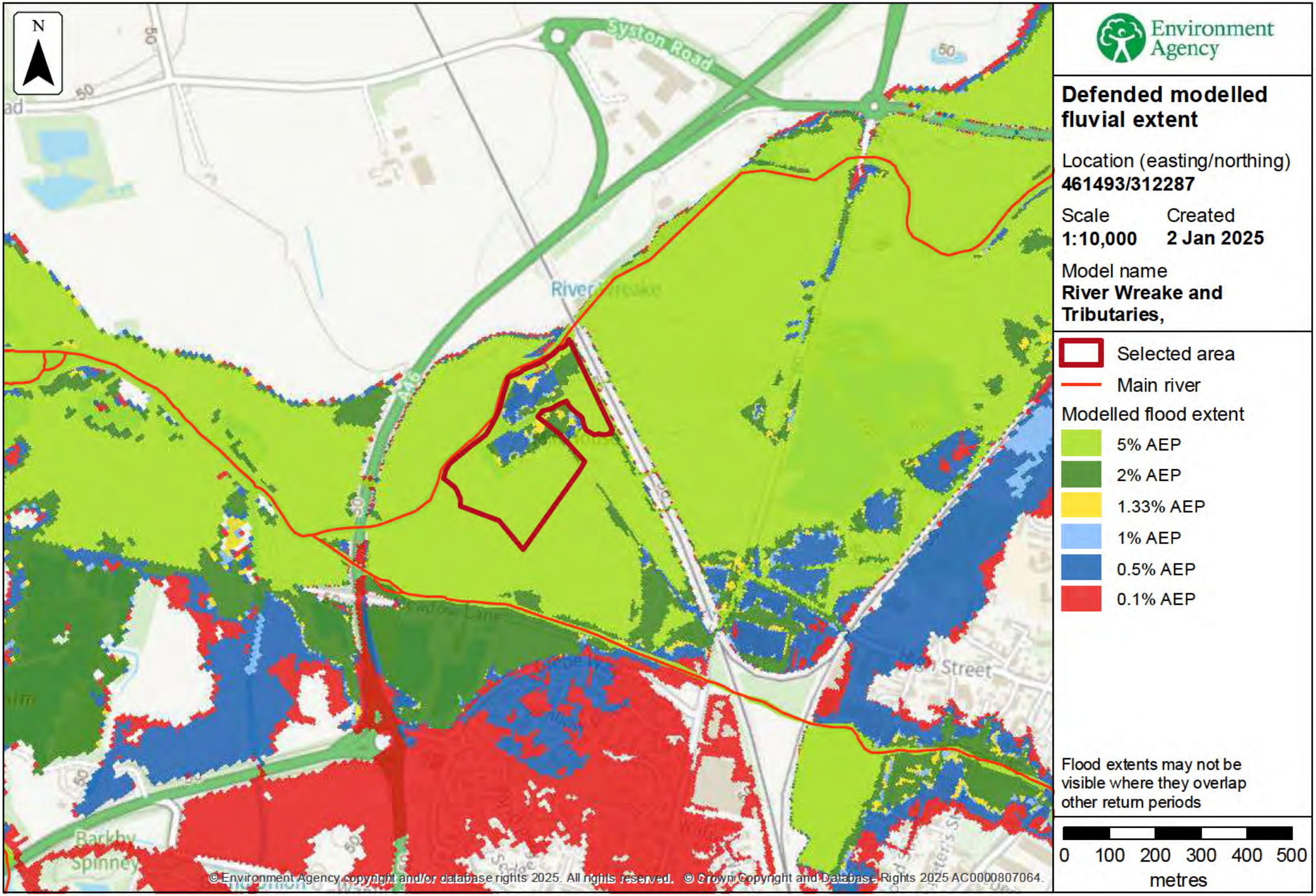
- Selected area
- Main river

Modelled flood extent

- 5% AEP
- 2% AEP
- 1.33% AEP
- 1% AEP
- 0.5% AEP
- 0.1% AEP

Flood extents may not be visible where they overlap other return periods

0 100 200 300 400 500
metres


N
Syston Road
River Wreake
Barkby Spinney
Environment Agency
Defended modelled fluvial extent
Location (easting/northing)
461493/312287
Scale
1:10,000
Created
2 Jan 2025
Model name
River Wreake and Tributaries,
Selected area
Main river
Modelled flood extent
5% AEP
2% AEP
1.33% AEP
1% AEP
0.5% AEP
0.1% AEP
Flood extents may not be visible where they overlap other return periods
0 100 200 300 400 500
metres
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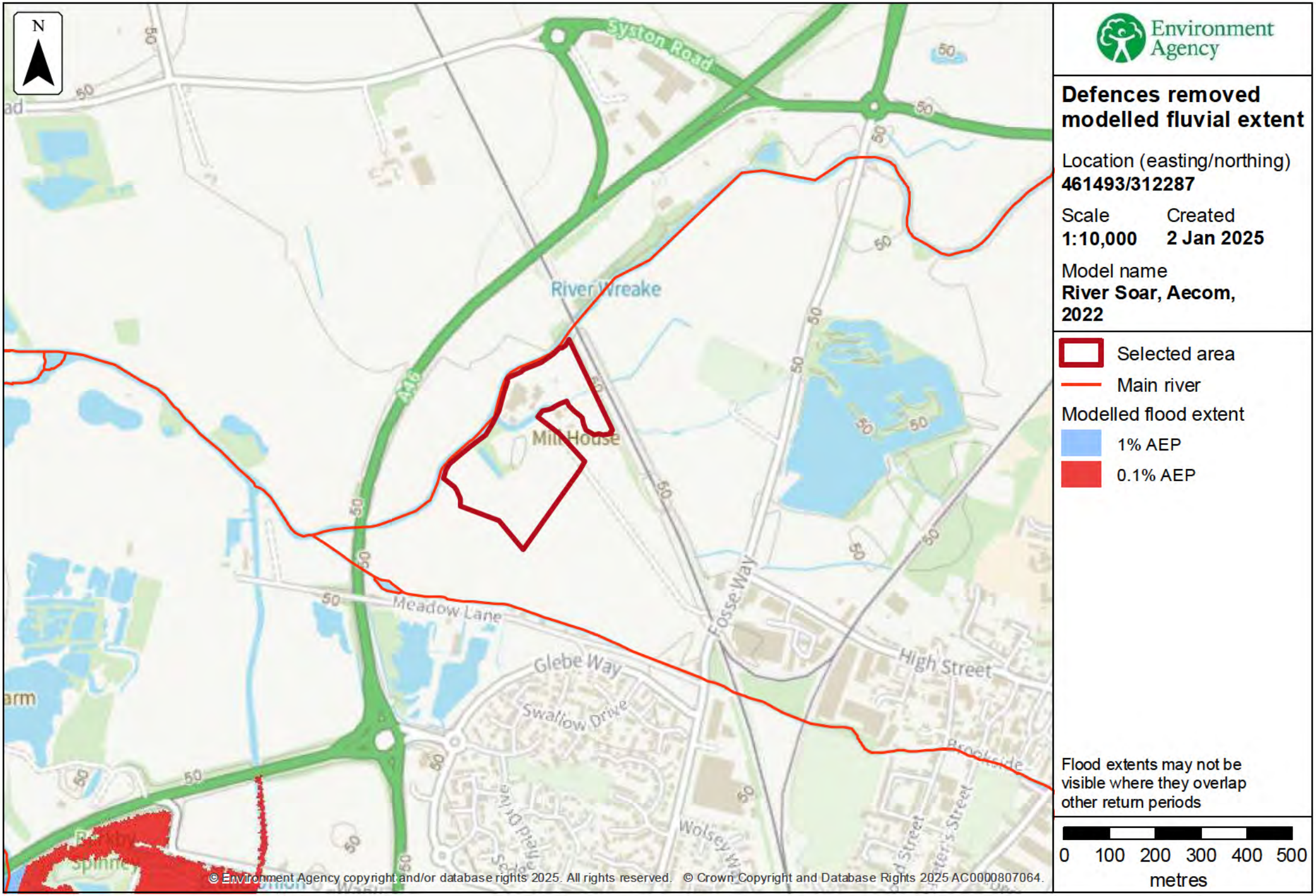


Environment Agency

Defences removed modelled fluvial extent

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
River Soar, Aecom, 2022

Selected area

Main river

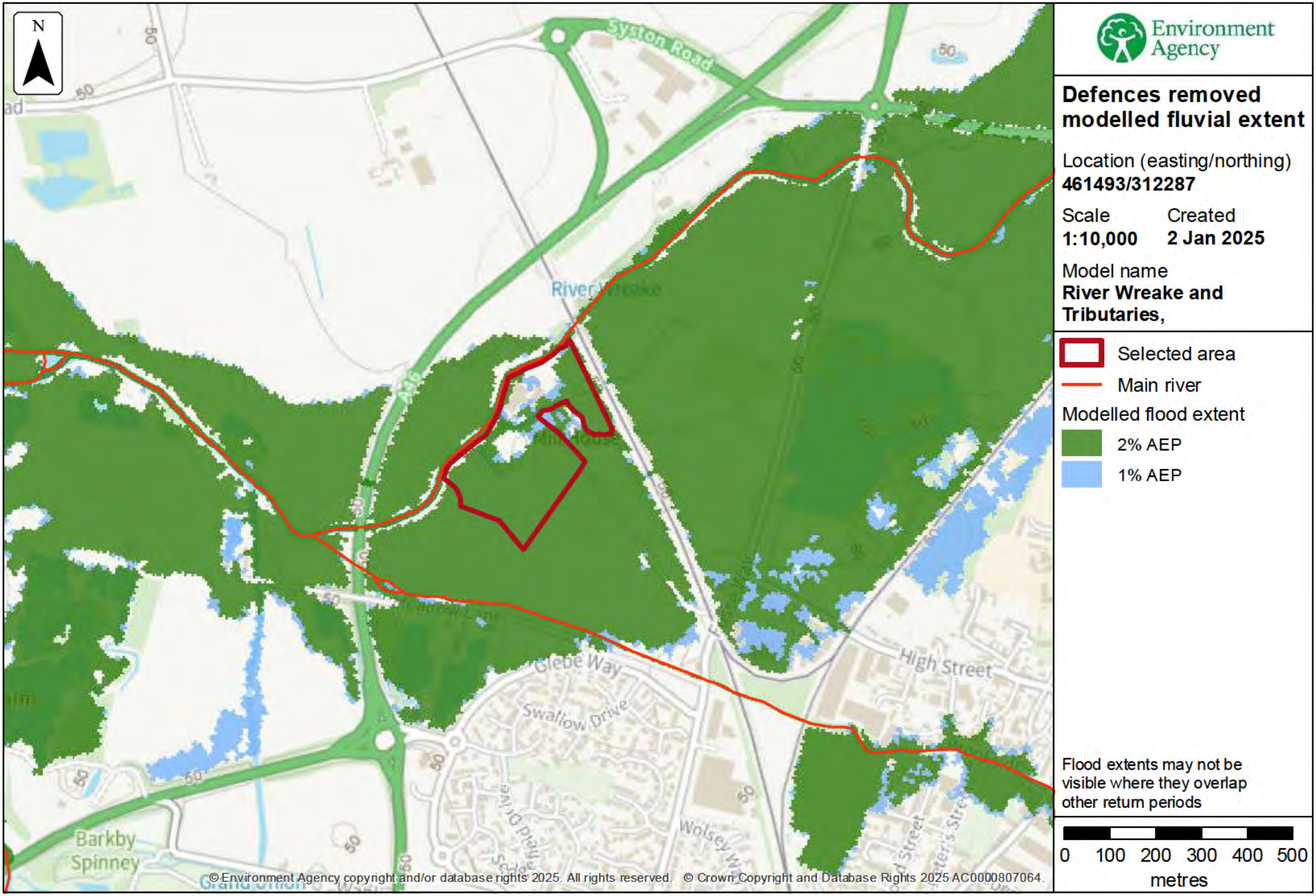
Modelled flood extent

1% AEP

0.1% AEP

Flood extents may not be visible where they overlap other return periods

0 100 200 300 400 500
metres


N
Syston Road
A46
Glebe Way
Swallow Drive
High Street
Barkby Spinney
Environment Agency
Defences removed modelled fluvial extent
Location (easting/northing)
461493/312287
Scale
1:10,000
Created
2 Jan 2025
Model name
River Wreake and Tributaries,
Selected area
Main river
Modelled flood extent
2% AEP
1% AEP
Flood extents may not be visible where they overlap other return periods
0 100 200 300 400 500
metres
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Environment Agency

Defended climate change modelled fluvial extent

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
Upper Lower River Soar, JBA, 2012

- Selected area
- Main river

Modelled flood extent

- 1.0% AEP (+20%)
- 1.0% AEP (+30%)
- 1.0% AEP (+50%)

Flood extents may not be visible where they overlap other return periods

0 100 200 300 400 500
metres

Environment Agency

Defended climate change modelled fluvial extent

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
River Soar, Aecom, 2022

- Selected area
- Main river

Modelled flood extent

- 1.0% AEP (+20%)
- 1.0% AEP (+30%)
- 1.0% AEP (+50%)

Flood extents may not be visible where they overlap other return periods

0 100 200 300 400 500
metres

Environment Agency

Defended climate change modelled fluvial extent

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
River Wreake and Tributaries,

Selected area

Main river

Modelled flood extent

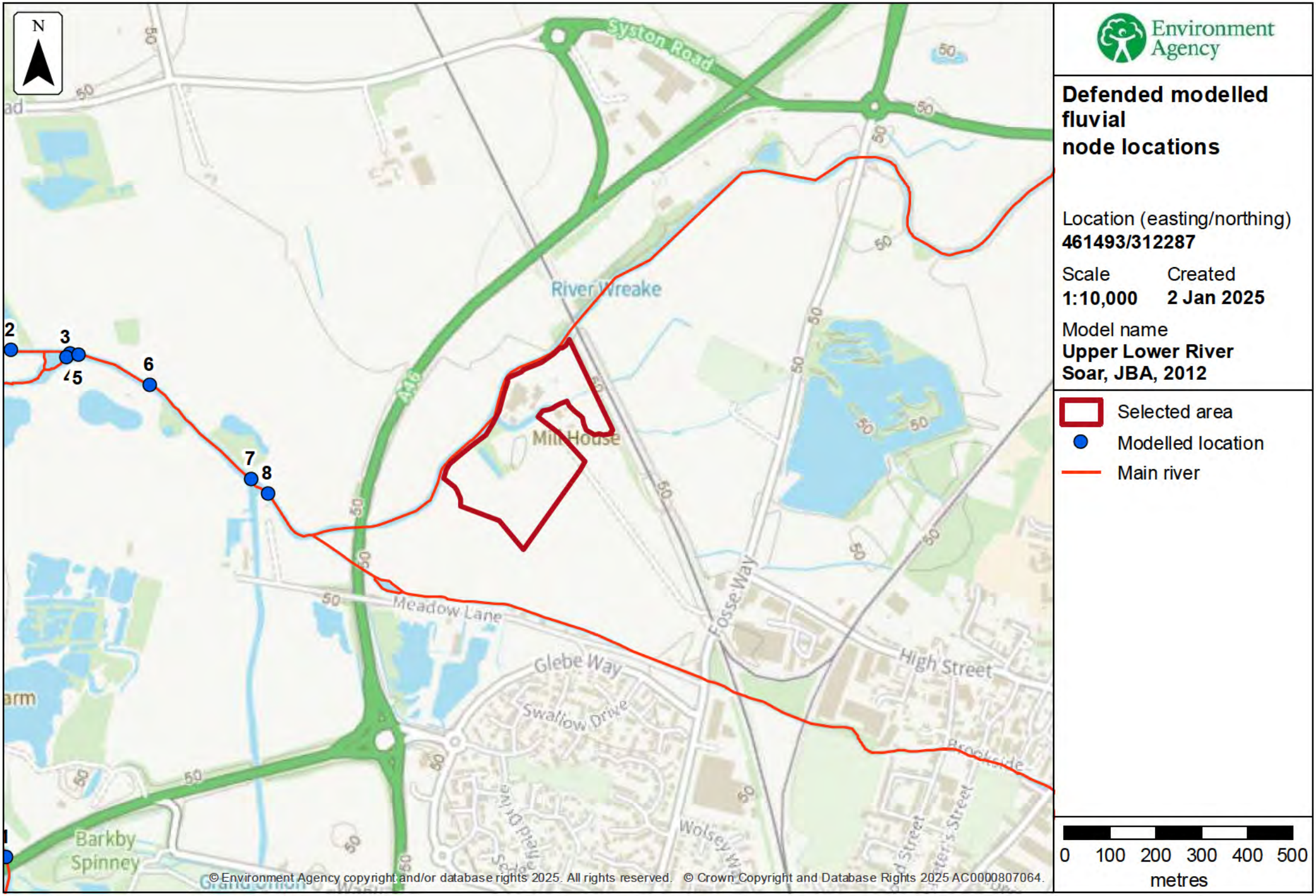
1.0% AEP (+20%)

1.0% AEP (+30%)

1.0% AEP (+50%)

Flood extents may not be visible where they overlap other return periods

0 100 200 300 400 500
metres



Environment Agency

Defended modelled fluvial node locations

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
Upper Lower River Soar, JBA, 2012

Selected area
Modelled location
Main river

0 100 200 300 400 500
metres

Modelled node locations data

Defended

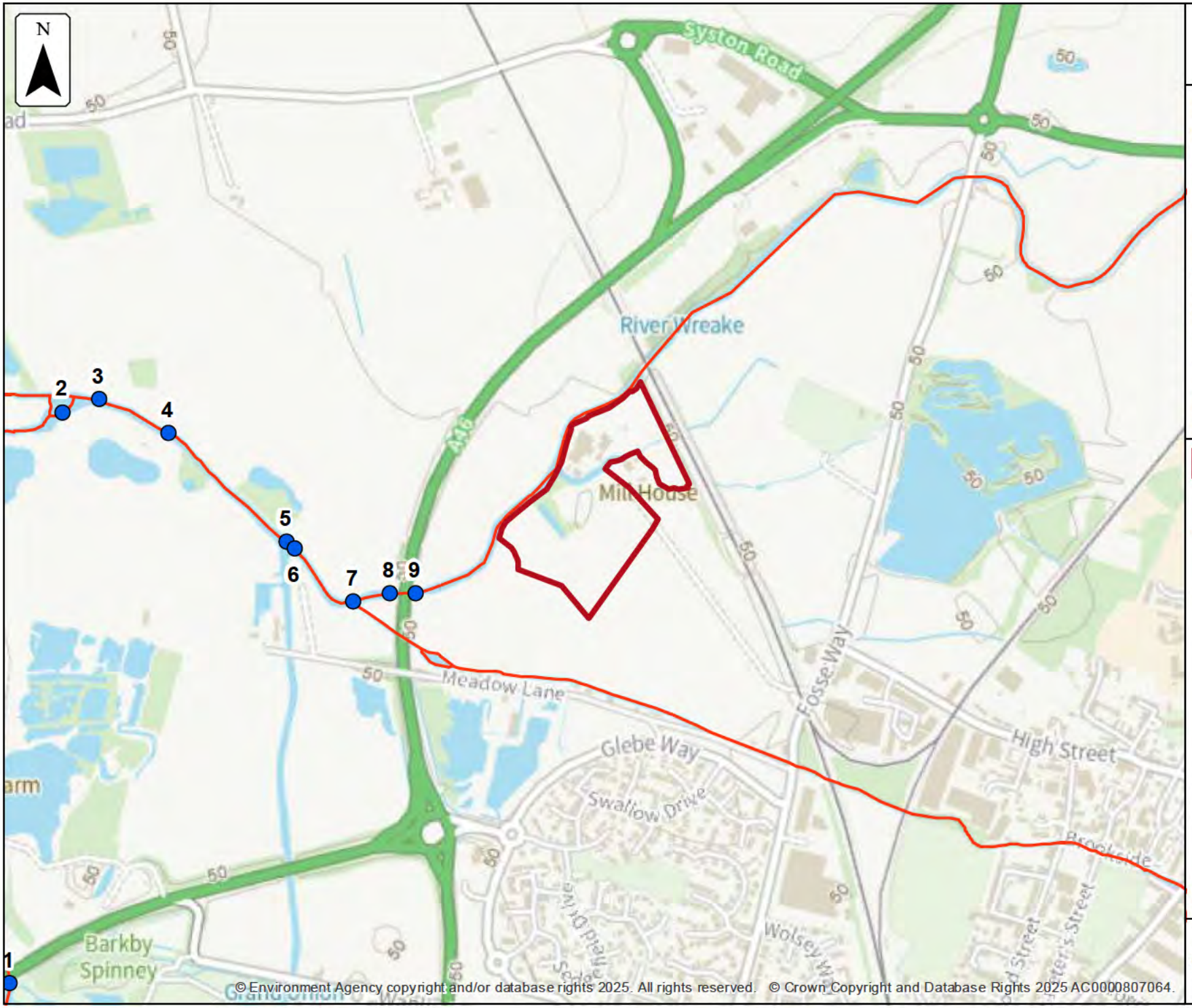
Label	Modelled location ID	Easting	Northing	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level
1	1453734	460350	311389	47.73	47.77	47.81	47.93	47.96	47.98	48.03	48.14
2	1453915	460361	312500	47.91	47.98	48.03	48.12	48.15	48.18	48.22	48.32
3	1453877	460482	312484	47.54	47.73	47.83	47.95	47.99	48.02	48.07	48.17
4	1453857	460490	312493	47.91	47.98	48.03	48.12	48.15	48.17	48.22	48.31
5	1453739	460510	312489	47.91	47.98	48.03	48.12	48.15	48.17	48.22	48.31
6	1453723	460665	312422	48.04	48.14	48.20	48.29	48.33	48.36	48.43	48.55
7	1453702	460886	312217	48.33	48.47	48.57	48.73	48.79	48.84	48.93	49.13
8	1453724	460924	312185	48.33	48.47	48.57	48.73	48.79	48.84	48.93	49.13

Data in this table comes from the Upper Lower River Soar, JBA, 2012 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.

Defended

Label	Modelled location ID	Easting	Northing	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1453734	460350	311389	102.05	107.88	116.98	142.41	149.07	153.68	164.75	184.65
2	1453915	460361	312500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	1453877	460482	312484	47.99	55.21	60.18	66.88	68.35	69.75	71.95	76.0
4	1453857	460490	312493	0.50	0.50	0.50	1.39	2.68	4.32	8.11	16.40
5	1453739	460510	312489	47.99	55.21	60.18	68.20	71.03	74.06	80.06	92.27
6	1453723	460665	312422	48.48	55.74	61.79	71.57	74.80	77.79	83.81	97.24
7	1453702	460886	312217	48.61	57.11	62.99	72.67	76.51	80.27	88.40	104.63
8	1453724	460924	312185	48.61	57.11	62.99	72.67	76.51	80.27	88.40	104.63

Data in this table comes from the Upper Lower River Soar, JBA, 2012 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.



Environment Agency

Defended modelled fluvial node locations

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
River Soar, Aecom, 2022

- Selected area
- Modelled location
- Main river

0 100 200 300 400 500
metres

Modelled node locations data

Defended

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
1	1432415	460356	311352	47.11	47.26	47.32	47.40	47.45	47.52	47.58	47.65	47.82	48.24
2	1432397	460458	312464	47.94	47.98	48.0	48.04	48.06	48.08	48.11	48.13	48.17	48.37
3	1432846	460530	312489	47.94	47.98	48.0	48.04	48.06	48.08	48.11	48.13	48.17	48.37
4	1432446	460666	312423	48.08	48.12	48.14	48.17	48.18	48.19	48.20	48.21	48.23	48.29
5	1432786	460896	312212	48.44	48.54	48.62	48.70	48.75	48.83	48.89	48.93	49.04	49.16
6	1432870	460912	312197	48.44	48.54	48.62	48.70	48.75	48.83	48.89	48.93	49.04	49.16
7	1432630	461024	312096	48.55	48.71	48.83	48.97	49.08	49.23	49.36	49.46	49.71	50.08
8	1432452	461096	312111	48.73	48.92	49.06	49.24	49.37	49.55	49.71	49.83	50.12	50.68
9	1432448	461147	312112	48.75	48.94	49.08	49.26	49.39	49.57	49.73	49.84	50.14	50.69

Data in this table comes from the River Soar, Aecom, 2022 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.

Defended

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1432415	460356	311352	51.95	74.10	86.68	102.48	112.58	124.48	132.62	138.81	157.91	212.03
2	1432397	460458	312464	0.06	0.07	0.08	0.08	0.09	0.10	0.10	0.10	0.10	5.62
3	1432846	460530	312489	51.60	55.93	58.87	62.21	64.47	67.58	70.23	72.20	77.24	93.42
4	1432446	460666	312423	52.98	59.92	65.12	71.22	75.43	81.28	86.32	90.07	99.59	138.65
5	1432786	460896	312212	57.67	72.22	84.62	100.30	111.58	127.69	141.79	152.41	179.68	249.68
6	1432870	460912	312197	57.67	72.22	84.62	100.30	111.58	127.69	141.79	152.41	179.68	249.68
7	1432630	461024	312096	57.67	72.23	84.62	100.30	111.58	127.69	141.79	152.41	179.68	249.68
8	1432452	461096	312111	57.67	72.22	84.62	100.30	111.58	127.69	141.80	152.42	179.69	249.69
9	1432448	461147	312112	57.67	72.22	84.62	100.30	111.58	127.69	141.79	152.42	179.69	249.68

Data in this table comes from the River Soar, Aecom, 2022 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.

Environment Agency

Defended modelled fluvial node locations

Location (easting/northing)
461493/312287

Scale
1:5,000

Created
2 Jan 2025

Model name
River Wreake and Tributaries,

Selected area
Modelled location
Main river

0 50 100 150 200 250
metres

Modelled node locations data

Defended

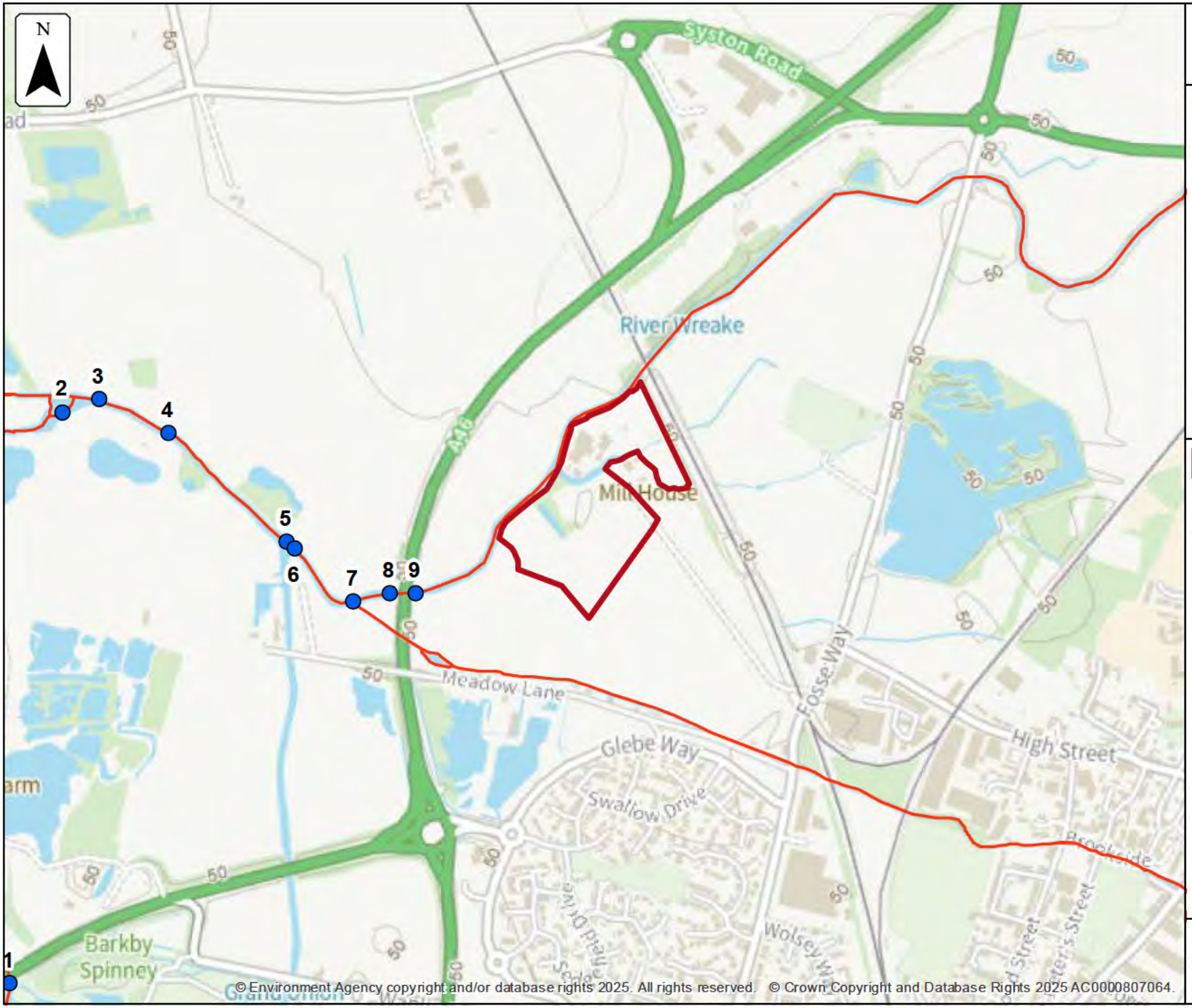
Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level	Level
1	1408979	461162	312118	63.64	63.82	63.88	63.92	64.05	64.07	64.08	64.19	64.29
2	1408978	461294	312205	80.0	80.16	80.27	80.39	80.69	80.70	80.70	80.72	80.84
3	1409172	461321	312261	79.50	79.67	79.79	79.90	80.22	80.27	80.31	80.57	80.73
4	1409289	461367	311948	86.65	86.80	86.90	86.99	87.27	87.31	87.34	87.64	88.02
5	1409301	461391	312319	78.99	79.17	79.29	79.41	79.61	79.64	79.66	79.87	80.16
6	1408798	461448	312447	78.54	78.79	78.93	79.05	79.34	79.38	79.42	79.83	80.08
7	1408972	461454	311940									
8	1409357	461526	312483	78.33	78.58	78.69	78.80	79.01	79.03	79.04	79.11	80.01
9	1408925	461578	312532	78.09	78.36	78.43	78.49	78.64	78.67	78.69	78.96	80.04
10	1408596	461619	312584	63.59	63.71	63.75	63.78	63.94	63.98	64.0	64.13	64.21

Data in this table comes from the River Wreake and Tributaries, CH2MHill, 2015 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.

Defended

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1408979	461162	312118	23.46	30.47	34.16	36.27	48.87	49.28	49.62	69.52	80.18
2	1408978	461294	312205	11.25	14.78	17.39	20.22	29.14	30.73	32.17	40.35	46.79
3	1409172	461321	312261	11.25	14.78	17.39	20.22	29.34	29.83	30.11	31.0	34.02
4	1409289	461367	311948	8.06	10.56	12.46	14.48	22.71	24.84	26.49	38.60	49.97
5	1409301	461391	312319	11.25	14.78	17.39	20.22	30.67	32.27	33.71	42.29	46.90
6	1408798	461448	312447	11.25	14.77	17.39	20.22	23.64	23.87	23.91	23.58	33.46
7	1408972	461454	311940									
8	1409357	461526	312483	11.89	15.62	18.38	21.12	28.42	29.72	31.15	44.61	47.31
9	1408925	461578	312532	11.88	15.62	18.38	21.36	28.02	28.60	29.16	32.90	33.71
10	1408596	461619	312584	23.45	30.33	34.07	35.70	44.66	44.81	44.92	51.09	52.29

Data in this table comes from the River Wreake and Tributaries, CH2MHill, 2015 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.



Environment Agency

Defences removed modelled fluvial node locations

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
River Soar, Aecom, 2022

- Selected area
- Modelled location
- Main river

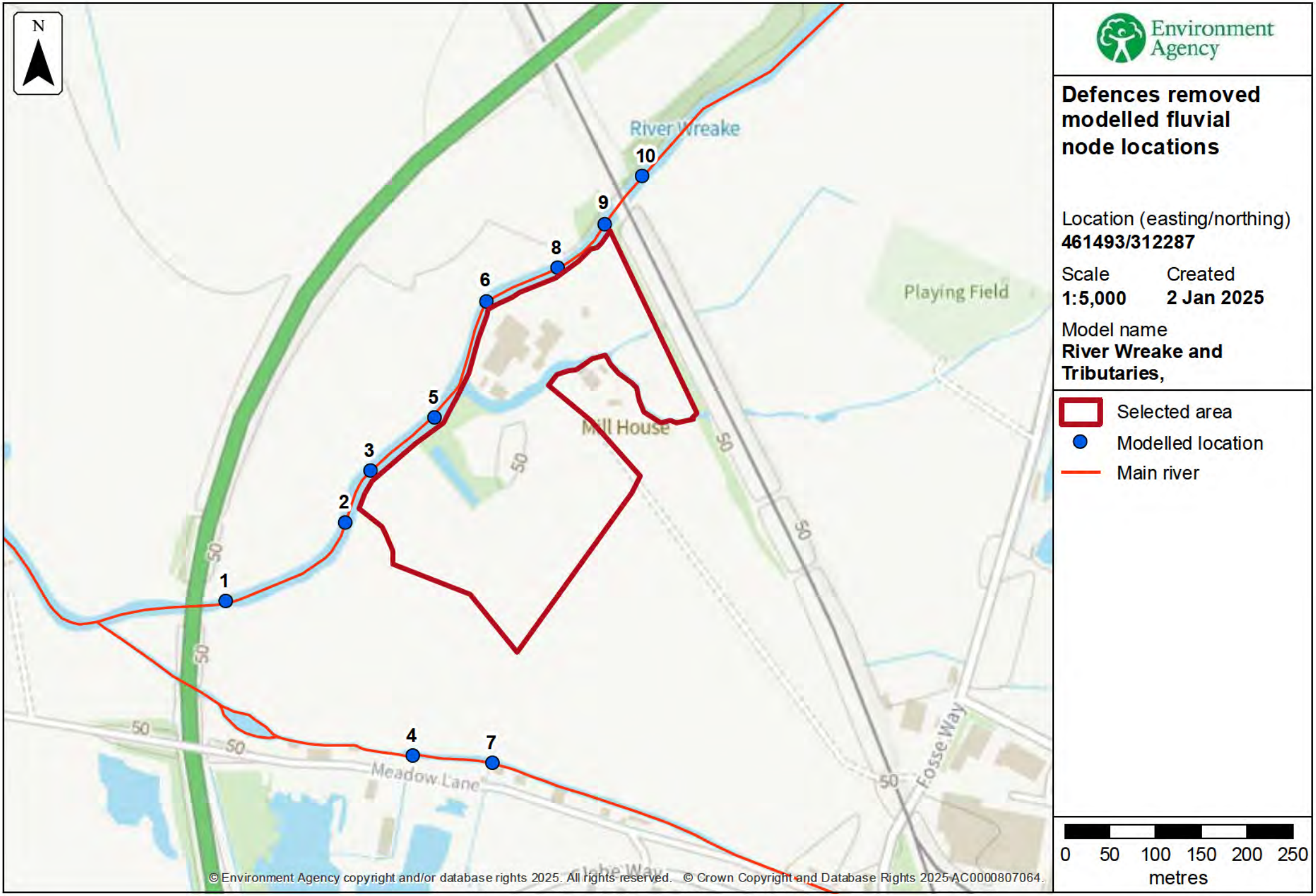
0 100 200 300 400 500
metres

Modelled node locations data

Defences removed

Label	Modelled location ID	Easting	Northing	1% AEP	0.1% AEP	1% AEP	0.1% AEP
				Level	Level	Flow	Flow
1	1432415	460356	311352	47.66	48.24	139.94	213.28
2	1432397	460458	312464	48.13	48.37	0.10	5.58
3	1432846	460530	312489	48.13	48.37	72.21	93.44
4	1432446	460666	312423	48.21	48.29	90.07	138.65
5	1432786	460896	312212	48.93	49.16	152.41	249.68
6	1432870	460912	312197	48.93	49.16	152.41	249.68
7	1432630	461024	312096	49.46	50.08	152.42	249.68
8	1432452	461096	312111	49.83	50.68	152.42	249.69
9	1432448	461147	312112	49.84	50.69	152.42	249.68

Data in this table comes from the River Soar, Aecom, 2022 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.


N
River Wreake
Playing Field
Mill House
Meadow Lane
Fosse Way
1
2
3
4
5
6
7
8
9
10
50
50
50
50
50
50
50
Environment Agency
Defences removed modelled fluvial node locations
Location (easting/northing)
461493/312287
Scale
1:5,000
Created
2 Jan 2025
Model name
River Wreake and Tributaries,
Selected area
Modelled location
Main river
0 50 100 150 200 250
metres
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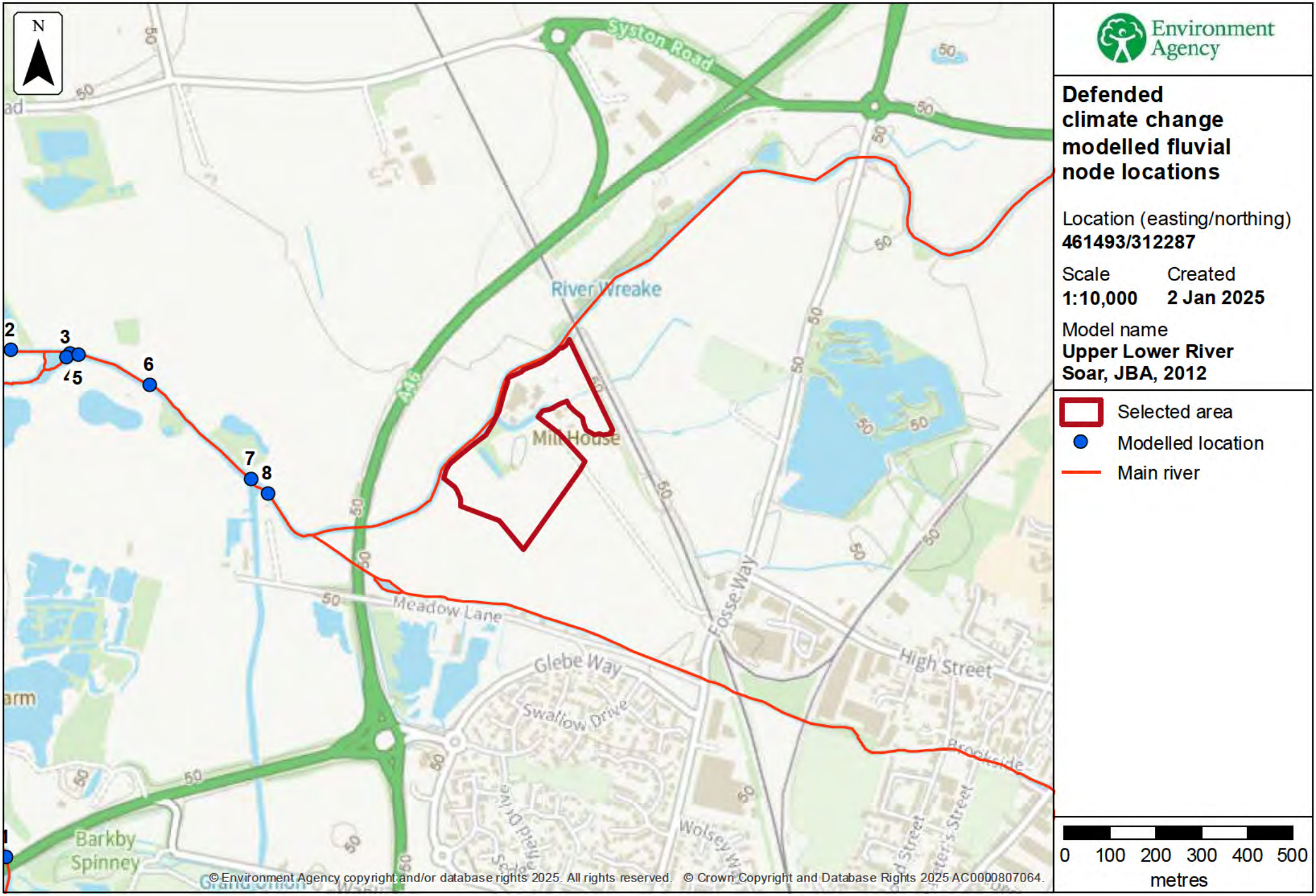
Modelled node locations data

Defences removed

Label	Modelled location ID	Easting	Northing	10% AEP	2% AEP	1% AEP	10% AEP	2% AEP	1% AEP
				Level	Level	Level	Flow	Flow	Flow
1	1408979	461162	312118	48.83	49.0	49.34	61.13	69.42	76.02
2	1408978	461294	312205	49.35	49.54	49.80	35.77	35.61	35.58
3	1409172	461321	312261	49.34	49.53	49.79	36.13	34.25	34.35
4	1409289	461367	311948	48.65	49.31	49.80	8.05	16.57	16.78
5	1409301	461391	312319	49.36	49.55	49.81	40.10	40.82	41.40
6	1408798	461448	312447	49.48	49.66	49.88	57.21	83.69	103.37
7	1408972	461454	311940						
8	1409357	461526	312483	49.47	49.64	49.85	57.21	83.69	103.37
9	1408925	461578	312532	49.72	50.05	50.32	57.22	84.97	113.27
10	1408596	461619	312584	49.74	50.08	50.36	57.22	84.97	113.27

Data in this table comes from the River Wreake and Tributaries, CH2MHill, 2015 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.



Environment Agency

Defended climate change modelled fluvial node locations

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
Upper Lower River Soar, JBA, 2012

Selected area
Modelled location
Main river

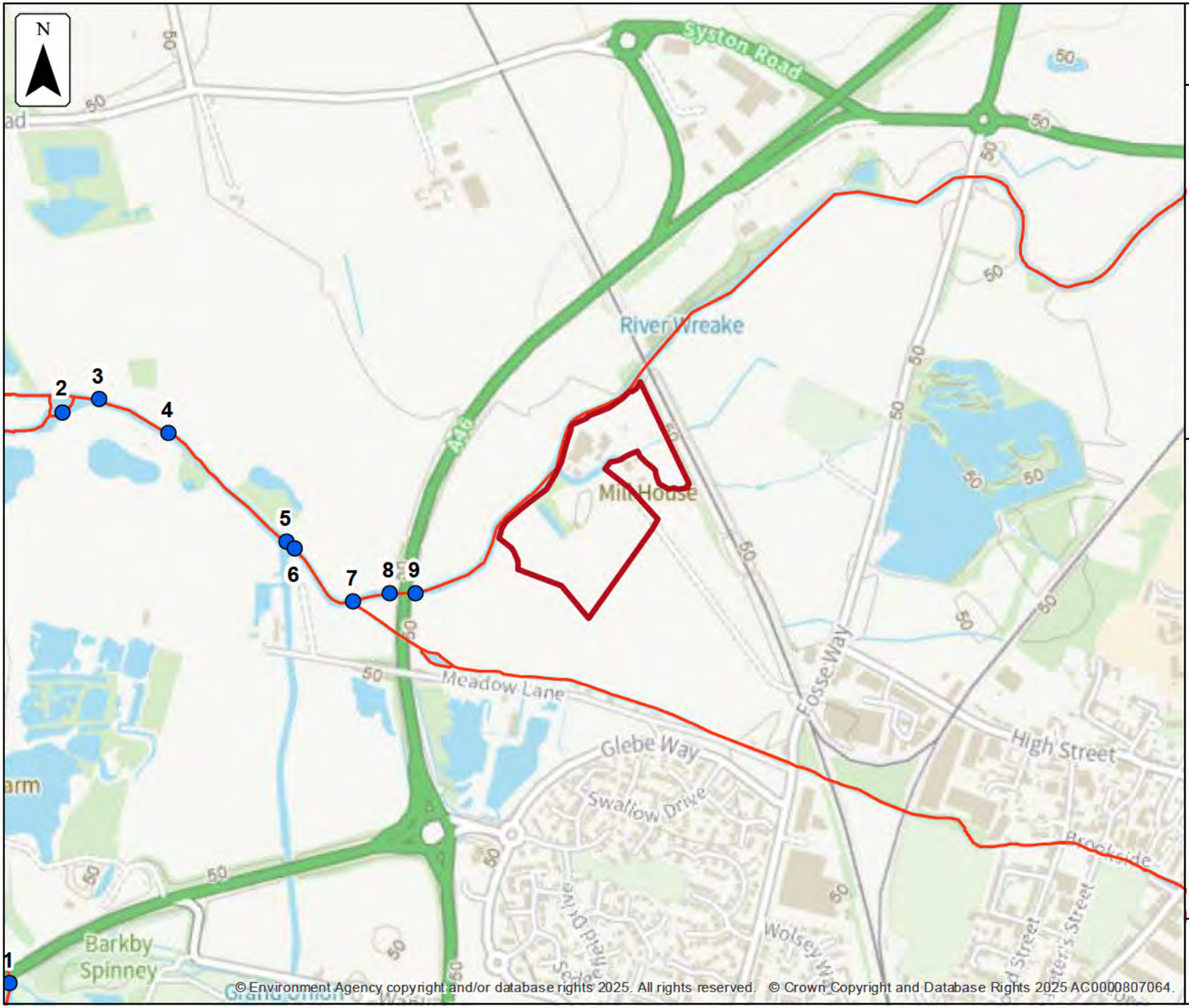
0 100 200 300 400 500
metres

Modelled node locations data

Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)
				Level	Level	Level	Flow	Flow	Flow
1	1453734	460350	311389	48.12	48.18	48.29	184.42	199.78	230.52
2	1453915	460361	312500	48.27	48.30	48.37	0.0	0.0	0.0
3	1453877	460482	312484	48.12	48.16	48.23	74.76	76.04	78.69
4	1453857	460490	312493	48.27	48.30	48.36	6.69	8.60	12.27
5	1453739	460510	312489	48.27	48.30	48.36	81.44	84.63	90.64
6	1453723	460665	312422	48.46	48.50	48.56	86.14	90.09	97.93
7	1453702	460886	312217	48.97	49.03	49.14	90.69	95.60	104.86
8	1453724	460924	312185	48.97	49.03	49.14	90.69	95.60	104.86

Data in this table comes from the Upper Lower River Soar, JBA, 2012 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.



Environment Agency

Defended climate change modelled fluvial node locations

Location (easting/northing)
461493/312287

Scale
1:10,000

Created
2 Jan 2025

Model name
River Soar, Aecom, 2022

- Selected area
- Modelled location
- Main river

0 100 200 300 400 500
metres

Modelled node locations data

Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)
				Level	Level	Level	Flow	Flow	Flow
1	1432415	460356	311352	47.85	47.95	48.11	163.30	172.69	188.94
2	1432397	460458	312464	48.18	48.20	48.28	1.73	2.57	4.25
3	1432846	460530	312489	48.18	48.20	48.28	77.85	80.58	91.0
4	1432446	460666	312423	48.23	48.23	48.27	100.70	105.84	126.78
5	1432786	460896	312212	49.06	49.11	49.13	182.89	198.14	228.63
6	1432870	460912	312197	49.06	49.11	49.13	182.89	198.14	228.63
7	1432630	461024	312096	49.74	49.88	50.06	182.90	198.14	228.63
8	1432452	461096	312111	50.16	50.31	50.57	182.90	198.14	228.62
9	1432448	461147	312112	50.17	50.33	50.58	182.90	198.14	228.62

Data in this table comes from the River Soar, Aecom, 2022 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.

Environment Agency

Defended climate change modelled fluvial node locations

Location (easting/northing)
461493/312287

Scale
1:5,000

Created
2 Jan 2025

Model name
River Wreake and Tributaries,

Selected area
Modelled location
Main river

0 50 100 150 200 250
metres

Modelled node locations data

Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)
				Level	Level	Level	Flow	Flow	Flow
1	1408979	461162	312118	64.12	49.06	49.72	50.40	107.15	143.28
2	1408978	461294	312205	49.61	49.72	50.27	49.14	49.55	60.04
3	1409172	461321	312261	80.31	49.70	50.25	30.12	72.43	82.90
4	1409289	461367	311948	87.34			26.48		
5	1409301	461391	312319	49.63	49.73	50.26	80.35	84.44	94.01
6	1408798	461448	312447	79.42	49.77	50.26	23.91	114.48	132.42
7	1408972	461454	311940	49.59	49.70	50.25	20.14	21.52	27.95
8	1409357	461526	312483	49.64	49.73	50.22	109.55	114.48	132.42
9	1408925	461578	312532	49.90	49.99	50.41	109.57	114.49	136.42
10	1408596	461619	312584	64.05	50.07	50.48	45.13	114.49	136.42

Data in this table comes from the River Wreake and Tributaries, CH2MHill, 2015 model.
Level values are shown in mAOD, and flow values are shown in cubic metres per second.
Any blank cells show where a particular scenario has not been modelled for this location.
If no level or flow data is available for a scenario, no table will be shown.

Environment Agency

Defended modelled fluvial extent and height

Location (easting/northing)
461493/312287

Scale
1:2,500

Created
2 Jan 2025

Model name
River Wreake and Tributaries,

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 49.0
- 49.0 - 49.375
- 49.375 - 49.75
- 49.75 - 50.125
- 50.125 - 50.5
- 50.5 - 50.875
- 50.875 - 51.25
- 51.25 - 51.625
- 51.625 - 52.0

This map shows the 0.1% AEP height data

0 25 50 75 100
metres

Sample point data

Defended

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
1	461450	312071	0.32	0.48	0.62	0.81	0.85	1.10	1.17	1.21	1.69	2.37
2	461517	312071	0.24	0.40	0.54	0.74	0.78	1.03	1.09	1.13	1.62	2.23
3	461383	312138	0.38	0.54	0.68	0.87	0.91	1.16	1.22	1.27	1.75	2.45
4	461450	312138	0.44	0.61	0.74	0.94	0.98	1.23	1.29	1.34	1.82	2.52
5	461517	312138	0.32	0.49	0.63	0.82	0.86	1.11	1.18	1.22	1.71	2.36
6	461316	312205	0.34	0.51	0.65	0.83	0.87	1.13	1.18	1.23	1.71	2.34
7	461383	312205	0.21	0.37	0.51	0.70	0.74	0.99	1.05	1.09	1.58	2.29
8	461450	312205	0.28	0.45	0.59	0.78	0.82	1.07	1.14	1.18	1.66	2.38
9	461517	312205	0.41	0.57	0.71	0.90	0.94	1.20	1.26	1.31	1.78	2.51
10	461584	312205	0.12	0.29	0.43	0.62	0.66	0.91	0.97	1.02	1.50	2.19
11	461316	312272	0.13	0.27	0.40	0.58	0.62	0.87	0.93	0.98	1.45	2.10
12	461383	312272	0.27	0.42	0.55	0.74	0.77	1.02	1.08	1.13	1.61	2.29
13	461450	312272	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.26	0.99
14	461517	312272	NoData	NoData	0.12	0.30	0.34	0.60	0.66	0.70	1.18	1.93
15	461584	312272	NoData	NoData	0.09	0.29	0.33	0.58	0.64	0.69	1.17	1.88
16	461450	312339	0.55	0.63	0.72	0.85	0.88	1.09	1.15	1.20	1.67	2.38

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
17	461517	312339	NoData	NoData	NoData	NoData	NoData	NoData	0.00	0.05	0.53	1.24
18	461651	312339	NoData	0.08	0.19	0.36	0.39	0.59	0.64	0.68	1.14	1.88
19	461450	312406	NoData	NoData	NoData	NoData	NoData	0.18	0.23	0.28	0.73	1.40
20	461517	312406	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.19	0.91
21	461584	312406	NoData	0.16	0.29	0.49	0.53	0.76	0.81	0.85	1.31	1.98
22	461651	312406	NoData	0.00	0.00	0.00	0.00	0.03	0.06	0.08	0.42	1.14
23	461517	312473	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
24	461584	312473	NoData	NoData	NoData	NoData	NoData	0.04	0.09	0.13	0.56	1.27
25	461584	312540	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			1.67	1.79	1.91	2.10	2.14	2.38	2.43	2.47	2.94	3.65

Data in this table comes from the River Wreake and Tributaries, CH2MHill, 2015 model.
Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
If no height or depth data is available for a scenario, no table will be shown.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

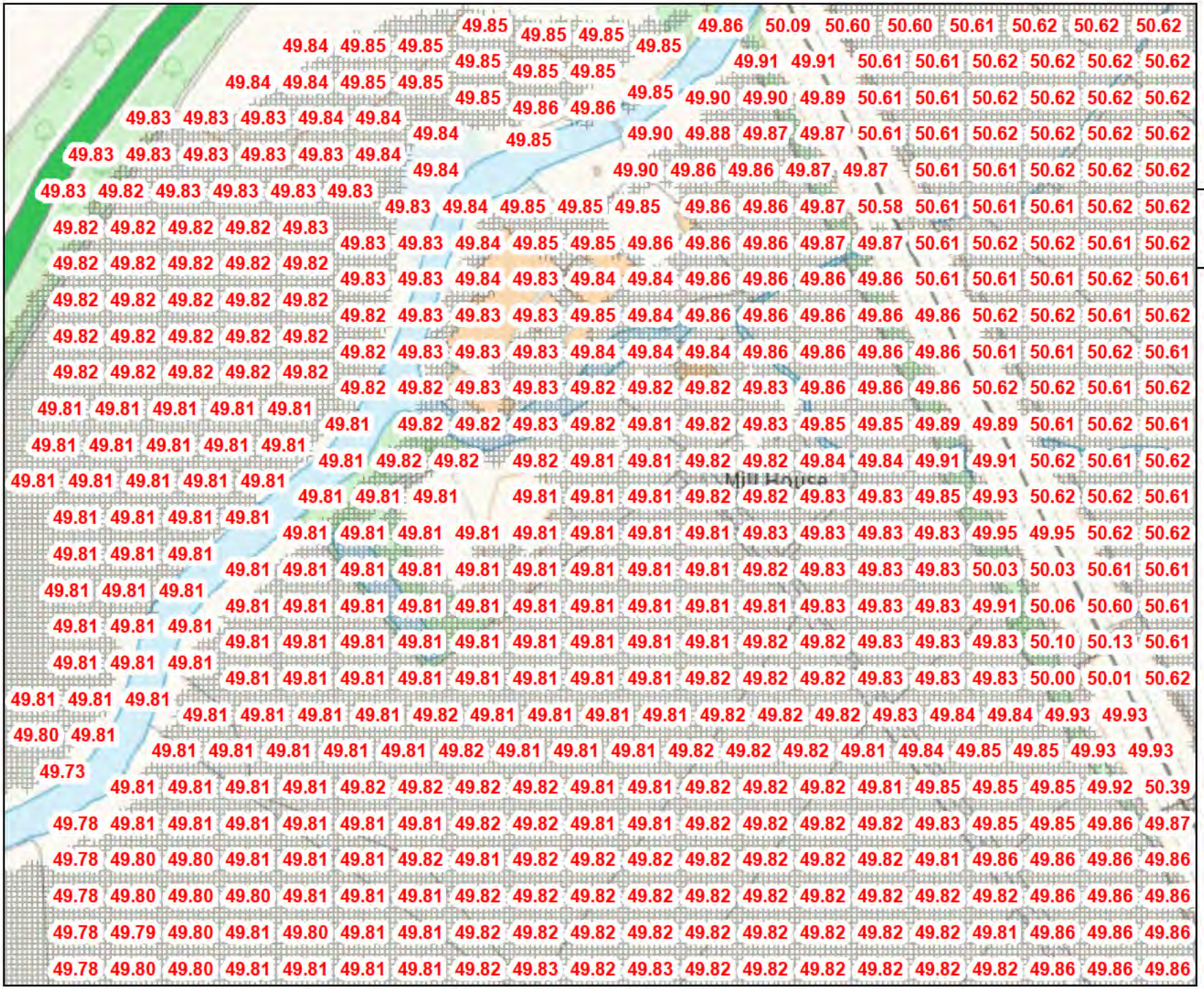
Defended

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height	Height
1	461450	312071	48.88	49.04	49.18	49.37	49.41	49.67	49.72	49.77	50.25	50.92
2	461517	312071	48.88	49.04	49.18	49.38	49.42	49.67	49.73	49.77	50.26	50.87
3	461383	312138	48.88	49.04	49.18	49.37	49.41	49.66	49.72	49.77	50.26	50.95
4	461450	312138	48.88	49.04	49.18	49.38	49.42	49.67	49.73	49.78	50.26	50.96
5	461517	312138	48.88	49.04	49.18	49.38	49.42	49.67	49.73	49.78	50.26	50.92
6	461316	312205	48.88	49.05	49.19	49.37	49.41	49.66	49.72	49.77	50.25	50.88
7	461383	312205	48.88	49.05	49.19	49.38	49.42	49.67	49.73	49.77	50.25	50.96
8	461450	312205	48.88	49.04	49.18	49.38	49.42	49.67	49.73	49.78	50.26	50.98
9	461517	312205	48.88	49.04	49.18	49.38	49.42	49.67	49.73	49.78	50.25	50.98
10	461584	312205	48.88	49.04	49.18	49.38	49.42	49.67	49.73	49.78	50.26	50.95
11	461316	312272	48.92	49.06	49.19	49.38	49.42	49.66	49.72	49.77	50.25	50.89
12	461383	312272	48.91	49.06	49.19	49.38	49.42	49.67	49.73	49.77	50.25	50.93
13	461450	312272	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	50.25	50.98
14	461517	312272	NoData	NoData	49.18	49.38	49.42	49.67	49.73	49.77	50.26	51.00
15	461584	312272	NoData	NoData	49.18	49.38	49.42	49.67	49.73	49.77	50.26	50.96
16	461450	312339	49.01	49.11	49.22	49.40	49.43	49.68	49.74	49.78	50.25	50.96
17	461517	312339	NoData	NoData	NoData	NoData	NoData	NoData	49.74	49.78	50.26	50.97
18	461651	312339	NoData	49.22	49.33	49.50	49.53	49.73	49.78	49.82	50.28	51.02

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height	Height
19	461450	312406	NoData	NoData	NoData	NoData	NoData	49.70	49.76	49.80	50.26	50.92
20	461517	312406	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	50.27	50.99
21	461584	312406	NoData	49.13	49.26	49.46	49.50	49.73	49.78	49.82	50.28	50.95
22	461651	312406	NoData	49.16	49.27	49.49	49.52	49.74	49.78	49.83	50.28	51
23	461517	312473	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
24	461584	312473	NoData	NoData	NoData	NoData	NoData	49.75	49.80	49.84	50.28	50.99
25	461584	312540	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			49.18	49.37	49.44	49.64	49.67	49.96	50.00	50.04	50.36	51.09

Data in this table comes from the River Wreake and Tributaries, CH2MHill, 2015 model.
Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
If no height or depth data is available for a scenario, no table will be shown.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Floodplain Heights Map



Environment Agency

N
W E
S

Scale 1:2,500

Date created: 02 January 2025

Legend

+ 1 in 100yr +20%CC Height (mAOD)

SOURCE:
River Wreake, CH2M Hill, 2015

Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as surface water, ground water and reservoirs

Your Lead Local Flood Authority is Leicestershire County.

About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

Flood risk activity permits

Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

Find out more about flood risk activity permits

Help and advice

Contact the East Midlands Environment Agency team at dnlenquiries@environment-agency.gov.uk for:

- more information about getting a product 5, 6, 7 or 8
- general help and advice about the site you're requesting data for

C Percentile flow calculations

TECHNICAL NOTE

JBA Project Code	2024s1819
Contract	Land at Syston Mill Flood Risk Assessment
Client	Wealth Property Ltd
Day, Date and Time	16/12/2024
Author	Imogen Barnsley BSc PhD
Reviewer / Sign off	Peter Rook BSc MSc MCIWEM C.WEM FGS
Subject	Calculations for flow and stage percentiles

1 Note on calculations

1.1 Introduction

These calculations were developed as part of the Land at Syston Mill Flood Risk Assessment. A site visit was conducted on 10th December 2024. During this site visit, bank full flows were observed. These calculations were developed to put this observation into context with the core question being to understand how often these flows are exceeded. This will provide context for the flows at the time of the site visit and help with a general understanding of the frequency of bank overtopping at the site.

Figure 1-1 Photos taken during site visit on 10th December 2024. Left: Ordinary Watercourse proximal to site. Centre: confluence of the Ordinary Watercourse and the River Wreake. Right: River Wreake (Main River).

1.2 Data used

Stage and flow data from the Syston gauge was used to derive flow percentile calculations. The Syston gauge is located on the Main River (River Wreake) adjacent to the study site. The Ordinary Watercourse which flows through the study site flows directly into River

Wreake. It is therefore a reasonable assumption that high flows on the River Wreake will be directly related to high flows in the Ordinary Watercourse.

The Syston gauge has a long period of record (Table 1-1). Data from before September 1982 was discounted and not used for this analysis due to a clear step change in the flow and level record. Furthermore, the NRFA website states that there were "complications with the rating history" during this period. Therefore, data from 01/09/1982 to the most recent date of record were used for this analysis.

Table 1-1 Table of date ranges for hydrometric data at Syston

Data type	Start of record	End of record
Flow data – daily	01/08/1967	13/12/2024
Flow data – 15-minute	01/08/1967	13/12/2024
Level data – daily	28/08/1967	11/12/2024
Level data – 15-minute	28/08/1967	16/12/2024

1.3 Calculations and results

Using the flow and level data at the time of the site visit (11:30am on 10/12/2024) was recorded and set as the target date. The 15-minute resolution data was used for this purpose because it records the shorter term fluctuations in level, including peaks and troughs.

Flow at the time of the site visit was 23.59m^3/s. The river level at the same time was 2.92m.

The percentile of these flows was calculated. Percentile flows are a way to describe river flow and level compared to their typical range. It therefore describes whether the target flow and level were unusually low or high. To do this, flow measurements in the entire period of record are ranked from lowest to highest. The percentile of a flow indicates its position within this range. For example, 50th percentile flow or level means that half of the flows recorded in the entire period of record are below that level, and half of them are above, indicating that 50th percentile flows are 'typal' or average.

The results of the analysis are shown in Table 1-2. This demonstrates that flows at the time of the site visit were very high. The 98th percentile indicates that flows have only exceeded this level 2% of the time throughout the period of record. Similarly, the level calculations demonstrate that the water level at this site has only been exceeded 1% of the time throughout the period of record. The probability exceeding these levels and flows at this site are very low. As the river channel was nearly at bank full at the time of the site visit, it indicates that bank overtopping at this site may also of a very low.

Table 1-2 Results of percentile calculations

Data	Percentile
Flow data – daily	98.9
Flow data – 15-minute	98.9
Level data – daily	99.2
Level data – 15-minute	99.2

Offices at

Bristol
Coleshill
Doncaster
Dublin
Edinburgh
Exeter
Glasgow
Haywards Heath
Leeds
Limerick
Newcastle upon Tyne
Newport
Peterborough
Portsmouth
Saltaire
Skipton
Tadcaster
Thirsk
Wallingford
Warrington

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Old Lane North
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3246693

JBA Group Ltd is
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ISO 9001:2015
ISO 14001:2015
ISO 27001:2013
ISO 45001:2018

MAGNA TRANSPORT PLANNING LTD

TRANSPORT ASSESSMENT

LAND AT SYSTON MILL, MILL LANE, SYSTON, LE7 1NS

On behalf of **Wealth Property Ltd**
Report Reference: **24/527/08B**
January 2025

MAGNA TRANSPORT PLANNING LTD
Office 4, 35 Stow Park Circle, Newport, NP20 4HF
Telephone 01633 843953 & 01291 639002 Email amol@magna-transport.co.uk Website magna-transport.co.uk

Registration Number: 14113060 VAT Registration Number: 412 0722 50 Registered in England & Wales

REPORT CONTROL SHEET

Magna Ref. 24/527/08B

January 2025

Revision	Status	Date	Author
A	CLIENT DRAFT 1	12/12/2024	AMOL PISAL
B	CLIENT DRAFT 2	20/12/2024	AMOL PISAL
C	CLIENT DRAFT 3	08/01/2025	AMOL PISAL
D	FINAL	08/01/2025	AMOL PISAL

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Registration Number: 14113060 VAT Registration Number: 412 0722 50 Registered in England & Wales

CONTENTS

1 INTRODUCTION

1.1 Purpose Of Report

1.1.1 Magna Transport Planning Ltd has been appointed by Wealth Property Limited (the "Appellant") to prepare this Transport Assessment (TA) in support of the Appellant's appeal against an Enforcement Notice (E/21/0183) issued by Charnwood Borough Council (the "Council")) dated 23rd September 2024.

1.1.2 The Notice relates to "Land at Syston Mill, Mill Lane, Syston, Leicestershire, LE7 1NS" (the "Site") and includes a Location Plan which identifies a single site "shown edged and shaded red" comprising the whole of the land in the Appellants' ownership (Appendix 2 of the Notice). Section 3 of the Notice describes the entire site as being in "sui generis use".

1.1.3 The Council issued the Notice relating to breaches of planning control (within the meaning of paragraph (a) of Section 171A (1) of the Town and Country Planning Act 1990).

1.1.4 The alleged breach of planning control as set out in the Notice (Section 3) is that:

> ***"without planning permission the material change of use of land and buildings, from industrial and agricultural use to sui generis use including industrial, agricultural, residential (building conversion and caravan), vehicle sales, MOT station, vehicle repairs and servicing, vehicle restoration, vehicle body repairs, storage, tyre fitting, siting of caravans and portable structures/buildings, storage, manufacturing and retail; and facilitating development including the installation of fencing, hardstanding, closed circuit television, lighting and ground works".***

1.1.5 Section 4 of the Notice sets out eight reasons for issuing the Notice.

1.1.6 Reason 8 relates to highways and states:

> ***"There are potential highway safety issues caused by the current design of the junction of Mill Lane with Fosse Way; and for pedestrians using the underbridge. Without an assessment of the development on the adopted highway, the impact on highway safety, or the residual cumulative impacts on the road network, an assessment of the risks and impacts cannot be made. There is no evidence from the landowners or their tenants to confirm that such an assessment is available, and no report has been forwarded to the Local Planning Authority for consideration. Furthermore, the development does not constitute sustainable development in transport terms and the developer has not provided an assessment of travel to confirm the priority of modes of transport to and from the site***

which encourages public transport use; address the needs of people with disabilities; reduce conflicts between pedestrians, cyclists and vehicle places; allow efficient delivery of goods and access by service and emergency vehicles; and enable charging of plug-in and other ultra-low emission vehicles. Therefore, development is contrary to Saved Policy TR/18 the adopted Borough of Charnwood Local Plan 2004; Policies CC5, T3 and INF2 of the submitted Charnwood Local Plan 2021-2037; and the provisions in paragraphs 114 - 117 of the NPPF".

1.1.7 At the time of writing the appeal will be heard at Inquiry in March 2025.

1.1.8 The Appellant is appealing on the following grounds:

- **Ground (c)** – "that those matters (if they occurred) do not constitute a breach of planning control".
- **Ground (d)** – "that, at the date when the notice was issued, no enforcement action could be taken in respect of any breach of planning control which may be constituted by those matters".
- **Ground (b)** – "that those matters have not occurred".
- **Ground (a)** – "that, in respect of any breach of planning control which may be constituted by the matters stated in the notice, planning permission ought to be granted or, as the case may be, the condition or limitation concerned ought to be discharged".
- **Ground (f)** – "that the steps required by the notice to be taken, or the activities required by the notice to cease, exceed what is necessary to remedy any breach of planning control which may be constituted by those matters or, as the case may be, to remedy any injury to amenity which has been caused by any such breach".
- **Ground (g)** – "that any period specified in the notice in accordance with section 173(9) falls short of what should reasonably be allowed".

1.1.9 The Site comprises a number of businesses (See Figure 3C in Chapter 3 of this TA) and it is the Appellant's case that these "Existing Uses" are permitted by planning permission reference P/00-02521/2 dated 16th January 2001 and/or that some of the uses/operations have persisted for more than 10 years and/or that planning permission should be granted if required.

1.1.10 This TA has been prepared in accordance with the Department for Transport's (DfT) Overarching principles on Travel Plans, Transport Assessments and Statements, the

National Planning Policy Framework (2024), Charnwood Borough Council's (CBC) Local Plan 2021-37, saved policies within the Borough of CBC's Local Plan 2004 and Leicestershire County Council's (LCC) Highway Design Guide.

1.1.11 The TA will assess the whole Site in terms of access, parking and traffic impact. It will respond to the Case Officer's Report (Local Highways Authority (LHA) comments on Pages 28-29 and Highways considerations on Pages 43-44) and will robustly respond to Reason 8 in the Enforcement Notice.

1.1.12 The TA will also be used to support the Ground (a) appeal and concludes that there are no highway reasons as to why Parcels 103A and 103B should not be granted planning permission for the parking and storage of motor vehicles.

1.1.13 Paragraph 116 of the NPPF (2024) states that, "development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios".

1.1.14 The TA concludes that the development does not result in any adverse traffic impact on the local road network. Accordingly, there should be no insurmountable highways or transport related reasons to object to the existing uses on site or the planning application submitted under Ground (a).

1.2 Structure of Report

1.2.1 Chapter 2 describes the site in terms of its location and existing uses.

1.2.2 Chapter 3 summarises the comments raised by the LHA and provides responses to each comment.

1.2.3 Chapter 4 provides details on the local road network. It also analyses accidents that may have been reported in the vicinity of the site.

1.2.4 Chapter 5 describes site's accessibility by non-car modes of transport.

1.2.5 Chapter 6 outlines details of the proposed development.

1.2.6 Chapter 7 sets out the trip generation methodology and traffic impact of the proposed development; and Chapter 8 concludes the report.

2 LHA'S COMMENTS WITHIN ENFORCEMENT NOTICE

2.1 Responses on Local Highway Authority's Comments

2.1.1 Leicestershire County Council (LCC) as Local Highway Authority (LHA) has provided its comments within Enforcement Notice, as follows:

LHA Comment 1:

> ***Mill Lane is a private and unadopted road therefore the LHA would only specifically be interested in the site access to and from the adopted highway which would be from Fosse Way which is an adopted classified road subject to a 30mph speed limit.***

Response to LHA Comment 1:

2.1.2 It is robustly demonstrated in Chapter 4 of this TA that Fosse Way/Mill Lane junction can achieve the visibility splays in accordance with the 85th percentile speeds along Fosse Way, as prescribed within Manual for Streets.

2.1.3 Even though Mill Lane is private and unadopted road, Chapter 4 demonstrates that it exhibits a low speed, low traffic nature and has a number of passing places with adequate forward visibilities.

LHA Comment 2:

> ***The access from Fosse Way measures to be more than 8.0m which narrows as entering Mill Lane. The access geometry should be accordance to Figure DG20 of Part 3 of the LHDG and the LHA believe the access may be substandard in accordance with this guidance.***

Response to LHA Comment 2:

2.1.4 Chapter 7 of this TA demonstrates that the proposals including Ground (a) appeal generate significantly less traffic by all modes when compared to the lawful (permitted) industrial use.

2.1.5 Fosse Way/Mill Lane junction is an established junction, with no accident records (see Chapter 4, Section 4.6). It is therefore considered that the junction is safe and suitable for the existing uses on the site

2.1.6 As there will be no intensification of use, LHA's indirect request to improve the width/geometry of an established junction which has no collision records does not meet the planning obligation tests.

LHA Comment 3:

From an assessment, visibility south of the site is restricted, the LHA would therefore have concerns regarding the potential intensification of use of a substandard access in both visibility and access width.

Response to LHA Comment 3:

2.1.7 Chapter 7 of this TA demonstrates that there will be unequivocally no intensification of use. In fact, given that the use of Plot 102, 104, 105, and 106 will cease, which will result in a significant reduction in trip generation when compared to the lawful industrial use of the site. Therefore, the LHA's comment relating to Fosse Way/Mill Lane junction bears no relevance to this planning application.

LHA Comment 4:

In future observations on a planning application the LHA would be commenting on the following details:

- ***Ensuring that the access and carriageway widths are appropriate for the proposed usage of the site;***
- ***Requesting that the proposed access meets the highway at a perpendicular angle;***
- ***Ensuring that visibility is achievable in accordance with 85th percentile speeds along Fosse Way;***
- ***Minimising the number of access points on to the highway; and,***
- ***Requiring hardbound surfacing for a distance, dependent upon site usage, to prevent debris on the highway.***

Response to LHA Comment 4:

2.1.8 Chapter 7 of this TA demonstrates that there will be unequivocally no intensification of use. In fact, given that the use of Plot 102, 104, 105, and 106 will cease, which will result in a significant reduction in trip generation when compared to the lawful industrial use of the site. Therefore, the LHA's comment relating to Fosse Way/Mill Lane junction bears no relevance to this planning application.

LHA Comment 5:

To enable the LHA to further consider the proposals, the LHA would request the detail in respect of trip generation. The level of trips the site presently generates under its current lawfully permitted use and the trip generation for the proposed development.

Response to LHA Comment 5:

2.1.9 The trip generation associated with the lawful industrial use has been undertaken using TRICS database in Chapter 7. People trips are obtained using the TRICS trip rates and applied to the 2011 Census dataset to obtain trips by all modes. This methodology has been accepted by Leicestershire County Council on a number of recent planning applications (including a large scale industrial development in Loughborough, which Magna Transport Planning were the highway consultants for. This application has been recommended for approval by the LHA).

2.1.10 The trip generation associated with the Existing Uses has been obtained using traffic surveys at the site, as described in Chapter 3 (Section 3.2). Obtaining trip generation using the traffic surveys is the most accurate and site-specific method.

LHA Comment 6:

> ***The Applicant should also include information in respect of the number of trips likely to be undertaken by certain vehicle types, i.e. large vehicle transporter type vehicles.***

Response to LHA Comment 6:

2.1.11 The traffic surveys record all vehicle types. This is discussed in Chapter 3 in more detail. The site does not generate any OGV2 trips; the main reason being the existing height restriction on Mill Lane enforced by a railway bridge with a vertical clearance of approximately 3.35 metres.

LHA Comment 7:

> ***Parking provision should be in accordance to Highway Requirement for Development (HRfD) (Part 4) available at;***
> ***ttps://resources.leicestershire.gov.uk/sites/resource/files/field/pdf/faq/2019/2/13/Highway-requirements-for-development-part-4-parkingstandards%20Refer-to-part3-sectionDG14-first.pdf in accordance to the most appropriate Use Class. Noting the proximity of the development site from the public highway, it is unlikely that any shortfall (if any) would overspill onto the public highway. Again, noting the site specific location, the site would be able to accommodate for a turning facility to enable all vehicles to enter and exit in a forward direction.***

Response to LHA Comment 7:

2.1.12 The LHA's observation that it is unlikely that the development will not result in any overspill onto the public highway and that the site can accommodate turning facility for all vehicles is correct. There is no further requirement to demonstrate the suitability of the on-site parking or turning provision.

2.2 Responses to Rights of Way Officer's Comments

RoW Officer's Comment 1:

> ***Based on the Definitive Map showing the route of Footpath I56 whilst it is noted that to access the southern end of the Footpath pedestrians must use the railway underbridge alongside any traffic the path is well used and forms part of a popular circuit from Syston. There is no footway through the underbridge and no place to step out of the way of vehicular traffic. Although the tunnel is short, when entering from the south there is a limited view of on-coming traffic due to the bend in the road. Therefore, the LHA would have concerns about any increase in the level of traffic using the lane as a possible result of the proposed development.***

Response to RoW Officer Commen1:

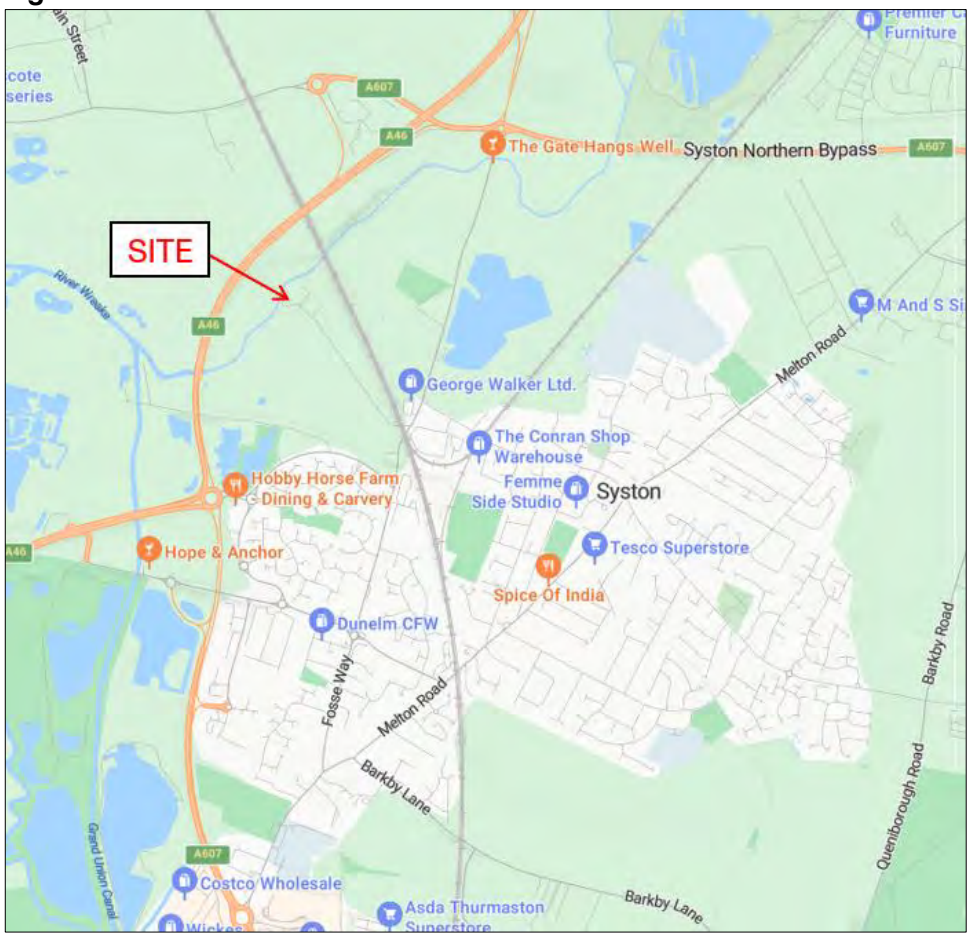
2.2.1 This TA demonstrates that the Existing Uses will not give rise to any increase in traffic over and above what is permitted under lawful industrial use. Therefore, the impact of the Existing Uses on pedestrian movements will not be any greater than what is permitted under lawful industrial use.

3 THE SITE

3.1 Site Description

3.1.1 The application site is located on the northwest of Syston, in the Syston West ward of Charnwood Local Authority. The site location in its wider context is shown in Figure 3A.

Figure 3A Site Location in Wider Context



3.1.2 The site is bound by River Wreake to the northwest, railway line to the northeast, an industrial development to the immediate southeast and fields to the southwest.

3.1.3 The site is divided into two parts by the River Wreake subsidiary watercourse – northern and southwestern parts.

3.1.4 The site location in its local context is shown in Figure 3B.

Figure 3B Site Location in Local Context

3.1.5 The Appellant has provided a record of each of the business units on the site and these are displayed on the plan in Figure 3C.

Figure 3C Building/Plot Numberings

Northern Part of Site

3.1.6 The northern part of the site comprises former Syston Mill, with a range of industrial, warehouse and office buildings with a total floor area of approximately 36,436 sqft (or 3,385 sqm).

3.1.7 The floor areas are listed in Table 3A.

Table 3A Existing Buildings on Northern Part of Site

Unit	Current Use	Floor Area (sqft)
7	Car Repair Workshop	1,300
7A	Car Repair Workshop	1,300
20	Previous occupied by County Roofing (Vacant)	950
A, C and Lean	Occupied by Green Goblin Garage LTD who repair motor vehicles	3,700
B1	Car Repair and Maintenance Workshop (Vacant)	2,260
B2	Car Repair and Maintenance Workshop	1,643
E1	Car Repair and Maintenance Workshop	1,382
E2	Car Repair and Maintenance Workshop (Vacant)	1,591
D	Car Repair and Maintenance Workshop	5,234
10	Offices	1,500
16	Previously occupied by SMC Site Services (Vacant)	1,500
17	Car Repair and Maintenance Workshop (Approx. 65% vacant)	10,000
22	Car Repair and Maintenance Workshop	2,957
18	Car Repair and Maintenance Workshop	1,119
Total		**36,436**

3.1.8 Table 3A shows that the combined floor area of all the existing buildings on the northern part of the site is approximately 36,436 sqm (or 3,385 sqm). It is noted that approximately 1,178 sqm floor area is currently vacant, with the remaining approximately 2,207 sqm occupied by the 'Existing Uses'.

3.1.9 The existing buildings form an industrial complex and the planning permission P/00/02521/2 refers the site as *'industrial, warehouse and office premises'*. Furthermore, the Case Officer's site visit notes in relation to the planning permission P/00/02521/2 also confirms that the site *"been used for industrial purposes for many years"*. As such, the prevailing use class of the northern part of the site is Use Class B2, Use Class B8 and Use Class E(g)(i) and Use Class E(g)(iii).

3.1.10 In accordance with the TRICS guidelines, the northern part of the site is defined as an "industrial estate.

3.1.11 In addition to the above, the northern part of the site also includes an area of hardstanding (Plot 107), which is associated with the use of the ground floor of Unit 22 ("We Sell Any Vans"). The land is used for the storage and sale of vehicles.

Southwestern Part of Site

3.1.12 The southwestern part of the site includes areas of hardstanding use, currently used for the vehicle storage and car sales. The floor areas of the each of the plots and their current use is provided in Table 3B.

Table 3B Existing Plots on Southwestern Part of Site

Plot	Current Use	Floor Area (sqft)
101	Land in use as parking area by Wealth Property Limited.	9,515
102	Land in use as car storage and selling/display of motor vehicles by Nippon Autos Ltd	17,448
103A	Land in use as car storage and selling/display of motor vehicles by Syston Autos	9,515
103B	Land in use as car storage and selling/display of motor vehicles by Syston Autos	9,928
104	Land in use as selling and/or display of motor vehicles by Bogden Fehrer Ltd	11,568
105	Land in use as selling and/or display of motor vehicles by Bogden Fehrer Ltd	13,606
106	Land in use as hardstanding by Bogden Fehrer Ltd	5,748
Total		**77,328**

3.1.13 Table 3B shows that the southwestern part of the site comprises six plots encompassing a total area of approximately 77,328 sqft (or 7,184 sqm).

3.1.14 Plot 101 has been known to be in use as a parking area since the 1980's with hardstanding in place at least since 2006. This plot is therefore immune from planning enforcement due to its use being as car parking has persisted for over 10 years

3.1.15 Under the Ground (a) appeal, it is considered that planning permission should be granted for Parcel 103A (9,515 sqft or 884 sqm) and 103B (9,928 sqft or 922 sqm) for parking/storage of vehicles.

3.2 Current Traffic Situation on Site

3.2.1 Magna Transport Planning instructed R D Services Ltd to undertake traffic counts at the site. The traffic at both parts of the site (northern and southwestern parts) was including in this traffic count survey. The survey was undertaken on 4th December 2024 (Wednesday) during 07:00 – 10:00 hours and 15:00 – 19:00 hours.

3.2.2 The survey data is provided in Appendix 1.1, and the results are summarised in Table 3C.

Table 3C Existing Uses – Traffic Survey Results [Two-way]

	Northern Part of Site				Southwestern Part of Site				Combined Existing Site			
	Peds	Cars	LGVs	OGV1	Peds	Cars	LGVs	OGV1	Peds	Cars	LGVs	OGV1
07:00-08:00	2	0	0	0	2	9	7	0	4	9	7	0
08:00-09:00	0	1	0	0	0	6	0	0	0	7	0	0
09:00-10:00	4	6	3	2	0	3	0	0	4	9	3	2
15:00-16:00	5	4	0	0	0	11	0	0	5	15	0	0
16:00-17:00	1	4	1	1	0	14	7	0	1	18	8	1
17:00-18:00	0	2	0	1	0	4	1	0	0	6	1	1
18:00-19:00	0	5	1	0	0	7	1	0	0	12	2	0

Note: Peds = Pedestrians, Vehs = Vehicles

3.2.3 The traffic data in Table 3C represents the trip generation with the Existing Uses of the site.

3.2.4 The survey showed that there no cyclists or OGV2 (other goods vehicles with four of more axles and articulated vehicles) recorded.

3.2.5 As demonstrated in Chapter 3 (Section 3.5) of this report, the local road network peak hours are 08:00 – 09:00 (AM peak hour) and 16:00 – 17:00 (PM peak hour).

3.2.6 The combined vehicular trip generation associated with the existing use in the peak hours is as follows:

AM Peak Hour

- Cars = 7 two-way trips
- LGVs = 0 trips
- OGV1 = 0 trips
- **Total = 7 two-way vehicular trips**

PM Peak Hour

- Cars = 18 two-way trips
- LGVs = 8 two-way trips
- OGV1 = 1 trip
- **Total = 27 two-way vehicular trips**

3.2.7 These trips relates to the floor area that is currently occupied i.e., 2,207 sqm plus Plot 107, which is associated with the Ground Floor of Unit 22 and is used for vehicular storage and sales; as well as Plots 101 to 106 on the southwestern part of the site.

4 LOCAL ROAD NETWORK

4.1 Fosse Way

4.1.1 The site gains access from Fosse Way, via Mill Lane. Fosse Way is an adopted public highway, maintained by Leicestershire County Council. Mill Lane is a private unadopted road. The Applicant has right of access over Mill Lane.

4.1.2 Fosse Way is subject to a 30 mph speed limit, and benefits from street lighting and footway provision. It has a carriageway of 6.7 metres width.

4.1.3 Fosse Way/Mill Lane junction is located at approximately 30 metres north of the railway bridge. This junction is in the form of a wide bellmouth, with Mill Lane approach being approximately 18 metres wide at the entrance.

4.2 Visibility Splays at Fosse Way/Mill Lane Junction

4.2.1 Magna Transport Planning instructed R D Services to undertake speed surveys on Fosse Way using automatic traffic counters (ATC). ATCs were placed on either side of the junction with Mill Lane in locations away from the railway bridge so that the actual speeds are not influenced by the bridge (i.e., motorists are likely to slow down as they come in close proximity to the bridge).

4.2.2 The ATC surveys were undertaken for a period of one week, commencing 29th November 2024. The ATC data is provided in Appendix 1.2.

4.2.3 The recorded 85th percentile speeds were as follows:

- Northbound = 32.8 mph
- Southbound = 30.9 mph

4.2.4 The speed surveys demonstrate that the actual speeds are within the acceptable range for the road with a 30 mph speed limit.

4.2.5 In relation to the visibility splays, the LCC's Highway Design Guide Table DG4 (item f) states that:

We will accept calculated values for actual agreed 85th percentile speeds

4.2.6 The visibility splays in the TA have therefore been calculated using the formula prescribed within the Manual for Streets (MfS):

$SSD = vt + v^2/2d$
where:
v = speed (m/s)
t = driver perception–reaction time (seconds)
d = deceleration (m/s^2)

4.2.7 Where the recorded 85th percentile speeds are at or below 37mph (i.e., 60kph), reaction time of 1.5 seconds and deceleration rate of 4.41 m/s^2 has been used. This methodology accords with Manual for Streets and has been accepted by the LHA in the recent planning application for a major industrial development in Loughborough.

4.2.8 Furthermore, the ATCs show that the HGVs on Fosse Way account for less than 1% of the total traffic and HGVs on Mill Lane account for less than 5% of the total traffic.

4.2.9 Based on the above parameters, the visibility splays at Fosse Way/Mill Lane junction have been calculated as follows:

- To the north = 2.4 metres x 47 metres
- To the south = 2.4 metres x 52 metres

4.2.10 An assessment of Fosse Way/Mill Lane junction shows that the junction achieves these splays, as shown in Drawing 24-527-SK01, in Appendix 2.

4.3 Mill Lane

4.3.1 At approximately 20 metres west of the junction with Fosse Way, Mill Lane crosses the railway bridge. Here, the carriageway of Mill Lane is reduced to 3.8 metres in width. The railway bridge has a height restriction of 11 feet (or 3.35 metres). Therefore, the vehicles of more than 3.35 metres in height cannot pass under the bridge along Mill Lane.

4.3.2 Past the railway bridge, there is a localised road widening on Mill Lane, which provides passing place, with clear forward visibility onto the junction (and vice versa from the junction) thus accommodating two-way traffic at the narrow width under the railway bridge safely, as shown in Figure 4A.

Figure 4A Forward Visibility along Mill Lane adjacent to Fosse Way

4.3.3 The width of Mill Lane from this point onwards in the direction of the site is approximately 3.8 metres. There is signage on Mill Lane advising motorists of the 20 mph speed limit. As such, a speed survey on Mill Lane (50 metres west of the railway bridge) was undertaken for a period of one week, commencing 29th November 2024. This showed the actual vehicular speeds on Mill Lane are less than 20 mph.

4.3.4 There are three further passing places on Mill Lane. Given the relatively straight alignment of Mill Lane, the forward visibility between these passing places is good, as shown in Drawing 24-527-SK03, in Appendix 3.

4.3.5 The ATC survey on Mill Lane also shows that on an average weekday, there were 269 two-way vehicular movements recorded, with a maximum of 38 two-way vehicular trips recorded in one hour.

4.3.6 This shows that Mill Lane exhibits low speed low traffic environment, which is conducive to walking and cycling.

4.4 Manoeuvrability at Fosse Way/Mill Lane Junction

4.4.1 As stated previously, the Mill Lane entrance to Fosse Way is approximately 18 metres wide at the bellmouth. This narrows to 3.8 metres as Mill Lane passes under the railway bridge, at a distance of 20 metres from the junction with Fosse Way.

4.4.2 This junction geometry creates a wide apron at the approach for a vehicle that is exiting Mill Lane onto Fosse Way to wait as it gives way to the traffic on Fosse Way and another vehicle to enter at the same time. This is further alleviated due to low trafficked nature of Mill Lane.

4.4.3 The safe junction operation is evident through the visibility splay drawing and the fact there has been no collision reported at this junction during the latest available five-year period.

4.4.4 Out of the total vehicular trips recorded at the existing site (as per Chapter 3 and Appendix 1.1 of this report), approximately 77% were cars, 19% were LGVs (light goods vehicles less than 3.5T) and only 4% were OGV1 (other goods vehicles less with three or less axles).

4.4.5 As such, the development generates mainly cars and LGVs trips, with limited number of OGV1s trips (i.e., no more than five inbound/outbound OGV1 on an average day). The development does not attract OGV2s. Hence, it is appropriate and commensurate to the type of the development to review the Fosse Way/Mill Lane junction against cars and LGVs. The swept path of car and LGV at the Fosse Way/Mill Lane junction has been undertaken. This is provided in Drawing 24-527-TR01, in Appendix 4. This demonstrates that the largest vehicle that can pass the railway bridge on Mill Lane is able to safely turn in / out of Fosse Way without any cause of concern.

4.4.6 Noting the height restriction on Mill Lane at the railway bridge of 3.35 metres, an appropriate OGV1 and car have also been tracked at the Fosse Way/Mill Lane junction. This is provided in Drawing 24-527-TR02, in Appendix 4.

4.4.7 The swept path analysis shows that Fosse Way/Mill Lane junction allows a vehicle to enter and exit at the same time. The traffic survey of this junction showed that at any given time, no more than one vehicle was waiting on Mill Lane approach to exit onto Fosse Way. Therefore, there is always sufficient space for another vehicle to enter Mill Lane from Fosse Way at the same time.

4.4.8 It is also demonstrated that Mill Lane is able to safely accommodate the vehicular and pedestrian movements safely due to its low speed low traffic nature and the provision of adequate passing places.

4.5 Traffic Survey at Fosse Way/Mill Lane Junction

4.5.1 Magna Transport Planning instructed R D Services to undertake turning movement count survey at Fosse Way/Mill Lane junction on 4th December 2024. The survey data is provided in Appendix 1.3.

4.5.2 The survey results are summarised in Table 4B.

Table 4B Fosse Way/Mill Lane Junction – Junction Throughput

	Fosse Way (North)	Fosse Way (South)	Mill lane	Throughput
07:00-08:00	397	347	17	761
08:00-09:00	464	426	6	896
09:00-10:00	324	278	7	609
15:00-16:00	446	457	8	911
16:00-17:00	519	464	32	1015
17:00-18:00	436	381	8	825
18:00-19:00	341	297	10	648

4.5.3 Table 4B shows that the local road network peak hours are as follows:

- AM peak hour = 08:00 – 09:00
- PM peak hour = 16:00 – 17:00

4.5.4 A queue length survey was also undertaken at this junction. The survey shows that during the road network peak hours, there was no more than one vehicle queueing on Mill Lane approach to the junction.

4.5.5 There were no vehicles waiting on Fosse Way to turn right into Mill Lane in AM peak hour. In the PM peak hour, there were a maximum of only two vehicles waiting on Fosse Way as they gave way to oncoming traffic before entering Mill Lane.

4.5.6 Overall, the junction does not appear to suffer from any congestion during peak hours.

4.6 Accident Analysis

4.6.1 The personal injury collision (PIC) data was obtained from LCC for the latest available five-year period (January 2019 – September 2024). The extant of the search included the entirety of Mill Lane, along with section of Fosse Way for approximately 200 metres in both directions from Mill Lane junction.

4.6.2 The accident search revealed that:

- No collisions were reported on Mill Lane
- No collisions were reported on Fosse Way/Mill Lane junction
- One slight collision was reported on Fosse Way junction with Glebe Way involving a goods vehicle exiting Glebe Way (turning right onto Fosse Way) and a cyclist travelling on Fosse Way in northbound direction.

4.6.3 The collision report is provided in Appendix 5.

4.6.4 The collision reported on Fosse Way/Glebe Way junction cannot be related to the site traffic because it was caused by a vehicle exiting Glebe Way and travelling in southbound direction on Fosse Way.

4.6.5 Although all PICs are regrettable, given the low volume and frequency of collision history and a reduction in trips associated with the proposed ground (a) appeal, there is no indication that the development would change or worsen the existing safe conditions.

5 ACCESSIBILITY BY NON-CAR MODES OF TRANSPORT

5.1 Pedestrians and Cyclists

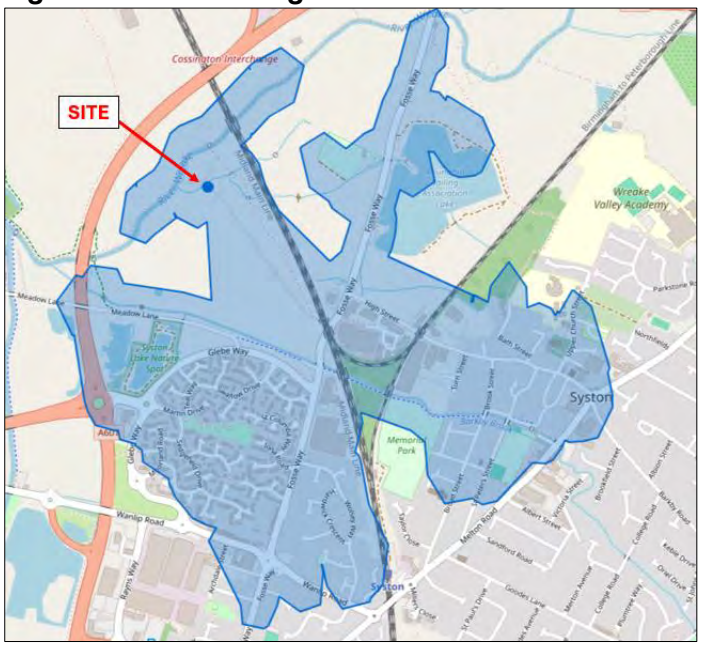
5.1.1 Whilst it is acknowledged that Mill Lane lacks footways, it is evident through the traffic surveys at the existing site that there were a total 14 pedestrian movements in total recorded during the entire survey period. This demonstrates that the staff/visitors to the existing site find it safe to walk along Mill Lane.

5.1.2 The reasons for this are:

- Low speed low traffic nature of Mill Lane (i.e., less than 20 mph and a maximum of 38 two-way vehicular movements per hour)
- Adequate passing places with good forward visibility along Mill Lane
- Less than 4% OGV1s and zero OGV2s

5.1.3 Chartered Institute of Highways and Transportation's (CIHT) "Planning for Walking" document states that majority of the journeys within one mile (1.6 kilometres) are made wholly on foot. A walking distance of 1.6 kilometres is therefore considered as an 'acceptable' walking distance. The walking isochrone is shown in Figure 5A.

Figure 5A Walking Isochrone



5.1.4 Figure 5A shows that the northwestern residential area of Syston and area along High Street are within the acceptable walking distance from the site.

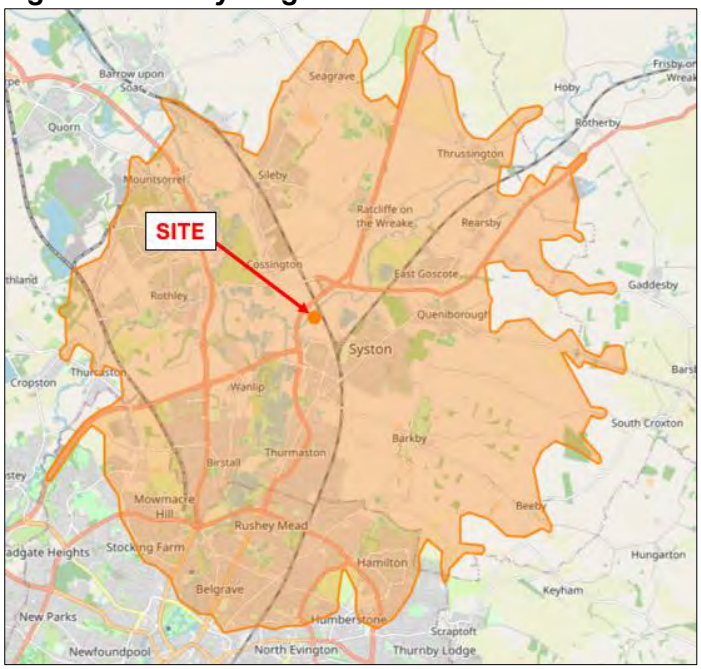
5.1.5 Therefore, staff living in these areas could walk to the work. To the south of the Fosse Way/Mill Lane junction, there are footways on both sides of Fosse Way which provide a convenient pedestrian access to the residential area located along Glebe Way. There is a pedestrian crossing facility on Fosse Way, approximately 50 metres north of Glebe Way junction.

5.1.6 To the north of Fosse Way/Mill Lane junction, there is a footway on the eastern side of Fosse Way. This footway continues northwards and along High Street, thus offering a continuous pedestrian access into the area along High Street which is located within the acceptable walking distance.

5.1.7 The footway on Fosse Way continues northwards providing access to the bus stops on Fosse Way, located at a walking distance of 650 metres (southbound bus stop) and 800 metres (northbound bus stop) from the site.

5.1.8 CIHT's "Planning for Cycling" (October 2014) states that majority of cycling trips are for short distance with 80% being less than five miles (or eight kilometres). The cycling isochrone is shown in Figure 5B.

Figure 5B Cycling Isochrone



5.1.9 Figure 5B shows that entirety of Syston, and the nearby areas of Mountsorrel, Sileby, East Goscote, Thurmaston and northern parts of Leicester such as Belgrave are located within acceptable cycling distance from the site. Thus, cycling represents a realistic mode of transport to staff and visitors to the site living in these areas.

5.1.10 A plan showing the cycle network is shown in Figure 5C.

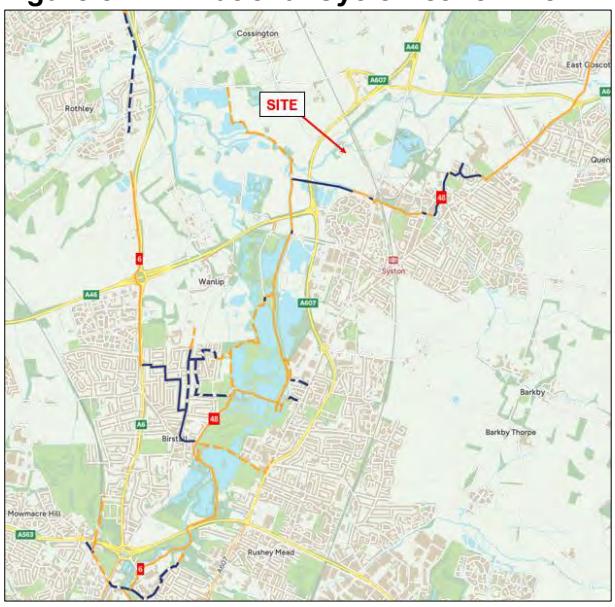
Figure 5C Local Cycle Network

5.1.11 Figure 5C shows that National Cycle Network (NCN) 48 crosses Fosse Way at approximately 170 metres south of the junction with Mill Lane. NCN 48 provides cycle link through Syston to the areas of East Goscote, Rearsby and beyond to the north.

5.1.12 There are a network of on-road and quieter roads to the south of the site that offer cycle connections to the areas to the south of the site including Thurmaston and Barkby.

5.1.13 A further review of NCN 48 via SUSTRANS website has been undertaken. This is shown in Figure 5D.

Figure 5D National Cycle Network 48



5.1.14 Figure 5D shows that NCN 48 runs along Grand Union Canal to the south of the site and provides a traffic-free route to the areas of Birstall and Belgrave via NCN 6.

5.1.15 As such, given the site location, existing cycle infrastructure is considered to good and conducive to encouraging staff to cycle to work; especially those who are living in Syston, and neighbouring areas.

5.2 Public Transport

Buses

5.2.1 There are bus stops located on Fosse Way. The southbound bus stop is located adjacent to the junction with Mill Lane, within a walking distance of 630 metres (or nine-minute walk) from the site. The northbound bus stop is located at a walking distance of 780 metres (or 10-minute walk) from the site.

5.2.2 The southbound bus stop is served by Route No. 100 which runs between Syston to Melton Mowbray via Great Dalby, Twyford, Ashby Folville, South Croxton and Barkby. This service five services per day from Monday to Saturday. The northbound bus stop on Fosse Way is served by Route No. 27 which provides access to Loughborough. This service runs only once a day.

Rail

5.2.3 Syston Railway Station is located at approximately two kilometres south of the site i.e., at 27-minute walk or eight-minute cycle ride from the site. All services at Syston are operated by East Midlands Railway. The typical off-peak service in trains per hour is:

- 1 train per hour to Leicester
- 1 train per hour to Lincoln via Nottingham of which 1 train per 2 hours continues to Grimsby Town of which 2 trains per day are extended to Cleethorpes

5.2.4 As such, the existing public transport infrastructure is considered to be adequate and could provide a realistic alternative to private car use to some staff and visitors.

6 PROPOSED DEVELOPMENT

6.1 The Proposal

6.1.1 The site comprises a number of businesses and it is the appellant's case that these uses are permitted by planning permission reference P/00-02521/2 dated 16th January 2001 and/or that some of the uses/operations have persisted for more than 10 years and/or that planning permission should be granted if required.

6.2 Access Arrangements

6.2.1 It is robustly demonstrated in Chapter 2 of this report that the junction meets the necessary highway safety standards prescribed within MfS, in terms of the visibility splays (in accordance with the 85th percentile speeds along Fosse Way).

6.2.2 The ground (a) appeal will result in a reduction of uses on the site with the use of Parcels 102, 104, 105 and 106 ceasing and the land will be reinstated in accordance with the requirements in the Enforcement Notice. The existing uses on site will not be intensified and it has been shown within this TA that the uses do not impact the existing highway; and accordingly, there is no requirement for any amendments to Fosse Way/Mill Lane junction.

6.3 Car Parking and Servicing

6.3.1 LCC's Highways' comments within the Enforcement Notice (page 28) on 'parking and turning' are as follows:

> ***Noting the proximity of the development site from the public highway, it is unlikely that any shortfall (if any) would overspill onto the public highway. Again, noting the site specific location, the site would be able to accommodate for a turning facility to enable all vehicles to enter and exit in a forward direction.***

6.3.2 LCC Highways agree that the parking provision is unlikely to result in an overspill onto the public highway and that there is sufficient capacity on site to accommodate the turning of all vehicles. As such, no changes are proposed to the existing car parking and turning arrangements.

6.4 Cycle Parking Provision

6.4.1 LCC's Highway Design Guide (LHDG) (2022 Interim) (Part 3 Design Guidance Interim) states that the industrial developments should be provided with a minimum of one cycle parking space per 400 sqm.

6.4.2 It is proposed to provide 20 cycle parking spaces on site, in the form of 10 Sheffield stands across two cycle stores; of which one could be provided within the northern part of the site and the other within the southwestern part of the site.

6.4.3 The preliminary location of these cycle stores is shown in Drawing 24-527-SK04, provided in Appendix 6. A detailed design/siting of the cycle stores could be secured via an appropriately worded condition.

7 TRAFFIC IMPACT ASSESSMENT

7.1 Introduction

7.1.1 NPPF (2024) states that development should only be prevented or refused on highways grounds if the *residual* cumulative impacts on the road network is severe.

7.1.2 In order to calculate the residual impact of the retrospectively proposed development, two scenarios would need to be tested:

- Scenario A: Trip generation of the development if occupied only by lawful industrial use
- Scenario B: Trip generation of the Existing Uses permitted by planning permission reference P/00-02521/2 dated 16th January 2001 and/or that some of the uses/operations have persisted for more than 10 years and/or that planning permission should be granted if required

7.1.3 Scenario A is provided in the following Section 7.2.

7.1.4 Scenario B is provided in the Section 7.3.

7.2 Lawful Use – Trip Generation

7.2.1 As stated previously, the existing buildings in the northern part of the site form an industrial complex and the planning permission P/00/02521/2 refers to the site as 'industrial, warehouse and office premises'.

7.2.2 In accordance with the TRICS guidelines, the northern part of the site is defined as an 'Industrial Estate'.

7.2.3 Hence, the combined floor area associated with the units in the northern part of the site only (i.e., 3,385 sqm) are considered in this scenario.

7.2.4 In order to estimate trip generation associated with the lawful use, the following criteria within TRICS v7.11.3 database have been used to calculate trip rates:

- Main Land Use – Employment
- Sub-land Use – Industrial Estate
- Regions – England (excl London), Wales and Scotland
- Location – Edge of Town
- Sites with floor areas between 1,000 and 6,000 sqm

7.2.5 TRICS report is provided in Appendix 7. The following methodology has been used to obtain trip generation associated with all modes:

- TRICS database used to calculate people trips
- 2011 Census dataset used to obtain travel mode split which is then applied to the people trips (calculated from TRICS) to obtain trips from all modes

7.2.6 The 2021 Census currently does not provide Origin-Destination Travel to Work information by choosing specific place of work and place of residence. Also, this Census took place during COVID pandemic, when many peoples' work was affected as it was during a phase when a 'stay at home' order was in force. The census aimed to gather data about what people were doing at that time, rather than what they may have been doing had the pandemic not occurred. The results are therefore likely to be skewed and hence the 2021 Census has not been used.

People Trip Generation

7.2.7 The people trip generation associated with the floor area of 3,385 sqm of industrial use during local road network peak hours (i.e., 08:00-09:00 and 16:00-17:00) is summarised in Table 7A.

Table 7A Lawful Industrial Use - Trip Generation – Person Trips

Mode	Hour	Trip Rates		Trips (3,385 sqm)		
		In	Out	In	Out	In
All People	08:00-09:00	0.886	0.611	30	21	51
	16:00-17:00	0.753	1.020	25	35	60

7.2.8 Table 7A shows that the lawful industrial use with a total floor area of 3,385 sqm has a potential to generate 51 and 60 two-way people trips during the network AM and PM peak hours respectively.

Mode Split

7.2.9 The 2011 Census dataset - ***WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)*** has been used, with Super Output Area (SOA) E02005361: Charnwood 017 chosen as 'place of work', given that the application site is located within this SOA.

7.2.10 This dataset provides information on mode of transport used by people working within SOA E02005346. This is provided in Table 7B.

Table 7B Method of Travel to Work

Modes	% Split
Driving in a car/ van	74%
Passenger in a car/van	7%
Bicycle	3%
On Foot	10%
Train	1%
Bus	5%
Total	**100%**

7.2.11 Table 7B shows 74% of people (working within SOA E02005361) drive to work, 7% are passengers in the cars/vans, 3% travel by bike, 10% on foot and 6% use public transport (train/bus/).

7.2.12 The mode splits from Table 7B are applied to the person trips in Table 7A to obtain trip generation by each mode. This is provided in Table 7C.

Table 7C Lawful Industrial Use - Trip Generation – All Modes [3,385 sqm]

	AM Peak Hour			PM Peak Hour		
Modes	**In**	**Out**	**Two-way**	**In**	**Out**	**Two-way**
Driving in a car/ van	22	16	38	18	26	44
Passenger in a car/van	2	1	3	2	2	4
Bicycle	1	1	2	1	1	2
On Foot	3	2	5	3	4	7
Train	0	0	0	0	0	0
Bus	2	1	3	1	2	3
Total	**30**	**21**	**51**	**25**	**35**	**60**

7.2.13 Table 7C shows that the lawful use of the site with an industrial floor area of 3,385 sqm has a potential to generate a maximum of 44 two-way vehicular trips, two two-way cycle trips, seven two-way pedestrian trips and three two-way public transport trips during the peak hours.

7.2.14 A further close inspection of the sites within TRICS database demonstrates that, of the total vehicular trips generated in the peak hours, 20 two-way trips in the AM peak hour and 12 two-way trips in the PM peak hour are made in LGVs; and two two-way trips in the AM and PM peak hours are made in OGVs (in this case OGV1s). Therefore, the overall vehicular trip generation associated with the lawful industrial use in the peak hours is as follows:

AM Peak Hour

- Cars = 16 two-way trips
- LGVs = 20 two-way trips
- OGV1 = 2 two-way trips

- **Total = 38 two-way vehicular trips**

PM Peak Hour

- Cars = 30 two-way trips
- LGVs = 12 two-way trips
- OGV1 = 2 two-way trips
- **Total = 44 two-way vehicular trips**

7.3 Proposed Development – Trip Generation

Existing Site Trip Generation

7.3.1 The traffic situation at the existing site discussed in Chapter 3 (Section 3.2) of this TA includes trip generation associated with the occupied floor area of approximately 2,207 sqm in the northern part of the site and the site are of approximately 7,184 sqm (Plots 101 to 106) in the southwestern part of the site. For completeness, the traffic survey data is reiterated in Table 7D.

Table 7D Existing Uses – Traffic Survey Results [Two-way]

	Northern Part of Site				Southwestern Part of Site				Combined Existing Site			
	Peds	Cars	LGVs	OGV1	Peds	Cars	LGVs	OGV1	Peds	Cars	LGVs	OGV1
07:00-08:00	2	0	0	0	2	9	7	0	4	9	7	0
08:00-09:00	0	1	0	0	0	6	0	0	0	7	0	0
09:00-10:00	4	6	3	2	0	3	0	0	4	9	3	2
15:00-16:00	5	4	0	0	0	11	0	0	5	15	0	0
16:00-17:00	1	4	1	1	0	14	7	0	1	18	8	1
17:00-18:00	0	2	0	1	0	4	1	0	0	6	1	1
18:00-19:00	0	5	1	0	0	7	1	0	0	12	2	0

7.3.2 The northern part of the site has approximately 1,178 sqm of floor area vacant.

7.3.3 Plot 101 (approx. 884 sqm) is immune to the planning enforcement because its operation as car parking has persisted for over 10 years.

7.3.4 The existing use of Plots 102, 104, 105 and 106 will cease, and the land will be reinstated in accordance with the requirements in the Enforcement Notice.

7.3.5 As the hardstanding has been proven to be lawful, the Appellant seeks planning permission for the use of Plot 103A (approx. 884 sqm) and Plot 103B (approx. 922 sqm) for the parking/storage of vehicles.

7.3.6 In order to estimate the trip generation associated with the proposed situation, following steps are undertaken:

- Step 1: discounting trips associated with Plots 102, 104, 105 and 106 because the existing use of these plots will cease
- Step 2: Pro-rata'ing the existing trips associated with the northern part of the site to take into account any vacant floor space for robustness
- Step 3: Combining Steps 1 and 2 to obtain the total trip generation associated with the proposed development

Step 1: *Discounting Trips Associated within Plots 102, 104, 105 and 106*

7.3.7 A total site area of 884 sqm (Plot 101) + 884 sqm (Plot 103A) + 922 sqm (part of Plot 103B) = 2,690 sqm of the total 7,184 sqm (37%) will remain in its current use in the proposed development scenario. The use of the remaining 7,184 minus 2,690 = 4,494sqm of site area (63%) will cease.

7.3.8 Applying a reduction factor of 0.63 (63%) to the traffic data associated with the southwestern part of the site (shown in Table 7D) gives the amount of traffic that will continue to occur from this part of the site in the proposed development scenario. This is provided in Table 7E.

Table 7E Traffic associated with Southwestern Part of the Site that will Continue to Operate under Ground (a) [Two-way]

	Southwestern Part of Site (applying 63% reduction)			
	Peds	Cars	LGVs	OGV1
07:00-08:00	1	3	3	0
08:00-09:00	0	2	0	0
09:00-10:00	0	1	0	0
15:00-16:00	0	4	0	0
16:00-17:00	0	5	3	0
17:00-18:00	0	1	0	0
18:00-19:00	0	3	0	0

Step 2: *Accounting for Units with Vacant Floor Space in Northern Part of Site*

7.3.9 The traffic data for the northern part of the site in Table 3D is associated with the occupied 2,207 sqm. As noted previously, approximately 1,178 sqm of floor area in the units located in the northern part of the site is vacant.

7.3.10 The traffic data for the northern part of the site in Table 7D is pro-rata'd up proportionally to obtain traffic data associated with the total combined floor area associated with the units in the northern part of the site of 3,385 sqm (to represent scenario whereby all floor space within the units in the northern part of the site is occupied) by applying a factor of 1.53 (which is derived as 3385 ÷ 2207).

7.3.11 The resultant traffic data for the northern part of the site and the combined traffic data for both parts of the site is provided in Table 7F.

Table 7F Resultant Traffic Associated with Northern Part of Site if All Units are Occupied [Two-way]

	Northern Part of Site (Pro-rata'd up to 3,385 sqm by applying factor of 1.39)			
	Peds	Cars	LGVs	OGV1
07:00-08:00	3	0	0	0
08:00-09:00	0	2	0	0
09:00-10:00	6	9	5	3
15:00-16:00	8	6	0	0
16:00-17:00	2	6	2	2
17:00-18:00	0	3	0	2
18:00-19:00	0	8	2	0

***Step 3:** Combining Step 1 and Step 2*

7.3.12 The combined trip generation associated with the northern and southwestern parts of the site obtained from Step 1 and Step 2 is provided in Table 7G.

Table 7G Proposed Development – Traffic Results [Two-way]

	Northern Part of Site (from Table 7F)				Southwestern Part of Site (from Table 7E)				Combined Proposed Development			
	Peds	Cars	LGVs	OGV1	Peds	Cars	LGVs	OGV1	Peds	Cars	LGVs	OGV1
07:00-08:00	3	0	0	0	1	3	3	0	4	3	3	0
08:00-09:00	0	2	0	0	0	2	0	0	0	4	0	0
09:00-10:00	6	9	5	3	0	1	0	0	6	10	5	3
15:00-16:00	8	6	0	0	0	4	0	0	8	10	0	0
16:00-17:00	2	6	2	2	0	5	3	0	2	11	5	2
17:00-18:00	0	3	0	2	0	1	0	0	0	4	0	2
18:00-19:00	0	8	2	0	0	3	0	0	0	11	2	0

7.3.13 Table 7G shows that the proposed development would generate:

AM Peak Hour

- Cars = 4 two-way trips
- LGVs = 0 trips
- OGV1 = 0 trips
- **Total = 4 two-way vehicular trips**

PM Peak Hour

- Cars = 11 two-way trips
- LGVs = 5 two-way trips
- OGV1 = 2 two-way trips
- **Total = 18 two-way vehicular trips**

7.4 Net Difference between Lawful Use and Existing Use Trip Generation

7.4.1 The net difference in trip generation between the lawful use and the proposed development is provided in Table 7H.

Table 7H Lawful Use versus Existing Use (Two-way)

Peak Hour	Modes	Lawful Use (Chapter 7, Section 7.2)	Proposed Development (Table 7G)	Net Difference
AM Peak Hour	Pedestrians (including public transport)	8	0	-8
	Cyclists	2	0	-2
	Cars	16	4	-12
	LGVs	20	0	-20
	OGV1	2	0	-2
PM Peak Hour	Pedestrians (including public transport)	10	2	-8
	Cyclists	2	0	-2
	Cars	30	11	-19
	LGVs	12	5	-7
	OGV1	2	2	0

7.4.2 Table 7D clearly demonstrates that the proposals, including the Ground (a) appeal subject to this TA generate significantly fewer trips across all modes of transport compared to the site's lawful (permitted) industrial use.

7.4.3 This unequivocally confirms that there is no intensification of activity at the site access. Consequently, there is no residual traffic impact on the local road network when compared to the lawful (permitted) industrial use of the site.

7.4.4 As there is no intensification at the site access beyond the lawful (permitted) scenario, it is not necessary to justify the adequacy of Mill Lane or the Fosse Way/Mill Lane junction.

7.4.5 Any request by the Council for road network improvements would therefore lack direct relevance to the proposed development and will therefore not meet the planning obligation tests set out in Regulation 122(2) of the Community Infrastructure Levy Regulations 2010.

8 SUMMARY AND CONCLUSIONS

8.1 Summary

8.1.1 This Transport Assessment demonstrates that the proposals, including the ground (a) appeal will not result in any adverse impact on the local highway network or highway safety.

8.1.2 The analysis confirms that the proposals generate significantly fewer trips across all modes of transport compared to the site's lawful (permitted) industrial use.

8.1.3 During the AM peak hour, the lawful use could generate 38 two-way vehicular trips, while the proposals generate only four two-way trips. Similarly, during the PM peak hour, the lawful use could generate 44 two-way vehicular trips compared to 18 trips for the proposed development. This reduction in traffic confirms that, there is no intensification of use at the site access or within the surrounding road network.

8.1.4 The Fosse Way/Mill Lane junction achieves the required visibility splays, based on recorded 85th percentile speeds in compliance with Manual for Streets standards. Furthermore, accident analysis over a five-year period confirms no recorded collisions at the junction or along Mill Lane, underscoring the safety of the existing arrangements.

8.1.5 The Local Highway Authority (LHA) raised concerns about potential intensification at the site access and the adequacy of the Fosse Way/Mill Lane junction. This assessment and the basis of the ground (a) appeal unequivocally demonstrates that there is no intensification of use at the site access, and the junction is both safe and operationally efficient.

8.1.6 The LHA's concerns about visibility and substandard access geometry are therefore not relevant in this context, because the residual traffic or highway safety impact at this junction as a result of the proposed development is significantly less than the lawful industrial use of the site. Hence, any of the Council's request to improve the junction will not meet the planning obligation tests set out in Regulation 122(2) of the Community Infrastructure Levy Regulations 2010.

8.1.7 Traffic surveys confirm that Fosse Way/Mill Lane junction does not suffer from congestion during peak hours, with minimal queuing observed. The existing uses, therefore, do not impose any residual or cumulative impacts that could be considered severe under the National Planning Policy Framework (NPPF).

8.1.8 Furthermore, traffic surveys recorded minimal pedestrian activity, but this reflects the nature of the existing uses rather than any physical constraints. Mill Lane itself exhibits a low-speed, low-traffic environment with adequate passing places and clear forward visibility, ensuring it operates safely for all road users. This makes it conducive to safe pedestrian movement.

8.1.9 NPPF (Paragraph 109 (d)) states that opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, should be considered in relation to the scale, location or density of the development that can be accommodated on site. In Paragraph 110, the NPPF emphasises the fact that opportunities to maximise sustainable transport solutions will vary between urban and rural areas and also clearly states that these differences should be considered in decision-making.

8.1.10 Cycling is a realistic and sustainable mode of transport for this site, particularly given its proximity to Syston and surrounding areas. The site benefits from nearby connections to National Cycle Network (NCN) Route 48, which links to broader cycling infrastructure, including traffic-free routes along the Grand Union Canal.

8.1.11 The proposed provision of 10 covered and secure cycle parking spaces exceeds local policy requirements and actively encourages cycling for both staff and visitors. These measures align with national and local objectives to promote active travel and reduce reliance on private vehicles.

8.2 Conclusions

8.2.1 Paragraph 116 of the NPPF (2024) states that:

> ***Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios***

8.2.2 This report demonstrates that the proposals will not result in any adverse traffic impact on the local road network; and accordingly, there are no reasons to refuse the ground (a) planning application on transport or highways grounds.

Appendix 1. TRAFFIC SURVEYS

Appendix 1.1 EXISTING USES – TRAFFIC SURVEY

Road Data Services Ltd

Leicester
Wednesday 4th December 2024
Approach: Northern Part of Site

	Inbound										Outbound									
TIME	PED	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	PED	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	0	0	0.0	2	0	0	0	0	0	0	0	2	0.0
07:15 - 07:30	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0.0**
08:00 - 08:15	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	0	1	0	1	0	0	2	2.5	0	0	0	1	0	0	0	0	1	1.0
09:30 - 09:45	2	0	0	1	2	0	0	0	5	3.0	2	0	0	1	0	1	0	0	4	2.5
09:45 - 10:00	0	0	0	1	0	0	0	0	1	1.0	0	0	0	1	1	0	0	0	2	2.0
Hourly Total	**2**	**0**	**0**	**3**	**2**	**1**	**0**	**0**	**8**	**6.5**	**2**	**0**	**0**	**3**	**1**	**1**	**0**	**0**	**7**	**5.5**
TOTAL	**2**	**0**	**0**	**4**	**2**	**1**	**0**	**0**	**9**	**7.5**	**4**	**0**	**0**	**3**	**1**	**1**	**0**	**0**	**9**	**5.5**
15:00 - 15:15	0	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0	0.0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0.0	0	0	0	2	0	0	0	0	2	2.0
15:45 - 16:00	3	0	0	0	0	0	0	0	3	0.0	2	0	0	0	0	0	0	0	2	0.0
Hourly Total	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**5**	**2.0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**4**	**2.0**
16:00 - 16:15	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	1	0	0	0	1	1.0
16:15 - 16:30	1	0	0	1	0	0	0	0	2	1.0	0	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	0	0	0	0	0	0	0	0.0	0	0	0	2	0	0	0	0	2	2.0
16:45 - 17:00	0	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	0	1	1.0
Hourly Total	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**3**	**2.5**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**4**	**4.0**
17:00 - 17:15	0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	1	0	0	1	1.5
17:15 - 17:30	0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1.5**
18:00 - 18:15	0	0	0	1	0	0	0	0	1	1.0	0	0	0	2	0	0	0	0	2	2.0
18:15 - 18:30	0	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	0	1	1.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	0	1	1.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	1	0	0	0	1	1.0
Hourly Total	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**5**	**5.0**
TOTAL	**4**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**11**	**7.5**	**2**	**0**	**0**	**9**	**2**	**1**	**0**	**0**	**14**	**12.5**

Road Data Services Ltd

Leicester
Wednesday 4th December 2024
Approach: Southwestern Part of Site

	Inbound										Outbound									
TIME	PED	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	PED	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	4	3	0	0	0	7	7.0	2	0	0	2	0	0	0	0	4	2.0
07:15 - 07:30	0	0	0	2	1	0	0	0	3	3.0	0	0	0	0	2	0	0	0	2	2.0
07:30 - 07:45	0	0	0	1	1	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**7**	**5**	**0**	**0**	**0**	12	12.0	**2**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	6	4.0
08:00 - 08:15	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	0	4	0	0	0	0	4	4.0	0	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	5	5.0	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	1	1.0
09:00 - 09:15	0	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	0	1	1.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	2	2.0	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	1	1.0
TOTAL	**0**	**0**	**0**	**14**	**5**	**0**	**0**	**0**	19	19.0	**2**	**0**	**0**	**4**	**2**	**0**	**0**	**0**	8	6.0
15:00 - 15:15	0	0	0	0	0	0	0	0	0	0.0	0	0	0	3	0	0	0	0	3	3.0
15:15 - 15:30	0	0	0	1	0	0	0	0	1	1.0	0	0	0	1	0	0	0	0	1	1.0
15:30 - 15:45	0	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0	0.0
15:45 - 16:00	0	0	0	2	0	0	0	0	2	2.0	0	0	0	2	0	0	0	0	2	2.0
Hourly Total	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	5	5.0	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	6	6.0
16:00 - 16:15	0	0	0	2	0	0	0	0	2	2.0	0	0	0	1	0	0	0	0	1	1.0
16:15 - 16:30	0	0	0	3	0	0	0	0	3	3.0	0	0	0	3	3	0	0	0	6	6.0
16:30 - 16:45	0	0	0	1	1	0	0	0	2	2.0	0	0	0	1	1	0	0	0	2	2.0
16:45 - 17:00	0	0	0	0	0	0	0	0	0	0.0	0	0	0	3	2	0	0	0	5	5.0
Hourly Total	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	7	7.0	**0**	**0**	**0**	**8**	**6**	**0**	**0**	**0**	14	14.0
17:00 - 17:15	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	1	0	0	0	1	1.0
17:15 - 17:30	0	0	0	1	0	0	0	0	1	1.0	0	0	0	1	0	0	0	0	1	1.0
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0	0.0	0	0	0	2	0	0	0	0	2	2.0
Hourly Total	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	1	1.0	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	4	4.0
18:00 - 18:15	0	0	0	0	1	0	0	0	1	1.0	0	0	0	1	0	0	0	0	1	1.0
18:15 - 18:30	0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	0	2	0	0	0	0	2	2.0	0	0	0	1	0	0	0	0	1	1.0
18:45 - 19:00	0	0	0	1	0	0	0	0	1	1.0	0	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	5	5.0	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	3	3.0
TOTAL	**0**	**0**	**0**	**16**	**2**	**0**	**0**	**0**	18	18.0	**0**	**0**	**0**	**20**	**7**	**0**	**0**	**0**	27	27.0

Appendix 1.2 ATC DATA

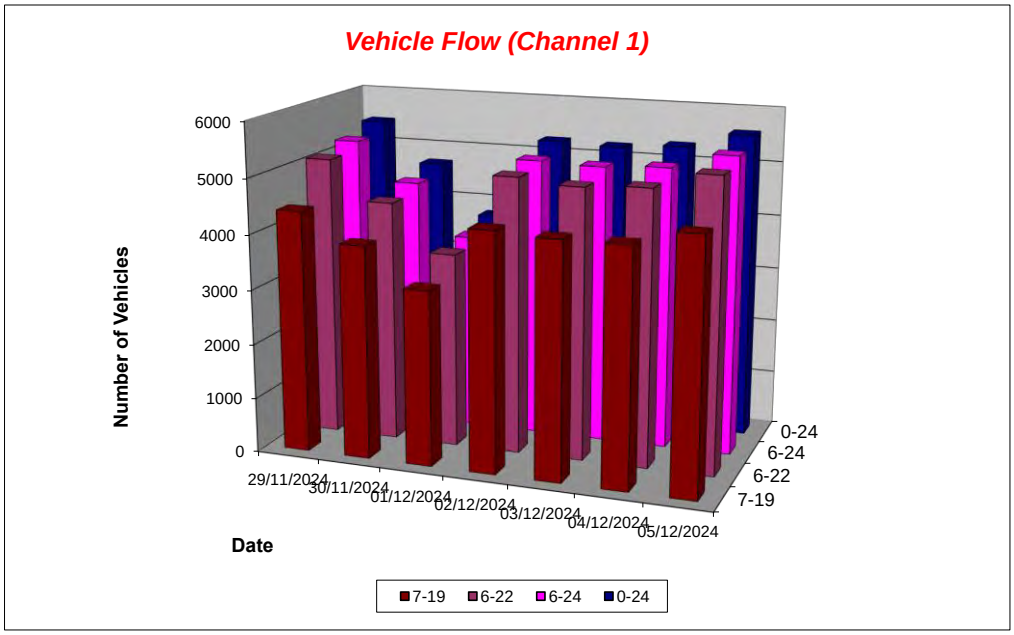
Leicester A, Fosse Way (Southern Site)

Produced by Road Data Services Ltd.

Channel 1 - Northbound | **Vehicle Flow** | **Week 1**

Hr Ending	29/11/2024 Friday	30/11/2024 Saturday	01/12/2024 Sunday	02/12/2024 Monday	03/12/2024 Tuesday	04/12/2024 Wednesday	05/12/2024 Thursday	Weekday Average	Average
1	25	38	36	13	9	10	13	14	21
2	7	13	28	2	7	4	4	5	9
3	6	12	16	4	11	8	6	7	9
4	9	11	10	5	10	14	14	10	10
5	14	12	14	18	18	17	21	18	16
6	131	66	57	112	99	122	116	116	100
7	140	49	25	166	151	176	139	154	121
8	322	117	60	319	335	339	337	330	261
9	445	237	112	424	421	421	514	445	368
10	312	329	220	310	318	268	320	306	297
11	283	359	296	294	288	291	286	288	300
12	334	399	361	312	319	296	332	319	336
13	363	408	395	330	307	343	324	333	353
14	366	437	351	371	345	343	343	354	365
15	441	423	323	419	419	415	438	426	411
16	426	331	336	401	432	449	440	430	402
17	427	290	313	419	435	457	455	439	399
18	366	304	251	411	385	371	422	391	359
19	315	247	169	331	279	291	347	313	283
20	252	224	163	242	239	256	303	258	240
21	198	150	114	168	163	165	187	176	164
22	123	96	61	112	99	118	111	113	103
23	81	78	33	59	80	106	86	82	75
24	60	62	14	22	60	30	34	41	40

7-19	4400	3881	3187	4341	4283	4284	4558	4373	4133
6-22	5113	4400	3550	5029	4935	4999	5298	5075	4761
6-24	5254	4540	3597	5110	5075	5135	5418	5198	4876
0-24	5446	4692	3758	5264	5229	5310	5592	5368	5042



Leicester A, Fosse Way (Southern Site)

Produced by Road Data Services Ltd.

Channel 1 - Northbound **Average Speed** **Week 1**

Hr Ending	29/11/2024 Friday	30/11/2024 Saturday	01/12/2024 Sunday	02/12/2024 Monday	03/12/2024 Tuesday	04/12/2024 Wednesday	05/12/2024 Thursday
1	33.5	29.5	28.4	28.3	28.8	31.0	30.7
2	32.6	28.4	29.1	29.0	32.2	28.6	28.6
3	28.5	29.3	28.4	25.0	32.3	33.0	29.9
4	32.1	31.0	30.8	29.2	30.9	29.3	30.3
5	31.9	30.3	33.3	31.0	31.1	27.8	32.9
6	27.9	28.3	27.7	29.2	28.8	28.4	29.1
7	30.0	29.3	27.6	29.0	29.2	28.3	28.7
8	27.4	29.1	26.8	26.2	28.0	27.1	26.5
9	27.1	28.0	28.7	21.7	22.7	24.1	26.5
10	28.2	28.4	28.7	27.9	28.0	27.0	27.1
11	28.4	28.5	28.2	27.5	27.8	27.3	27.1
12	27.3	28.5	28.2	27.4	28.1	26.4	27.9
13	28.4	27.9	28.3	26.5	27.6	27.5	28.1
14	27.9	28.5	29.0	27.7	26.9	27.9	28.7
15	28.0	28.2	29.5	26.8	28.6	26.9	27.3
16	27.4	28.8	29.8	26.5	26.2	23.2	26.4
17	26.8	28.1	28.4	25.0	26.4	17.7	22.8
18	26.8	28.5	28.8	25.2	25.9	22.5	18.5
19	26.4	28.3	29.4	27.5	27.4	27.6	25.0
20	28.3	28.4	29.8	28.3	29.1	28.3	28.2
21	29.2	29.1	29.6	29.4	28.9	27.6	28.7
22	29.1	29.3	29.2	29.1	28.7	28.7	29.5
23	30.0	30.0	30.1	28.4	26.7	27.9	28.7
24	29.2	29.0	28.2	30.7	29.8	28.7	29.8
10-12	27.8	28.5	28.2	27.4	27.9	26.9	27.5
14-16	27.7	28.5	29.6	26.6	27.4	25.0	26.8
0-24	27.8	28.5	28.8	26.7	27.2	25.7	26.4

Mean (ALL)	27.2
Weekday Inter-Peak	27.1

Channel 1 - Northbound **85th Percentile**

Hr Ending	29/11/2024 Friday	30/11/2024 Saturday	01/12/2024 Sunday	02/12/2024 Monday	03/12/2024 Tuesday	04/12/2024 Wednesday	05/12/2024 Thursday
1	39.2	33.1	32.6	31.7	33.2	33.4	36.9
2	39.8	34.0	34.0	32.8	35.7	32.6	30.3
3	31.9	36.2	32.4	27.1	37.6	35.9	33.9
4	37.6	35.6	35.0	31.6	36.0	33.1	34.5
5	36.1	34.8	41.3	35.4	35.6	32.0	37.0
6	32.7	33.5	32.8	34.6	33.1	33.6	34.6
7	34.0	34.6	31.8	33.6	33.8	33.0	33.3
8	31.5	33.4	31.7	32.0	32.4	32.4	32.0
9	31.7	32.4	33.2	29.9	31.9	31.5	31.3
10	32.5	33.1	32.8	32.6	32.7	31.9	31.3
11	32.7	33.5	32.2	31.5	32.1	31.3	31.7
12	31.7	32.9	31.9	31.4	32.0	31.0	32.4
13	32.5	32.1	32.8	32.3	31.7	32.2	32.4
14	32.2	32.5	33.4	32.1	32.4	32.1	33.1
15	32.4	32.3	33.6	30.5	33.0	32.2	31.9
16	32.2	33.5	34.2	30.8	31.0	30.9	31.8
17	31.5	32.7	32.6	30.6	31.1	26.6	31.2
18	31.3	33.2	33.3	30.8	31.4	30.6	27.3
19	30.6	33.0	33.8	31.3	31.5	32.3	31.2
20	33.0	32.8	34.9	32.6	33.9	32.6	32.4
21	33.7	33.4	35.2	33.6	33.0	32.0	33.9
22	34.1	34.1	34.1	33.9	33.4	33.0	34.9
23	34.0	34.4	34.6	34.6	32.1	32.9	32.9
24	33.8	34.2	31.0	35.5	34.3	33.7	34.9
10-12	32.2	33.2	32.0	31.4	32.0	31.2	32.1
14-16	32.3	32.9	33.8	30.6	32.2	31.9	31.9
0-24	32.4	33.0	33.3	32.2	32.6	32.5	32.7

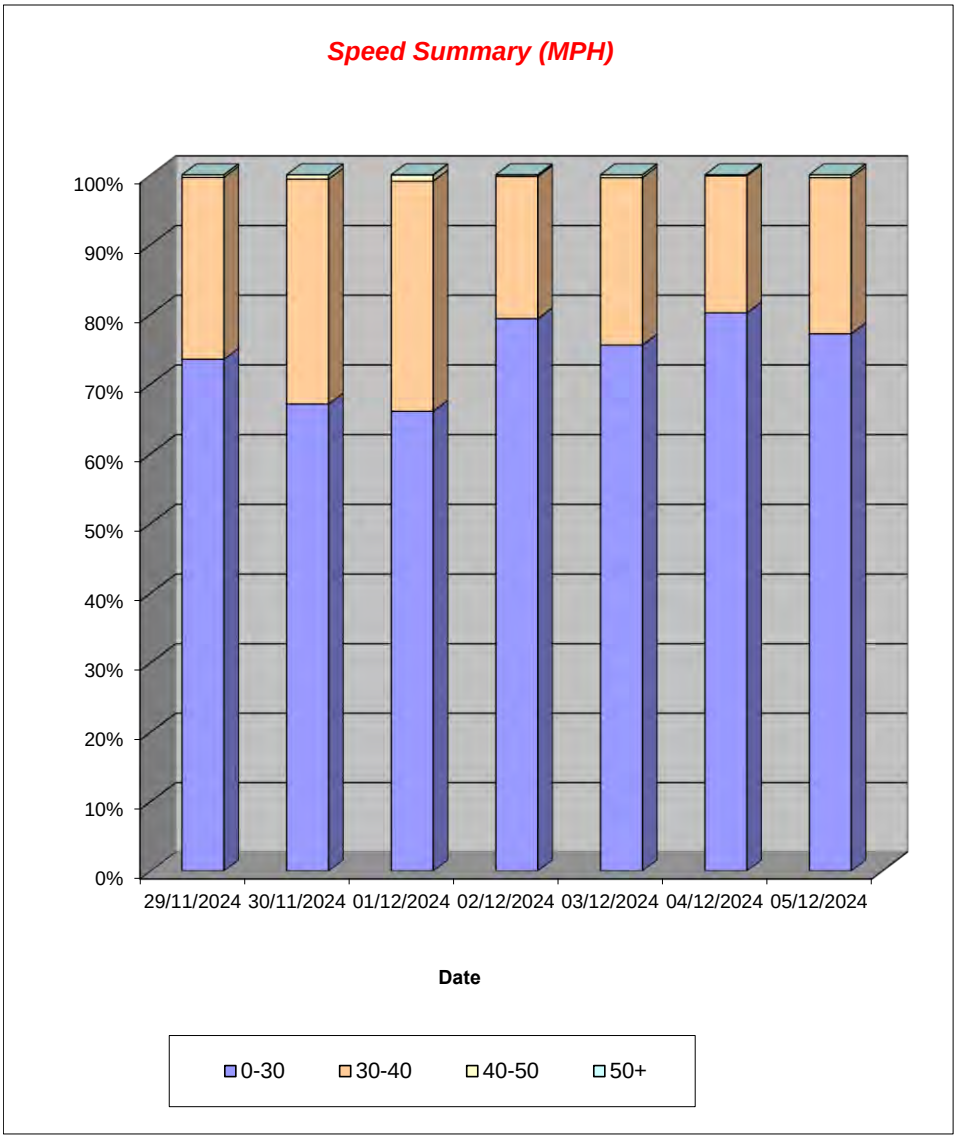
85th %ile (ALL)	32.8
Weekday Inter-Peak	32.0

Leicester A, Fosse Way (Southern Site)

Produced by Road Data Services Ltd.

Channel 1 - Northbound | **Speed Summary** | **Week 1**

Speed (MPH)	29/11/2024 Friday	30/11/2024 Saturday	01/12/2024 Sunday	02/12/2024 Monday	03/12/2024 Tuesday	04/12/2024 Wednesday	05/12/2024 Thursday
0-30	4005	3149	2483	4178	3952	4259	4317
30-40	1421	1514	1241	1074	1256	1043	1253
40-50	20	29	33	12	21	8	22
50+	0	0	1	0	0	0	0
TOTAL	**5446**	**4692**	**3758**	**5264**	**5229**	**5310**	**5592**



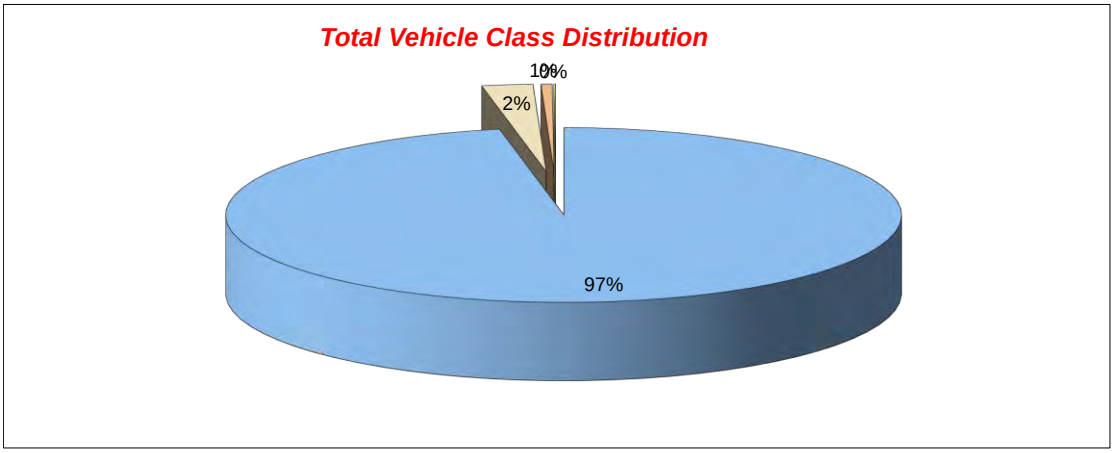
Leicester A, Fosse Way (Southern Site)

Produced by Road Data Services Ltd.

Channel 1 - Northbound | **Vehicle Class** | **Week 1**

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
29/11/2024					
7-19	4222	136	36	6	4400
6-22	4915	152	38	8	5113
6-24	5053	154	38	9	5254
0-24	5238	161	38	-9	5428
30/11/2024					
7-19	3806	72	3	0	3881
6-22	4316	77	6	1	4400
6-24	4455	78	6	1	4540
0-24	4605	79	7	1	4692
01/12/2024					
7-19	3145	40	0	2	3187
6-22	3503	44	1	2	3550
6-24	3550	44	1	2	3597
0-24	3708	46	2	2	3758
02/12/2024					
7-19	4185	121	28	7	4341
6-22	4858	134	29	8	5029
6-24	4936	137	29	8	5110
0-24	5085	140	30	9	5264
03/12/2024					
7-19	4117	130	30	6	4283
6-22	4753	143	31	8	4935
6-24	4889	147	31	8	5075
0-24	5039	151	31	8	5229
04/12/2024					
7-19	4136	117	25	6	4284
6-22	4836	131	26	6	4999
6-24	4967	136	26	6	5135
0-24	5133	143	28	6	5310
05/12/2024					
7-19	4384	116	45	13	4558
6-22	5100	133	52	13	5298
6-24	5219	134	52	13	5418
0-24	5386	141	52	13	5592

Average					
7-19	3999	105	24	6	4133
6-22	4612	116	26	7	4761
6-24	4724	119	26	7	4876
0-24	4885	123	27	4	5039



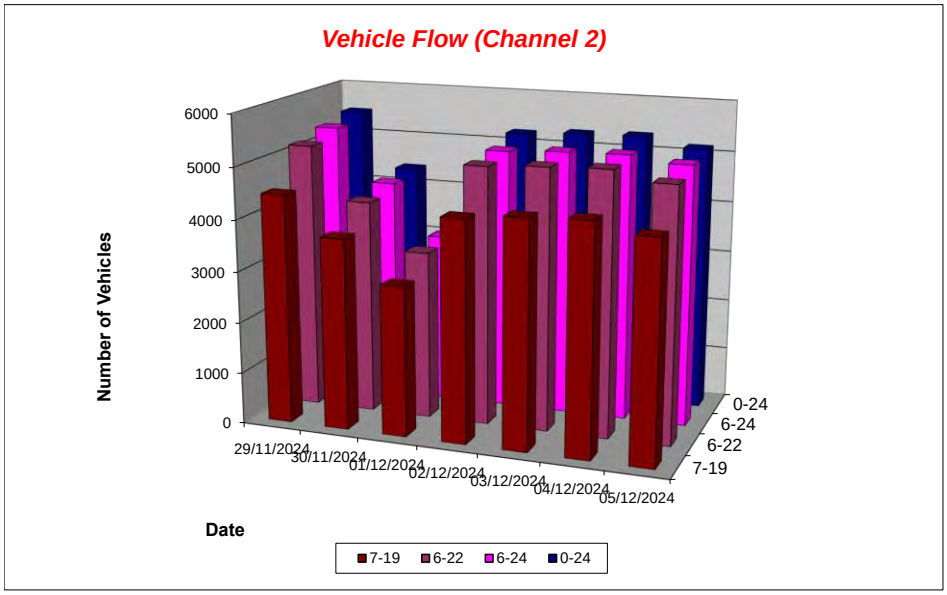
Leicester B, Fosse Way (Northern Site)

Produced by Road Data Services Ltd.

Channel 2 - Southbound | **Vehicle Flow** | **Week 1**

Hr Ending	29/11/2024 Friday	30/11/2024 Saturday	01/12/2024 Sunday	02/12/2024 Monday	03/12/2024 Tuesday	04/12/2024 Wednesday	05/12/2024 Thursday	Weekday Average	Average
1	13	22	40	2	8	5	9	7	14
2	11	12	21	5	5	7	2	6	9
3	2	4	11	1	6	10	2	4	5
4	6	4	12	10	10	12	9	9	9
5	29	11	10	19	25	32	12	23	20
6	83	24	29	107	96	84	50	84	68
7	206	51	40	224	226	227	181	213	165
8	389	126	42	405	401	390	369	391	303
9	394	242	140	416	459	453	340	412	349
10	334	301	205	323	298	321	240	303	289
11	308	399	306	303	306	317	258	298	314
12	329	358	393	276	309	303	302	304	324
13	347	401	354	347	323	334	309	332	345
14	367	380	327	301	294	295	339	319	329
15	382	328	304	338	337	341	322	344	336
16	428	332	252	427	405	428	445	427	388
17	487	334	223	461	505	501	509	493	431
18	372	283	187	384	422	429	451	412	361
19	324	233	180	310	338	332	362	333	297
20	243	194	136	233	205	208	222	222	206
21	154	98	94	148	123	133	150	142	129
22	115	101	85	127	134	112	136	125	116
23	94	64	30	58	47	39	89	65	60
24	66	76	7	14	22	15	43	32	35

7-19	4461	3717	2913	4291	4397	4444	4246	4368	4067
6-22	5179	4161	3268	5023	5085	5124	4935	5069	4682
6-24	5339	4301	3305	5095	5154	5178	5067	5167	4777
0-24	5483	4378	3428	5239	5304	5328	5151	5301	4902



Leicester B, Fosse Way (Northern Site)

Produced by Road Data Services Ltd.

Channel 2 - Southbound **Average Speed** **Week 1**

Hr Ending	29/11/2024 Friday	30/11/2024 Saturday	01/12/2024 Sunday	02/12/2024 Monday	03/12/2024 Tuesday	04/12/2024 Wednesday	05/12/2024 Thursday
1	27.9	28.3	26.8	22.6	26.5	22.0	27.8
2	24.4	29.3	26.1	24.8	28.1	23.6	26.0
3	29.0	25.6	26.5	24.6	32.7	28.8	31.4
4	28.8	23.9	26.3	26.8	26.3	21.5	27.8
5	27.3	28.7	26.3	26.7	26.4	26.8	25.3
6	26.7	26.2	25.8	27.2	27.0	26.8	26.1
7	27.3	27.0	27.5	27.2	28.0	27.6	27.9
8	26.2	28.3	26.7	26.0	26.3	26.1	27.1
9	25.9	27.2	26.9	25.1	25.0	25.5	26.2
10	26.2	26.8	27.9	25.8	26.3	26.2	26.7
11	25.8	26.3	27.6	25.0	26.4	26.0	26.9
12	26.4	26.7	26.9	25.5	25.9	25.7	26.0
13	25.1	26.4	26.2	25.5	25.7	26.2	26.4
14	25.3	26.7	27.2	26.5	25.8	25.9	26.0
15	26.0	26.4	27.1	25.9	25.5	26.3	24.7
16	25.9	27.4	27.1	25.1	25.1	24.8	25.6
17	25.0	25.9	28.3	24.6	24.7	23.2	23.8
18	25.6	26.5	27.0	25.1	25.6	24.7	22.7
19	25.9	27.1	26.8	26.2	26.2	26.5	23.2
20	27.5	27.2	29.2	26.7	27.3	26.8	26.8
21	27.7	27.4	27.7	27.1	27.2	26.4	28.2
22	28.2	27.3	28.1	27.3	26.8	25.4	26.7
23	27.6	26.6	27.3	29.3	29.9	27.7	28.4
24	28.6	27.1	25.5	26.2	28.4	31.4	28.1
10-12	26.1	26.5	27.2	25.2	26.1	25.8	26.4
14-16	25.9	26.9	27.1	25.4	25.3	25.5	25.2
0-24	26.1	26.8	27.2	25.8	26.0	25.7	25.6

Average (ALL)	26.1
Weekday Inter-Peak	25.7

Channel 2 - Southbound **85th Percentile**

Hr Ending	29/11/2024 Friday	30/11/2024 Saturday	01/12/2024 Sunday	02/12/2024 Monday	03/12/2024 Tuesday	04/12/2024 Wednesday	05/12/2024 Thursday
1	35.2	33.6	31.2	28.5	28.4	28.7	34.7
2	29.5	33.4	30.6	27.3	32.5	28.3	29.9
3	30.7	32.0	31.3	-	38.6	33.5	34.5
4	32.6	28.5	29.2	32.0	33.1	25.0	33.8
5	32.9	32.3	30.1	32.1	30.5	29.8	30.0
6	31.3	31.0	29.8	31.4	31.5	31.9	30.9
7	32.2	32.7	31.9	32.1	33.2	32.4	33.2
8	30.8	32.9	30.5	31.3	30.9	30.6	32.3
9	30.5	31.8	32.2	29.4	30.7	30.4	30.6
10	31.1	31.2	32.5	30.6	31.0	30.8	31.6
11	30.1	31.3	31.8	29.6	31.1	30.1	31.4
12	31.4	31.2	30.9	30.0	30.5	30.6	30.9
13	30.1	30.8	30.9	29.8	30.9	30.8	30.9
14	30.1	31.5	31.8	31.0	30.5	30.2	30.3
15	30.3	31.1	31.8	30.2	30.2	30.7	29.9
16	30.1	31.8	32.0	29.6	29.4	29.5	30.2
17	29.5	30.0	33.5	28.9	29.4	27.5	28.5
18	29.5	30.8	31.8	29.6	30.2	28.9	27.3
19	30.5	31.5	31.1	30.6	30.6	30.7	27.8
20	33.7	31.7	34.4	31.1	32.5	30.6	31.9
21	33.2	32.3	32.8	32.0	31.3	30.6	33.4
22	33.2	32.6	33.0	32.1	31.4	30.2	31.1
23	32.6	32.2	31.9	34.9	34.9	32.1	34.2
24	33.8	31.0	26.8	31.0	35.0	40.5	34.4
10-12	30.8	31.3	31.3	29.8	30.8	30.3	31.1
14-16	30.2	31.5	31.9	29.9	29.8	30.1	30.1
0-24	30.9	31.4	31.9	30.5	30.9	30.3	30.7

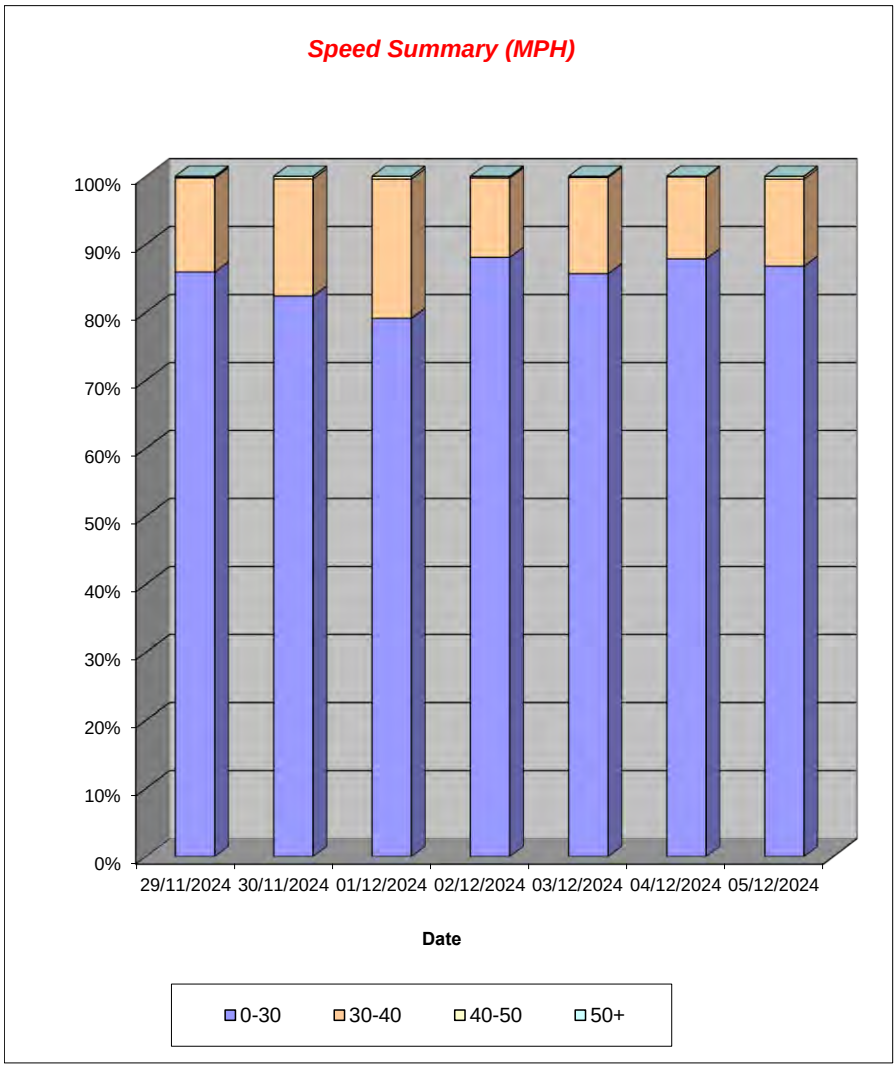
85th %ile (ALL)	30.9
Weekday Inter-Peak	30.3

Leicester B, Fosse Way (Northern Site)

Produced by Road Data Services Ltd.

Channel 2 - Southbound | **Speed Summary** | **Week 1**

Speed (MPH)	29/11/2024 Friday	30/11/2024 Saturday	01/12/2024 Sunday	02/12/2024 Monday	03/12/2024 Tuesday	04/12/2024 Wednesday	05/12/2024 Thursday
0-30	4711	3607	2712	4615	4544	4681	4470
30-40	759	754	702	611	751	642	660
40-50	9	17	14	12	9	5	20
50+	4	0	0	1	0	0	1
TOTAL	**5483**	**4378**	**3428**	**5239**	**5304**	**5328**	**5151**



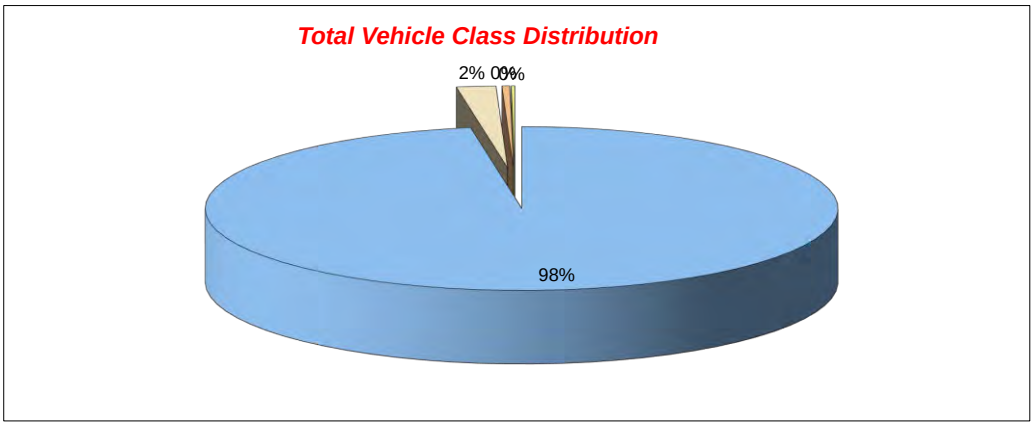
Leicester B, Fosse Way (Northern Site)

Produced by Road Data Services Ltd.

Channel 2 - Southbound | **Vehicle Class** | **Week 1**

Classes / Day / Time	Car / LGV / Caravan - 1	MGV - 2	OGV1 / Bus - 3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
29/11/2024					
7-19	4295	126	22	18	**4461**
6-22	4997	141	22	19	**5179**
6-24	5156	142	22	19	**5339**
0-24	5294	148	22	19	**5483**
30/11/2024					
7-19	3652	49	13	3	**3717**
6-22	4094	51	13	3	**4161**
6-24	4233	52	13	3	**4301**
0-24	4309	53	13	3	**4378**
01/12/2024					
7-19	2884	29	0	0	**2913**
6-22	3236	32	0	0	**3268**
6-24	3273	32	0	0	**3305**
0-24	3394	34	0	0	**3428**
02/12/2024					
7-19	4168	97	18	8	**4291**
6-22	4884	107	22	10	**5023**
6-24	4955	108	22	10	**5095**
0-24	5094	110	25	10	**5239**
03/12/2024					
7-19	4277	87	22	11	**4397**
6-22	4949	102	23	11	**5085**
6-24	5017	103	23	11	**5154**
0-24	5163	107	23	11	**5304**
04/12/2024					
7-19	4316	97	21	10	**4444**
6-22	4977	115	22	10	**5124**
6-24	5030	116	22	10	**5178**
0-24	5172	122	23	11	**5328**
05/12/2024					
7-19	4113	97	26	10	**4246**
6-22	4789	110	26	10	**4935**
6-24	4921	110	26	10	**5067**
0-24	4996	115	30	10	**5151**

Average					
7-19	3958	83	17	9	**4067**
6-22	4561	94	18	9	**4682**
6-24	4655	95	18	9	**4777**
0-24	4775	98	19	9	**4902**



Appendix 1.3 TRAFFIC SURVEY AT FOSSE WAY/MILL LANE JUNCTION

Road Data Services Ltd

Leicester
Wednesday 4th December 2024
Junction: 1
Approach: Fosse Road North

	Ahead to Fosse Road (S)									Right to Mill Lane								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	60	12	2	3	0	77	81.9	0	0	1	0	0	0	0	1	1.0
07:15 - 07:30	0	0	66	10	3	0	2	81	84.5	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	98	11	0	1	0	110	111.3	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	1	104	16	4	1	0	126	128.7	0	0	2	0	0	0	0	2	2.0
Hourly Total	**0**	**1**	**328**	**49**	**9**	**5**	**2**	**394**	**406.4**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**
08:00 - 08:15	0	2	92	14	3	0	0	111	111.3	0	0	1	0	0	0	0	1	1.0
08:15 - 08:30	0	0	103	21	6	1	0	131	135.3	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	2	0	83	21	6	3	0	115	120.3	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	85	16	3	1	0	105	107.8	0	0	1	0	0	0	0	1	1.0
Hourly Total	**2**	**2**	**363**	**72**	**18**	**5**	**0**	**462**	**474.7**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**
09:00 - 09:15	0	0	76	18	1	2	0	97	100.1	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	59	14	5	0	0	78	80.5	0	0	1	0	1	0	0	2	2.5
09:30 - 09:45	1	0	58	13	3	1	1	77	80.0	0	0	1	0	0	0	0	1	1.0
09:45 - 10:00	0	0	57	10	1	1	0	69	70.8	0	0	0	0	0	0	0	0	0.0
Hourly Total	**1**	**0**	**250**	**55**	**10**	**4**	**1**	**321**	**331.4**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**3**	**3.5**
TOTAL	**3**	**3**	**941**	**176**	**37**	**14**	**3**	**1177**	**1212.5**	**0**	**0**	**7**	**0**	**1**	**0**	**0**	**8**	**8.5**
15:00 - 15:15	0	0	86	20	6	0	0	112	115.0	0	0	0	0	0	0	0	0	0.0
15:15 - 15:30	0	1	96	26	5	1	0	129	132.2	0	0	1	0	0	0	0	1	1.0
15:30 - 15:45	0	0	88	19	1	1	0	109	110.8	0	0	1	0	0	0	0	1	1.0
15:45 - 16:00	1	1	77	14	1	0	0	94	93.1	0	0	0	0	0	0	0	0	0.0
Hourly Total	**1**	**2**	**347**	**79**	**13**	**2**	**0**	**444**	**451.1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**
16:00 - 16:15	1	1	91	20	1	0	0	114	113.1	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	0	0	78	18	2	1	1	100	103.3	0	0	2	0	3	0	0	5	6.5
16:30 - 16:45	0	2	133	17	3	0	0	155	155.3	0	0	0	0	0	1	0	1	2.3
16:45 - 17:00	2	1	131	7	3	0	0	144	143.3	0	0	0	0	0	0	0	0	0.0
Hourly Total	**3**	**4**	**433**	**62**	**9**	**1**	**1**	**513**	**515.0**	**0**	**0**	**2**	**0**	**3**	**1**	**0**	**6**	**8.8**
17:00 - 17:15	0	0	120	14	4	0	0	138	140.0	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	1	109	8	2	1	0	121	122.7	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	92	9	1	0	0	102	102.5	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	1	0	61	13	0	0	0	75	74.2	0	0	0	0	0	0	0	0	0.0
Hourly Total	**1**	**1**	**382**	**44**	**7**	**1**	**0**	**436**	**439.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
18:00 - 18:15	0	1	103	6	1	0	0	111	110.9	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	83	4	0	0	0	87	87.0	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	1	1	76	0	0	0	0	78	76.6	0	0	2	0	0	0	0	2	2.0
18:45 - 19:00	0	0	52	8	2	0	0	62	63.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	**1**	**2**	**314**	**18**	**3**	**0**	**0**	**338**	**337.5**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**
TOTAL	**6**	**9**	**1476**	**203**	**32**	**4**	**1**	**1731**	**1743.0**	**0**	**0**	**7**	**0**	**3**	**1**	**0**	**11**	**13.8**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

Leicester
Wednesday 4th December 2024
Junction: 1
Approach: Fosse Road South

	Left to Mill Lane									Ahead to Fosse Road (N)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	4	3	1	0	0	8	8.5	0	0	42	9	4	0	0	55	57.0
07:15 - 07:30	0	0	4	1	0	0	0	5	5.0	1	1	58	11	6	1	0	78	80.9
07:30 - 07:45	0	0	0	1	0	0	0	1	1.0	0	0	52	29	3	4	0	88	94.7
07:45 - 08:00	0	0	5	0	0	0	0	5	5.0	0	1	84	18	3	0	1	107	108.9
Hourly Total	**0**	**0**	**13**	**5**	**1**	**0**	**0**	**19**	**19.5**	**1**	**2**	**236**	**67**	**16**	**5**	**1**	**328**	**341.5**
08:00 - 08:15	0	0	1	0	0	0	0	1	1.0	0	0	80	19	2	1	0	102	104.3
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	106	19	3	0	0	128	129.5
08:30 - 08:45	0	0	1	0	0	0	0	1	1.0	0	0	74	20	5	2	0	101	106.1
08:45 - 09:00	0	0	4	0	0	0	0	4	4.0	0	1	66	17	4	1	0	89	91.7
Hourly Total	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**6**	**6.0**	**0**	**1**	**326**	**75**	**14**	**4**	**0**	**420**	**431.6**
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	50	6	1	2	0	59	62.1
09:15 - 09:30	0	0	1	0	1	0	0	2	2.5	0	0	61	11	2	2	0	76	79.6
09:30 - 09:45	0	0	1	3	0	0	0	4	4.0	4	0	56	14	7	1	0	82	83.6
09:45 - 10:00	0	0	3	0	0	0	0	3	3.0	0	0	40	9	3	0	0	52	53.5
Hourly Total	**0**	**0**	**5**	**3**	**1**	**0**	**0**	**9**	**9.5**	**4**	**0**	**207**	**40**	**13**	**5**	**0**	**269**	**278.8**
TOTAL	**0**	**0**	**24**	**8**	**2**	**0**	**0**	**34**	**35.0**	**5**	**3**	**769**	**182**	**43**	**14**	**1**	**1017**	**1051.9**
15:00 - 15:15	0	0	1	0	0	0	0	1	1.0	1	0	78	19	5	1	0	104	107.0
15:15 - 15:30	0	0	0	0	0	0	0	0	0.0	1	0	79	22	3	1	0	106	108.0
15:30 - 15:45	0	0	2	1	0	0	0	3	3.0	0	0	99	12	3	0	0	114	115.5
15:45 - 16:00	0	0	0	0	1	0	0	1	1.5	0	0	98	25	3	1	1	128	131.8
Hourly Total	**0**	**0**	**3**	**1**	**1**	**0**	**0**	**5**	**5.5**	**2**	**0**	**354**	**78**	**14**	**3**	**1**	**452**	**462.3**
16:00 - 16:15	0	0	4	0	4	0	0	8	10.0	0	0	97	20	2	1	0	120	122.3
16:15 - 16:30	0	0	1	0	0	0	0	1	1.0	0	0	83	23	5	0	0	111	113.5
16:30 - 16:45	0	0	1	1	1	0	0	3	3.5	0	0	91	16	1	0	0	108	108.5
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	1	89	20	3	0	0	113	113.9
Hourly Total	**0**	**0**	**6**	**1**	**5**	**0**	**0**	**12**	**14.5**	**0**	**1**	**360**	**79**	**11**	**1**	**0**	**452**	**458.2**
17:00 - 17:15	0	0	1	0	0	0	0	1	1.0	0	1	96	15	2	0	0	114	114.4
17:15 - 17:30	0	0	2	0	0	0	0	2	2.0	0	0	84	8	1	0	0	93	93.5
17:30 - 17:45	0	0	1	0	0	0	0	1	1.0	0	1	81	12	0	0	0	94	93.4
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	71	3	2	0	0	76	77.0
Hourly Total	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**4**	**4.0**	**0**	**2**	**332**	**38**	**5**	**0**	**0**	**377**	**378.3**
18:00 - 18:15	0	0	2	1	0	0	0	3	3.0	0	0	86	8	0	0	0	94	94.0
18:15 - 18:30	0	0	2	0	0	0	0	2	2.0	0	1	69	8	1	0	0	79	78.9
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	1	47	4	0	0	0	52	51.4
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	1	57	7	1	1	0	67	68.2
Hourly Total	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**5**	**5.0**	**0**	**3**	**259**	**27**	**2**	**1**	**0**	**292**	**292.5**
TOTAL	**0**	**0**	**17**	**3**	**6**	**0**	**0**	**26**	**29.0**	**2**	**6**	**1305**	**222**	**32**	**5**	**1**	**1573**	**1591.3**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

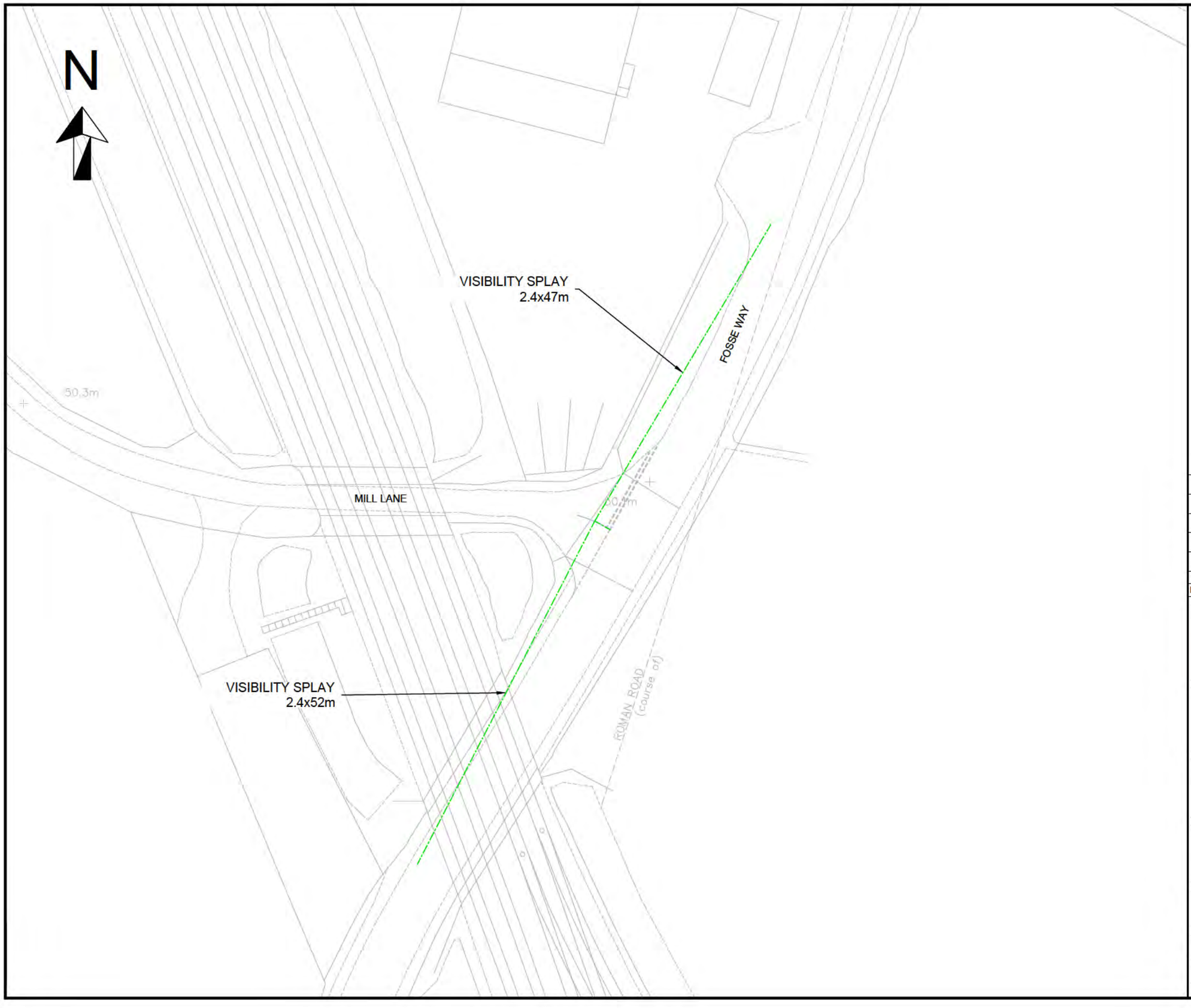
Road Data Services Ltd

Leicester
Wednesday 4th December 2024
Junction: 1
Approach: Mill Lane

	Left to Fosse Road (N)									Right to Fosse Road (S)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	2	1	0	0	0	3	3.0	0	0	0	2	0	0	0	2	2.0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	0	0	4	0	0	0	4	4.0
07:30 - 07:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	6	0	0	6	9.0
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	1	0	0	1	1.5
Hourly Total	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**4**	**4.0**	**0**	**0**	**0**	**6**	**7**	**0**	**0**	**13**	**16.5**
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	3	0	0	3	4.5
08:15 - 08:30	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**2**	**0**	**3**	**0**	**0**	**5**	**6.5**
09:00 - 09:15	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	0	1	1	1	0	0	3	3.5
09:45 - 10:00	0	0	0	1	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**3**	**1**	**1**	**0**	**0**	**5**	**5.5**
TOTAL	**0**	**0**	**5**	**2**	**0**	**0**	**0**	**7**	**7.0**	**0**	**0**	**5**	**7**	**11**	**0**	**0**	**23**	**28.5**
15:00 - 15:15	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0
15:15 - 15:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
15:30 - 15:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
15:45 - 16:00	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0
Hourly Total	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**5**	**5.0**
16:00 - 16:15	0	0	1	1	0	0	0	2	2.0	0	0	4	0	0	0	0	4	4.0
16:15 - 16:30	0	0	2	1	0	0	0	3	3.0	0	0	4	1	2	0	0	7	8.0
16:30 - 16:45	0	0	2	0	0	0	0	2	2.0	0	0	5	2	0	0	0	7	7.0
16:45 - 17:00	0	0	1	0	0	0	0	1	1.0	0	0	4	2	0	0	0	6	6.0
Hourly Total	**0**	**0**	**6**	**2**	**0**	**0**	**0**	**8**	**8.0**	**0**	**0**	**17**	**5**	**2**	**0**	**0**	**24**	**25.0**
17:00 - 17:15	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
17:30 - 17:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	5	0	0	0	0	5	5.0
Hourly Total	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**6**	**6.0**
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	5	0	0	0	0	5	5.0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
18:30 - 18:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	2	0	0	0	0	2	2.0	0	0	0	1	0	0	0	1	1.0
Hourly Total	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**7**	**7.0**
TOTAL	**0**	**0**	**13**	**3**	**0**	**0**	**0**	**16**	**16.0**	**0**	**0**	**33**	**7**	**2**	**0**	**0**	**42**	**43.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Appendix 2. FOSSE WAY/MILL LANE – VISIBILITY SPLAYS



Rev	Date	Description	Drn	Chk	App
-	11.12.24	ORIGINAL ISSUE	KI	AP	AP

MAGNA TRANSPORT PLANNING LTD

Client
-

Project
SYSTON MILLS INDUSTRIAL ESTATE,
MILL LANE,
SYSTON

Drawing Title
EXISTING SITE ACCESS
VISIBILITY SPLAYS

Drawing Status
FOR INFORMATION

Drawn	Designed	Date	Scale	Size
KI		DEC 2024	1:500	A3

Drawing No.	Rev
24-527-SK01	-

PLOT DATE: 11 December 2024 17:03:19

Appendix 3. MIL LANE – ROAD ARRANGEMENTS

N

EXISTING PASSING PLACE

142m

EXISTING ROAD WIDENING

120m

EXISTING ROAD WIDENING

156m

EXISTING ROAD WIDENING

EXISTING PASSING PLACE

49m

EXISTING PASSING PLACE

47m

EXISTING PASSING PLACE

Industrial Estate

50.3m

Rev	Date	Description	Drn	Chk	App
-	11.12.24	ORIGINAL ISSUE	KI	AP	AP

MAGNA TRANSPORT PLANNING LTD

Client

-

Project

SYSTON MILLS INDUSTRIAL ESTATE,
MILL LANE,
SYSTON

Drawing Title

FORWARD VISIBILITY
MILL LANE

Drawing Status

FOR INFORMATION

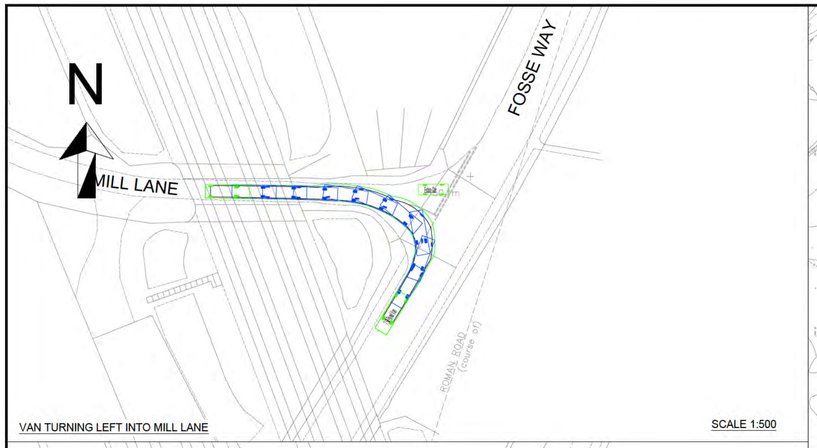
Drawn	Designed	Date	Scale	Size
KI		DEC 2024	NTS	A1

Drawing No.: 24-527-SK03

Rev: -

PLOT DATE: 20 December 2024 13:58:03

Appendix 4. SWEPT PATH ASSESSMENT – FOSSE WAY/MILL LANE

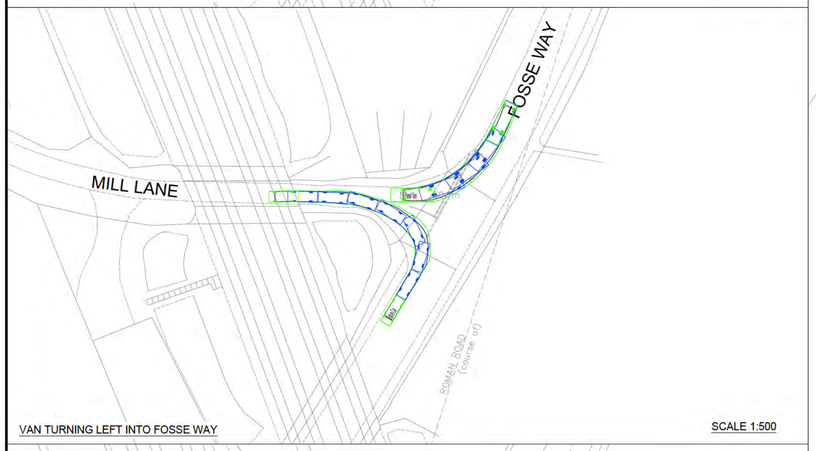


VAN TURNING LEFT INTO MILL LANE

SCALE 1:500

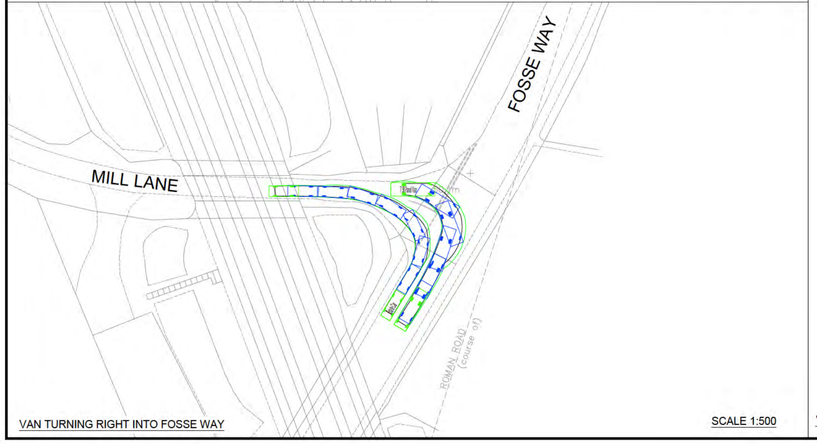
VAN TURNING RIGHT INTO MILL LANE

SCALE 1:500



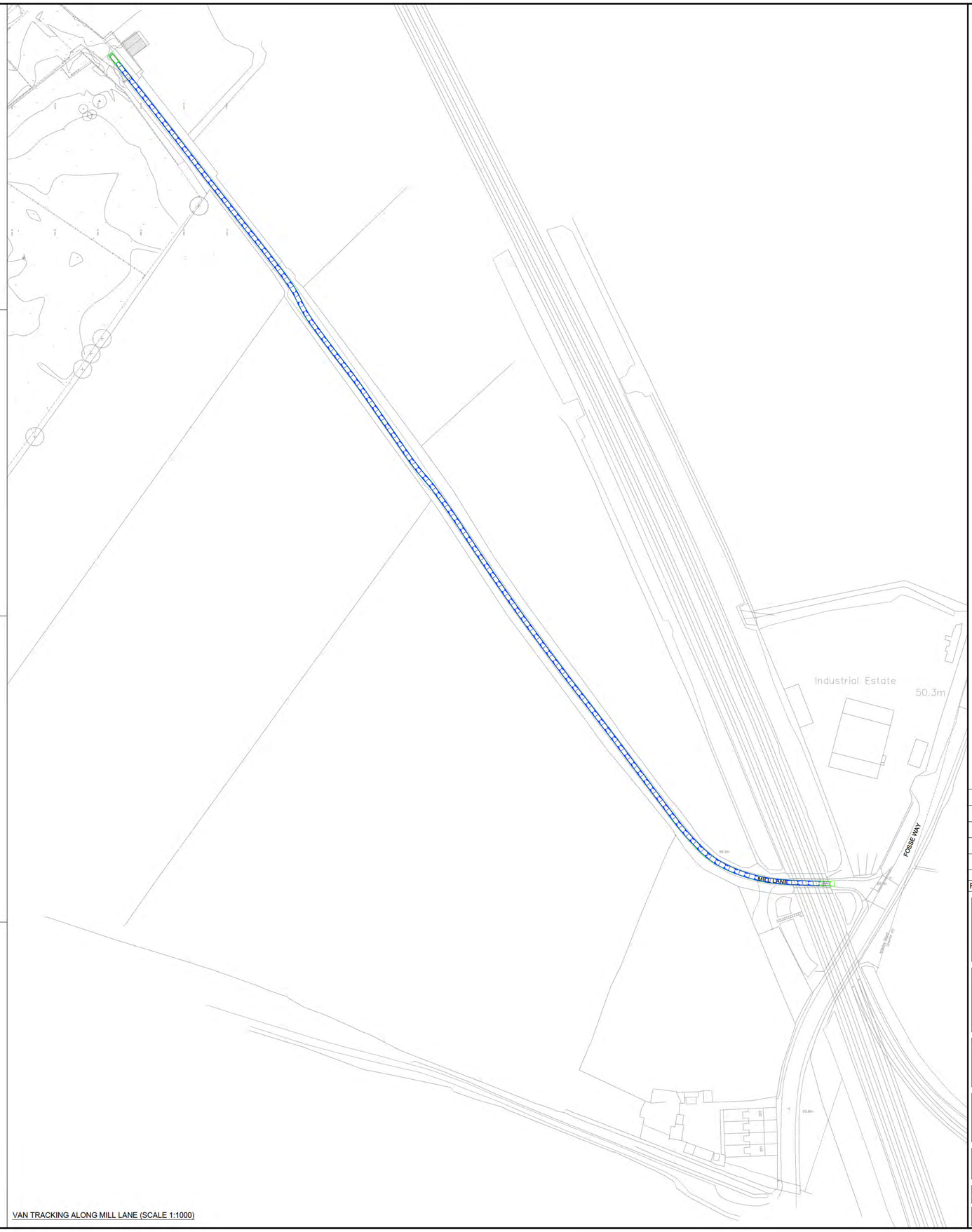
VAN TURNING LEFT INTO FOSSE WAY

SCALE 1:500

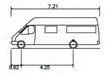


VAN TURNING RIGHT INTO FOSSE WAY

SCALE 1:500



VAN TRACKING ALONG MILL LANE (SCALE 1:1000)



7.5t Panel Van	
Overall Length	7.210m
Overall Width	2.192m
Overall Body Height	2.544m
Min Body Ground Clearance	0.316m
Track Width	1.865m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

Estate Car	
Overall Length	4.845m
Overall Width	1.750m
Overall Body Height	1.424m
Min Body Ground Clearance	0.189m
Max Track Width	1.655m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	4.950m

Rev	Date	Description	Drn	Chk	App
-	11.12.24	ORIGINAL ISSUE	KI	AP	AP

MAGNA TRANSPORT PLANNING LTD

Client

-

Project

SYSTON MILLS INDUSTRIAL ESTATE,
MILL LANE,
SYSTON

Drawing Title

SWEPT PATH ANALYSIS
7.5t PANEL VAN

Drawing Status

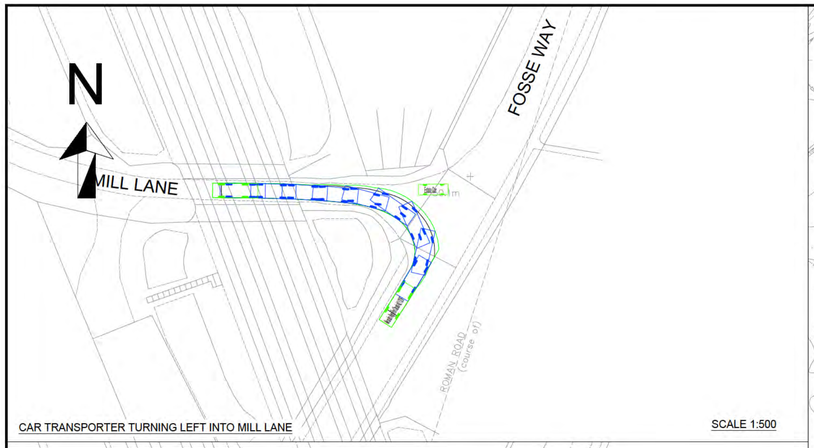
FOR INFORMATION

Drawn	Designed	Date	Scale	Size
KI		DEC 2024	AS SHOWN	A1

Drawing No. 24-527-TR01

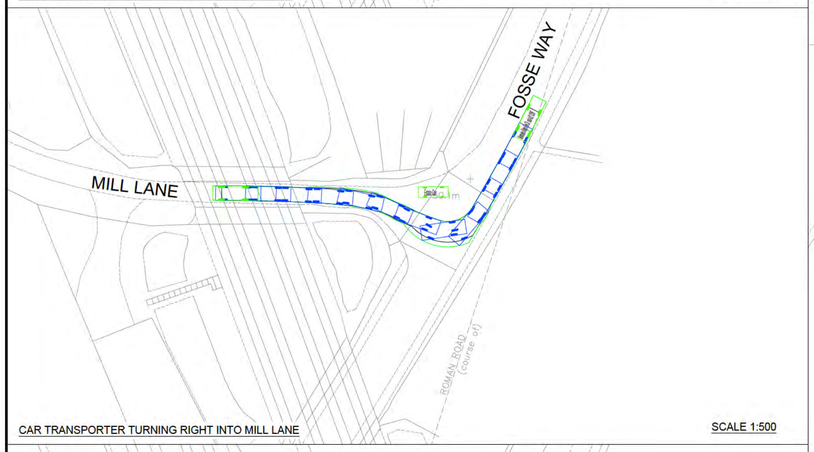
Rev -

PLOT DATE: 20 December 2024 13:59:30



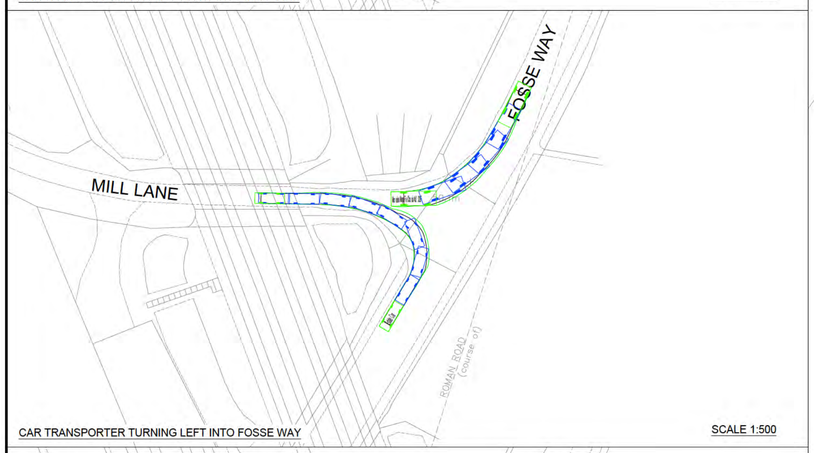
CAR TRANSPORTER TURNING LEFT INTO MILL LANE

SCALE 1:500



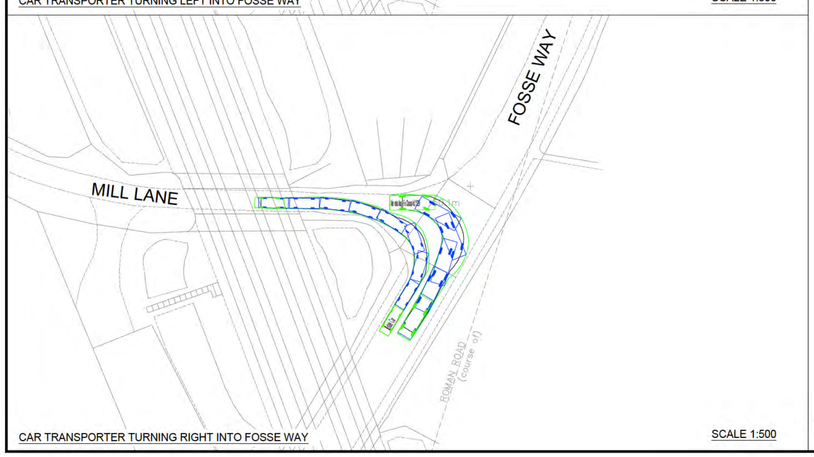
CAR TRANSPORTER TURNING RIGHT INTO MILL LANE

SCALE 1:500



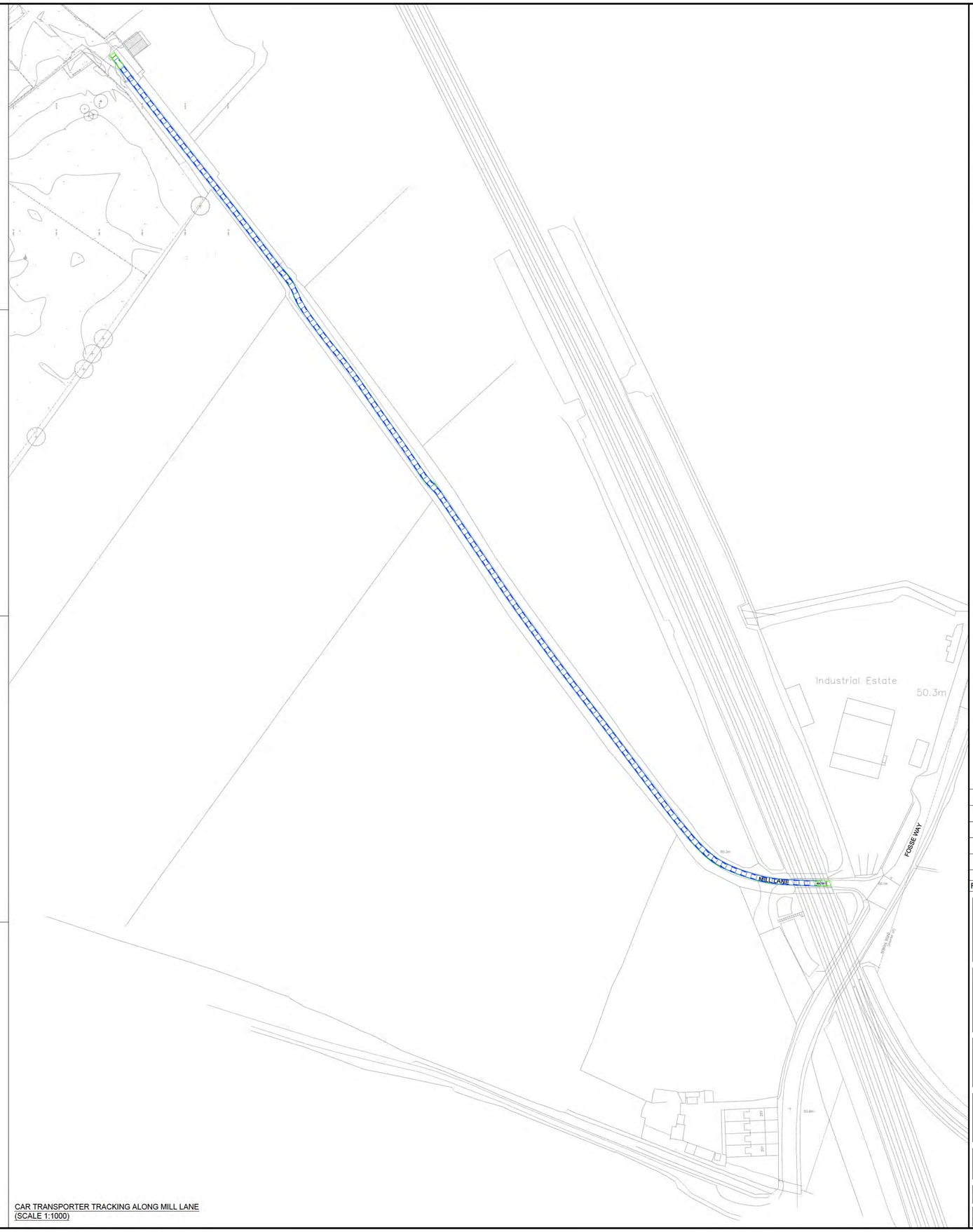
CAR TRANSPORTER TURNING LEFT INTO FOSSE WAY

SCALE 1:500

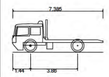


CAR TRANSPORTER TURNING RIGHT INTO FOSSE WAY

SCALE 1:500



CAR TRANSPORTER TRACKING ALONG MILL LANE
(SCALE 1:1000)



Mercedes Atego Fire Chassis 4x2 1329F

Overall Length	7.385m
Overall Width	2.363m
Overall Body Height	2.647m
Min Body Ground Clearance	0.183m
Track Width	2.363m
Lock to lock time	5.00s
Wall to Wall Turning Radius	7.450m

Estate Car

Overall Length	4.845m
Overall Width	1.750m
Overall Body Height	1.424m
Min Body Ground Clearance	0.189m
Max Track Width	1.655m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	4.950m

Rev	Date	Description	Drn	Chk	App
-	11.12.24	ORIGINAL ISSUE	KI	AP	AP

MAGNA TRANSPORT PLANNING LTD

Client

-

Project

SYSTON MILLS INDUSTRIAL ESTATE,
MILL LANE,
SYSTON

Drawing Title

SWEPT PATH ANALYSIS
SMALL CAR TRANSPORTER

Drawing Status

FOR INFORMATION

Drawn	Designed	Date	Scale	Size
KI		DEC 2024	AS SHOWN	A1

Drawing No. 24-527-TR02

Rev -

PLOT DATE: 20 December 2024 13:59:45

Appendix 5. COLLISION REPORT

Accidents between dates **01/01/2019** **and** **30/09/2024** (69) months

Selection:
Selected using Manual Selection

Notes:

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300138	15/02/2023	461870	311710	Other	Dry	Daylight	Slight

Location: C3307 FOSSE WAY SYSTON JW GLEBE WAY.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Pedal Cycle (Including pedal assisted electric bicycles)	Mid Junction - on roundabout or main road	Going ahead other	S	N
Van / Goods 3.5 tonnes mgw and under	Entering main road	Turning right	W	S

Casualties:

Class	Severity
Driver / Rider	Slight

Number of records in selection: **1**

Appendix 6. PROPOSED CYCLE PARKING

Rev	Date	Description	Drn	Chk	App
-	08.01.24	ORIGINAL ISSUE	KI	AP	AP

MAGNA TRANSPORT PLANNING LTD

Client

-

Project

SYSTON MILLS INDUSTRIAL ESTATE,
MILL LANE,
SYSTON

Drawing Title

PROPOSED CYCLE PARKING

Drawing Status

FOR INFORMATION

Drawn	Designed	Date	Scale	Size
KI		JAN 2025	NTS	A1

Drawing No.: 24-527-SK04

Rev: -

PLOT DATE: 08 January 2025 12:17:14

Appendix 7. TRICS: INDUSTRIAL ESTATE

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : D - INDUSTRIAL ESTATE
MULTI-MODAL OGVS

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
03	SOUTH WEST		
	DV	DEVON	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	AK	WAKEFIELD	3 days
	NY	NORTH YORKSHIRE	1 days
10	WALES		
	SW	SWANSEA	1 days

Primary Filtering selection:

Parameter:	Gross floor area
Actual Range:	1660 to 5280 (units: sqm)
Range Selected by User:	1000 to 6000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 30/06/23

Selected survey days:

Monday	3 days
Tuesday	1 days
Thursday	1 days
Friday	2 days

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town	7

Selected Location Sub Categories:

Industrial Zone	5
Development Zone	1
No Sub Category	1

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	3 days - Selected
Servicing vehicles Excluded	4 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	7 days

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	3 days
15,001 to 20,000	1 days
25,001 to 50,000	2 days

Population within 5 miles:

100,001 to 125,000	1 days
125,001 to 250,000	6 days

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	3 days

Travel Plan:

No	7 days

PTAL Rating:

No PTAL Present	7 days

LIST OF SITES relevant to selection parameters

1 AK-02-D-01 INDUSTRIAL ESTATE WAKEFIELD
CARR WOOD ROAD
CASTLEFORD

Edge of Town
Development Zone
Total Gross floor area: 1776 sqm
Survey date: MONDAY *22/05/17* *Survey Type: MANUAL*

2 AK-02-D-02 INDUSTRIAL ESTATE (PART) WAKEFIELD
PIONEER WAY
CASTLEFORD

Edge of Town
Industrial Zone
Total Gross floor area: 4328 sqm
Survey date: TUESDAY *23/05/17* *Survey Type: MANUAL*

3 AK-02-D-03 INDUSTRIAL ESTATE WAKEFIELD
THUNDERHEAD RIDGE RD
CASTLEFORD
GLASSHOUGHTON
Edge of Town
No Sub Category
Total Gross floor area: 3191 sqm
Survey date: MONDAY *15/05/17* *Survey Type: MANUAL*

4 DV-02-D-07 INDUSTRIAL ESTATE DEVON
BITTERN ROAD
EXETER
SOWTON IND. ESTATE
Edge of Town
Industrial Zone
Total Gross floor area: 3600 sqm
Survey date: MONDAY *03/07/17* *Survey Type: MANUAL*

5 EX-02-D-03 INDUSTRIAL ESTATE ESSEX
WYNCOLLS ROAD
COLCHESTER
SEVERALLS INDUSTRIAL PK
Edge of Town
Industrial Zone
Total Gross floor area: 4876 sqm
Survey date: FRIDAY *18/05/18* *Survey Type: MANUAL*

6 NY-02-D-04 INDUSTRIAL ESTATE NORTH YORKSHIRE
GRIMBALD CRAG CLOSE
KNARESBOROUGH

Edge of Town
Industrial Zone
Total Gross floor area: 1660 sqm
Survey date: FRIDAY *30/06/23* *Survey Type: MANUAL*

7 SW-02-D-02 INDUSTRIAL ESTATE SWANSEA
CLARION COURT
SWANSEA
SWANSEA ENTERPRISE PK
Edge of Town
Industrial Zone
Total Gross floor area: 5280 sqm
Survey date: THURSDAY *10/10/19* *Survey Type: MANUAL*

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	3470	0.000	2	3470	0.000	2	3470	0.000
06:00 - 07:00	2	3470	0.000	2	3470	0.000	2	3470	0.000
07:00 - 08:00	7	3530	0.012	7	3530	0.012	7	3530	0.024
08:00 - 09:00	7	3530	0.036	7	3530	0.020	7	3530	0.056
09:00 - 10:00	7	3530	0.036	7	3530	0.028	7	3530	0.064
10:00 - 11:00	7	3530	0.028	7	3530	0.016	7	3530	0.044
11:00 - 12:00	7	3530	0.036	7	3530	0.057	7	3530	0.093
12:00 - 13:00	7	3530	0.028	7	3530	0.024	7	3530	0.052
13:00 - 14:00	7	3530	0.028	7	3530	0.020	7	3530	0.048
14:00 - 15:00	7	3530	0.024	7	3530	0.036	7	3530	0.060
15:00 - 16:00	7	3530	0.036	7	3530	0.028	7	3530	0.064
16:00 - 17:00	7	3530	0.024	7	3530	0.032	7	3530	0.056
17:00 - 18:00	7	3530	0.004	7	3530	0.016	7	3530	0.020
18:00 - 19:00	7	3530	0.000	7	3530	0.000	7	3530	0.000
19:00 - 20:00	2	3470	0.000	2	3470	0.000	2	3470	0.000
20:00 - 21:00	2	3470	0.000	2	3470	0.000	2	3470	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.292			0.289			0.581

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.33

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	3470	0.014	2	3470	0.014	2	3470	0.028
06:00 - 07:00	2	3470	0.216	2	3470	0.000	2	3470	0.216
07:00 - 08:00	7	3530	0.607	7	3530	0.202	7	3530	0.809
08:00 - 09:00	7	3530	0.886	7	3530	0.611	7	3530	1.497
09:00 - 10:00	7	3530	0.826	7	3530	0.599	7	3530	1.425
10:00 - 11:00	7	3530	1.101	7	3530	0.813	7	3530	1.914
11:00 - 12:00	7	3530	1.068	7	3530	1.101	7	3530	2.169
12:00 - 13:00	7	3530	0.996	7	3530	1.004	7	3530	2.000
13:00 - 14:00	7	3530	0.809	7	3530	0.919	7	3530	1.728
14:00 - 15:00	7	3530	0.838	7	3530	0.967	7	3530	1.805
15:00 - 16:00	7	3530	0.846	7	3530	0.866	7	3530	1.712
16:00 - 17:00	7	3530	0.753	7	3530	1.020	7	3530	1.773
17:00 - 18:00	7	3530	0.397	7	3530	1.016	7	3530	1.413
18:00 - 19:00	7	3530	0.089	7	3530	0.247	7	3530	0.336
19:00 - 20:00	2	3470	0.014	2	3470	0.360	2	3470	0.374
20:00 - 21:00	2	3470	0.000	2	3470	0.014	2	3470	0.014
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			9.460			9.753			19.213

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	3470	0.000	2	3470	0.000	2	3470	0.000
06:00 - 07:00	2	3470	0.072	2	3470	0.000	2	3470	0.072
07:00 - 08:00	7	3530	0.105	7	3530	0.069	7	3530	0.174
08:00 - 09:00	7	3530	0.304	7	3530	0.291	7	3530	0.595
09:00 - 10:00	7	3530	0.214	7	3530	0.231	7	3530	0.445
10:00 - 11:00	7	3530	0.291	7	3530	0.255	7	3530	0.546
11:00 - 12:00	7	3530	0.312	7	3530	0.324	7	3530	0.636
12:00 - 13:00	7	3530	0.279	7	3530	0.279	7	3530	0.558
13:00 - 14:00	7	3530	0.235	7	3530	0.247	7	3530	0.482
14:00 - 15:00	7	3530	0.231	7	3530	0.202	7	3530	0.433
15:00 - 16:00	7	3530	0.231	7	3530	0.186	7	3530	0.417
16:00 - 17:00	7	3530	0.178	7	3530	0.182	7	3530	0.360
17:00 - 18:00	7	3530	0.085	7	3530	0.142	7	3530	0.227
18:00 - 19:00	7	3530	0.012	7	3530	0.040	7	3530	0.052
19:00 - 20:00	2	3470	0.000	2	3470	0.043	2	3470	0.043
20:00 - 21:00	2	3470	0.000	2	3470	0.014	2	3470	0.014
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.549			2.505			5.054