

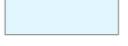


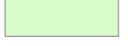

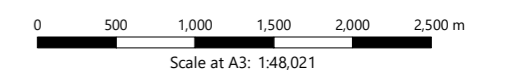


Key

 London Borough of Bexley Boundary

Groundwater Vulnerability Classification

-  MAJOR_H1
-  MAJOR_HU
-  MAJOR_I1
-  MINOR_H1
-  MINOR_HU
-  MINOR_I1



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London Borough of Bexley
Level 1 SFRA

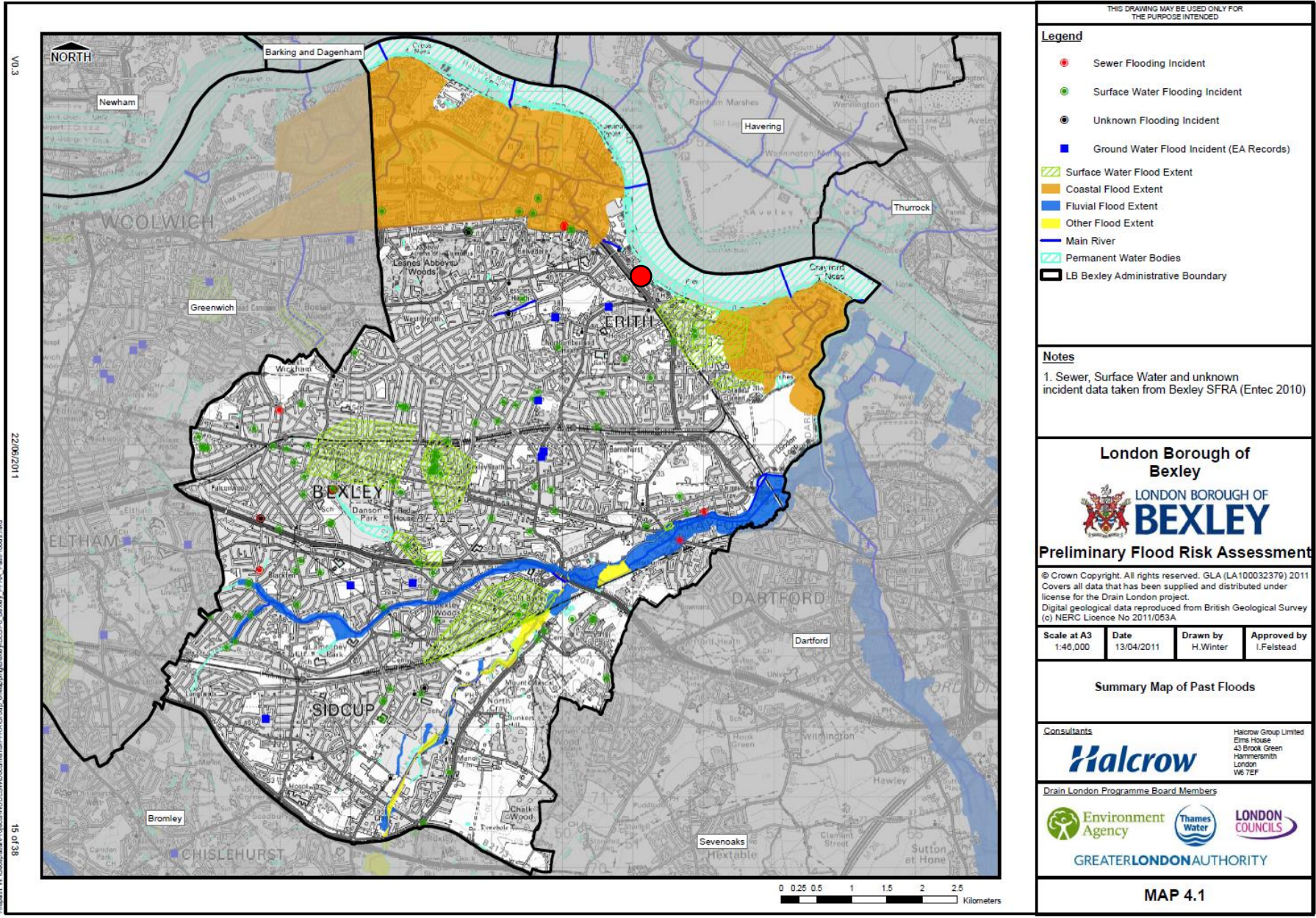
Figure A24
Groundwater Vulnerability Classifications

H:\Projects\40463 Bexley SFRA Level 1 and 2\GIS\Figures - L1\2\A24 - GW Vul_14Oct20.mxd Originator: jack.park



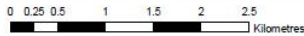
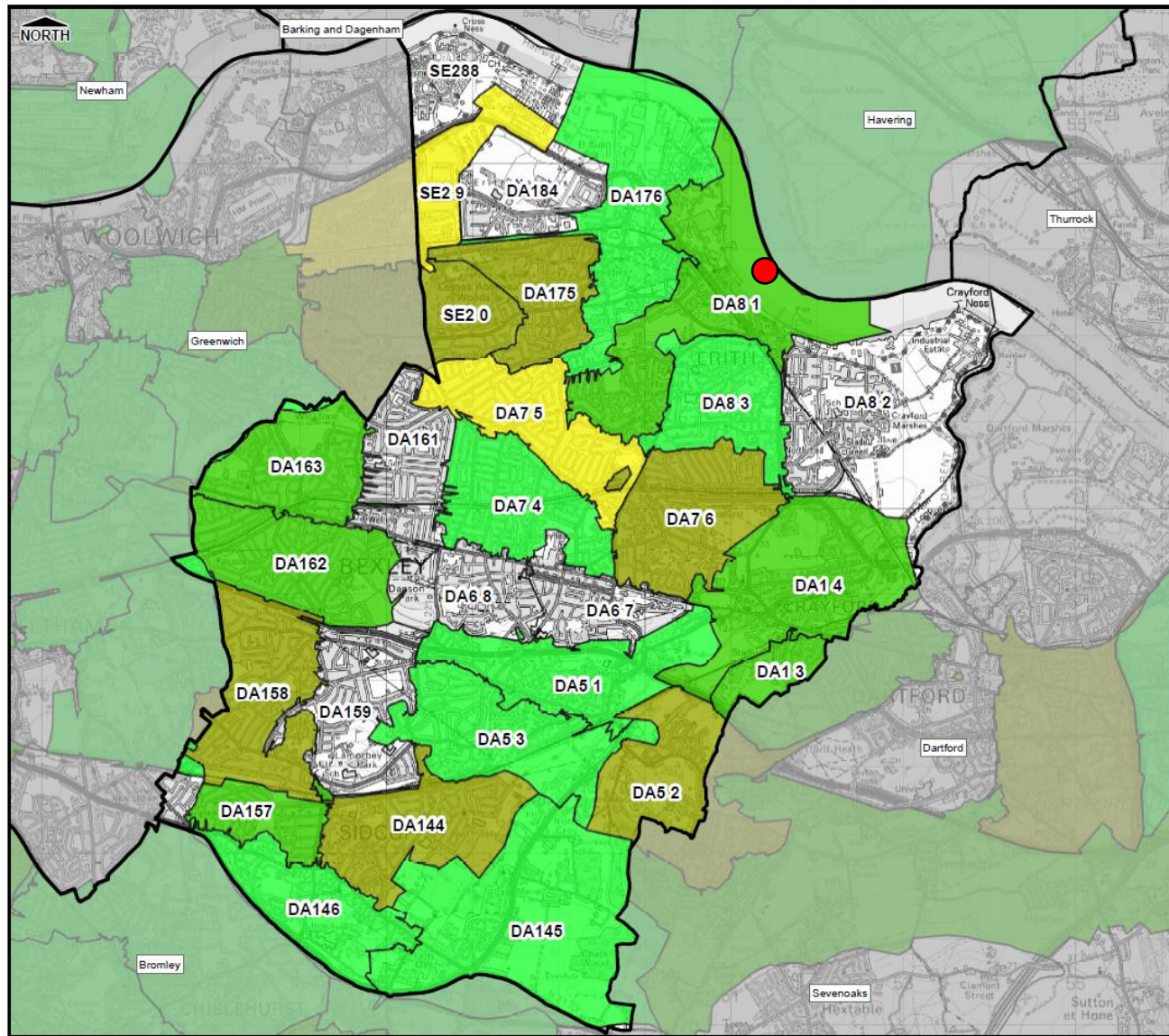
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Solutions**

Appendix E – Extracts from Preliminary Flood Risk Assessment



**2633-FRA-1: Land to rear of Winifred Road, Erith
 Scheuch Developments**

V0.3
22/06/2011
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THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED

Legend

Thames Water DG5 Records
No. of Sewer Flood Records

- None
- 1 - 5
- 6 - 10
- 11 - 20
- 21 - 50
- 51 - 100
- 101+

LB Bexley Administrative Boundary

Notes

- Sewer flood records relate to internal and external flooding of properties
- Data supplied by Thames Water Ltd and is correct as at June 2010

London Borough of Bexley
LONDON BOROUGH OF **BEXLEY**
Preliminary Flood Risk Assessment

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Scale at A3 1:46,000	Date 13/04/2011	Drawn by H.Winter	Approved by I.Felstead
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Summary Map of Past Floods -
Recorded Incidents of Sewer Flooding
(Thames Water DG5 Data)

Consultants

Halcrow

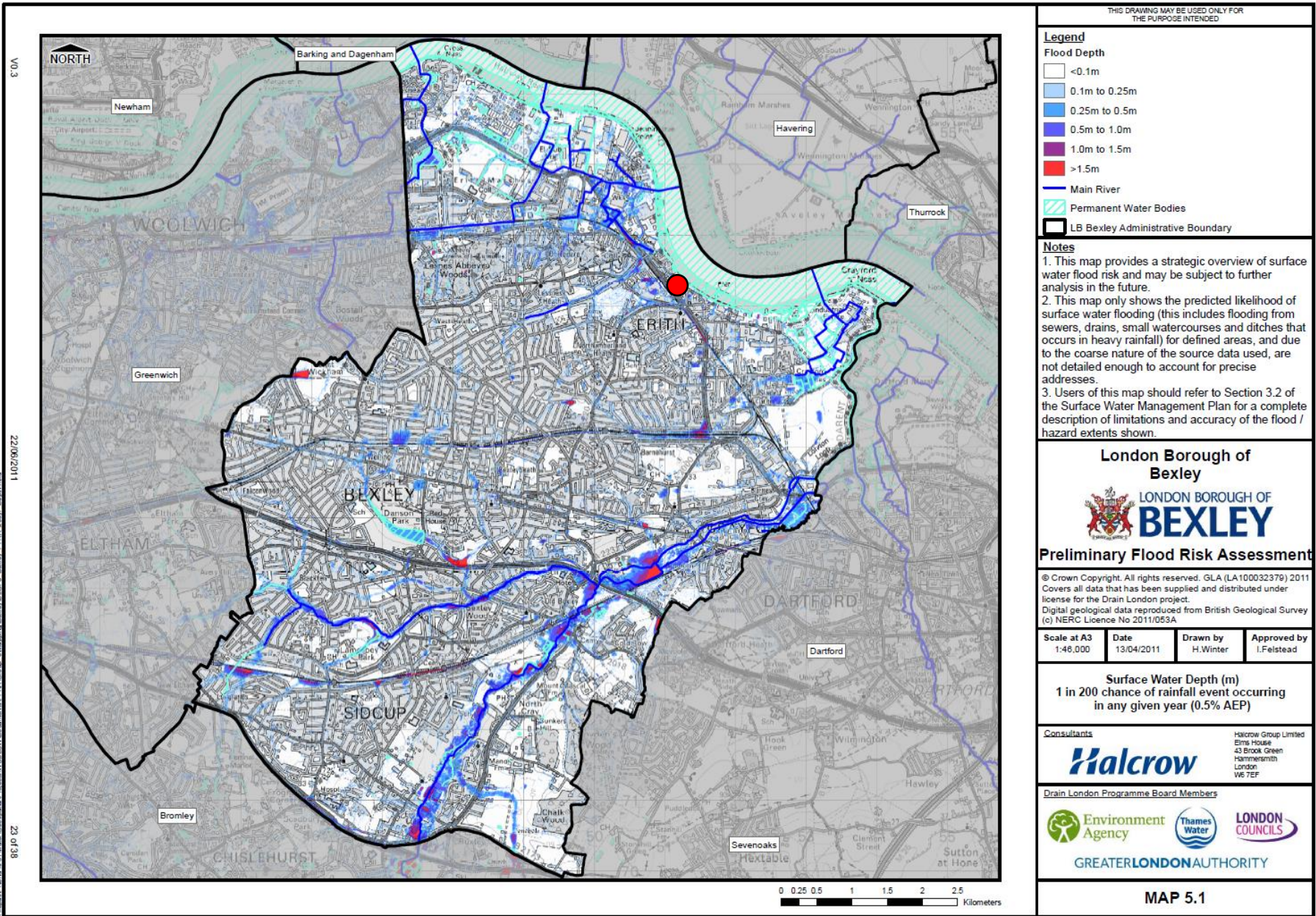
Halcrow Group Limited
Elms House
43 Brook Green
Hammersmith
London
W6 7EF

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Environment Agency
Thames Water
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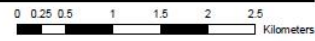
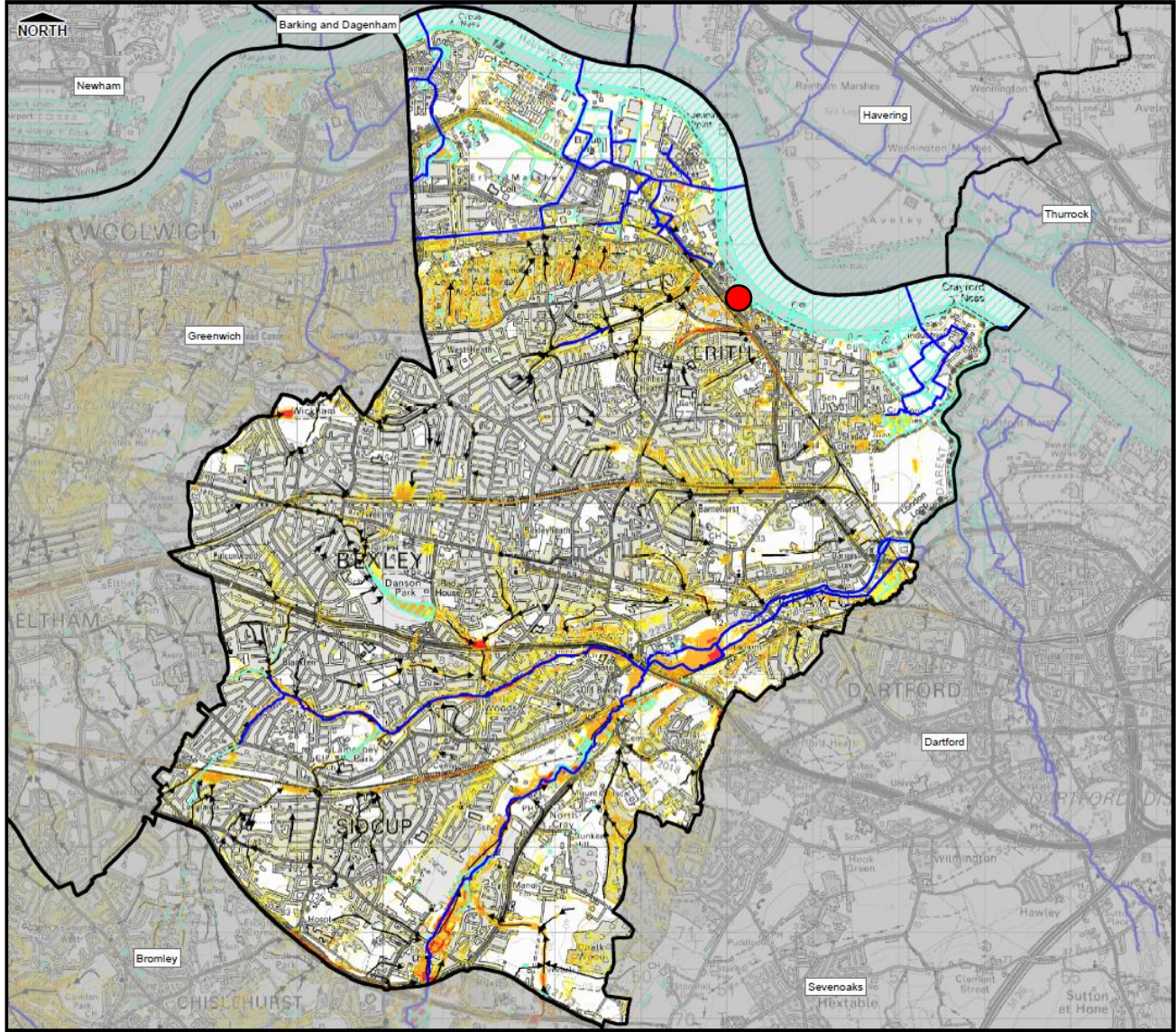
MAP 4.1a

**2633-FRA-1: Land to rear of Winifred Road, Erith
Scheuch Developments**



**2633-FRA-1: Land to rear of Winifred Road, Erith
 Scheuch Developments**

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 22/06/2011
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Legend

Flood Hazard

- <0.75 - Caution
- 0.75 - 1.25 Moderate
- 1.25 - 2.0 Significant
- >2.0 Extreme
- Main River
- Permanent Water Bodies
- LB Bexley Administrative Boundary
- Direction of Flow

Notes

1. This map provides a strategic overview of surface water flood risk and may be subject to further analysis in the future.
2. This map only shows the predicted likelihood of surface water flooding (this includes flooding from sewers, drains, small watercourses and ditches that occurs in heavy rainfall) for defined areas, and due to the coarse nature of the source data used, are not detailed enough to account for precise addresses.
3. Users of this map should refer to Section 3.2 of the Surface Water Management Plan for a complete description of limitations and accuracy of the flood / hazard extents shown.
4. Flood Hazard has been defined based upon the joint EA and Defra R&D Technical Report FD2320 (January 2006).
5. Degree of flood hazard can be interpreted as follows:
 - Caution: Flood zone with shallow flowing water or deep standing water
 - Moderate: Flood Zone with deep or fast flowing water. Dangerous for children, the elderly and the infirm
 - Significant: Flood zone with deep fast flowing water. Dangerous for most people
 - Extreme: Flood zone with deep fast flowing water. Dangerous for all (including emergency services)

London Borough of Bexley

Preliminary Flood Risk Assessment

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Surface Water Flood Hazard Rating
 1 in 200 chance of rainfall event occurring in any given year (0.5% AEP)

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 London
 W6 7EF

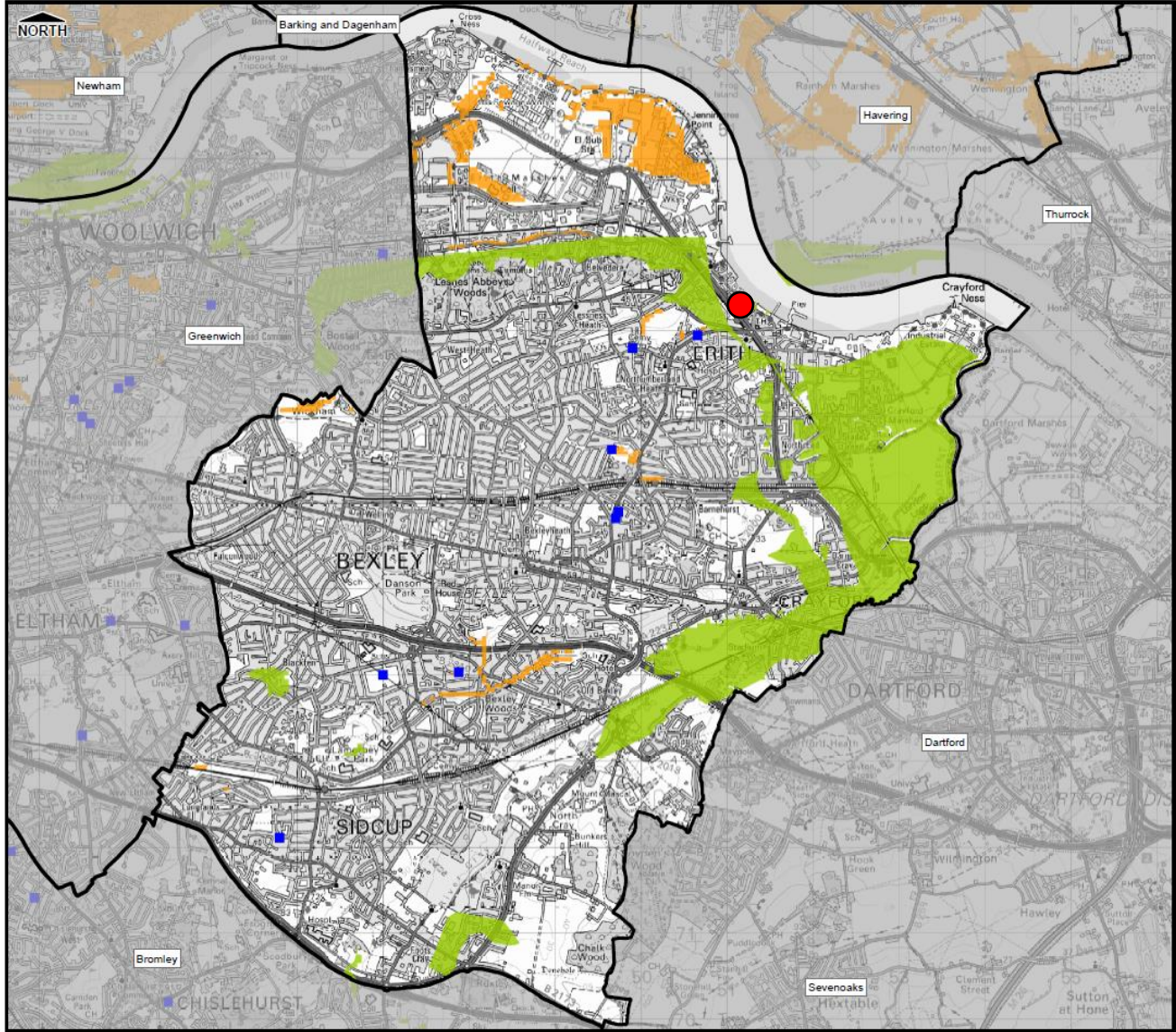
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MAP 5.2

**2633-FRA-1: Land to rear of Winifred Road, Erith
 Scheuch Developments**

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THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED

Legend

- Increased Potential for Elevated Groundwater
- Consolidated Aquifers
- Permeable Superficial Deposits
- Ground Water Flood Incident (EA Records)
- LB Bexley Administrative Boundary

Notes

1. The increased Potential for Elevated Groundwater map shows those areas within the London Boroughs where there is an increased potential for groundwater to rise sufficiently to interact with the ground surface or be within 2m of the ground surface. Such groundwater rise could lead to the following consequences:
 - flooding of basements of buildings below ground level;
 - flooding of buried services or other assets below ground level;
 - inundation of farmland, roads, commercial, residential and amenity areas;
 - flooding of ground floors of buildings above ground level; and
 - overflowing of sewers and drains
2. Incident records shown are generally unconfirmed and may include issues such as water main bursts or non-groundwater related problems.
3. Areas not shown to have increased potential for elevated groundwater should be considered to have a low potential for elevated groundwater
- Lack of information does not imply 'no potential' of elevated groundwater in that area.
4. Includes groundwater flood mapping provided by JBA Consulting, Copyright Jeremy Benn Associates Limited 2008-2011, partially derived from data supplied by the Environment Agency.

London Borough of Bexley

LONDON BOROUGH OF **BEXLEY**

Preliminary Flood Risk Assessment

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Increased Potential for Elevated Groundwater Map

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Halcrow Group Limited
Elms House
43 Brook Green
Hammersmith
London
W6 7EF

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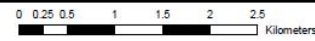
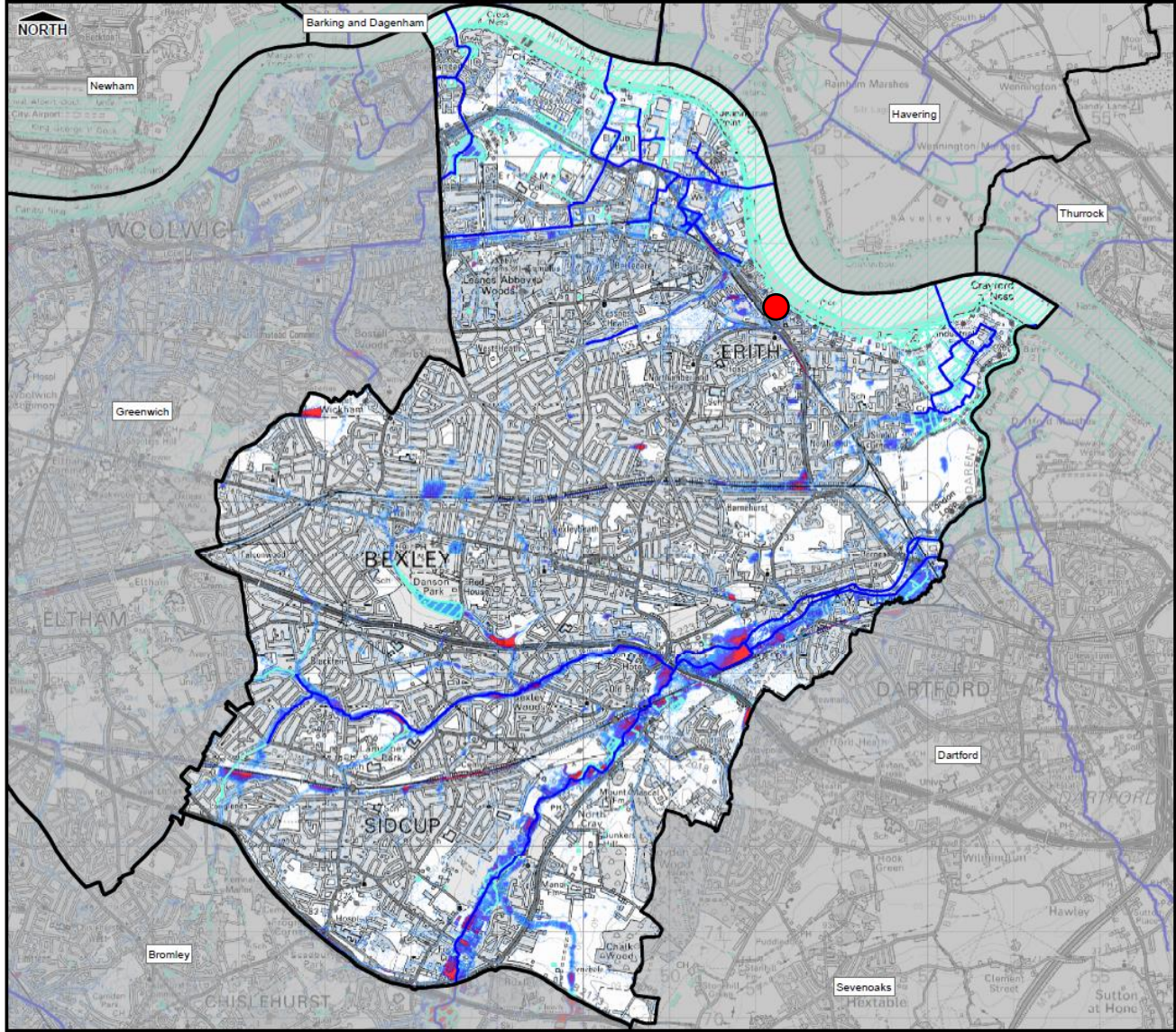
Environment Agency Thames Water LONDON COUNCILS

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MAP 5.3

**2633-FRA-1: Land to rear of Winfred Road, Erith
Scheuch Developments**

VO 3
22/06/2011
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THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED

Legend

Flood Depth

- <0.1m
- 0.1m to 0.25m
- 0.25m to 0.5m
- 0.5m to 1.0m
- 1.0m to 1.5m
- >1.5m

- Main River
- Permanent Water Bodies
- LB Bexley Administrative Boundary

Notes

1. This map provides a strategic overview of surface water flood risk and may be subject to further analysis in the future.
2. This map only shows the predicted likelihood of surface water flooding (this includes flooding from sewers, drains, small watercourses and ditches that occurs in heavy rainfall) for defined areas, and due to the coarse nature of the source data used, are not detailed enough to account for precise addresses
3. Users of this map should refer to Section 3.2 of the Surface Water Management Plan for a complete description of limitations and accuracy of the flood / hazard extents shown.



Preliminary Flood Risk Assessment

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Scale at A3 1:46,000	Date 13/04/2011	Drawn by H.Winter	Approved by I.Felstead
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Surface Water Depth (m)
1 in 100 chance of rainfall event
occurring in any given year (1% AEP)
plus climate change

Consultants

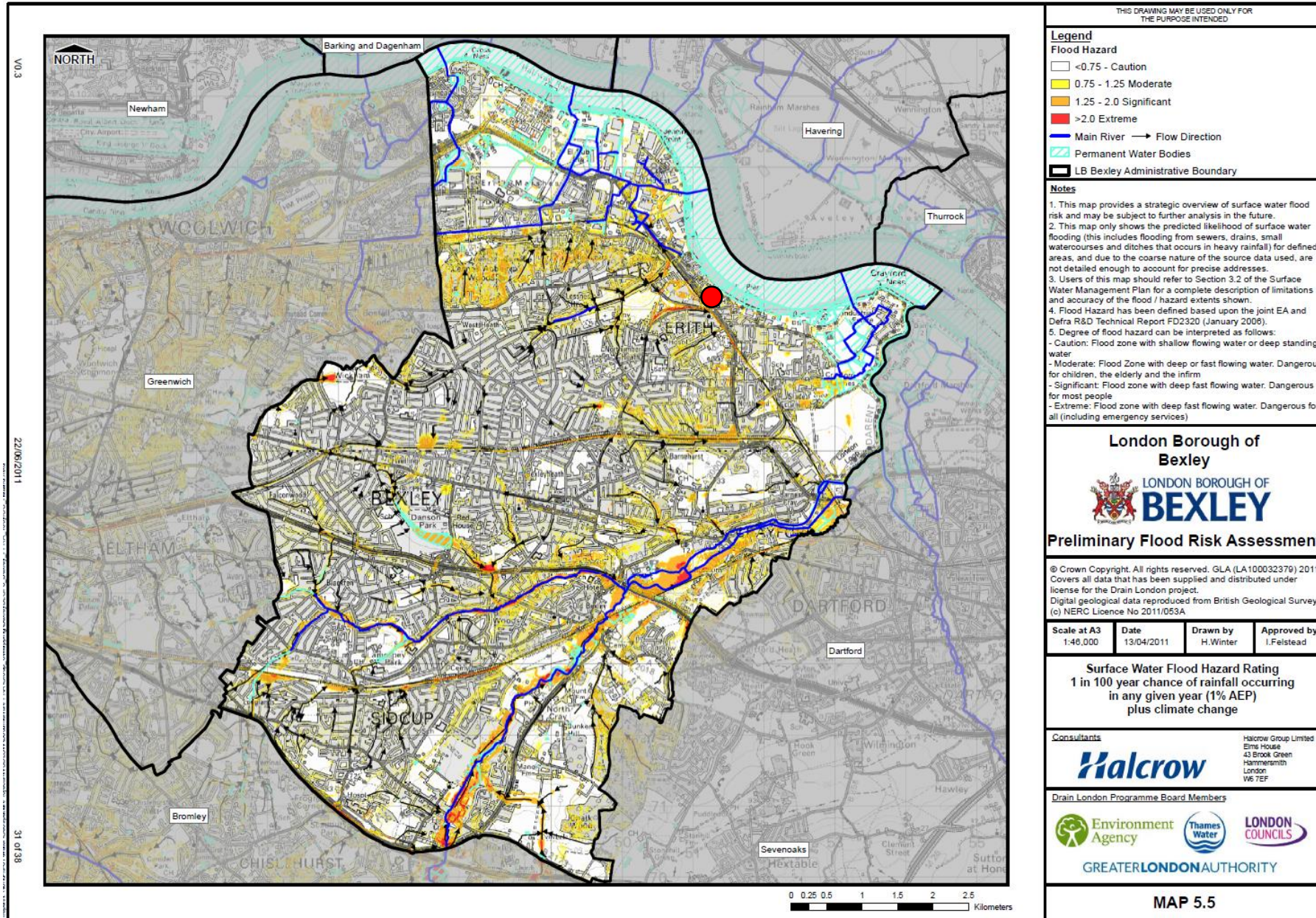
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Hammersmith
London
W6 7EF

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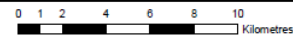
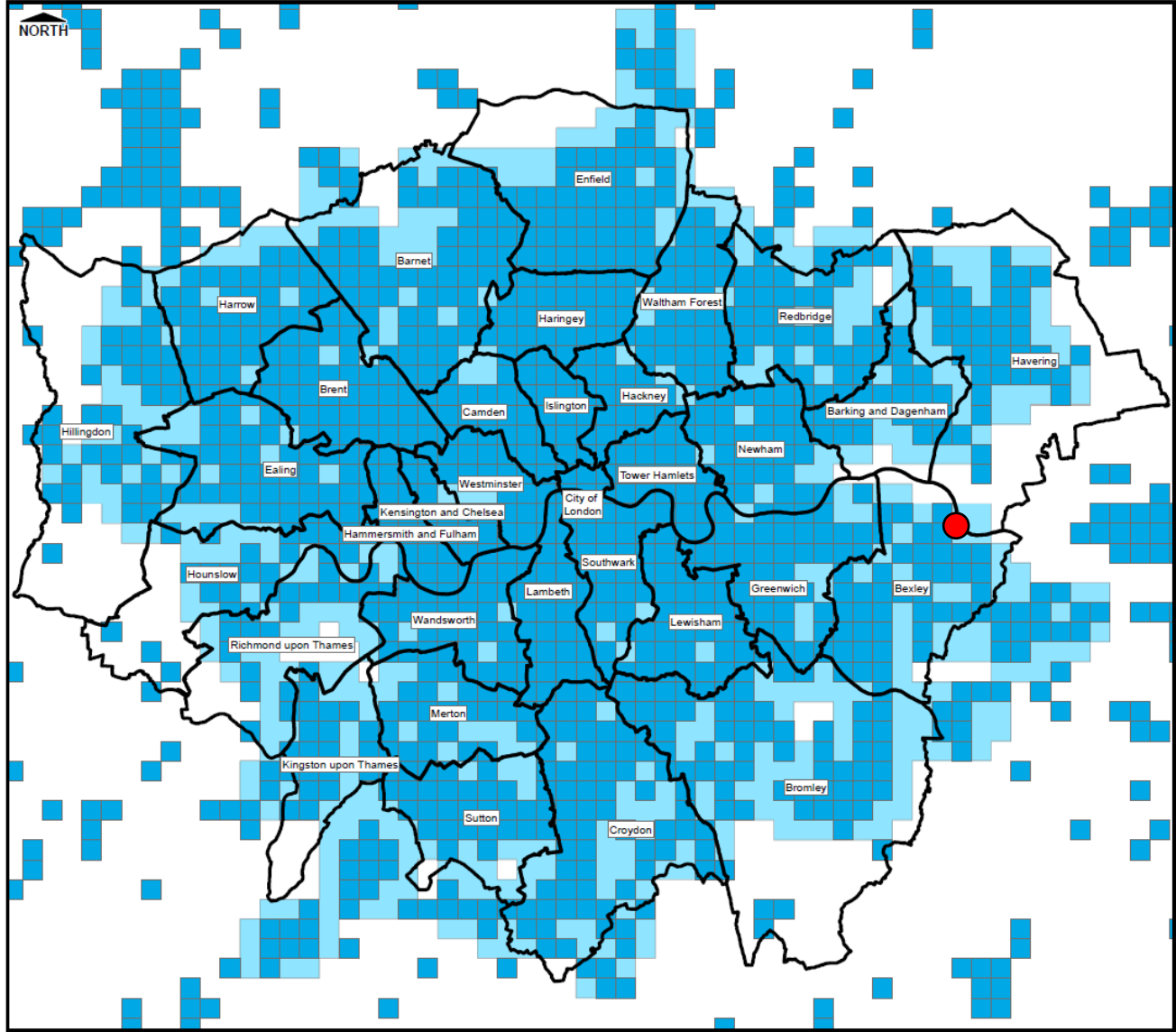
MAP 5.4

**2633-FRA-1: Land to rear of Winifred Road, Erith
Scheuch Developments**



**2633-FRA-1: Land to rear of Winifred Road, Erith
 Scheuch Developments**

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- Legend**
- Places Above Flood Risk Thresholds
 - England Indicative Flood Risk Areas
 - LB Administrative Boundaries

- Notes**
1. Indicative flood risk areas based on clusters formed from all 3km squares that contain 5 or more Places above the Flood Risk Thresholds (1km squares) that are touching. Clusters with fewer than 30,000 people at risk have not been designated as indicative flood risk areas
 2. Indicators used to identify places above the flood risk thresholds:
 1. Number of People >200
 2. Critical Services >1
 3. Number of Non-Residential Properties >20
 Indicators calculated using the Environment Agency's detailed method of counting (based on property outlines)
 3. The Indicative Flood Risk Areas for London are based on the new Flood Map for Surface Water (deep - for 1 in 200 annual probability rainfall)



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Scale at A3 1:200,000	Date 13/04/2011	Drawn by H.Winter	Approved by I.Felstead
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Environment Agency Map of Indicative Flood Risk Areas Greater London

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 Hammersmith
 London
 W6 7EF

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MAP 6.1

**2633-FRA-1: Land to rear of Winifred Road, Erith
 Scheuch Developments**



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Appendix F – Environment Agency Information

Product 4 (Detailed Flood Risk) for: Land to Rear of Winifred Road, Erith DA8 1AF
Requested by: Matthew Mayes, Go Solve
Reference: KSL 339424 JP
Date: 29 December 2023

Contents

- Flood Map for Planning (Rivers and Sea)
- Flood Map Extract
- Thames Estuary 2100 (TE2100)
- Thames Tidal Downriver Breach Inundation Modelling 2018
- Thames Tidal Downriver Breach Inundation Modelling Map
- Site Node Locations Map
- Defence Details
- Recorded Flood Events Data
- Recorded Flood Events Outlines Map
- Additional Information

The information provided is based on the best data available as of the date of this letter.

You may feel it is appropriate to contact our office at regular intervals, to check whether any amendments/ improvements to the data for this location have been made. Should you re-contact us after a period of time, please quote the above reference in order to help us deal with your query.

Please refer to the [Open Government Licence](#) which explains the permitted use of this information.

Flood Map for Planning (Rivers and Sea)

The Flood Map:

Our Flood Map shows the natural floodplain for areas at risk from river and tidal flooding. The floodplain is specifically mapped ignoring the presence and effect of defences (including any tidal barriers). Although flood defences reduce the risk of flooding they cannot completely remove that risk as they may be over topped or breached during a flood event.

The Flood Map indicates areas with a 1% (0.5% in tidal areas), Annual Exceedance Probability (AEP) - the probability of a flood of a particular magnitude, or greater, occurring in any given year, and a 0.1% AEP of flooding from rivers and/or the sea in any given year. In addition, the map also shows the location of some flood defences.

The Flood Map is intended to act as a guide to indicate the potential risk of flooding. When producing it we use the best data available to us at the time and also take into account historic flooding and local knowledge. The Flood Map is updated on a quarterly basis to account for any amendments required. These amendments are then displayed on the internet at <https://www.gov.uk/check-flood-risk>

At this Site:

The Flood Map shows that part of this site lies within the outline of Flood Zone 3 which comprises land assessed as having a 0.5% (1 in 200) or greater annual probability of tidal flooding and Flood Zone 3 which comprises land assessed as having between a 0.5% (1 in 200) and 0.1% (1 in 1000) annual probability of tidal flooding.

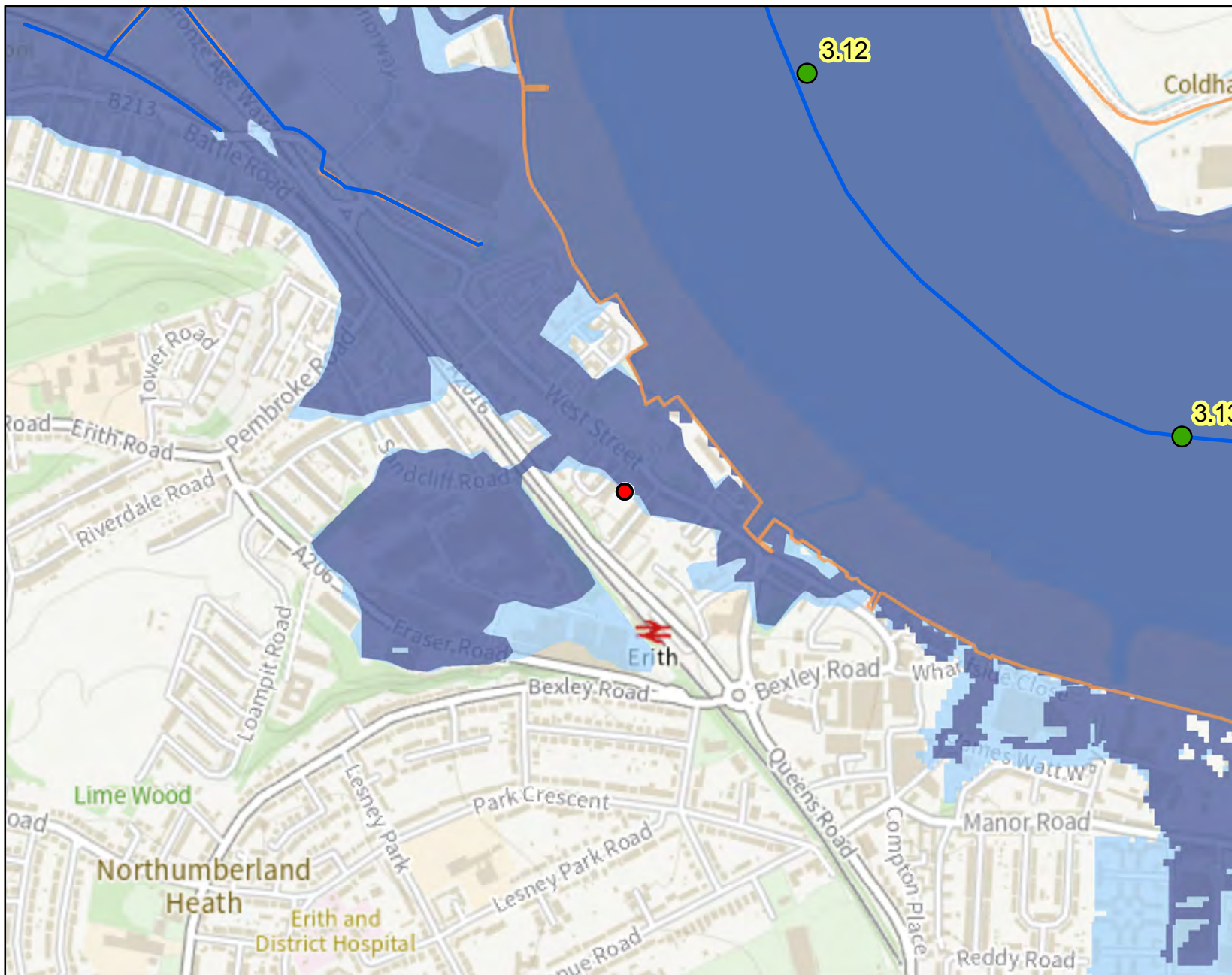
The Flood Map also shows that the western-most part of the site is not within the current 'Extreme Flood Outline'. According to the Flood Map, which provides a general estimate of the likelihood of flooding across England & Wales, this part of the site is shown to have less than 0.1% (1 in 1000) chance of flooding in any year from rivers and/or the sea.

Enclosed is an extract of our Flood Map which shows this information for your area.

Method of production

The Flood Map at this location has been derived using detailed modelling of the tidal River Thames through the Thames Tidal Defences Study completed in 2006 by Halcrow Ltd.

Flood Map for Planning centred on DA8 1AF created 29 December 2023 [Ref: KSL 339424 JP]



Scale 1: 10,000



Legend

- Site Location
- TE2100 Model Nodes
- Main Rivers
- Flood Zone 3
- Flood Zone 2
- Flood Defences

Flood Map for Planning (assuming no defences)

Flood Zone 3 shows the area that could be affected by flooding:

- from the sea with a 0.5% or greater chance of occurring each year
- or from a river with a 1% or greater chance of occurring each year.

Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 0.1% chance of occurring each year.

Thames Estuary 2100 (TE2100)

You have requested in-channel flood levels for the tidal river Thames. These have been taken from the Thames Estuary 2100 study completed by HR Wallingford in 2008. The modelled node closest to your site is **3.12**; the locations of nearby nodes are also shown on the enclosed map.

Details about the TE2100 plan

The Plan sets out how the Environment Agency and our partners can work together to manage tidal flood risk, from now until the end of the century. The Plan covers the Thames Estuary from Teddington in the west to the mouth of the estuary at Shoeburyness (north bank) and Sheerness (south bank) in the east. It is an adaptive plan for managing the estuary, including the tidal defence system, until 2100 so that current standards of flood protection are maintained or improved taking into account climate change effects e.g. sea level rise. The Plan has 3 phases of activity:

- Until 2035 – maintain and improve current defences, safeguard areas required for future improvements, and monitor climate change indicators.
- 2035-2050 – raise existing walls, defences & smaller barriers whilst reshaping the riverside environment.
- 2050-2100 – determine and implement an option for the future of the Thames Barrier, and adapt other defences as required to work alongside this to protect the estuary.

The Thames Estuary 2100 Plan can be found at: <https://www.gov.uk/government/publications/thamesestuary-2100-te2100>

Details about the TE2100 in-channel levels

The TE2100 in-channel levels take into account operation of the Thames Barrier when considering future levels. The Thames Barrier requires regular maintenance and with additional closures the opportunity for maintenance will be reduced. When this happens, river levels – for which the Barrier would normally shut for the 2008 epoch – will have to be allowed through to ensure that the barrier is not shut too often. For this reason, levels upriver of the barrier will increase and the tidal walls will need to be raised to match.

For further information about the Thames Barrier please visit our website at:

<https://www.gov.uk/the-thames-barrier>

Where to find the in-channel levels and defence crest level data from the 2008 TE2100 study

The TE2100 in-channel levels and defence crest levels documents can be downloaded from ShareFile at the following link:

<https://ea.sharefile.com/d-s5e564014724448219331e780c91c4ac2>

- Upriver of the Thames Barrier – is detailed within Table 6.1 (page 44) of the document titled '*Thames Estuary 2100, Improvements to Flood Risk Management System, Design Water Levels and Future Defence Crest Levels, May 2015*'.
- Downriver of the Thames Barrier is detailed within Table 7.1 (page 56) of the document titled '*Thames Estuary 2100, Improvements to Flood Risk Management System, Design Water Levels and Future Defence Crest Levels, May 2015*'. Defence raising for other barrier options can also be found in the document titled '*Thames Estuary 2100, Phase 3 Studies, Topic 1.5, Phase 3 Set 2 Estuary Wide Options Hydraulic modelling, December 2008*'

Thames Tidal Downriver Breach Inundation Modelling - 2018

The table below displays site-specific modelled flood levels at your site. These have been taken from the Downriver Breach Inundation Modelling Study 2018 completed by Atkins Ltd. in May 2018.

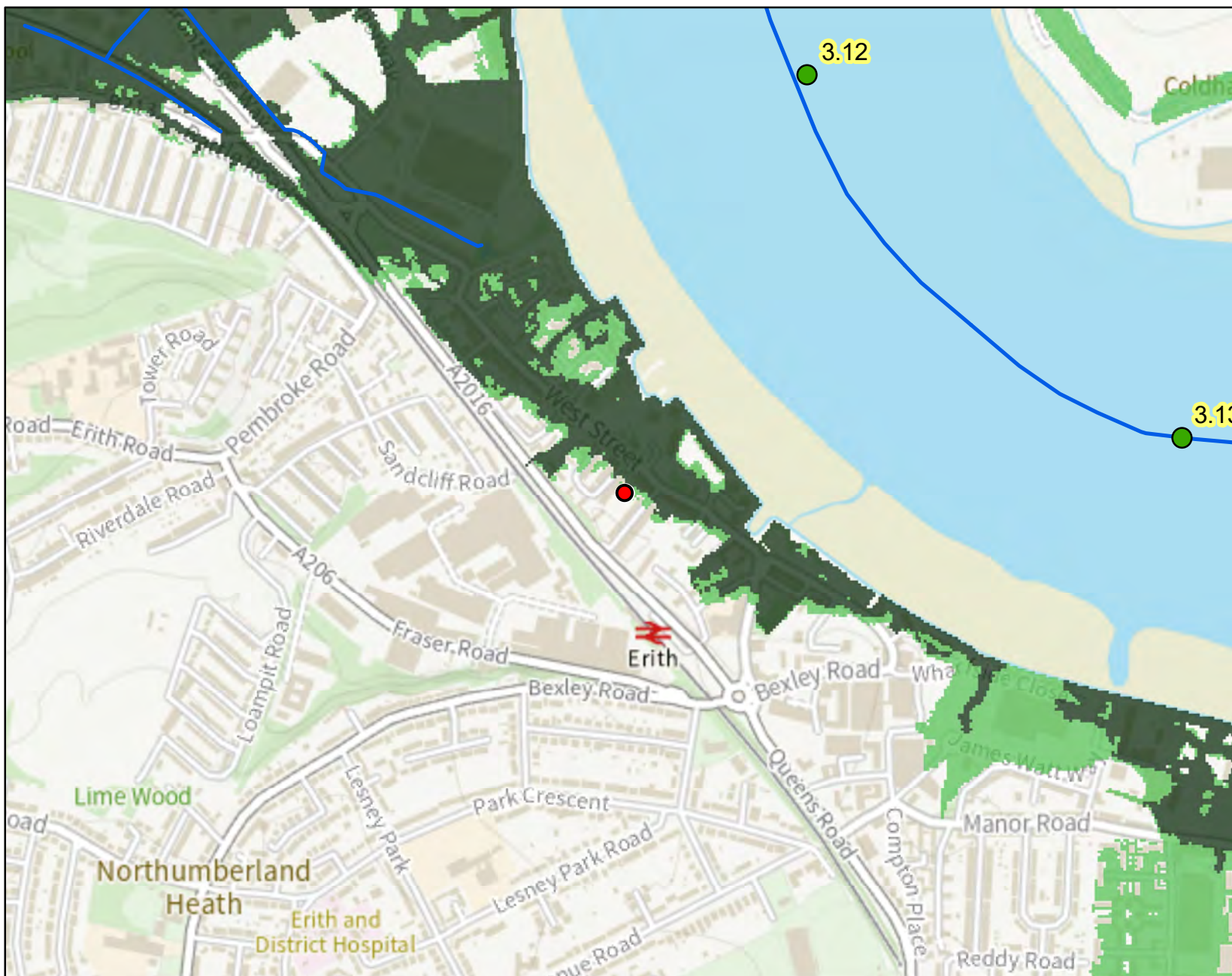
We have developed a modelling approach where all downriver breach locations along the Thames are equitably modelled, to ensure a consistent approach across London. This modelling simulates continuous tidal breaches along the entire extent of the Thames between the Thames Barrier and east of Gravesend on the south bank and east of Tilbury on the north bank. For hard and composite defences breaches are set at 20 m wide; for soft defences, breaches are 50 m wide. In both cases, the defence breach scour distance was assumed to extend into the floodplain by the same distance as the breach width.

Based on the 2008 TE2100 in-channel levels, the 0.5% (1 in 200 year) and 0.1% (1 in 1000 year) annual probability of exceedance tidal events were modelled for all breach locations downriver of the Thames Barrier. These were modelled for the 2014 year epoch (current year), as well as 2115 epoch which include allowances for climate change.

This model has been designed for catchment wide flood risk mapping. It should be noted that it was not created to produce flood levels for specific development sites within London.

Node	National Grid Reference		Modelled levels in mAODN for 0.5% AEP		Modelled levels in mAODN for 0.1% AEP	
	Easting	Northing	2014	2115	2014	2115
1	551097	178354	5.00	5.57	5.28	5.78
2	551101	178346	5.00	5.57	5.28	5.78
3	551109	178339	Nil return	5.57	5.28	5.78
4	551104	178333	Nil return	5.57	Nil return	5.78
5	551097	178339	Nil return	5.56	Nil return	5.77
6	551089	178342	Nil return	5.56	Nil return	5.78
7	551093	178335	Nil return	5.46	Nil return	5.78
8	551098	178328	Nil return	Nil return	Nil return	5.73
9	551086	178326	Nil return	Nil return	Nil return	Nil return
10	551078	178316	Nil return	Nil return	Nil return	Nil return

Downriver Breach Modelling Map centred on DA8 1AF created 29 December 2023 [Ref: KSL 339424 JP]



Scale 1: 10,000



Legend

- Site Location
- TE2100 Model Nodes
- Main Rivers

Downriver 0.5% AEP Outlines

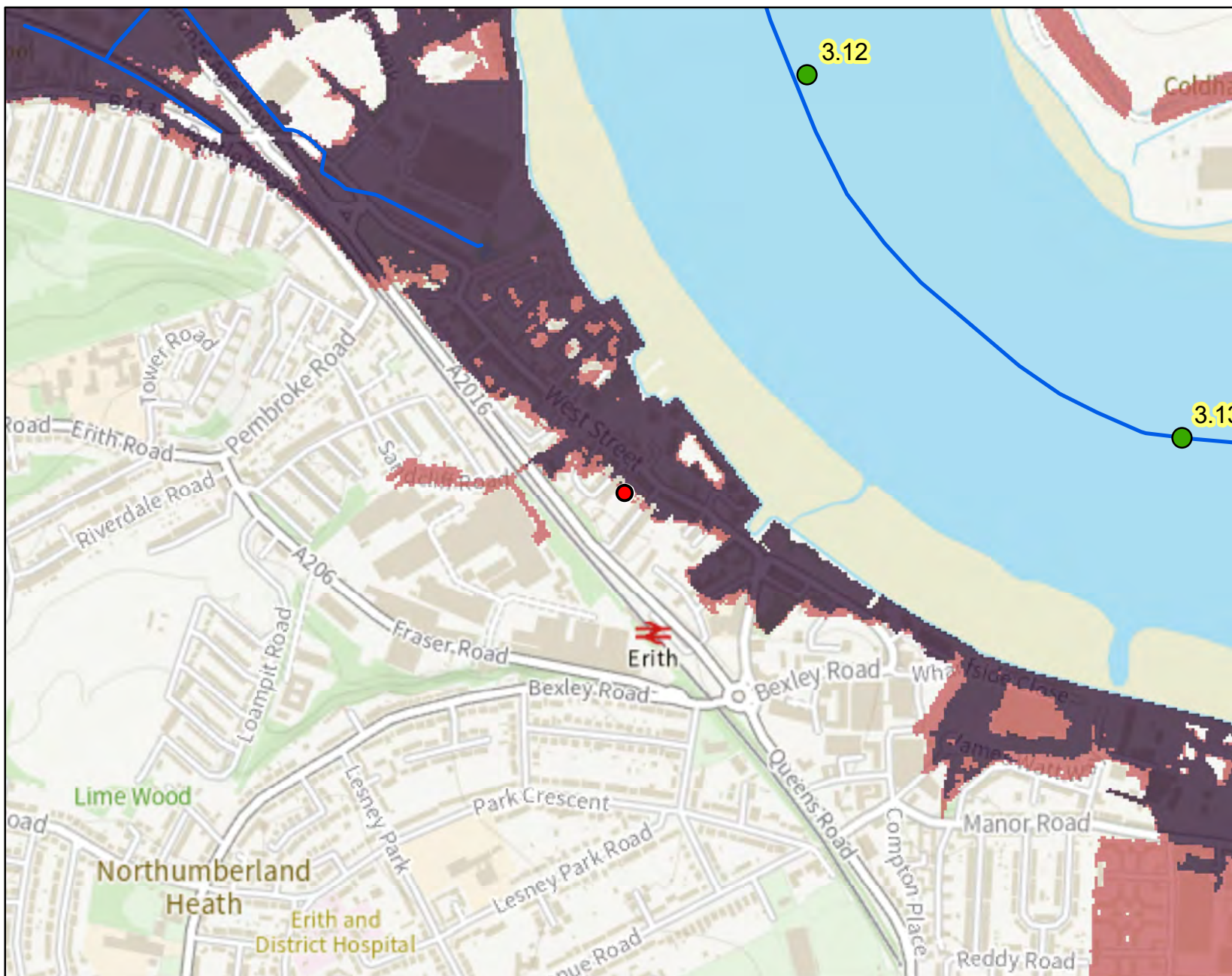
Epoch

- 2014 (Current year)
- 2115

Thames Tidal Downriver Breach Inundation Modelling 2018

A modelled representation of all tidal breach locations along the Thames from the Thames Barrier to Gravesend, based on low floodplain topography. For hard and composite defences breaches are set at 20 m wide; for soft defences, breaches are 50 m wide. In both cases, the defence breach scour distance was assumed to extend into the floodplain by the same distance as the breach width. The modelling is based on the 2008 TE2100 in-channel levels, with an allowance for climate change for epoch 2115.

Downriver Breach Modelling Map centred on DA8 1AF created 29 December 2023 [Ref: KSL 339424 JP]



Scale 1: 10,000



Legend

- Site Location
- TE2100 Model Nodes
- Main Rivers

Downriver 0.1% AEP Outlines

Epoch

- 2014 (Current year)
- 2115

Thames Tidal Downriver Breach Inundation Modelling 2018

A modelled representation of all tidal breach locations along the Thames from the Thames Barrier to Gravesend, based on low floodplain topography. For hard and composite defences breaches are set at 20 m wide; for soft defences, breaches are 50 m wide. In both cases, the defence breach scour distance was assumed to extend into the floodplain by the same distance as the breach width. The modelling is based on the 2008 TE2100 in-channel levels, with an allowance for climate change for epoch 2115.



Node Location Map centred on DA8 1AF created 29 December 2023 [Ref: KSL 339424 JP]



Scale 1: 500



Legend

-  Node Point Locations
-  Main Rivers

Defence Details

The design standard of protection of the flood defences in this area of the Thames is 0.1% AEP; they are designed to defend London up to a 1 in 1000 year **tidal** flood event. The defences are all raised, man-made and privately owned. It is the riparian owners' responsibility to ensure that they are maintained to a crest level of 7.00 m AODN (the Statutory Flood Defence Level in this reach of the Thames). Information relating the TE2100 Plan and any future defence crest levels can be found on ShareFile at following link: <https://ea.sharefile.com/d-s5e564014724448219331e780c91c4ac2>

For more information on your rights and responsibilities as a riparian owner, please see our document 'Living on the edge' found on our website at: <https://www.gov.uk/government/publications/riverside-ownership-rights-and-responsibilities>

Areas Benefiting from Flood Defences

The Environment Agency has taken the decision to retire this dataset and remove it from the Flood Map for Planning portal. This is because we have determined that it no longer meets the customer needs and creates a false sense of security for users.

To understand the long-term risk of flooding to an area, you can use the [Check Your Long Term Flood Risk portal](#): this will provide an understanding of flood risk from rivers and sea, taking into account the presence and condition of defences, and other sources of flood risk such as from surface water and reservoirs.

Recorded Flood Events Data

We hold records of historic flood events from rivers and the sea. Information on the floods that may have affected the area local to your site is provided below and in the enclosed map (if relevant).

Flood Event Data

1953 – The site was within approximately 800 m of the tidal flooding, due to a storm surge in the North Sea, on the night of the 31st January into the morning of 1st February. An approximate level in the Thames at the time was 5.06 m AODN.

Due to the fact that our records are not comprehensive, we would advise that you make further enquiries locally with specific reference to flooding at this location. You should consider contacting the relevant Local Planning Authority and/or water/sewerage undertaker for the area.

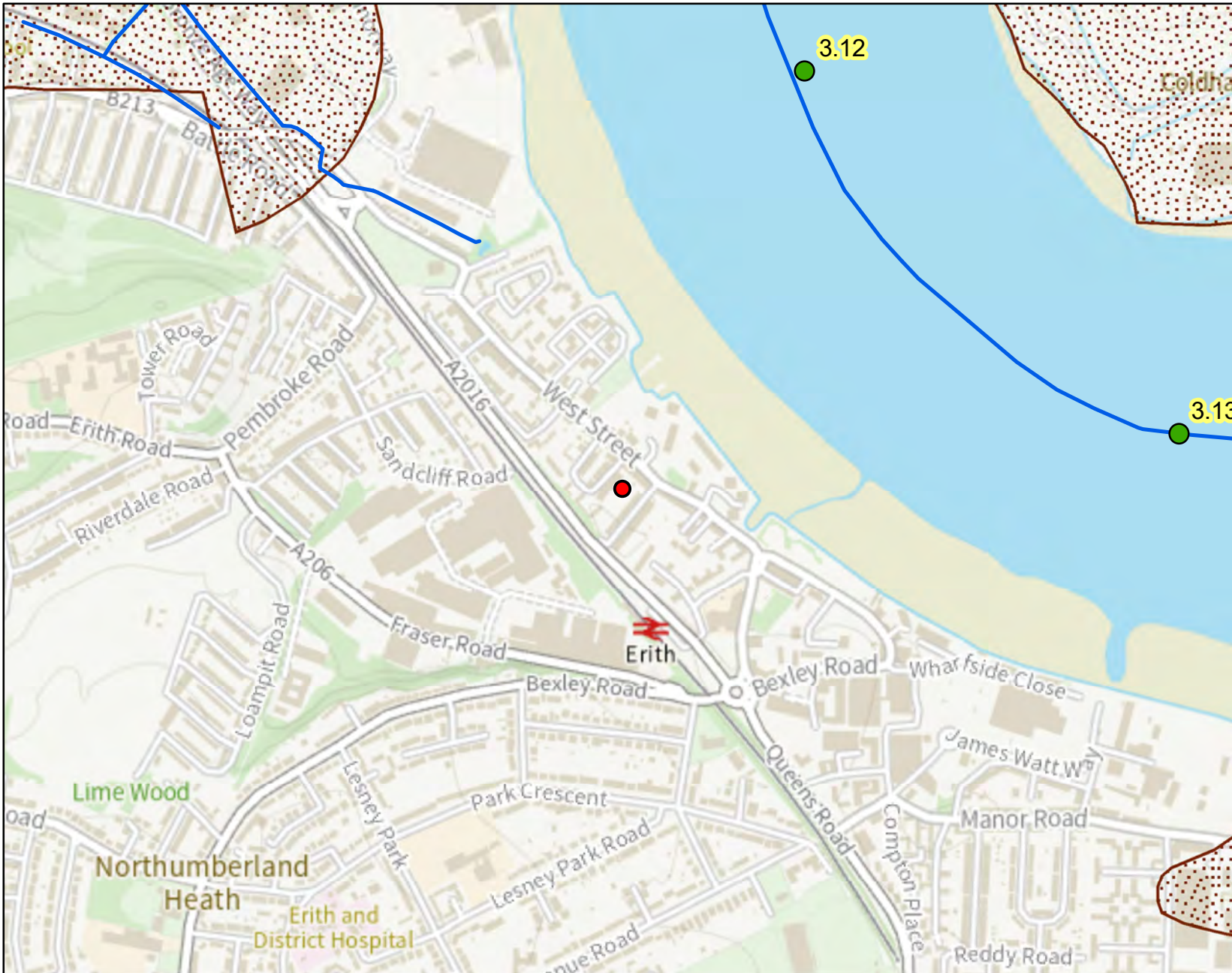
We map flooding to land, not individual properties. Our historic flood event record outlines are an indication of the geographical extent of an observed flood event. Our historic flood event outlines do not give any indication of flood levels for individual properties. They also do not imply that any property within the outline has flooded internally.

Please be aware that flooding can come from different sources. Examples of these are:

- from rivers or the sea;
- surface water (i.e. rainwater flowing over or accumulating on the ground before it is able to enter rivers or the drainage system);
- overflowing or backing up of sewer or drainage systems which have been overwhelmed,
- groundwater rising up from underground aquifers

Currently the Environment Agency can only supply flood risk data relating to the chance of flooding from rivers or the sea. However you should be aware that in recent years, there has been an increase in flood damage caused by surface water flooding and drainage systems that have been overwhelmed.

Historic Flood Map centred on DA8 1AF created 29 December 2023 [Ref: KSL 339424 JP]



Scale 1: 10,000



Legend

- Site Location
- TE2100 Model Nodes
- Main Rivers
- Jan 1953 Flood Outline

Additional Information

Information Warning - OS background mapping

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Environment Agency planning guidance and pre application service

- Planning Practice Guidance_- provides information about planning considerations in areas at risk of flooding. <https://www.gov.uk/guidance/flood-risk-and-coastal-change>
- Planning applications: assessing flood risk - information about completing Flood Risk Assessments. <https://www.gov.uk/planning-applications-assessing-flood-risk>
- Site specific flood risk assessment: Checklist_- a checklist to help ensure you have considered all the relevant factors in your flood risk assessment. <http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/site-specific-flood-risk-assessment-checklist/>
- Climate change allowance guidance <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

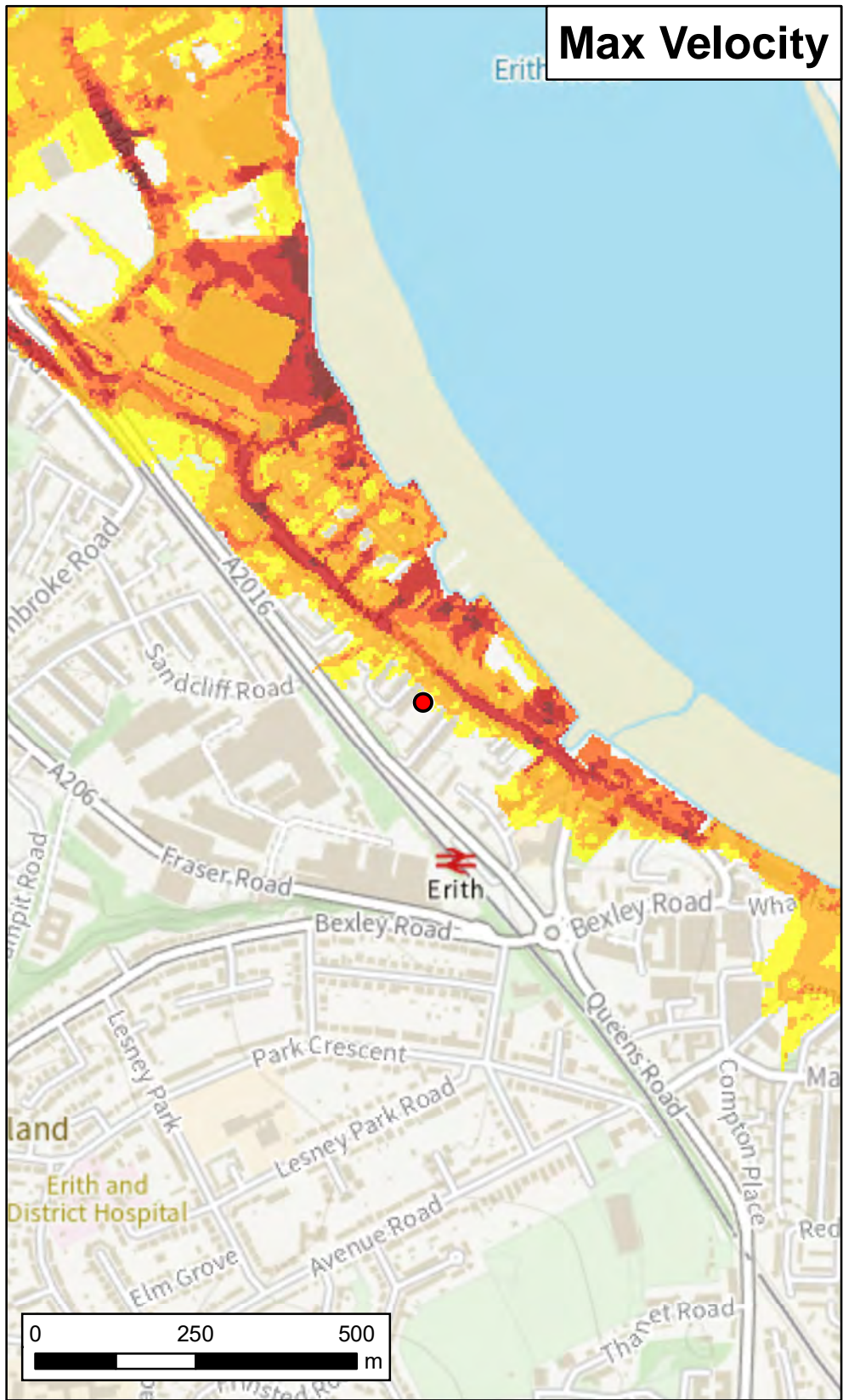
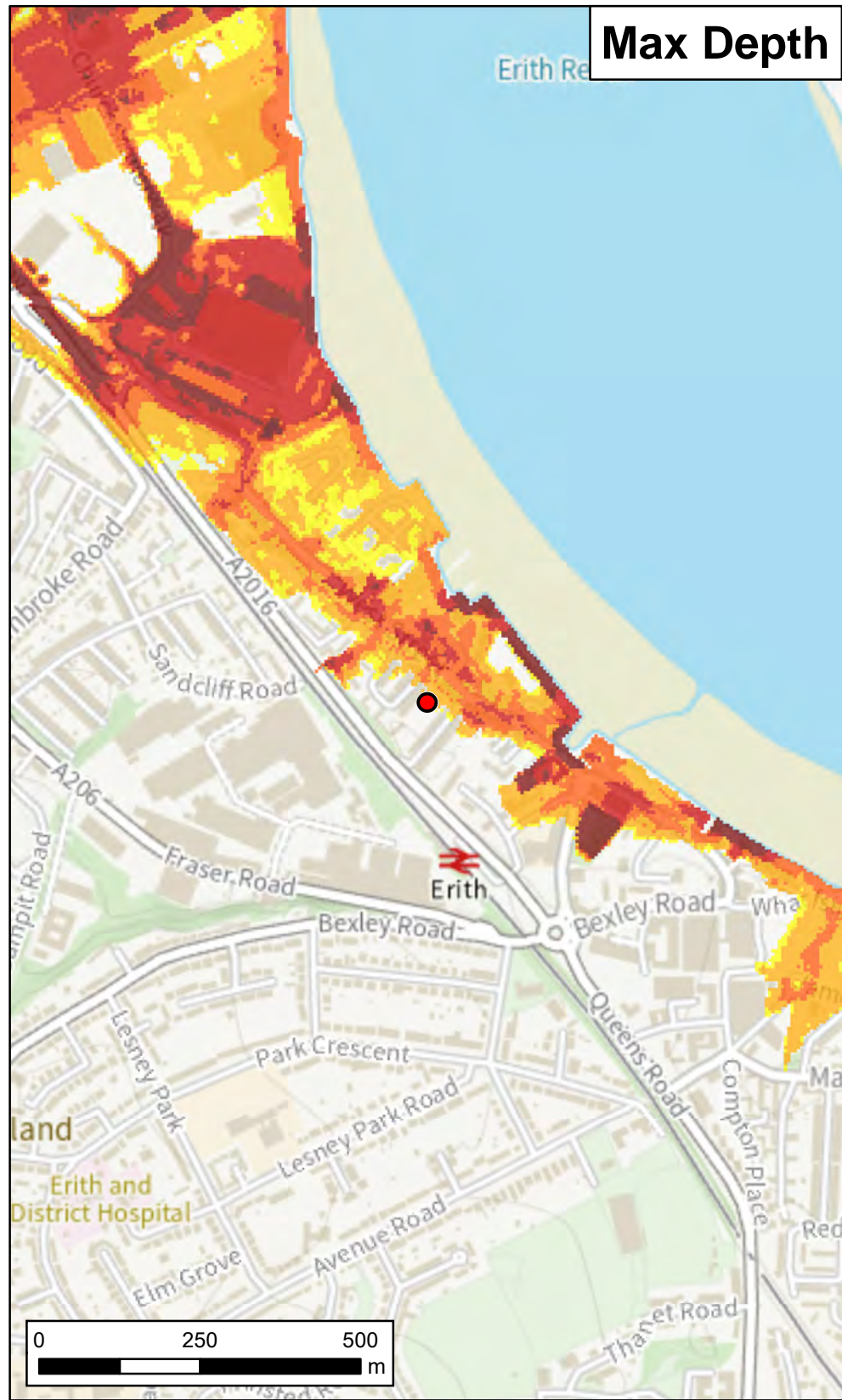
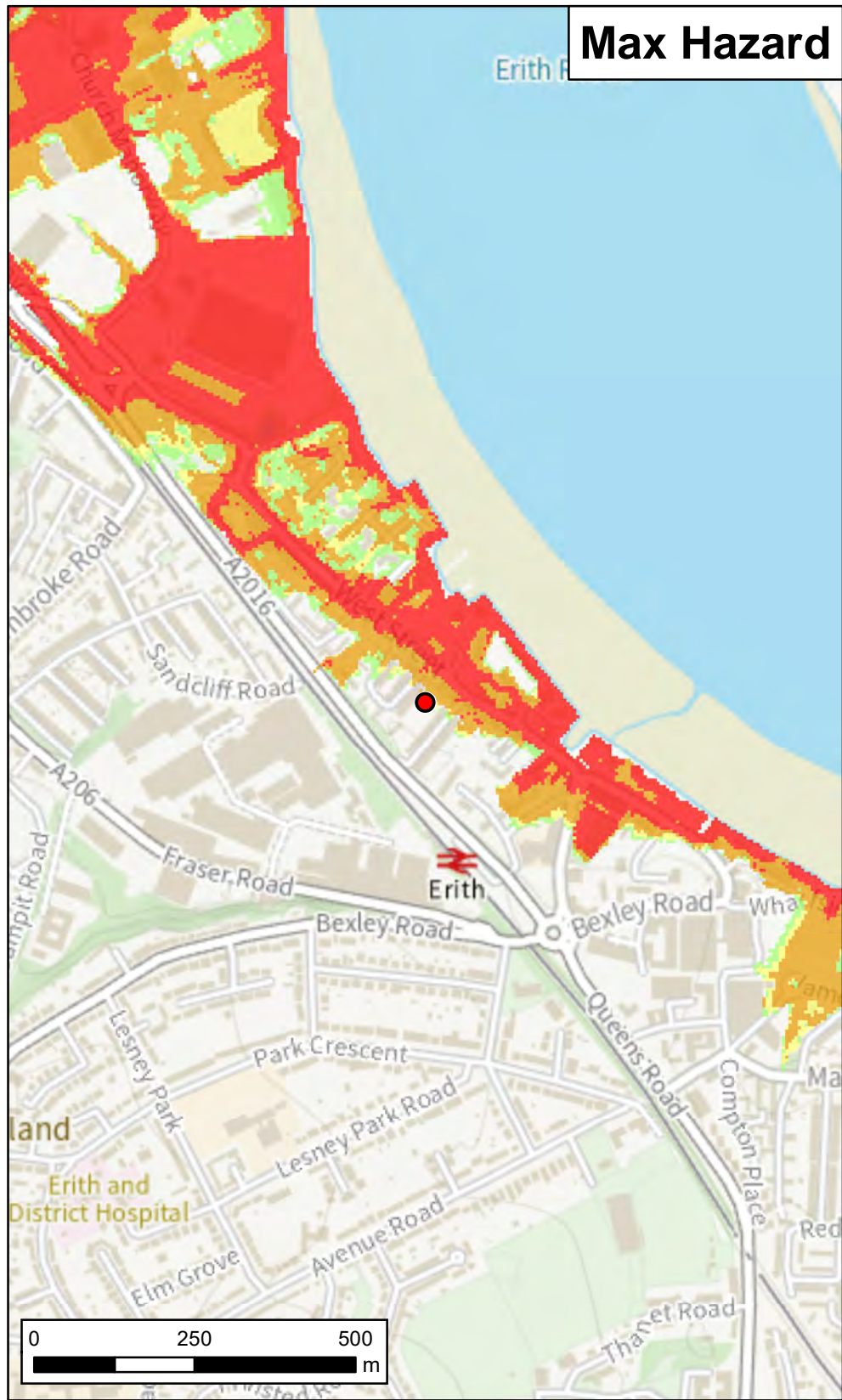
We recommend that you discuss your proposals with the Local Planning Authority at the earliest opportunity. They will be able to advise you on a wide range of planning matters in addition to flood risk.

Please see our website for details on how to get planning advice, including charged-for discretionary advice, from the Environment Agency <https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals#when-to-consult>. Our planning team can be contacted at kslplanning@environment-agency.gov.uk

You should also consult the Strategic Flood Risk Assessment and flood risk local plan policies produced by your local planning authority.

You should note that:

1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk Assessment where one is required, but does not constitute such an assessment on its own.
2. This information covers flood risk from main rivers and the sea, and you will need to consider other potential sources of flooding, such as groundwater or overland runoff. You should discuss surface water management with your Lead Local Flood Authority.
3. Where a planning application requires a FRA and this is not submitted or deficient, the Environment Agency may well raise an objection due to insufficient information



● Site Location	
Max Hazard	Max Depth (m)
Less than 0.75 (Low Hazard)	0 - 0.25
Between 0.75 and 1.25 (Danger for Some)	0.25 - 1.00
Between 1.25 and 2.00 (Danger for Most)	1.00 - 1.50
Greater than 2.00 (Danger for All)	1.50 - 2.00
	> 2.00
Max Velocity (m/s)	
0 - 0.3	
0.3 - 1.0	
1.0 - 1.5	
1.5 - 2.5	
> 2.5	
Date Printed 29/12/2023	Scenario year 2115
Scenario Annual Chance 0.5% (1 in 200)	


This map shows the combined flood hazard to people (called a hazard rating) if our flood defences are breached at any given single location, 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 covering the entire extent between the Thames Barrier and Gravesend. 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.

Please contact the Environment Agency for further information on emergency planning associated with flood risk in this area.

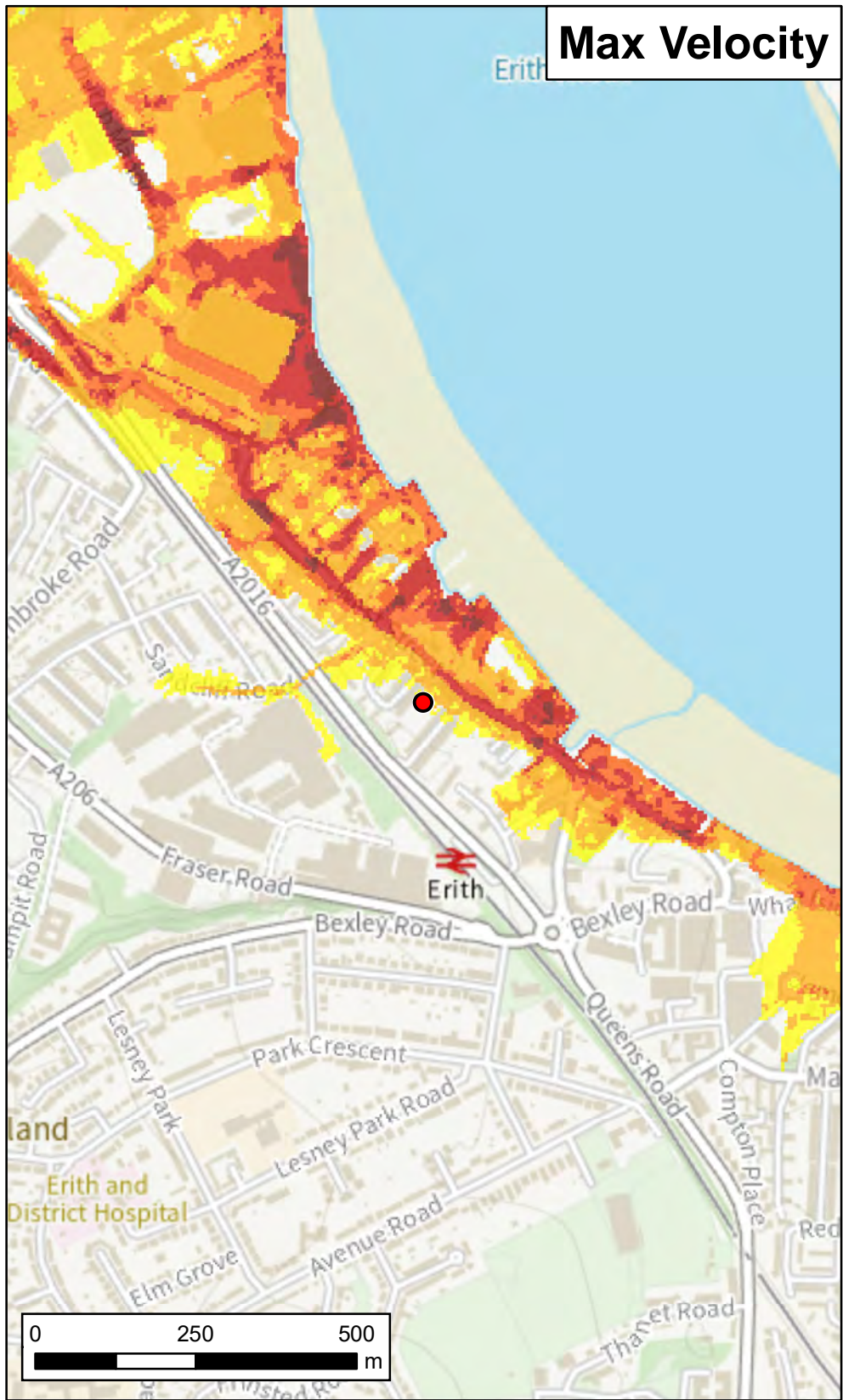
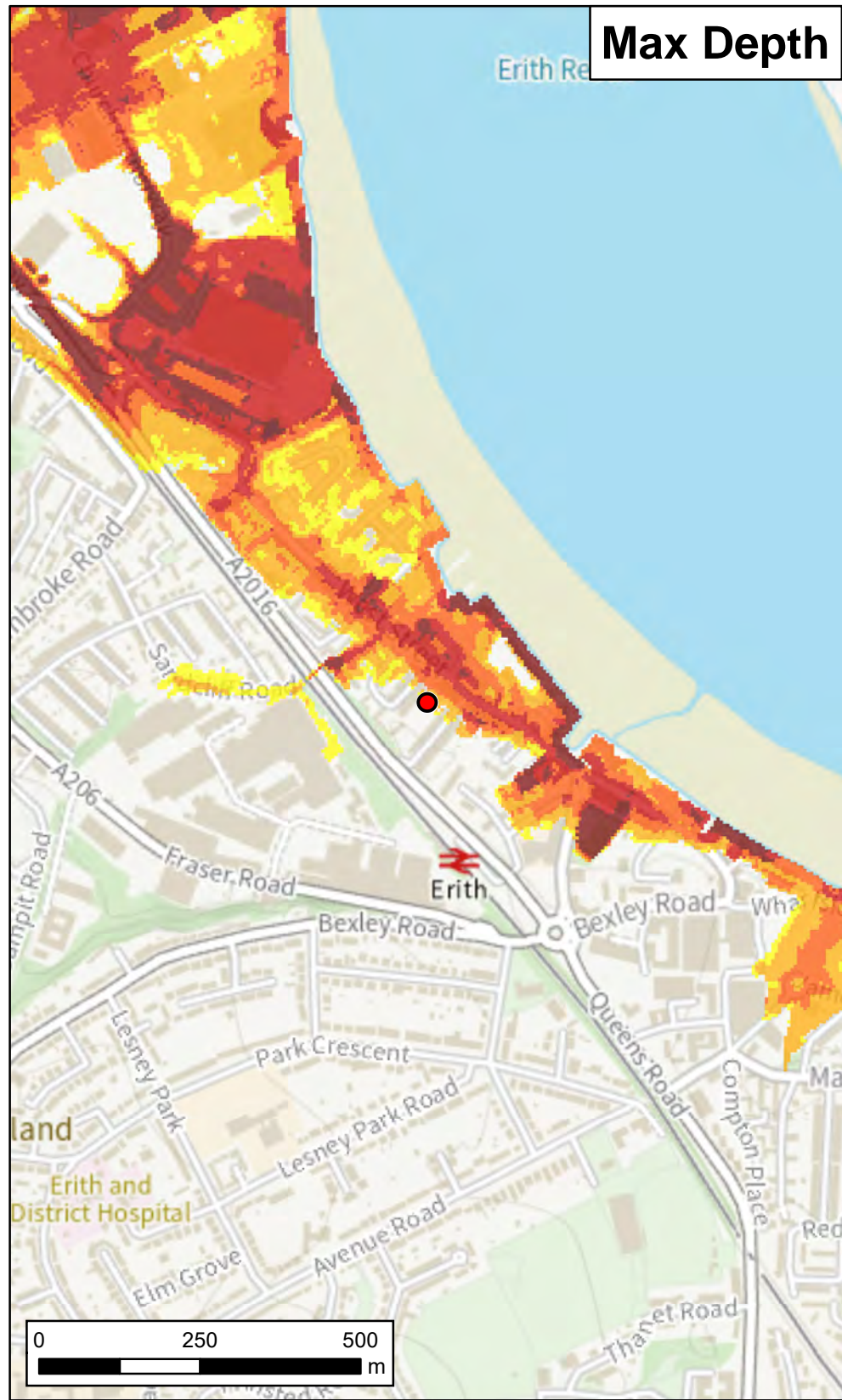
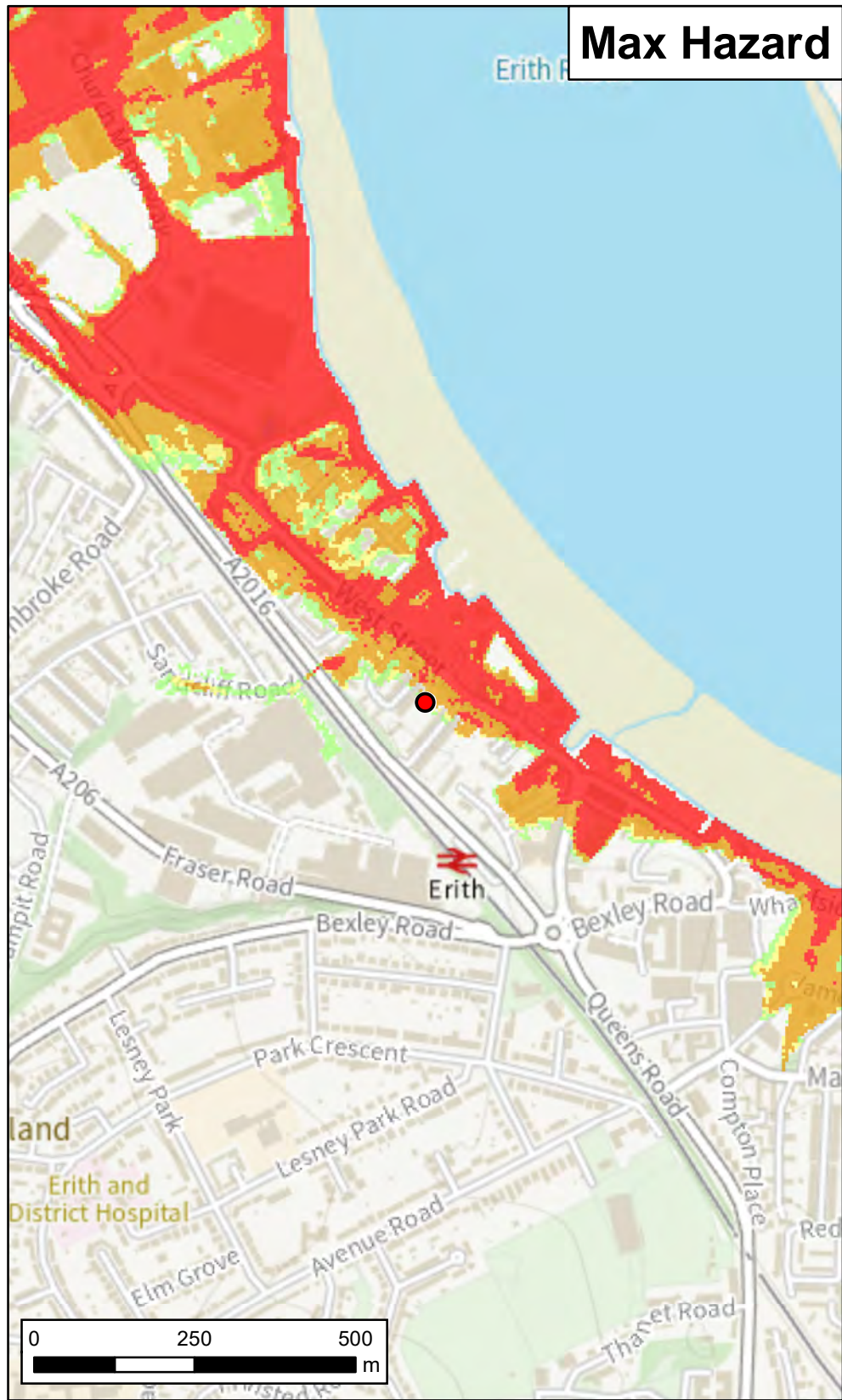
General Enquiries No: 03708 506 506. Weekday Daytime calls cost 5p plus up to 6p per minute from BT Weekend Unlimited. Mobile and other providers' charges may vary



Thames Tidal Downriver Breach Hazard Mapping

Map Centred on DA8 1AF
KSL 339424 JP

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● Site Location	
Max Hazard	Max Depth (m)
Less than 0.75 (Low Hazard)	0 - 0.25
Between 0.75 and 1.25 (Danger for Some)	0.25 - 1.00
Between 1.25 and 2.00 (Danger for Most)	1.00 - 1.50
Greater than 2.00 (Danger for All)	1.50 - 2.00
	> 2.00
Max Velocity (m/s)	
0 - 0.3	
0.3 - 1.0	
1.0 - 1.5	
1.5 - 2.5	
> 2.5	
Date Printed	29/12/2023
Scenario year	2115
Scenario Annual Chance	0.1% (1 in 1000)


This map shows the combined flood hazard to people (called a hazard rating) if our flood defences are breached at any given single location, 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 covering the entire extent between the Thames Barrier and Gravesend. 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.

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Thames Tidal Downriver Breach Hazard Mapping

Map Centred on DA8 1AF
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Flood map for planning

Your reference
2633

Location (easting/northing)
551088/178330

Created
18 Dec 2023 12:03

**Your selected location is in flood zone 3
– an area with a high probability of flooding.**

This means:

- you may need to complete a flood risk assessment for development in this area
- you should ask the Environment Agency about the level of flood protection at your location and request a Flood Defence Breach Hazard Map (You can email the Environment Agency at: enquiries@environment-agency.gov.uk)
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (find out more at www.gov.uk/guidance/flood-risk-assessment-standing-advice)

Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>

Flood map for planning

Your reference
2633

Location (easting/northing)
551088/178330

Scale
1:2500

Created
18 Dec 2023 12:03

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area



0 20 40 60m



Extent of flooding



Enter a place or postcode



Extent of flooding from surface water

High Medium Low Very low Location you selected

id, Erith
Scheuch Developments

Flood risk

High risk: depth

Location

Enter a place or postcode



Surface water flood risk: water depth in a high risk scenario

Flood depth (millimetres)

- Over 900mm
- 300 to 900mm
- Below 300mm
- Location you selected

**of Winifred Road, Erith
Scheuch Developments**

Flood risk

Medium risk: depth

Location

Enter a place or postcode



Surface water flood risk: water depth in a medium risk scenario

Flood depth (millimetres)

● Over 900mm ● 300 to 900mm ● Below 300mm ⊕ Location you selected

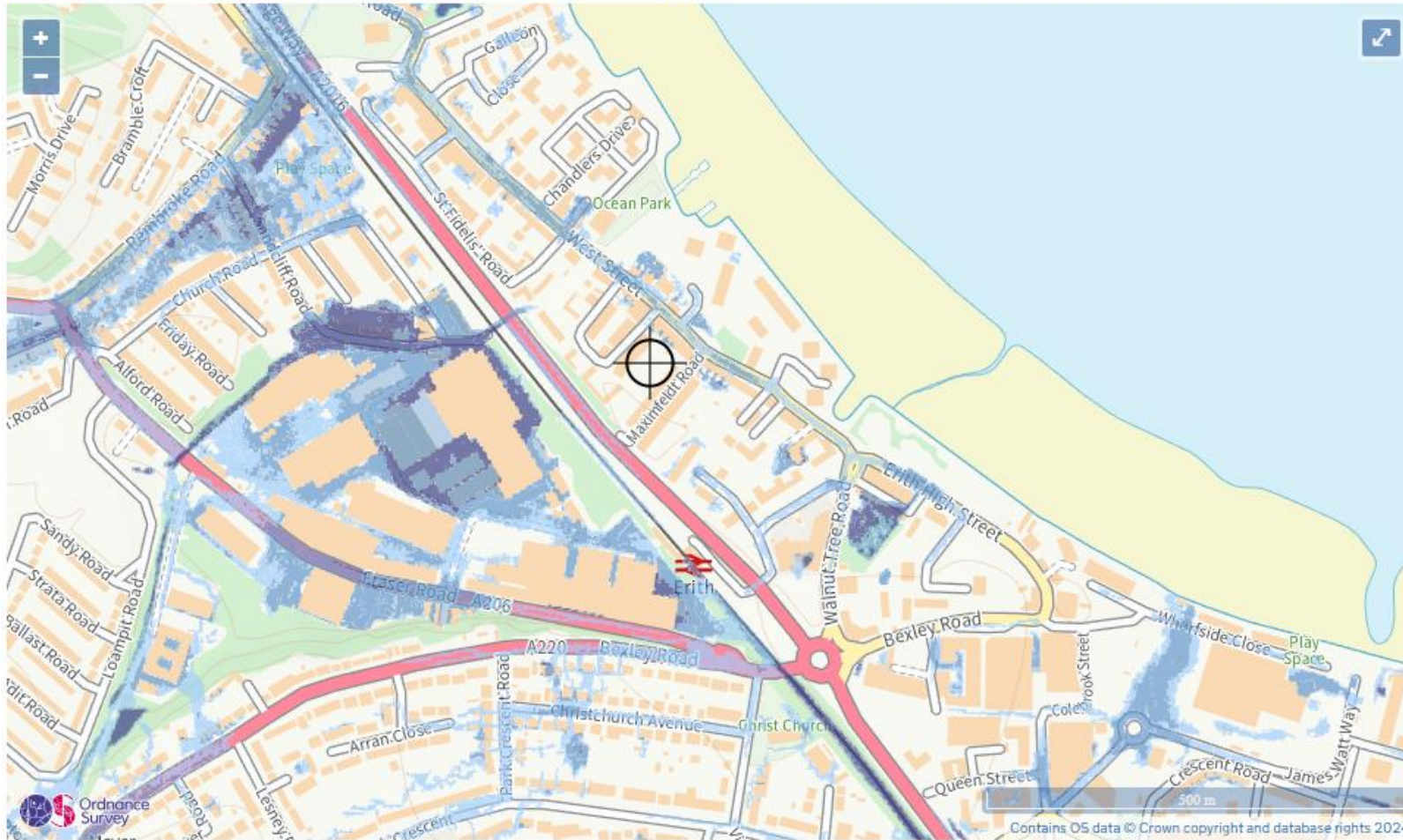
**of Winifred Road, Erith
Scheuch Developments**

Flood risk

Low risk: depth

Location

Enter a place or postcode




Surface water flood risk: water depth in a low risk scenario

Flood depth (millimetres)

Over 900mm 300 to 900mm Below 300mm Location you selected

**2633-FRA-1: Land to rear of Winifred Road, Erith
Scheuch Developments**

▼ This map illustrates the proposed Environment Agency Flood and Coastal Erosion Risk Management capital investment
62,466 views
Published on October 8, 2023
[SHARE](#) 

Early Assessment

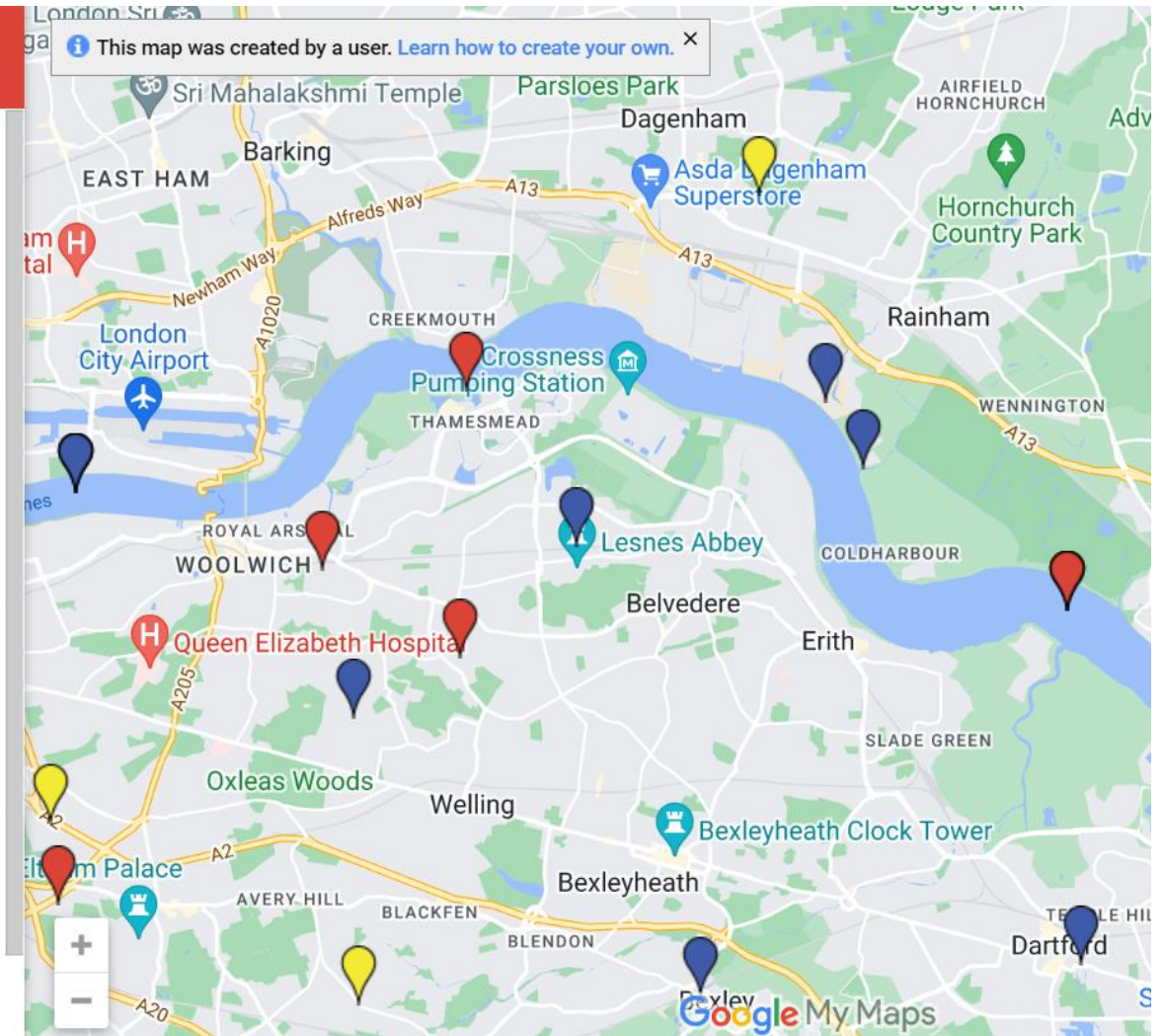
▼  All items

In Construction

▼  All items

Potential scheme at appraisal stage

▼  All items

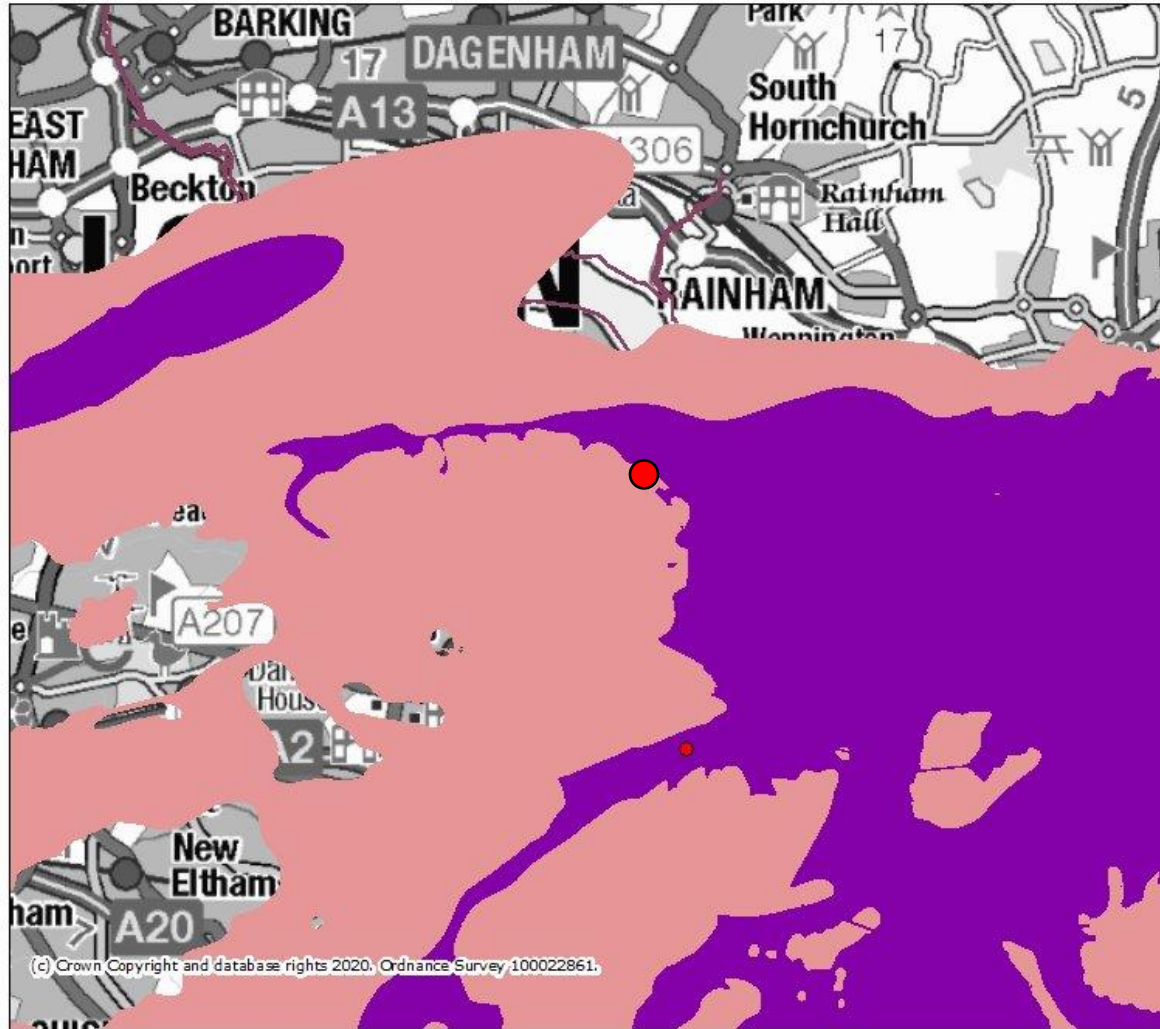


**2633-FRA-1: Land to rear of Winifred Road, Erith
Scheuch Developments**



**Contaminated
Land
Solutions**

Appendix G – Magic Defra Information

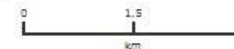


Legend

Aquifer Designation Map (Bedrock) (England)

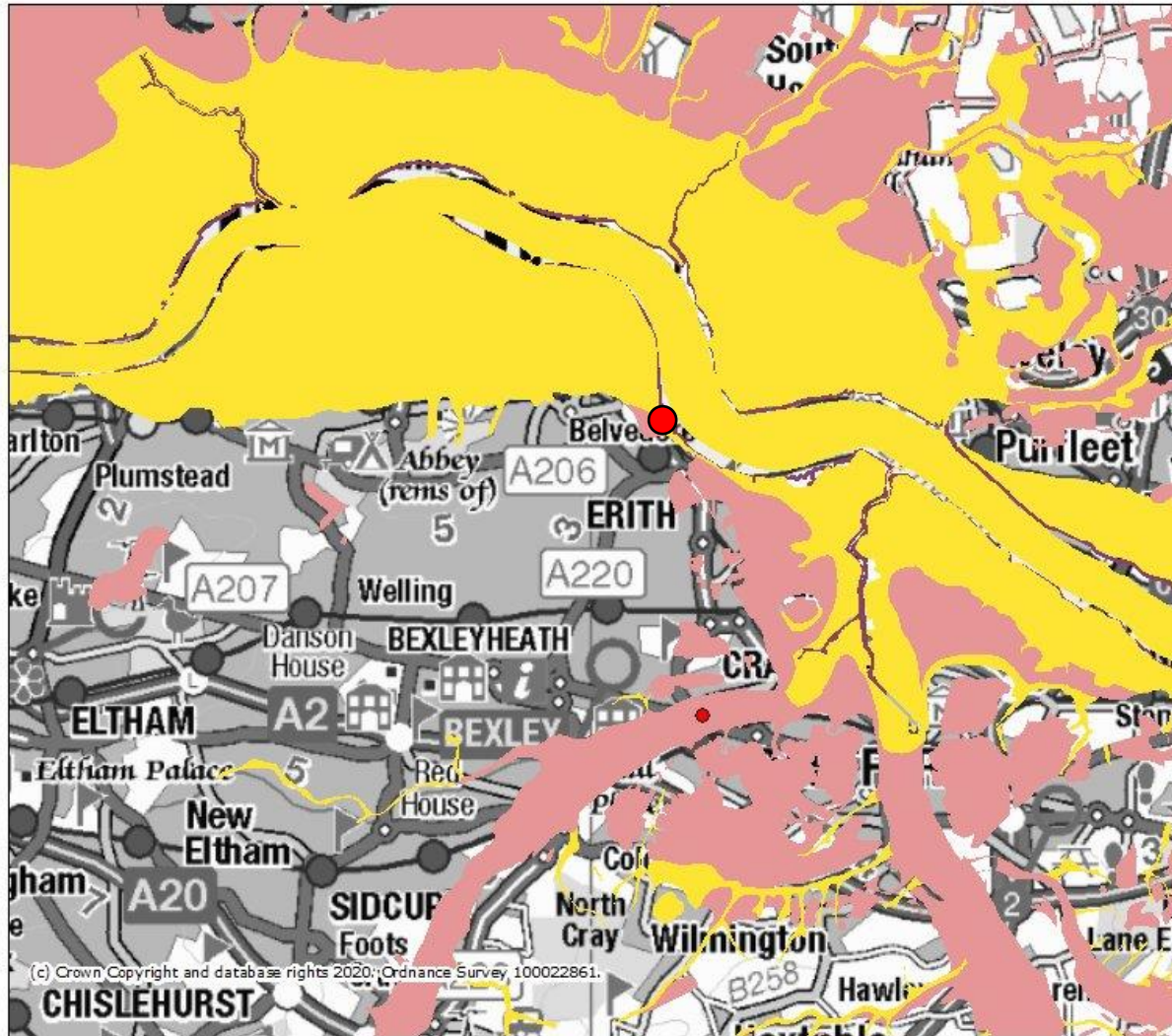
- Principal
- Secondary A
- Secondary B
- Secondary (undifferentiated)
- Unproductive

Projection = OSGB36
 xmin = 529900
 ymin = 168100
 xmax = 570500
 ymax = 187600



Map produced by MAGiC on 3 July, 2020
 Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGiC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

**2633-FRA-1: Land to rear of Winifred Road, Erith
 Scheuch Developments**



Legend

Aquifer Designation Map (Superficial Drift) (England)

- Principal
- Secondary A
- Secondary B
- Secondary (undifferentiated)
- Unknown (lakes+landslip)
- Unproductive

Projection = OSGB36
 xmin = 529900
 ymin = 167100
 xmax = 570200
 ymax = 187600

Map produced by MAGiC on 3 July, 2020.
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**2633-FRA-1: Land to rear of Winifred Road, Erith
 Scheuch Developments**



Legend

Source Protection Zones merged (England)

- Zone I - Inner Protection Zone
- Zone I - Subsurface Activity
- Zone II - Outer Protection Zone
- Zone II - Subsurface Activity
- Zone III - Total Catchment
- Zone III - Subsurface Activity
- Zone of Special Interest

Projection = OSGB36
 xmin = 529900
 ymin = 168100
 xmax = 570500
 ymax = 187600

Map produced by MAGiC on 3 July, 2020.
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**2633-FRA-1: Land to rear of Winifred Road, Erith
 Scheuch Developments**



**Contaminated
Land
Solutions**

Appendix H – Contacts

Local Authority	Building Control	t	020 8303 7777
		e	buildingcontrolinspections@bexley.gov.uk
	Environmental Health	t	020 8303 7777
		e	EnvironmentalHealth@bexley.gov.uk
Environment Agency	National Customer Contact Centre PO Box 544 Rotherham S60 1BY	t	08708 506 506
		f	
		e	enquiries@environment-agency.gov.uk
Coal Authority	Mining Reports Office 200 Lichfield Lane Berry Hill, Mansfield Notts, HG18 4RG	t	
		f	
		e	www.coalminingreports .co.uk