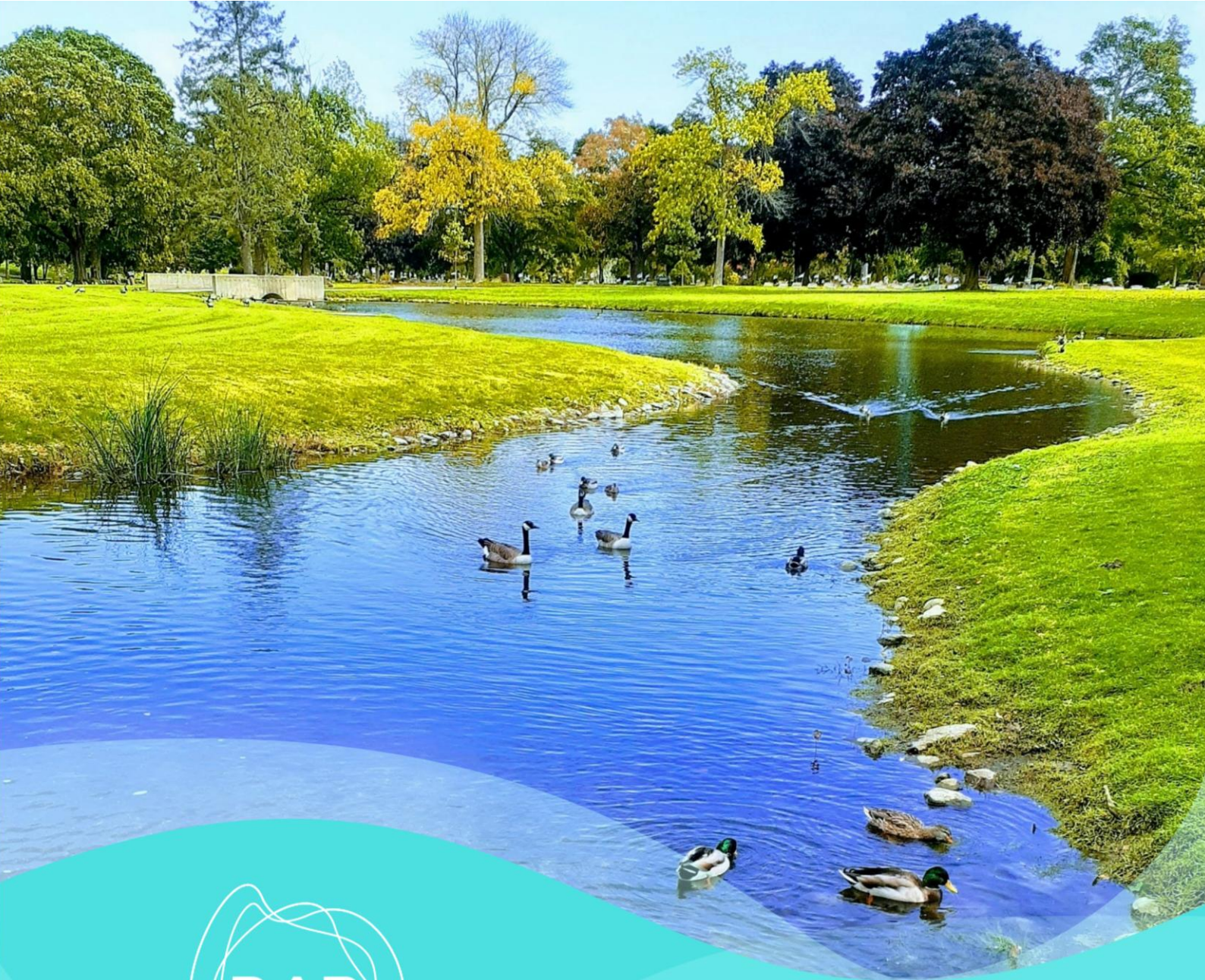




41 & 43 Hall Gate, Holbeach PE12 7JA – Flood Risk Assessment

20/11/2025
Version 1.0
RAB: 3612



Disclaimer

This document has been prepared solely as a Flood Risk Assessment for Surveying Services Ltd. RAB Consultants accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared. No person other than the client may copy (in whole or in part) use or rely on the contents of this document, without the prior written permission of the Managing Director of RAB Consultants Ltd. Any advice, opinions, or recommendations within this document should be read and relied upon only in the context of the whole document.

Published by

RAB Consultants Limited
Second Floor
Cathedral House
Beacon Street
Lichfield
Staffordshire
WS13 7AA

Call: 0330 2236475
Email: enquiries@rabconsultants.co.uk
Visit: rabconsultants.co.uk

By viewing and saving this document digitally instead of printing it, you could save 4.6g of carbon emissions from double-sided printing on primary-sourced or 3.7g from 100% recycled A4 paper. Please only print this document if it is necessary.



Quality Control

Action	Name
Prepared	Joe Lawrie-Jones
Checked	Alexandros Tsavdaris CEng MICE
Approved	Alexandros Tsavdaris CEng MICE

Revision History

Version	Date	Amendments	Issued to
1.0	20/11/2025	First issue	Peter Legg



Contents

1.0	INTRODUCTION	1
2.0	SITE DETAILS	1
2.1	Site location	1
2.2	Site description	2
2.3	Development proposal	2
3.0	FLOOD RISK	2
3.1	Sequential test	2
3.2	Climate Change Impact	3
3.3	Flood History	4
3.4	Fluvial (Rivers)	4
3.5	Coastal/Tidal	4
3.6	Flood defence breach and overtopping	5
3.6.1	Breach Risk	5
3.7	Pluvial (Surface water)	6
3.8	Artificial water bodies	7
3.9	Groundwater	7
3.10	Sewers	7
4.0	MITIGATION METHODS	7
4.1	Risk to structures	7
4.1.1	Finished floor levels / Risk control measures	7
4.1.2	Risk mitigation measures	8
4.2	Risk to occupiers	8
4.2.1	Safe access/egress	8
4.2.2	Flood warning and evacuation plan	8
4.3	Risk to others	9
4.3.1	Impact on flooding	9
4.3.2	Impact on surface water run-off	10
4.3.3	SuDS feasibility	10
5.0	CONCLUSION	11
6.0	RECOMMENDATIONS	12
	APPENDIX A – DEVELOPMENT PROPOSAL	13
	APPENDIX B – ENVIRONMENT AGENCY DATA	14



1.0 Introduction

RAB Consultants has prepared this Flood Risk Assessment (FRA) in support of the proposed demolition and reconstruction of the semi-detached properties of 41 & 43 Hall Gate, Holbeach, PE12 7JA.

The development site is located in Flood Zone 3 according to the Environment Agency's Flood Map for Planning (Rivers and Sea). A Flood Risk Assessment for this site is required under the National Planning Policy Framework (NPPF) due to its location in Flood Zone 3.

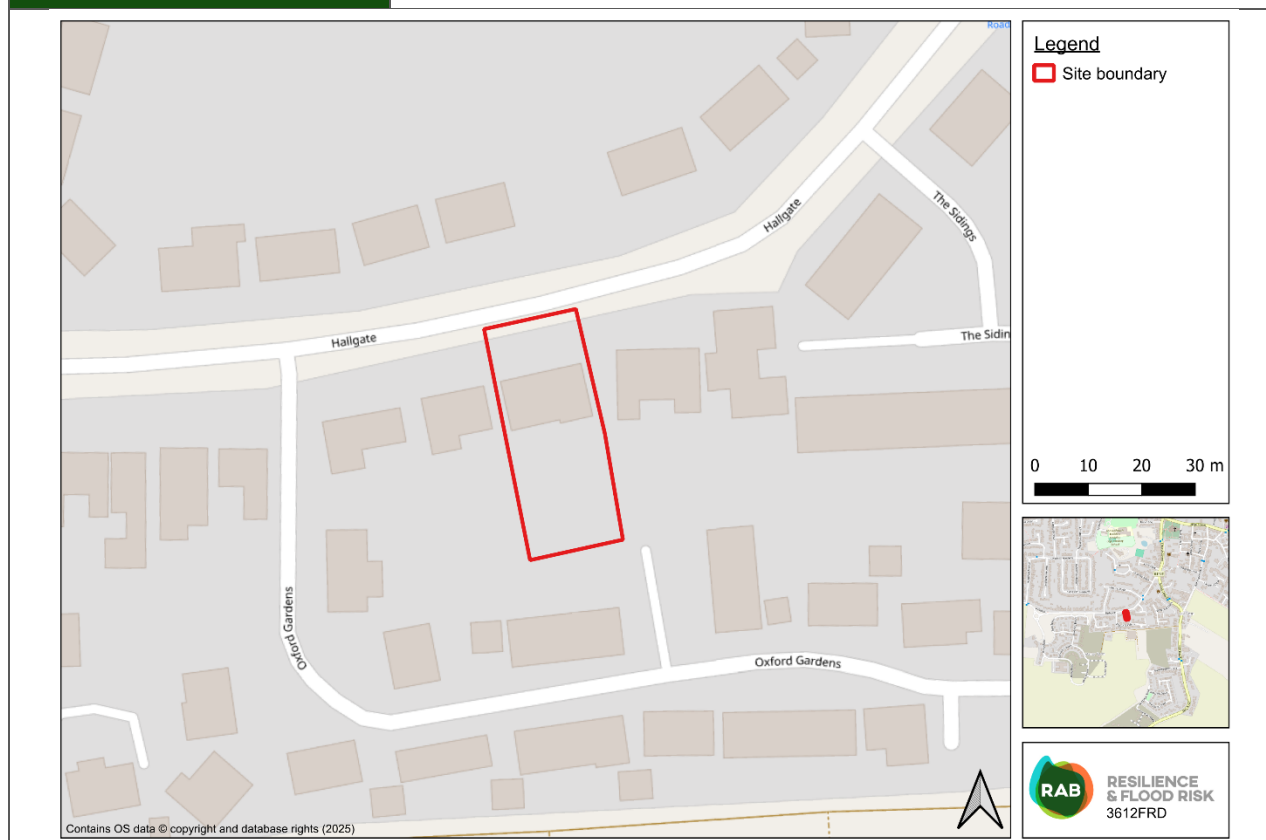
A site-specific FRA is required to ensure that the development is safe from flooding and will not increase the risk of flooding elsewhere.

2.0 Site details

2.1 Site location

TABLE 1: SITE LOCATION

Site address:	41 & 43 Hall Gate, Holbeach PE12 7JA
Site area:	420m ²
Existing land use:	Semi-detached residential properties
OS NGR:	TF 35672 24367
Local Planning Authority:	South Holland District Council



2.2 Site description

The site consists of two semi-detached residential properties, 41 and 43 Hall Gate, and is located within the town of Holbeach. The properties are accessible from Hall Gate only, which bounds the site to the north. The surrounding area is dominated by other residential properties, which border the site to the east, south and west.

The site is located approximately 12km south-west of The Wash estuary, while the closest watercourse to the site is Old River, an ordinary watercourse located 200m south of the site.

2.3 Development proposal

It is proposed to demolish the existing semi-detached properties and reconstruct two new residential properties in their place.

3.0 Flood Risk

3.1 Sequential test

According to the Environment Agency's Flood Map for Planning the site lies in Flood Zone 3, which is described in the NPPF as land having a 1 in 100 or greater annual probability of river flooding (1% or greater Annual Exceedance Probability, AEP); or land having a 1 in 200 or greater annual probability of sea flooding (0.5% AEP or greater).

The NPPF follows a sequential risk-based approach in determining the suitability of land for development in flood risk areas, with the intention of steering all new development to the lowest flood risk areas. NPPF Planning Practice Guidance (PPG) Annex 3 confirms the 'Flood risk vulnerability classification' of a site, depending upon the proposed usage. This classification is subsequently applied to Table 2 'Flood risk vulnerability and flood zone compatibility' to determine whether:

- The proposed development is suitable for the flood zone in which it is located; and
- Whether an Exception Test is required for the proposed development.

As the development is classified as 'non-major' and 'more vulnerable', in accordance with the NPPF PPG, the Sequential and Exception Tests are normally required, due to the site's location in Flood Zone 3.

As the proposal is to replace two existing 'more vulnerable' buildings that have been in place for many years with two new, purpose built 'more vulnerable' buildings, it is reasonable to conclude that the sustainable use of the land for this vulnerability classification of building has already been proven through experience. It is not feasible to achieve the aim of the project (demolish and rebuild) by utilising an alternative site. Furthermore, the proposal provides an opportunity to reduce risk to people and buildings through better design of the buildings. We therefore believe that the requirements of the Sequential Test are met.

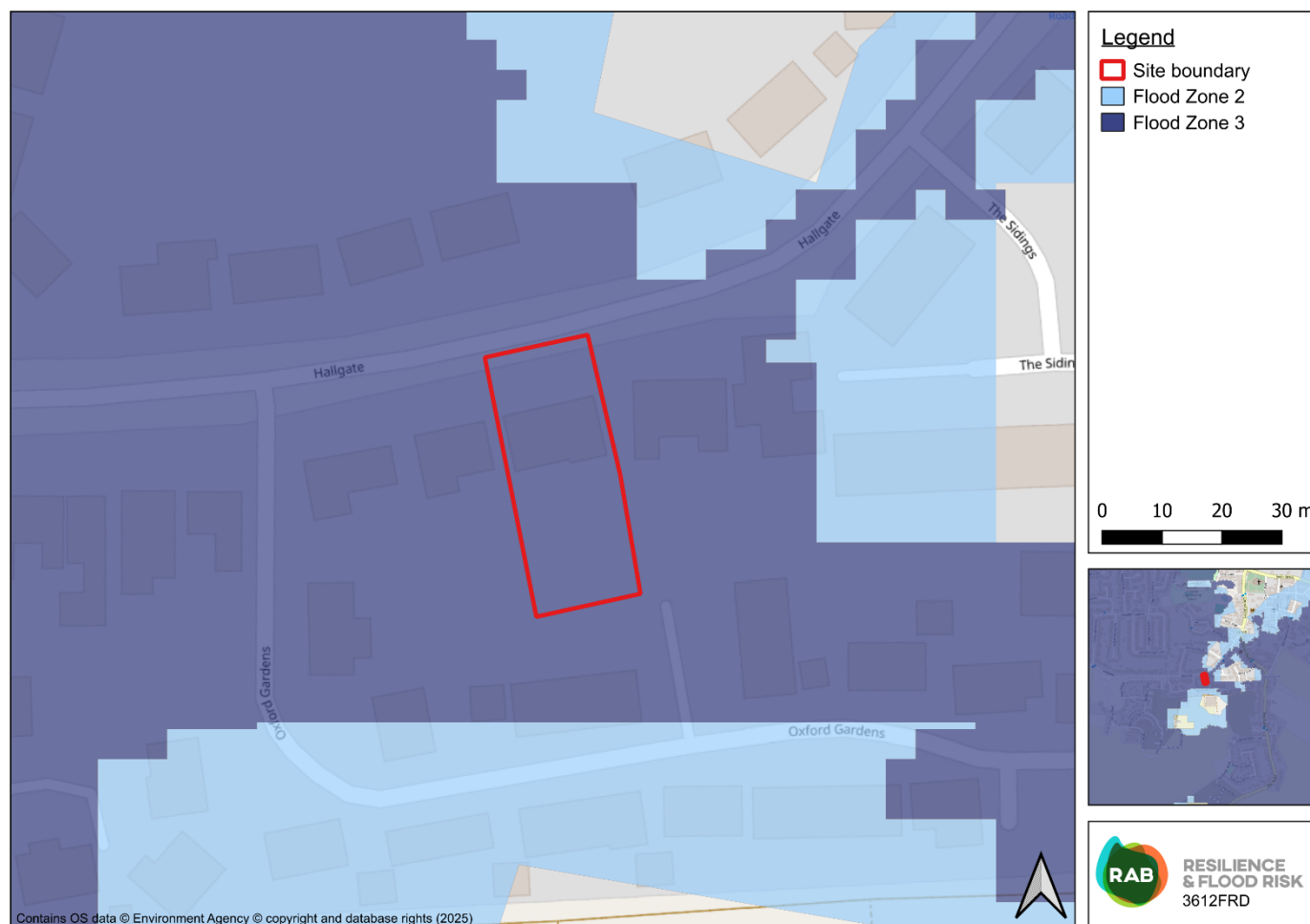


FIGURE 1: ENVIRONMENT AGENCY'S FLOOD ZONE MAP

3.2 Climate Change Impact

The Environment Agency guidance document 'Flood risk assessments: climate change allowances' was released in February 2016 and last updated in May 2022. It includes statistical increases on peak fluvial flows, sea level rise, and rainfall intensity by Management Catchment and allowance categories based on epochs and development vulnerability classification.

Referring to the NPPF PPG, the development is classified as 'more vulnerable' and has an expected lifetime of 100 years therefore the 'upper end' allowance category applies for development in Flood Zone 3a. This equates to an increase of 1.60m on sea level rise for the Anglian river basin district in the 2100 Epoch.

For peak rainfall intensity, the 'upper end' allowance category applies. This equates to an increase of 40% on peak rainfall intensity for the Welland Management Catchment in the 2070s.

3.3 Flood History

The Environment Agency holds records of historic flooding from rivers and the sear, of which there are none at the site. South East Lincolnshire's 2017 Strategic Flood Risk Assessment (SFRA) does not make note of any other instances of historic flooding in the area.

3.4 Fluvial (Rivers)

The Environment Agency has indicated that the site is not considered to be at risk of flooding from main rivers, but it is not known whether the site is at risk of flooding from ordinary watercourses. South East Lincolnshire's 2017 SFRA states that ordinary watercourses with a catchment of 3km² are represented on the Environment Agency's Flood Map for Planning. For ordinary watercourses with a catchment below this threshold, site specific FRAs are only required when the site is within 10m of an ordinary watercourse. As the nearest ordinary watercourse is located 200m away, the risk from this source is considered to be lower than coastal/tidal risk (see Section 3.5).

3.5 Coastal/Tidal

The site's location in Flood Zone 3 is representative of the risk at the site from tidal sources, due to its proximity to The Wash, a tidal estuary located approximately 12km northeast of the site. The coastal/tidal Flood Zone extent shows areas at risk of flooding from the sea in the 0.5% AEP, and assumes the site is unprotected from any raised defences. In reality, the site does benefit from raised defences, with embankments along the River Welland, River Nene, and along The Wash estuary between these two watercourses surrounding the site.

Risk of flooding from rivers and sea mapping shows that the majority of the site is expected not to flood up to the 0.1% AEP +CC event given that the existing defences are adequately maintained, with a very small region at the north of the site within the flood extent, as shown in Figure 2 below. A comparison of this flood extent against local ground levels, obtained from LiDAR DTM 2022 data, shows that the flood level is expected to reach approximately 3.32mAOD. This is only an indicative estimation, but given that it is based on the extreme 0.1% AEP +CC extent, it is sufficient to inform mitigation measures.

While the defences adequately protect the properties from flooding, there remains a residual risk of a breach of the raised defences, which has the potential to cause a rapid inundation of tidal flooding in extreme events. This risk has been assessed in Section 3.6 below.

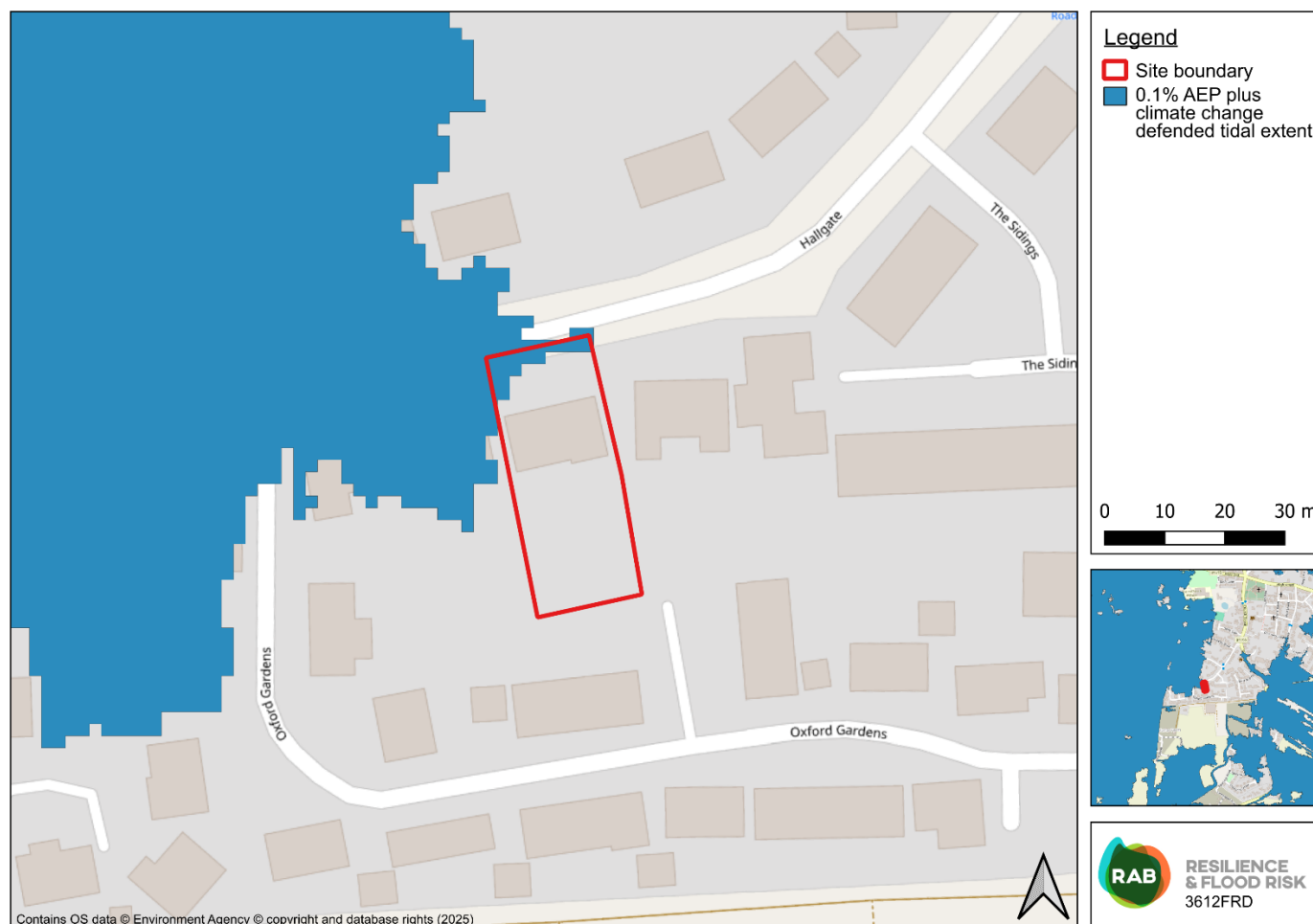


FIGURE 2: ENVIRONMENT AGENCY'S 0.1% AEP +CC DEFENDED TIDAL EXTENT MAP

3.6 Flood defence breach and overtopping

3.6.1 Breach Risk

Appendix B of South East Lincolnshire's 2017 SFRA shows mapping of flood depths which incorporates both fluvial and tidal events. The mapping includes modelled flooding consequences resulting from both overtopping and breaching of flood defences but primarily demonstrates the breach risk and shows the worst-case flood scenario for the site. The mapping provided is for the 0.5% AEP tidal breach event for the 2100 Epoch and shows the maximum expected depth in the range of 0-0.25m at the location of the site.

The Environment Agency has provided separate 'Lincolnshire and Northamptonshire Tidal Breaching Hazard Mapping', which is consistent with the SFRA breach mapping, showing the site to be in an area with flood depths in the 0-0.25m range for both the 0.5% AEP and 0.1% AEP extents in the 2115 scenario year.

It should be noted that no flood levels have been provided for the flood events, and as such flood depth will be used to inform mitigation measures.

3.6.2 Overtopping risk

It should be noted that the 0.1% AEP +CC defended tidal extent shown in Figure 2 essentially demonstrates the overtopping risk at the site, as it factors in the raised defences already in place, which have been overtopped in the flood event. Despite already factoring in the increase in flood risk due to climate change, the site would still benefit from an increased standard of protection to further mitigate risk. The management of the shoreline along this section of coast is outlined in 'The Wash Shoreline Management Plan 2', which sets out goals for successfully managing tidal flood risk in the area from Gibraltar Point to Wolferton Creek, known as Policy Development Zone 1 (PDZ1). From the period of 2005-2025, the generic approach for this unit has been to 'Hold the line' (HL3), meaning that where protection is currently provided by coastal defence structures, these should be adequately maintained if funding allows, but not replaced if they fail or reach the end of their design life. The approach for the period 2025-2055 is still pending agreement.

3.7 Pluvial (Surface water)

The Environment Agency's risk of flooding from surface water map, including an allowance from an increase in rainfall intensity due to climate change, shows that the site is entirely outside of an area at risk of flooding from this source.

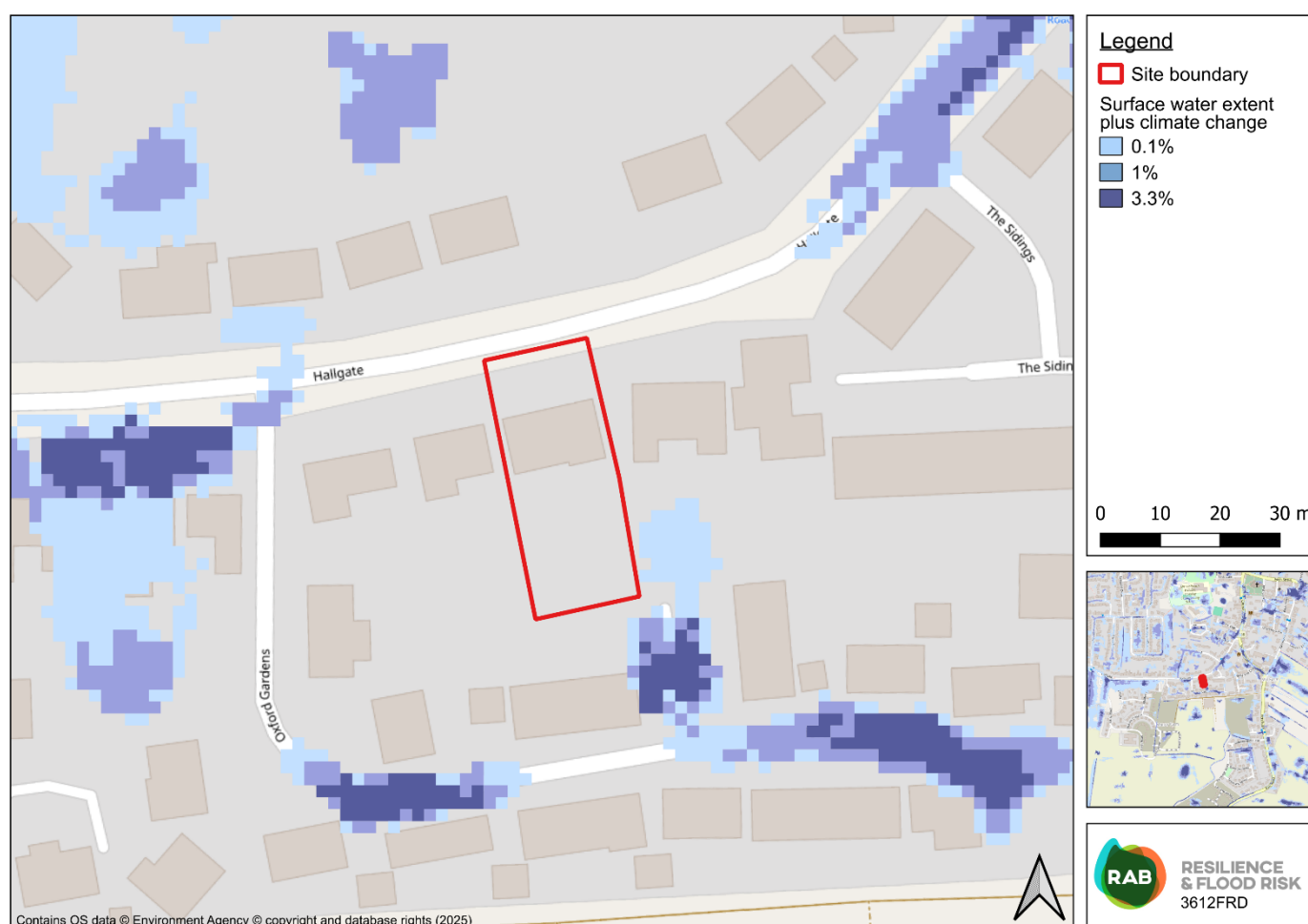


FIGURE 3: ENVIRONMENT AGENCY'S RISK OF FLOODING FROM SURFACE WATER MAP

TABLE 2: ENVIRONMENT AGENCY SURFACE WATER RISK CATEGORIES

Surface Water Risk Category	Surface water flooding Annual Exceedance Probability
Very Low	< 0.1%
Low	Between 1% and 0.1% (1 in 100 years and 1 in 1000 years)
Medium	Between 1% and 3.3% (1 in 100 years and 1 in 30 years)
High	> 3.3% (1 in 30 years)

3.8 Artificial water bodies

The Environment Agency as the enforcement authority for the Reservoirs Act 1975, also ensures that reservoirs are inspected regularly, and essential safety work is carried out. The Environment Agency's long term flood risk service show that flooding from reservoirs is unlikely in this area. The risk of flooding from reservoirs is therefore considered to be lower than tidal risk, which has been assessed in Section 3.5. South East Lincolnshire's 2017 SFRA does not make note of any other artificial water bodies in the area.

3.9 Groundwater

BGS Geology Viewer shows the site to be located in an area of 'West Walton Formation – Mudstone and siltstone' with superficial deposits of 'Tidal Flats Deposits – Clay and silt'. While groundwater is expected to be near the surface in this area, due to the nature of the region as coastal flats, it's expected that the superficial deposits of clay and silt are likely to create a natural barrier to groundwater emergence.

This is corroborated by the BGS susceptibility to groundwater flooding mapping, where the site is shown to be in a general area where there is no susceptibility to groundwater emergence.

3.10 Sewers

South East Lincolnshire's 2017 SFRA does not make a mention of sewer flooding in the area, and as such it is not considered to be of significant concern. It is expected that any flooding involving sewers will be underpinned by other sources of flooding, the primary source of which has been described in Section 3.5. The development is also not expected to require any change to the existing sewer connection.

4.0 Mitigation Methods

4.1 Risk to structures

4.1.1 Finished floor levels / Risk control measures

In order to afford a level of protection against flooding it is normally recommended that finished floor levels are set at least 0.3 - 0.6m above the modelled 1% AEP plus climate change design flood level.

The estimated flood height at the site in the 0.1% AEP +CC defended extent is 3.32mAOD, based on the comparison of Environment Agency flood extents and LiDAR DTM 2022 data. The flood height for the



residual worst-case scenario 0.5% AEP +CC breach event are not provided, so the maximum depths should therefore be used to inform finished floor levels. Residual flood depths aren't expected to exceed 0.25m. Finished floor levels should therefore be set at minimum of 3.62mAOD OR 0.3m above surrounding ground levels, whichever is greater.

4.1.2 Risk mitigation measures

Flood resistance is a strategy of temporary or permanent measures taken to reduce the amount of flood water that will enter buildings. Flood recoverability measures are intended to reduce damage to a building such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment.

Provided that finished floor levels are set 0.3m above local ground levels and the 0.1% AEP +CC defended tidal extent, flood resilience measures are not necessary to further mitigate flood risk but may be considered to provide a more robust defence against future flooding.

No ground floor sleeping is permitted as part of the development, in order to mitigate the worst possible case flood event.

4.2 Risk to occupiers

4.2.1 Safe access/egress

In both the 0.1% AEP +CC defended extent, and the 0.5% AEP breach event, flooding is expected on the access to the site to the north from Hall Gate. Flood Hazard mapping has been provided as part of the breach and overtopping modelling in South East Lincolnshire's 2017 SFRA, which show the site to be in an area with hazard rating of <0.75, which signifies a low hazard. Hazard mapping provided by the Environment Agency for the 0.1% AEP breach event also shows the site to be area of hazard rating <0.75. This indicates that safe access and egress is possible at the site for such an event.

4.2.2 Flood warning and evacuation plan

The proposed site is included in an Environment Agency Flood Warning area '*Holbeach, Fleet, Gedney and surrounding areas*'.

The free service offers a minimum 30 minute lead time before the onset of flooding at the site. Residents should register to receive a Flood Warning for this area from Environment Agency by the channels identified in Table 3. A choice is provided on how they are to be contacted by the Environment Agency in the event of a flood, such as an automated telephone call, fax or email.

TABLE 3: FLOOD WARNING INFORMATION

Channel	Details
Register for Flood Warnings	https://www.gov.uk/sign-up-for-flood-warnings
Floodline	0345 988 1188 (Quick Dial Code: 307153)
Typetalk	0845 602 6340
Live information	https://flood-warning-information.service.gov.uk/

Residents also have the option to monitor the:

- Met Office Severe Weather Warnings for rainfall.

- Environment Agency's 5-day flood risk.
- Water levels near the site and adjacent roads.
- Live updates and advice provided by the Environment Agency, the Council, Police and Fire and Rescue Service on their websites, local media (local TV and radio) and social media channels (e.g. Twitter).

This will provide triggers which will enable them to make appropriate decisions to safeguard their health and safety. Table 4 includes a list of useful links which can be used to monitor flood risk and weather warnings.

TABLE 4: USEFUL WEBSITE LINKS

USEFUL WEBSITE LINKS	
Description	Website Link
Weather Warning Guide	https://www.metoffice.gov.uk/weather/guides/warnings
EA Live Flood Alert information	https://check-for-flooding.service.gov.uk/alerts-and-warnings
Guide to email alert service	https://www.metoffice.gov.uk/about-us/guide-to-emails
5-day flood risk for England and Wales	https://check-for-flooding.service.gov.uk/?v=map-outlook
Severe Weather Warning Service including weather warning impacts and what they mean	https://www.metoffice.gov.uk/weather/guides/severe-weather-advice
Met Office Live Severe Weather Warnings	https://www.metoffice.gov.uk/weather/warnings-and-advice/uk-warnings#?date=2022-12-15
BBC Weather	https://www.bbc.co.uk/weather

4.3 Risk to others

4.3.1 Impact on flooding

Environment Agency guidance states there must be no loss of flood storage capacity for flooding up to the 1% AEP plus climate change event. As the development involves the reconstruction of two demolished properties, and the risk associated with the site is from the residual breach risk, it is expected that the new building footprints will have a negligible impact on floodplain storage capacity. In addition, the site is located within a coastal/tidally influenced floodplain where floodplain compensation does not apply.



4.3.2 Impact on surface water run-off

Any increase in hardstanding area as a result of the development can have a negative impact on surface water runoff. The rate of surface water runoff should be managed through the incorporation of Sustainable Drainage Systems (SuDS), information regarding which can be found within the section below.

4.3.3 SuDS feasibility

The SuDS Manual (2015) discusses the SuDS approach to managing surface water runoff which is intended to mimic the natural catchment process as closely as is possible. The approach sets out the design objectives in respect of SuDS:

- Use of surface water runoff as a resource;
- Manage rainwater close to where it falls (at source);
- Manage runoff on the surface (above ground);
- Allow rainwater to soak into the ground (infiltration);
- Promote evapotranspiration;
- Slow and store runoff to mimic natural runoff rates and volumes;
- Reduce contamination of runoff through pollution prevention and by controlling the runoff at source; and
- Treat runoff to reduce the risk of urban contaminants causing environmental pollution.

Depending on the characteristics of the site and local requirements, these may be used in conjunction and to varying degrees. Table 5 presents the functions of the SuDS components (from which a management train can be created) and their feasibility in respect of the site.

TABLE 5: FEASIBILITY OF SuDS TECHNIQUES AT THE DEVELOPMENT SITE

Technique	Description	Feasibility Y / N / M (Maybe)
Good building design and rainwater harvesting	Components that capture rainwater and facilitate its use within the building or local environment.	Y – The development can incorporate water butts / SuDS planters to collect roof run-off from the property roofs.
Porous and pervious surface materials	Structural surfaces that allow water to penetrate, thus reducing the proportion of runoff that is conveyed to the drainage system (green roofs, pervious paving).	M – There may be potential to include permeable paving at the property parking spaces.



Technique	Description	Feasibility Y / N / M (Maybe)
Infiltration Systems	Components that facilitate the infiltration of water into the ground. These often include temporary storage zones to accommodate runoff volumes before slow release to the soil.	M – Capacity to discharge water into the ground may be possible subject to BRE 365 infiltration testing.
Conveyance Systems	Components that convey flows to downstream storage systems (e.g. swales, watercourses).	N – There is no space on site for conveyance systems.
Storage Systems	Components that control the flows and, where possible, volumes of runoff being discharged from the site, by storing water and releasing it slowly (attenuation). These systems may also provide further treatment of the runoff (e.g. ponds, wetlands, and detention basins).	M - There may be space on site for small underground attenuation systems.
Treatment Systems	Components that remove or facilitate the degradation of contaminants present in the runoff.	Y – Appropriate SuDS features can provide treatment benefits.

5.0 Conclusion

The proposed development at 41 & 43 Hall Gate, Holbeach PE12 7JA is located in Flood Zone 3, and includes the demolition and reconstruction of two semi-detached dwellings.

The proposals constitute a 'non-major' 'more vulnerable' development, and the Sequential and Exception Tests are therefore normally required. As it is not feasible to achieve the aim of the project by utilising an alternative site, and that the vulnerability classification is not to change and the new design can include improved risk mitigation measures, the requirements of the Sequential Test can be considered to be met.

The primary source of flooding has been identified as tidal flooding from The Wash, on the basis of available data from the Environment Agency and Local Planning Authority. The site is protected from flooding from raised defences along The Wash, River Welland and River Nene.

A small area at the north of the site is expected to flood in the 0.1% AEP +CC defended tidal extent, and the site is at a residual risk of flooding in the 0.5% AEP +CC breach event.

Risk should be mitigated by setting the finished floor levels of the properties 0.3m above local ground levels or the 0.1% AEP +CC defended tidal event, whichever is greater.

Safe access and egress is available to Hall Gate, which bounds the site to the north, based on provided data.

The implementation of SuDS should be considered to provide betterment to the management of surface water runoff.

It is concluded that the proposed development is appropriate for the risk of flooding and is not expected to increase flood risk elsewhere, provided that the recommendations in this report are adhered to.



6.0 Recommendations

- Finished floor levels should therefore be set at minimum 3.62mAOD OR 0.3m above surrounding ground levels, whichever is greater..
- Flood resistance and recoverability measures should be considered to provide more robust flood resilience at the properties.
- Avoid sleeping accommodation at the ground floor level.
- Residents should consider signing up to the Environment Agency's Flood Warning service, as described in Section 4.2.2 of this report.
- Surface water should be managed by the implementation of SuDS features to provide betterment to the rate and volume of runoff.
- Construction (Design and Management) Regulations 2015:
 - The revised CDM Regulations came into force in April 2015, which defines the duties for all parties involved in a construction project, including those promoting the development. One of the designer's responsibilities is to ensure that the client organisation, in this instance Surveying Services Ltd, is made aware of their duties (please see [link](#) for Domestic Client) under the CDM Regulations.



Appendix A – Development proposal

Responsibility is not accepted for errors made by others in scaling from this drawing. All construction information should be taken from figured dimensions only.

0mm

50mm

A3

Original Sheet Size



Location Plan
1 : 1250

Planning Issue

date	rev	name	chk	note
------	-----	------	-----	------



Architectural Design - Feasibility - Planning - Building Control - Construction Details - Sustainable Design
Systems House 89 Heol Don Cardiff CF14 2AT
T 02920316857 M 07785582007 info@dlparchitecture.co.uk

PROJECT
The proposed demolition and rebuild of existing dwellings

41 & 43 Hallgate, Holbeach, SPALDING, Lincolnshire, PE12 7JA

DRAWING TITLE
Location Plan

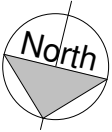
SCALE	DATE	DRAWN BY	CHECKED BY
1 : 1250	23/07/25	PL	MK

DRAWING NUMBER	REVISION
P840 L_001	

Responsibility is not accepted for errors made by others in scaling from this drawing. All construction information should be taken from figured dimensions only.

0mm50mm

A3Original Sheet Size



Planning Issue

date	rev	name	chk	note
------	-----	------	-----	------



Architectural Design - Feasibility - Planning - Building Control - Construction Details - Sustainable Design
Systems House 89 Heol Don Cardiff CF14 2AT
T 02920316857 M 07785582007 info@dlparchitecture.co.uk

PROJECT
The proposed demolition and rebuild of existing dwellings

41 & 43 Hallgate, Holbeach, SPALDING, Lincolnshire, PE12 7JA

DRAWING TITLE
Site Plan as Existing

SCALE	DATE	DRAWN BY	CHECKED BY
1 : 200	23/07/25	PL	MK

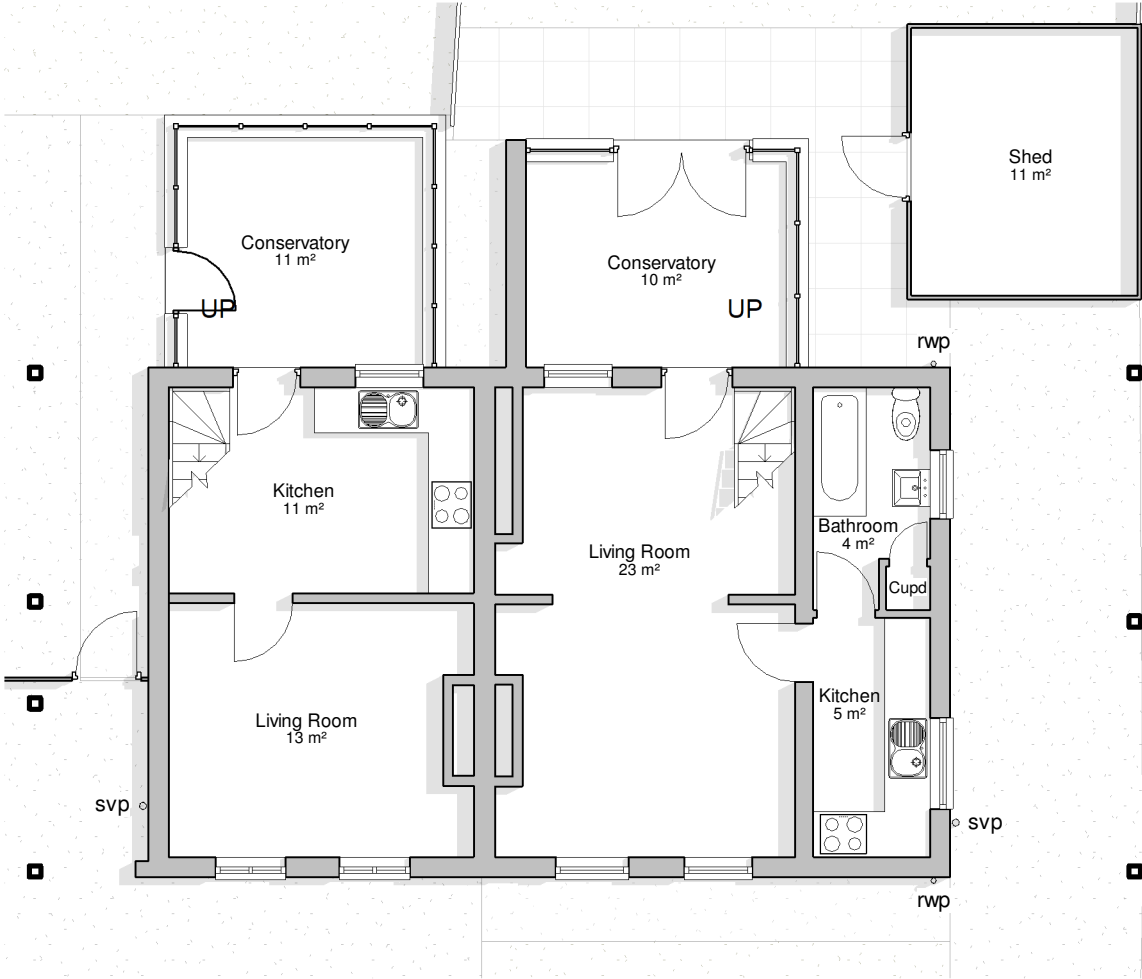
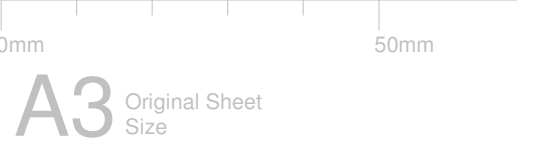
DRAWING NUMBER	REVISION
P840 L_002	

Site Plan as Existing
1 : 200

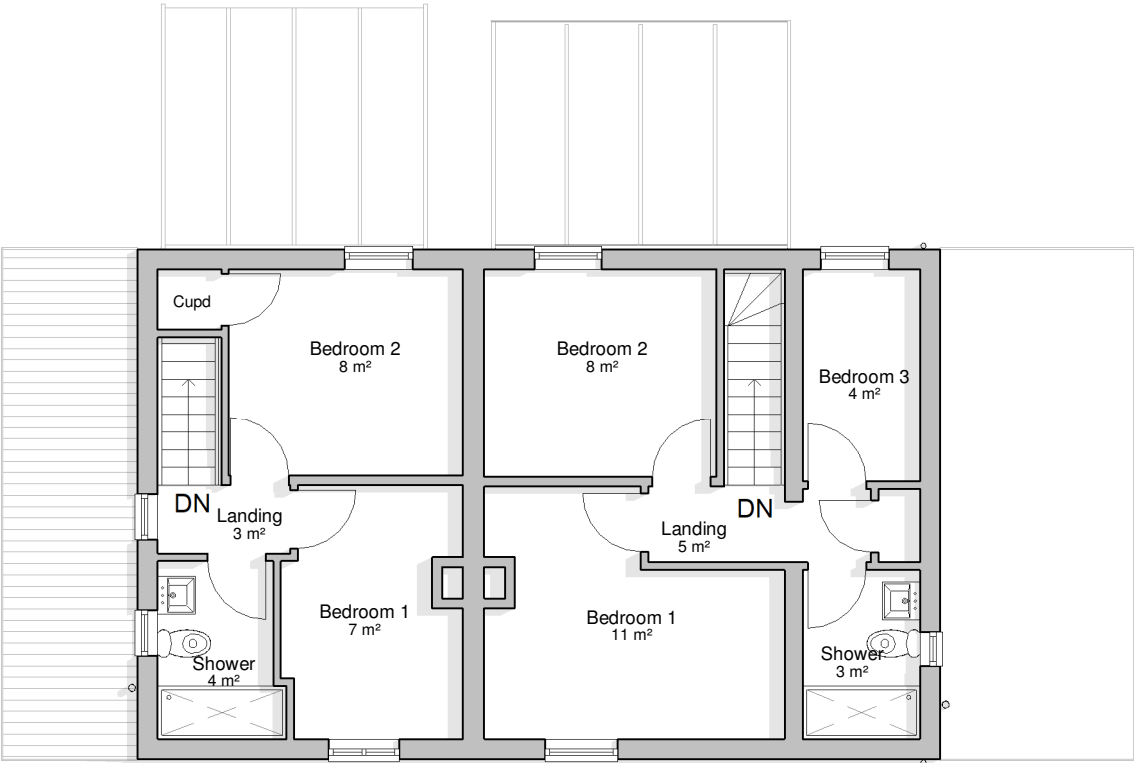
HALL GATE

Site Area: 420m2

Responsibility is not accepted for errors made by others in scaling from this drawing. All construction information should be taken from figured dimensions only.



Ground Floor
1 : 100



First Floor
1 : 100

Planning Issue

date	rev	name	chk	note
------	-----	------	-----	------



Architectural Design - Feasibility - Planning - Building Control - Construction Details - Sustainable Design
Systems House 89 Heol Don Cardiff CF14 2AT
T 02920316857 M 07785582007 info@dlparchitecture.co.uk

PROJECT
The proposed demolition and rebuild of existing dwellings

41 & 43 Hallgate, Holbeach, SPALDING,
Lincolnshire, PE12 7JA

DRAWING TITLE
Ground and First Floor Plans as Existing

SCALE	DATE	DRAWN BY	CHECKED BY
1 : 100	23/07/25	PL	MK

DRAWING NUMBER	REVISION
P840 L_100	

Responsibility is not accepted for errors made by others in scaling from this drawing. All construction information should be taken from figured dimensions only.



A3 Original Sheet Size

FINISHES KEY:

- A : BROWN CONCRETE ROOFING & RIDGE TILES
- B : WHITE UPVC WINDOWS & DOORS
- C : WHITE UPVC RAINWATER GOODS ON WHITE UPVC FASCIA
- D : BROWN BRICKWORK EXTERNAL WALLS
- E : BLACK UPVC RAINWATER GOODS ON BLACK UPVC FASCIA
- F : BROWN UPVC WINDOWS & DOORS
- G : SALMON PAINTED BRICKWORK EXTERNAL WALLS



North (Front) Elevation
1 : 100

Planning Issue

date	rev	name	chk	note
------	-----	------	-----	------



Architectural Design - Feasibility - Planning - Building Control - Construction Details - Sustainable Design
Systems House 89 Heol Don Cardiff CF14 2AT
T 02920316857 M 07785582007 info@dlparchitecture.co.uk

PROJECT
The proposed demolition and rebuild of existing dwellings

41 & 43 Hallgate, Holbeach, SPALDING, Lincolnshire, PE12 7JA

DRAWING TITLE
Elevations 1 of 2 as Existing

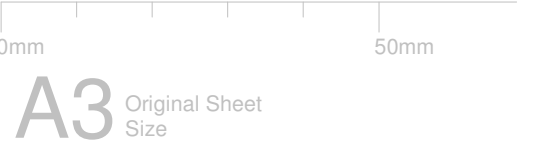
SCALE	DATE	DRAWN BY	CHECKED BY
1 : 100	23/07/25	PL	MK

DRAWING NUMBER	REVISION
P840 L_110	



East (Side) Elevation
1 : 100

Responsibility is not accepted for errors made by others in scaling from this drawing. All construction information should be taken from figured dimensions only.



South (Rear) Elevation
1 : 100

FINISHES KEY:	
A	: BROWN CONCRETE ROOFING & RIDGE TILES
B	: WHITE UPVC WINDOWS & DOORS
C	: WHITE UPVC RAINWATER GOODS ON WHITE UPVC FASCIA
D	: BROWN BRICKWORK EXTERNAL WALLS
E	: BLACK UPVC RAINWATER GOODS ON BLACK UPVC FASCIA
F	: BROWN UPVC WINDOWS & DOORS
G	: SALMON PAINTED BRICKWORK EXTERNAL WALLS

Planning Issue



West (Side) Elevation
1 : 100

date	rev	name	chk	note
------	-----	------	-----	------



Architectural Design - Feasibility - Planning - Building Control - Construction Details - Sustainable Design
Systems House 89 Heol Don Cardiff CF14 2AT
T 02920316857 M 07785582007 info@dlparchitecture.co.uk

PROJECT
The proposed demolition and rebuild of existing dwellings

41 & 43 Hallgate, Holbeach, SPALDING, Lincolnshire, PE12 7JA

DRAWING TITLE
Elevations 2 of 2 as Existing

SCALE	DATE	DRAWN BY	CHECKED BY
1 : 100	23/07/25	PL	MK

DRAWING NUMBER	REVISION
P840 L_111	



Appendix B – Environment Agency data

Alexandros Tsavdaris
alexandros@rabconsultants.co.uk

Our ref: EIR2025/35636
Date: 20 October 2025

Dear Alexandros,

Flood Risk Information for Hallgate, Holbeach

The flood risk information for the above site is set out below and attached. It is important you read any contextual notes on the maps provided.

If you are preparing a Flood Risk Assessment (FRA) for this site, please note this information may not be sufficient by itself to produce an adequate FRA to demonstrate the development is safe over its lifetime. Additional information may be required to carry out an appropriate assessment of all risks, such as the consequences of a breach in the flood defences.

We aim to review our information on a regular basis, so if you are using this data more than twelve months from the date of this letter, please contact us again to check it is still valid.

Please read the letter in full as the information covered has been updated in **August 2025**.

1. Flood Map for Planning

The attached map includes the current Flood Map for Planning for your area. The map indicates the Area at Risk of Flooding (Flood Zone 3) and the Extreme Flood Outline (Flood Zone 2) **assuming no flood defences exist**.

The Area at Risk of Flooding shows the land that could be impacted from a flood with a 0.5% or greater chance of occurring in any year for flooding from the sea, or a 1% or greater chance of occurring in any year for fluvial (river) flooding.

The Extreme Flood Outline shows the land that could be impacted from a flood which has between a 1% and 0.1% chance of occurring in any year for fluvial (river) flooding, or between a 0.5% and 0.1% annual probability of sea flooding, or the highest recorded historic extent if greater.

In some locations, such as around the fens and the large coastal floodplains, showing the area at risk of flooding assuming no defences may give a slightly misleading picture in that if there were no flood defences, water would spread out across these large floodplains. This flooding could cover large areas of land but to relatively shallow depths and could leave pockets of locally slightly higher land as isolated dry islands. It is important to understand the actual risk of the flooding to these dry islands, particularly in the event of defence failure.

The Flood Map for Planning also shows the location of formal raised flood defences and flood storage reservoirs. It represents areas at risk of flooding for present day only and does not take account of climate change.

The Flood Map for Planning only indicates the extent and likelihood of flooding from rivers or the sea. It should also be remembered flooding may occur from other sources such as surface water sewers, road drainage, etc.

2. Recorded Flood Outlines

With regards to the history of flooding I can advise we do not have any records of flooding in this area. It is possible recent flooding may have occurred which we are currently investigating, therefore this information may be subject to change.

It is possible other flooding may have occurred which other risk management authorities, such as the Lead Local Flood Authority (i.e. top tier council) or Internal Drainage Board (where they exist) have responsibility.

3. Schemes in the area

There are no ongoing capital projects to reduce or sustain the current flood risk to this area.

4. Fluvial Flood Risk Information

This site is not considered to be at risk of flooding from main rivers.

The site may be at risk from local ordinary watercourses for which other risk management authorities, such as the Lead Local Flood Authority (i.e. top tier council) or Internal Drainage Board (where they exist) have responsibility.

5. Tidal Flood Risk Information

This site is considered to be at risk from tidal flooding.

5.1 Tidal Defence Information

The existing tidal defences protecting this site consist of earth embankments.

They are in fair condition and reduce the risk of flooding (at the defence) from the Tidal Welland to a 1% (1 in 100) chance of occurring in any year, and from the Wash to a 0.67% (1 in 150) chance of occurring in any year. We inspect these defences routinely to ensure potential defects are identified.

Refer to paragraph 3 for details of any ongoing capital projects to reduce the flood risk to this site.

5.2 Tidal Flood Levels

The attached data sheets show our current best estimate for extreme tide levels.

Please read the information notes on the data sheets.

5.3 Tidal Hazard Mapping

For certain locations we have carried out modelling to map the maximum values of flood depth, velocity and hazard rating (danger to people) resulting from overtopping and / or breaching of defences at specific locations for a number of scenarios.

At present this information is available along the full coastal / tidal floodplain, except the tidal Witham Haven in Boston (upstream of Hobhole) where only breaching and not overtopping has been modelled and the tidal River Welland upstream of Fosdyke Bridge where neither breaching nor overtopping are available.

The number of locations we have this information for is expected to increase in time.

The attached maps show the maximum values of flood depth, velocity and hazard rating (danger to people) resulting from breaching of the defences at specific locations for the scenarios below. For some locations the breach mapping also includes flooding from overtopping if this is expected in that scenario. The location of modelled tidal breaches is shown on a separate attached map.

5.3.1 Tidal Hazard Mapping – Breaches

- Year 2115 0.5% (1 in 200) chance
- Year 2115 0.1% (1 in 1000) chance

Your site is not affected by breaching of the tidal defences for the present day (2006) scenarios.

5.3.2 Tidal Hazard Mapping - Overtopping

Your site is not affected by overtopping of the defences for the present day (2006) and climate change (2115) scenarios, though may be at risk from breaching.

6. Development Planning

If you would like local guidance on preparing a flood risk assessment for a planning application, please contact our Sustainable Places team at LNplanning@environment-agency.gov.uk. It will help if you mention this data request and attach your site location plan.

We provide free preliminary advice; additional/detailed advice, review of draft FRAs and meetings are chargeable at a rate set to cover our costs, currently £115 (plus VAT) per hour of staff time. Further details are available on our website at <https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals>.

General advice on flood risk assessment for planning applications can be found on GOV.UK at <https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications>

We have provided information on risk of breach where it is available. If you are intending on using this information to prepare a Flood Risk Assessment you will need to check if the data meets your requirements. You may need to carry out further assessment (or modelling) for sites that are at residual risk (including from breach of defences), or additional locations or scenarios.

Climate change will increase flood risk due to overtopping of defences. Please note, unless specified otherwise, the climate change data included has an allowance for 20% increase in flow. Updated guidance on how climate change could affect flood risk to new development - 'Flood risk assessments: climate change allowances' was published on GOV.UK in **July 2021**. The appropriate updated climate change allowance should be applied in a Flood Risk Assessment.

You should also consult the Strategic Flood Risk Assessment produced by your local planning authority.

7. Permitting Information

Under the Environmental Permitting (England and Wales) Regulations 2016, permission must be obtained from the Environment Agency for any proposed activities which will take place:

- in, over, under or within 8 metres of a main river (16 metres if tidal)
- on or within 8 metres of a flood defence structure or culvert (16 metres if tidal)
- on or within 16 metres of a sea defence
- within 16 metres of any main river, flood defence (including a remote defence) or culvert for quarrying or excavation
- in a flood plain more than 8 metres from the river bank, culvert or flood defence structure (16 metres if tidal) if planning permission has not already been granted for the works

For further guidance and advice please visit our website: <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits> or contact our local Partnerships and Strategic Overview team by email at psown@environment-agency.gov.uk. The team will be able to advise if an environmental permit or exemption registration is required and the fee applicable.

Please note that a permit is separate to and in addition to any planning permission granted. The applicant should not assume that such a permit will automatically be forthcoming once planning permission has been granted, and we would advise them to consult with us at the earliest opportunity.

8. Data Licence and Other Supporting Information

We respond to requests for recorded information we hold under the Freedom of Information Act 2000 (FOIA) and the associated Environmental Information Regulations 2004 (EIR).

customer service line 03708 506 506
gov.uk/environment-agency

This information is provided in accordance with the Open Government Licence which can be found here: <http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Further information on flood risk can be found on the GOV.UK website at:
<https://www.gov.uk/browse/environment-countryside/flooding-extreme-weather>

Rights of appeal

If you are not satisfied with our decision, you can contact us within two calendar months to ask for the decision to be reviewed. We will then conduct an internal review of our response to your request and give you our decision in writing within 40 working days.

If you are not satisfied with the outcome of the internal review, you can then make an appeal to the Information Commissioner Office, the statutory regulator for EIR and the Freedom of Information Act 2002. The address is: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire. SK9 5AF.

Tel: 0303 123 1113 (local rate) or 01625 545 745 (national rate) | Fax: 01625 524 510
Email: casework@ico.org.uk | Website: www.ico.org.uk

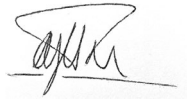
9. Other Flood Risk Management Authorities

The information provided with this letter relates to flood risk from main river or the sea. The Flood Map for Surface Water can be viewed at <https://www.gov.uk/check-long-term-flood-risk>

Additional information may be available from other risk management authorities, such as the Lead Local Flood Authority (ie top tier council) or Internal Drainage Board (where they exist).

I hope we have correctly interpreted your request. If you have any queries or would like to discuss the content of this letter further please contact Alexander Tan using the email address below and quoting our EIR reference number above.

Yours sincerely,



for John O'Neill

Welland and Nene Partnerships and Strategic Overview Team Leader

e-mail PSOWN@environment-agency.gov.uk

Enc.

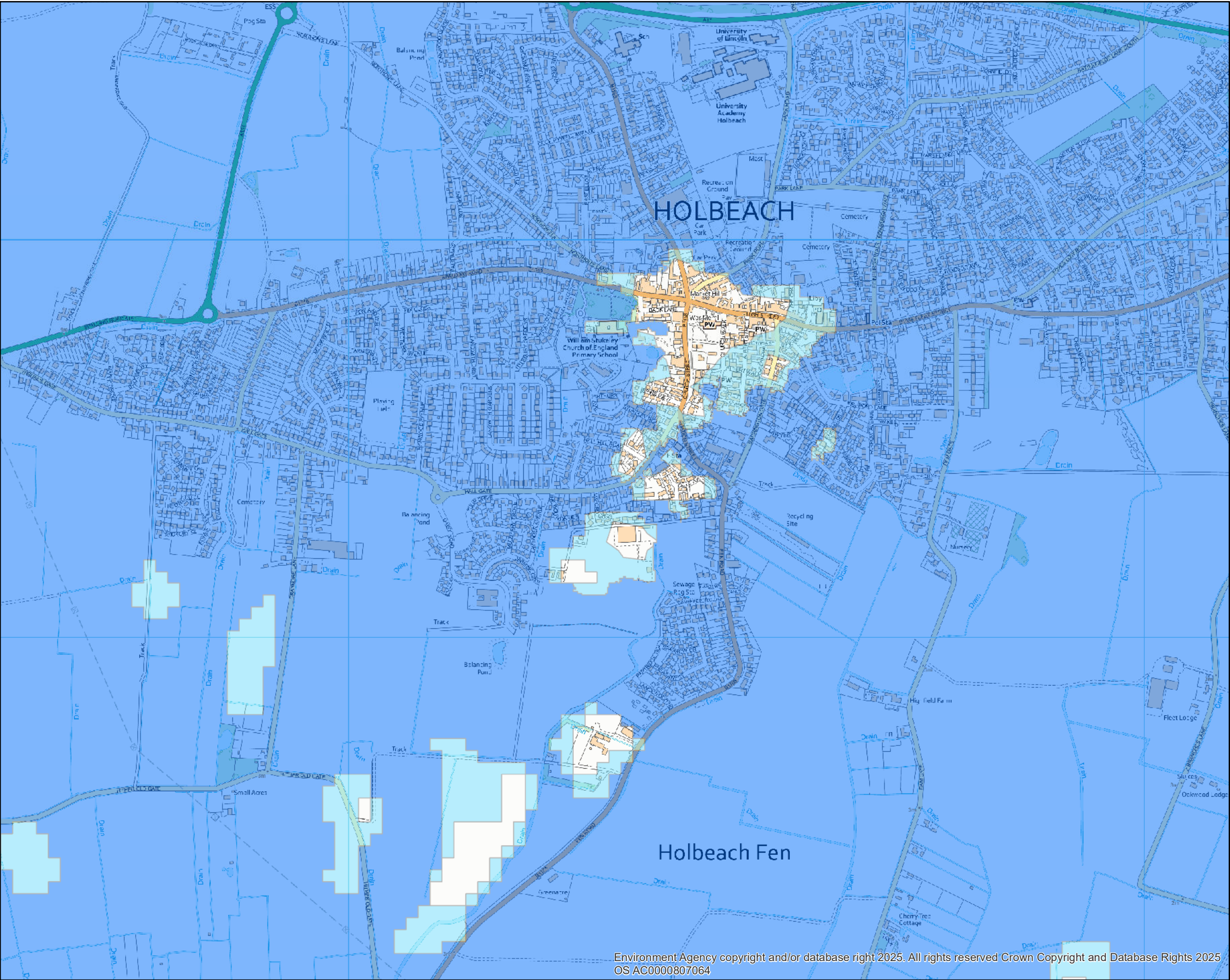
Flood Map for Planning

Tidal Level Data Sheets - Map and Tables

Tidal Breach Points – Locations Map

Hazard Mapping – Breaching

Flood Map centred on TF 35668 24369 - created October 2025 [Ref: EIR2025/35636]



Scale 1:10,000



- Legend**
- Main Rivers
 - Raised Defences
 - Flood Storage Areas
 - Flood Zones 2 and 3 Rivers and Sea**
 - Flood Zone**
 - Flood Zone 2
 - Flood Zone 3

Dark blue shows the area that could be affected by flooding, either from rivers or the sea, if there were no flood defences. This represents land that could be impacted by a flood which has a 1% (1 in 100) or greater chance of occurring in any year from rivers or 0.5% (1 in 200) or greater annual probability of flooding from the sea.

Light blue shows the extent of the Extreme Flood Outline. This represents land that could be impacted by a flood which has between a 1% and 0.1% (1 in 100 to 1 in 1000) chance of occurring in any year from rivers or between 0.5% and 0.1% (1 in 200 to 1 in 1000) annual probability of flooding from the sea, or the highest recorded historic extent if greater.

These two colours show the extent of the natural floodplain if there were no flood defences or certain other manmade structures and channel improvements. Sites outside the two extents, but behind raised defences, may be affected by flooding if the defences are overtopped or fail.

Created by the Partnerships and Strategic Overview Team, Kettering

Environment Agency copyright and/or database right 2025. All rights reserved Crown Copyright and Database Rights 2025 OS AC0000807064

East Coast and Wash - 2018 Coastal Flood Boundary [CFB] Dataset

Key Node Points



Scale 1:550,000



▲ East Coast and Wash

See separate data sheet for predicted flood levels

Created by the Partnerships and Strategic Overview Team, Lincoln

East Coast and Wash: Immingham to the West Lighthouse

2018 Coastal Flood Boundary Extreme Sea Levels

CFB REF	LOCATION	EASTING	NORTHING	ANNUAL CHANCE (1 IN X) OF TIDE LEVEL IN METRES ODN																						
				1			10			50			100			200			300			1000				
				Confidence Bound			Confidence Bound			Confidence Bound			Confidence Bound			Confidence Bound			Confidence Bound			Confidence Bound				
				2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%	97.5%	2.5%	50%
3888	Immingham	520440	417625	4.16	4.17	4.19	4.50	4.53	4.62	4.73	4.80	5.00	4.83	4.93	5.19	4.93	5.06	5.41	4.98	5.14	5.55	5.15	5.38	6.01		
3890	Haborough Marsh	522100	416512	4.14	4.15	4.17	4.48	4.51	4.60	4.70	4.77	4.97	4.80	4.90	5.16	4.90	5.03	5.38	4.94	5.10	5.51	5.11	5.34	5.97		
3898	Grimsby	529295	413162	3.98	3.99	4.01	4.31	4.34	4.43	4.53	4.60	4.80	4.61	4.71	4.97	4.71	4.84	5.19	4.74	4.90	5.31	4.88	5.11	5.74		
3906	Buck Beck	534709	407369	3.87	3.88	3.90	4.19	4.23	4.31	4.41	4.50	4.68	4.50	4.61	4.86	4.61	4.75	5.10	4.64	4.82	5.22	4.80	5.05	5.66		
3910	Tetney	538035	405537	3.85	3.86	3.89	4.17	4.22	4.30	4.40	4.50	4.67	4.49	4.61	4.86	4.60	4.75	5.10	4.63	4.82	5.21	4.80	5.06	5.66		
3918	Donna Nook	544641	401997	3.82	3.83	3.86	4.14	4.19	4.27	4.38	4.48	4.65	4.47	4.60	4.85	4.58	4.74	5.10	4.63	4.82	5.22	4.81	5.08	5.68		
3928	Saltfleet	549131	393360	3.78	3.79	3.82	4.11	4.16	4.26	4.36	4.46	4.64	4.47	4.59	4.86	4.57	4.74	5.11	4.63	4.83	5.25	4.83	5.11	5.74		
3942	Boygrift	555131	380860	3.72	3.74	3.77	4.06	4.11	4.22	4.33	4.43	4.65	4.43	4.57	4.87	4.56	4.73	5.13	4.62	4.83	5.28	4.85	5.15	5.82		
3968	Gibraltar Point	557652	356181	4.16	4.17	4.20	4.51	4.56	4.67	4.76	4.85	5.08	4.85	4.97	5.27	4.94	5.10	5.49	4.99	5.18	5.63	5.14	5.41	6.09		
3992_14	Hobhole	535990	340116	4.96	4.97	5.01	5.40	5.44	5.56	5.66	5.76	5.98	5.78	5.90	6.20	5.88	6.04	6.44	5.92	6.11	6.57	6.03	6.31	6.99		
	Grand Sluice*	532366	344510	4.93	4.94	4.98	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3		
3992_9	Boston Barrier	532754	342852	4.93	4.94	4.98	5.41	5.45	5.57	5.73	5.83	6.05	5.85	5.97	6.27	5.93	6.09	6.49	5.94	6.13	6.59	5.98	6.26	6.94		
3992_5	Fosdyke Bridge	531886	332234	4.87	4.88	4.92	5.31	5.35	5.47	5.58	5.68	5.90	5.71	5.83	6.13	5.82	5.98	6.38	5.87	6.06	6.52	6.01	6.29	6.97		
4008	West Lighthouse	550094	329971	4.87	4.88	4.91	5.21	5.26	5.37	5.46	5.56	5.78	5.56	5.68	5.98	5.66	5.82	6.21	5.71	5.90	6.35	5.86	6.14	6.81		
-	Marsh Road	525988	324065	-	5.04	-	-	5.44	-	-	5.73	-	-	5.85	-	-	5.98	-	-	-	-	-	-	-		
-	Wisbech	546110	309940	-	4.83	-	-	5.25	-	-	5.53	-	-	5.66	-	-	5.78	-	-	-	-	-	-	-		
-	Dog-in-a-Doublet	527200	299287	-	3.67	-	-	4.00	-	-	4.22	-	-	4.32	-	-	4.42	-	-	-	-	-	-	-		

See next page for notes

2018 Coastal Flood Boundary Extreme Sea Levels

NOTES:

The following notes apply to all CFB sites (ie all on table excluding Marsh Road, Wisbech, Dog-in-a-Doublet)

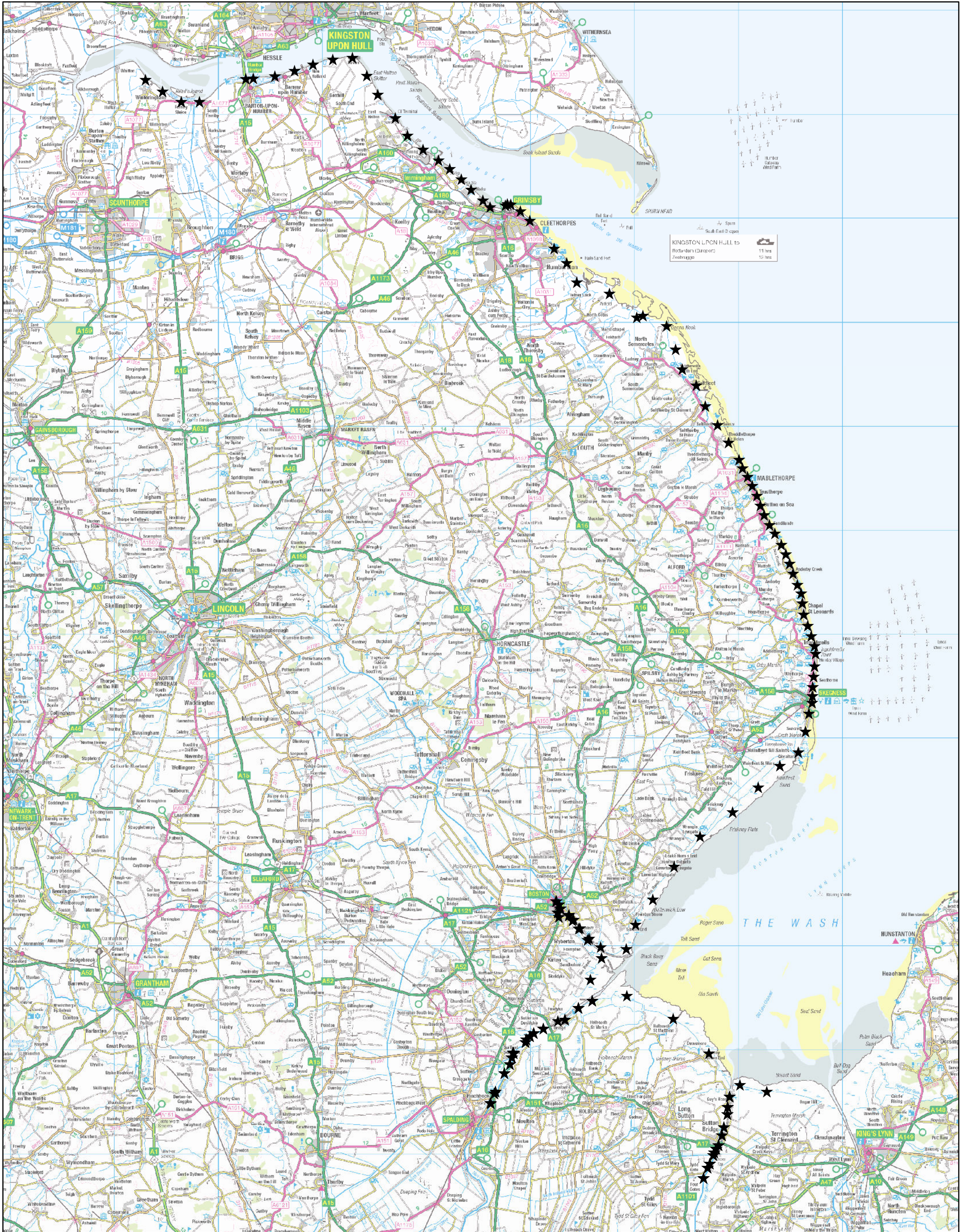
- The base date for the data is 2017.
- The levels are still water levels. Depending on the use of the data it may be necessary to consider wave heights and / or joint probability analysis of water level and other variables.
- Levels for other annual chance probabilities are available if required.
- For additional information relating to the 2018 Coastal Flood Boundary Extreme Sea Levels or to access the full dataset for the above sites or intermediate locations refer to the Defra Metadata Catalogue at <https://deframetadadata.com/geonetwork/srv/eng/catalog.search#/metadata/84a5c7c0-d465-11e4-b0bd-f0def148f590>

The following notes apply to all Marsh Road, Wisbech, Dog-in-a-Doublet

- The base date for the data is 2006
- The levels are still water levels. Depending on the use of the data it may be necessary to consider wave heights and / or joint probability analysis of water level and other variables.
- Levels for other annual chance probabilities are available if required.
- These levels will be updated as their respective tidal river models are updated.

The following notes apply to Grand Sluice

- Grand Sluice remains the tidal limit for the River Witham.
- The data is based on CFB 2018 data for Boston Barrier site, capped at 5.3mAOD to reflect use of the barrier which raises for tides above this level.
- The base date for the data is 2017
- The levels are still water levels. Depending on the use of the data it may be necessary to consider wave heights and / or joint probability analysis of water level and other variables.
- For additional information relating to the 2018 Coastal Flood Boundary Extreme Sea Levels or to access the full dataset for the above sites or intermediate locations refer to the Defra Metadata Catalogue at <https://deframetadadata.com/geonetwork/srv/eng/catalog.search#/metadata/84a5c7c0-d465-11e4-b0bd-f0def148f590>



★ **Modelled Breach Locations**

0 3.5 7 14
Kilometers

This map indicates the location of where we have modelled the consequence of breaches in the defences along the coastline and tidal rivers. We have mapped the maximum values of Hazard Rating (Danger to People), Depth and Velocity.

We have not assumed that all breaches occur at the same time, but have modelled each breach individually and overlaid the results to find the maximum values.

Our modelling only considers the consequences of a breach, it does not make any assumption about the likelihood of a breach occurring. Our defences generally provide a good standard of flood defence but a risk of breaching remains.

Please contact the Environment Agency for information on how these maps are used in the management of flood risk.

General Enquiries No: 03708 506 506.

Weekday calls cost 5p plus up to 6ppm from BT Weekend Unlimited. Mobile and other providers charges may vary.

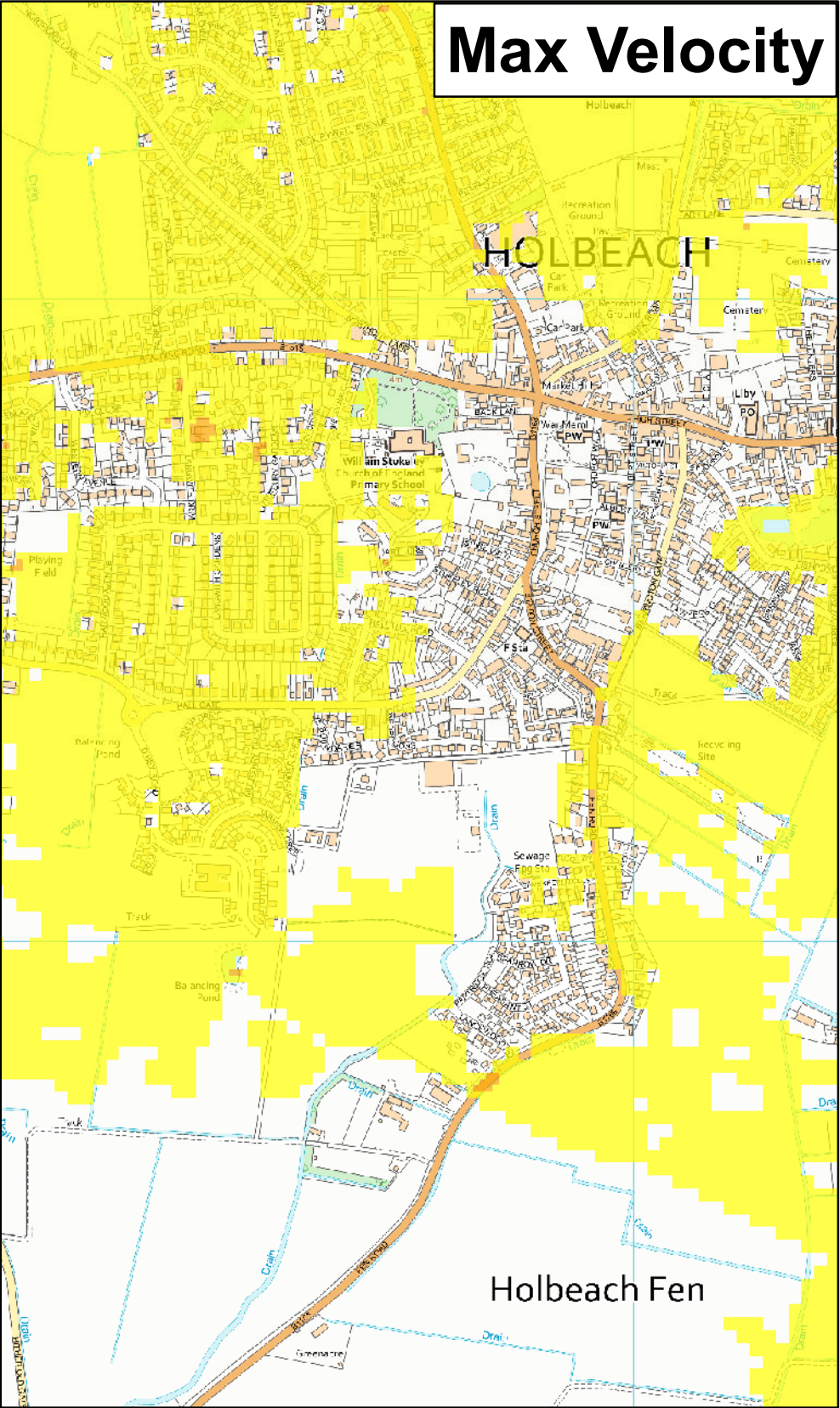
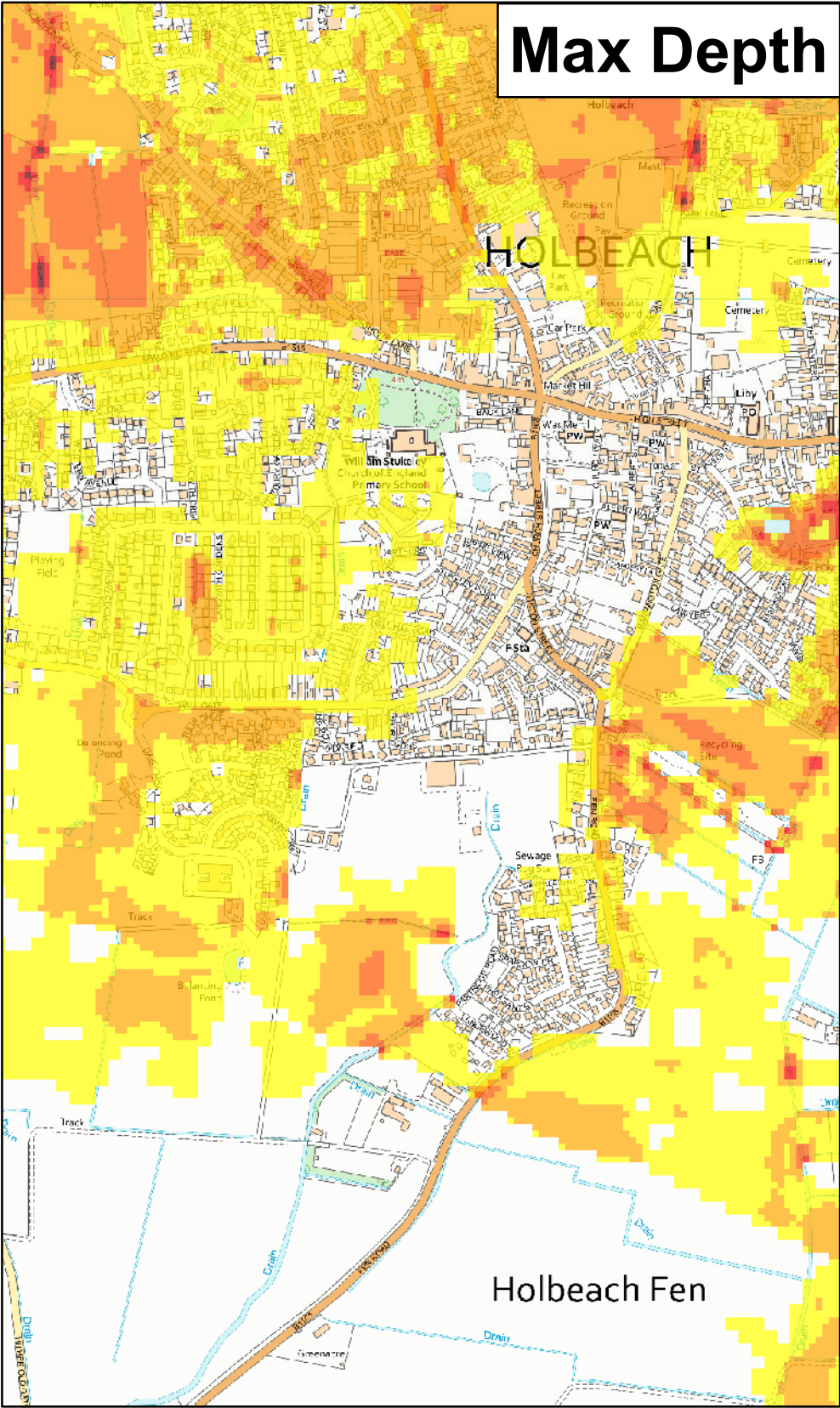
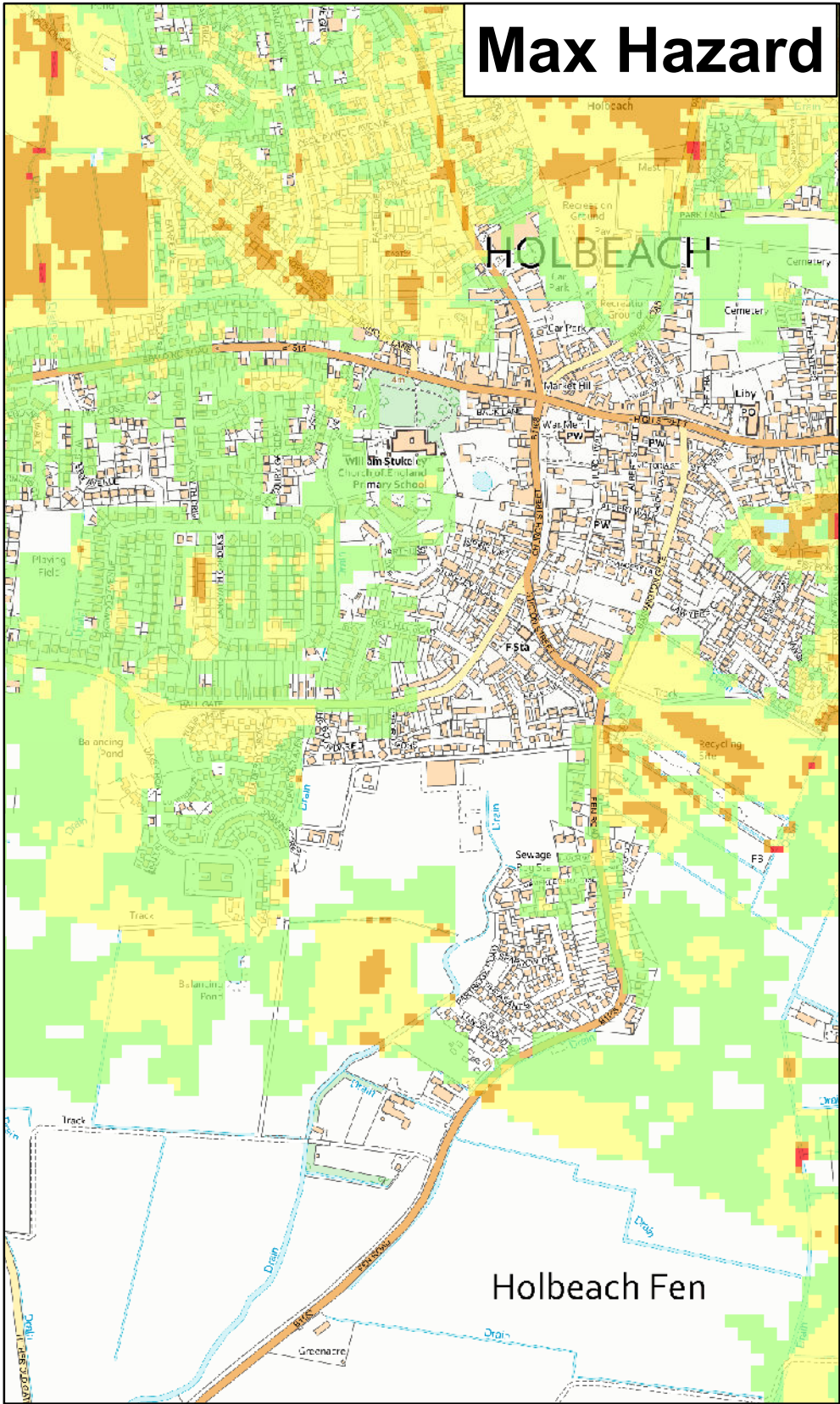


Produced by the Partnership and Strategic Overview Team, Lincoln
General Enquiries No: 03708 506 506

**Northern Area Tidal
Hazard Mapping**

Location of Modelled Breaches

This map is reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office. Crown copyright. All rights reserved. Environment Agency A20000807064, 2025
Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.



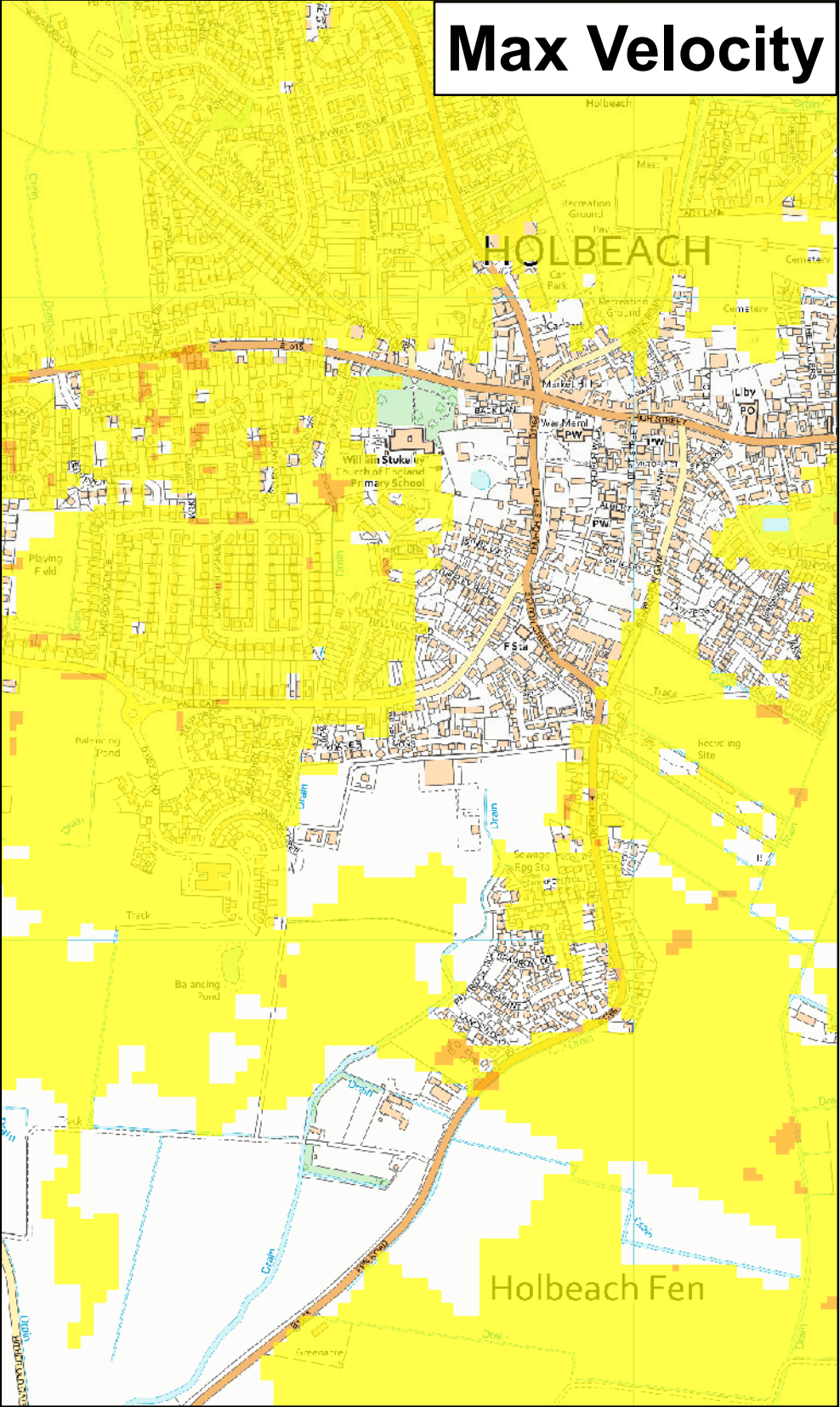
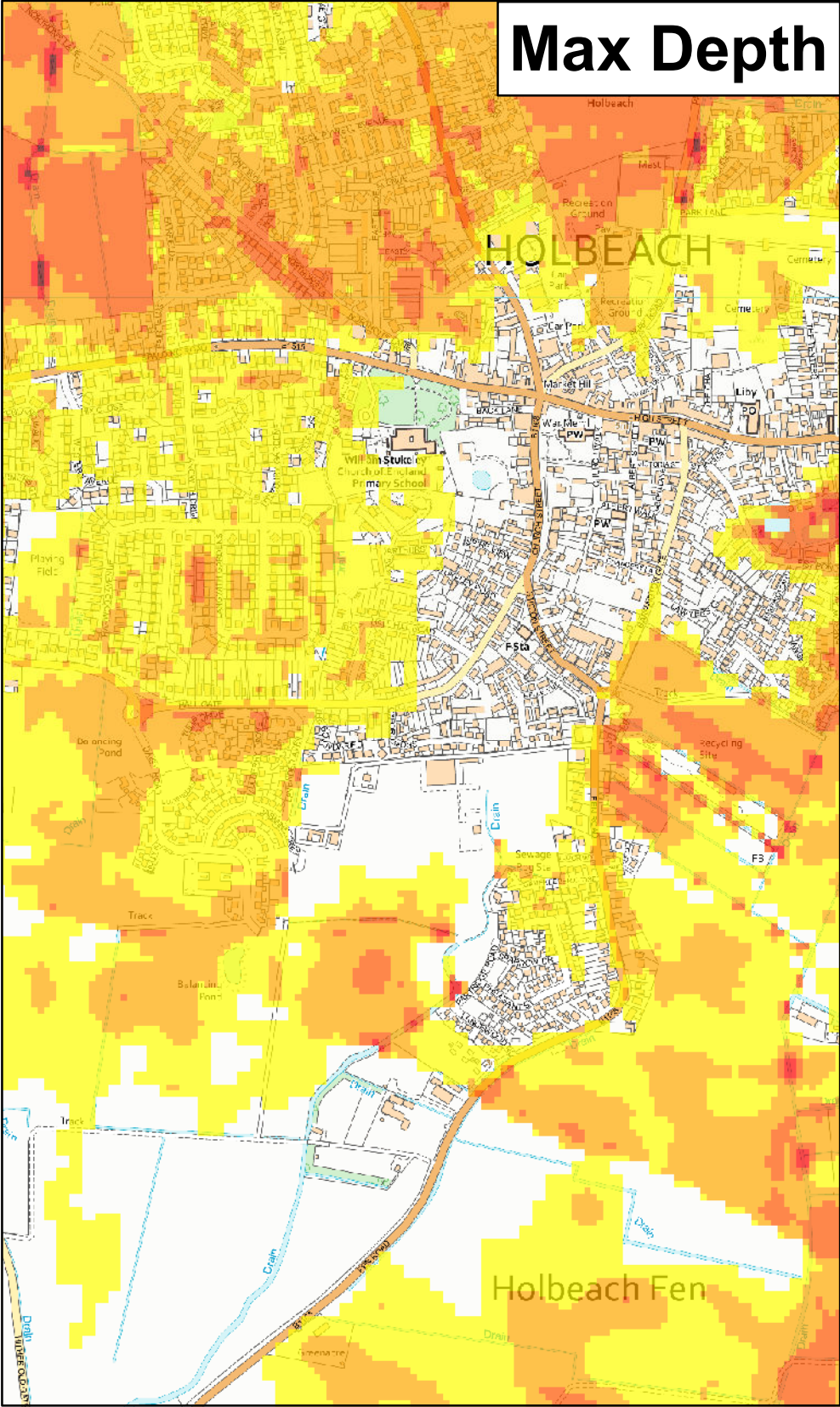
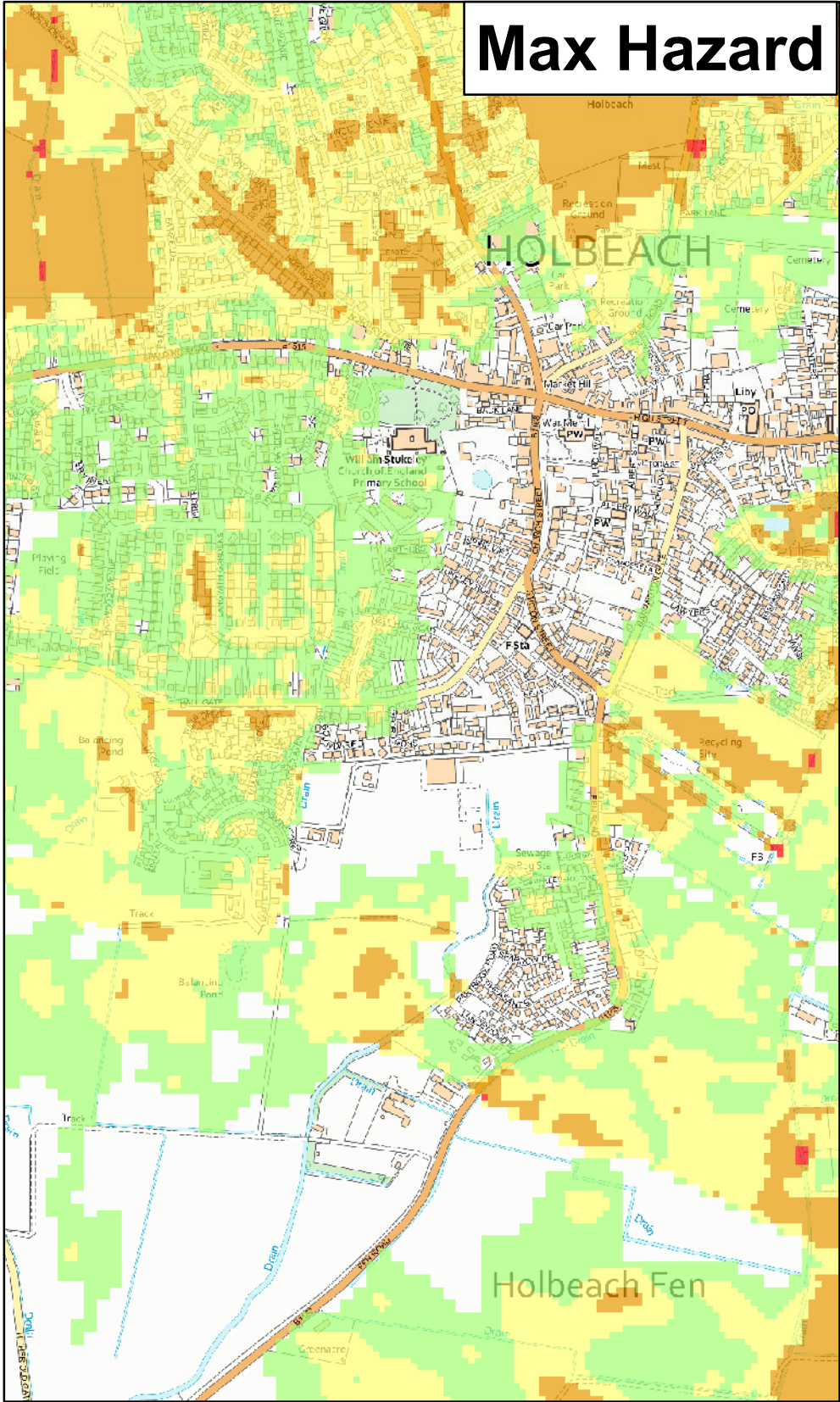
★ Modelled Breach Locations - see also the accompanying plan "Location of Modelled Breaches"								This map shows the level of flood hazard to people (called a hazard rating) if our flood defences are breached at certain locations, for a range of scenarios. The hazard rating depends on the depth and velocity of floodwater, and maximum values of these are also mapped. The map is based on computer modelling of simulated breaches at specific locations. Each breach has been modelled individually and the results combined to create this map. Multiple breaches, other combinations of breaches, different sized tidal surges or flood flows may all give different results. The map only considers the consequences of a breach, it does not make any assumption about the likelihood of a breach occurring. The likelihood of a breach occurring will depend on a number of different factors, including the construction and condition of the defences in the area. A breach is less likely where defences are of a good standard, but a risk of breaching remains. General Enquiries No: 03708 506 506. Weekday Daytime calls cost 5p plus up to 6p per minute from BT Weekend Unlimited. Mobile and other providers' charges may vary	Max Hazard (Flood Risk to People : FD2320)		Max Depth (m)		Max Velocity (m/s)	
Less than 0.75 (Low Hazard) Between 0.75 and 1.25 (Danger for Some) Between 1.25 and 2.0 (Danger for Most) Greater than 2.0 (Danger for All)		0 - 0.25 0.25 - 0.50 0.50 - 1.0 1.0 - 1.6 1.6 +		0 - 0.3 0.3 - 1.0 1.0 - 1.5 1.5 - 2.5 2.5 +										
Date Printed	October 2025	Scenario year	2115	Scenario Annual Chance	0.5% (1 in 200)	CCN Number	EIR-2025-35636							

Lincolnshire and Northamptonshire Tidal Breaching Hazard Mapping

Map Centred on TF 35668 24369

1:10,000

© Environment Agency copyright and/or database rights 2025.
© Crown Copyright and Database Rights 2025 OS AC0000807064.



★ **Modelled Breach Locations** - see also the accompanying plan "Location of Modelled Breaches"

Max Hazard	Max Depth (m)	Max Velocity (m/s)
(Flood Risk to People : FD2320)		
Less than 0.75 (Low Hazard)	0 - 0.25	0 - 0.3
Between 0.75 and 1.25 (Danger for Some)	0.25 - 0.50	0.3 - 1.0
Between 1.25 and 2.0 (Danger for Most)	0.50 - 1.0	1.0 - 1.5
Greater than 2.0 (Danger for All)	1.0 - 1.6	1.5 - 2.5
	1.6 +	2.5 +

This map shows the level of flood hazard to people (called a hazard rating) if our flood defences are breached at certain locations, for a range of scenarios. The hazard rating depends on the depth and velocity of floodwater, and maximum values of these are also mapped.

The map is based on computer modelling of simulated breaches at specific locations. Each breach has been modelled individually and the results combined to create this map. Multiple breaches, other combinations of breaches, different sized tidal surges or flood flows may all give different results.

The map only considers the consequences of a breach, it does not make any assumption about the likelihood of a breach occurring. The likelihood of a breach occurring will depend on a number of different factors, including the construction and condition of the defences in the area. A breach is less likely where defences are of a good standard, but a risk of breaching remains.

General Enquiries No: 03708 506 506. Weekday Daytime calls cost 5p plus up to 6p per minute from BT Weekend Unlimited. Mobile and other providers' charges may vary

Environment Agency

Lincolnshire and Northamptonshire Tidal Breaching Hazard Mapping

Map Centred on TF 35668 24369

1:10,000

© Environment Agency copyright and/or database rights 2025.
© Crown Copyright and Database Rights 2025 OS AC0000807064.

Date Printed	October 2025	Scenario year	2115	Scenario Annual Chance	0.1% (1 in 1000)	CCN Number	EIR-2025-35636
--------------	--------------	---------------	------	------------------------	------------------	------------	----------------