

**PATRICK
PARSONS**

CREATING PLACES  FOR FUTURE GENERATIONS TO THRIVE

Flood Risk Assessment

Land North of The Oysters

Furniss Way, Hayling Island,
PO11 0FG

for

Hayling Island Builders Limited

A21078

June 2022

Flood Risk Assessment
Land North of The Oysters
for
Hayling Island Builders Limited

Revision	Date of issue	Comments	Prepared By	Checked By
1.0	29.07.2021	Initial Issue	AJ	DB
2.0	14.10/2021	Layout Change	AJ	DB
3.0	27.06.2022	Updated to new template, updated to new climate change data, epoch flood information reviewed against new received flood data from the EA	AJ	DB

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Executive Summary

Description	
Patrick Parsons has been instructed by Hayling Island Builders Limited, to produce a Flood Risk Assessment under National Planning Policy Framework (NPPF) to support the Planning Application for the site at Land North of The Oysters, Furniss Way, Hayling Island, PO11 0FG.	
Flood Risk Assessment	
Coastal:	Zone 1
Fluvial:	Zone 1
Pluvial:	Low
Groundwater:	Low
Other sources:	Low
Flood Resilience Measures	
None required	
Conclusions	
The site is not at risk of any forms of flooding.	



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Appendix E	Environment Agency Flood Map (For Planning)
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1.0 Introduction

- 1.1.1 Hayling Island Builders Limited is planning a proposed development on the site at Land North of The Oysters, Furniss Way, Hayling Island, PO11 0FG.
- 1.1.2 Patrick Parsons has been instructed by Hayling Island Builders Limited, to produce a Flood Risk Assessment to support the Planning Application.
- 1.1.3 This report aims to demonstrate that the site is not at risk of any form of flooding.
- 1.1.4 The general limitations of this assessment are that:
- Several data sources have been used in compiling this report. Whilst Patrick Parsons believe them to be trustworthy; it is unable to guarantee the accuracy of the information that has been provided by others.
 - This report is based on information available at the time of preparation. There is potential for further information to become available, which may create a need to modify conclusions drawn in this report.

2.0 Location of Site

- 2.1.1 The site is located north of The Oysters in Hayling Island. A location plan is enclosed in **Appendix A**.
- 2.1.2 The Local Authorities are Havant Borough Council and Hampshire County Council.

3.0 Site Description

3.1 Existing Site

- 3.1.1 The existing site is the parcel of land to the north of The Oysters. A topographical survey has been commissioned for the site and can be found in **Appendix B**.

3.2 Existing Geology

- 3.2.1 The geology of the site has been ascertained by reference to the 1:50,000 British Geological Survey website. The data provided on the website indicates the bedrock and superficial drift geology for the site.

- 3.2.2 The strata of the site (bedrock geology) comprises London Clay formation, described as follows:

“London Clay Formation - Clay, Silt and Sand. Sedimentary Bedrock formed approximately 48 to 56 million years ago in the Palaeogene Period. Local environment previously dominated by deep seas. These sedimentary rocks are marine in origin. They are detrital and comprise coarse- to fine-grained slurries of debris from the continental shelf flowing into a deep-sea environment, forming distinctively graded beds.”

- 3.2.3 The strata of the site (superficial drift) comprises River Terrace Deposits, described as follows:

“River Terrace Deposits (undifferentiated) - Sand, Silt and Clay. Superficial Deposits formed up to 3 million years ago in the Quaternary Period. Local environment previously dominated by rivers (U). These sedimentary deposits are fluvial in origin. They are detrital, ranging from coarse- to fine-grained and form beds and lenses of deposits reflecting the channels, floodplains and levees of a river or estuary (if in a coastal setting).”

3.3 Hydrogeology Setting

- 3.3.1 The Environment Agency (EA) mapping service, as provided by Magic Map, indicates the aquifer designation for the bedrock and superficial drift geology and the groundwater vulnerability in the area. The mapping, as included at **Appendix C**, provide the following information for the site:

Geology Map	Site Description
Aquifer Designation (Bedrock)	Unproductive
Aquifer Designation (Superficial Drift)	Secondary A
Groundwater Vulnerability	Medium / Low
Groundwater Source Protection Zone	None

4.0 Proposed Development

4.1.1 The proposal is for up to 29 No. new residential units. A site plan is included at **Appendix D**.

5.0 Flooding Information

5.1.1 As set out in the National Planning Policy Framework (NPPF), inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere. For these purposes:

- “areas at risk of flooding” means land within Flood Zones 2 and 3; or land within Flood Zone 1 which has critical drainage problems, and which has been notified to the local planning authority by the Environment Agency;
- “flood risk” means risk from all sources of flooding - including from rivers and the sea, directly from rainfall on the ground surface and rising groundwater, overwhelmed sewers and drainage systems, and from reservoirs, canals and lakes and other artificial sources.

5.1.2 Flooding information for Planning from the Environment Agency (EA) has indicated the site is located within Flood Zone 1, as found in the map at **Appendix E**.

5.1.3 As the site is within Flood Zone 1, no further data was required from the Environment Agency to support versions 1.0 and 2.0 of this report.

5.1.4 There is a potential risk of flooding on the SFRA mapping using epoch baselines, which will be assessed in this report. To support this, further data was requested from the Environment Agency and can be found at **Appendix H**.

5.1.5 As part of the data capture, data and mapping from the Richmond Strategic Flood Risk Assessment (SFRA) was sought. This will be included and references in the relevant sections below.

6.0 Flood Risk Classification

- 6.1.1 The data on the EA's website in their updated mapping, shows the site has a "very low" risk of flooding.
- 6.1.2 The EA confirmed that the proposed development site is located in Flood Zone 1 for Planning.
- 6.1.3 According to Table 2 of National Planning Policy Framework (NPPF), the development, being residential, is classed as 'more vulnerable'.
- 6.1.4 According to NPPF Table 3 'Flood Risk Vulnerability and Flood Zone Compatibility', the development should be permitted.

Table 3: Flood risk vulnerability and flood zone 'compatibility'

Flood risk vulnerability classification (see table 2)		Essential infrastructure	Water compatible	Highly vulnerable	More vulnerable	Less vulnerable
Flood zone (see table 1)	Zone 1	✓	✓	✓	✓	✓
	Zone 2	✓	✓	Exception Test required	✓	✓
	Zone 3a	Exception Test required	✓	✗	Exception Test required	✓
	Zone 3b functional floodplain	Exception Test required	✓	✗	✗	✗

Key: ✓ Development is appropriate.
 ✗ Development should not be permitted.

6.2 Sequential Test

- 6.2.1 Local Planning Authorities (LPA) are encouraged to take a risk-based approach to proposals for development in or affecting flood risk areas through the application of the Sequential Test and the objectives of this test are to steer new development away from high-risk areas towards those at lower risk of flooding.
- 6.2.2 However, in some areas where developable land is in short supply, there can be an overriding need to build in areas that are at risk of flooding. In such circumstances, the application of the Sequential Test is used to ensure that the lower risk sites are developed before the higher risk ones.
- 6.2.3 NPPF (PPG25) states that the Sequential Test should be applied at all stages of the planning process and the starting point is generally the Environment Agency's flood zone maps.
- 6.2.4 These maps and the associated information are intended for guidance and cannot provide details for individual properties. They do not consider other considerations such as existing flood defences, alternative flooding mechanisms and detailed site-based surveys. They do, however, provide high level information on the type and likelihood of flood risk in any area of the country.
- 6.2.5 The site is within Flood Zone 1 and so does not require a sequential test assessment.

6.3 Exception Test

- 6.3.1 The Exception Test is an additional test to be applied by decision-makers following application of the Sequential Test. The Exception Test has two elements as shown below, both of which must be satisfied for development in a flood risk area to be considered acceptable.
- 6.3.2 The Exception Test is only appropriate for use when there are large areas in Flood Zones 2 and 3, where the Sequential Test alone cannot deliver acceptable sites, but where some continuing development is needed for wider sustainable development reasons, considering the need to avoid social or economic blight and the need for essential civil infrastructure to remain operational during floods.
- 6.3.3 For the Exception Test to be passed:
 - a. It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a SFRA; and,
 - b. A site-specific FRA must demonstrate that the development will be safe for its lifetime, without increasing flood risk elsewhere and, where possible, reducing flood risk overall.
- 6.3.4 The site does not require an exception test in accordance with NPPF.

7.0 Climate Change Allowance

- 7.1.1 Climate change allowances, as set out by the Government guidance, are predictions of anticipated change for peak river flow, peak rainfall intensity, sea level rise and offshore wind speed / extreme wave height.
- 7.1.2 To increase resilience to flooding and coastal change, allowances for climate change are considered in any flood risk assessment.
- 7.1.3 The allowances are based on percentiles from UKCP18 climate change prediction data. A percentile is a measure used in statistics. They describe the proportion of possible scenarios that fall below an allowance level. The:
- Central allowance is based on the 50th percentile
 - Higher central allowance is based on the 70th percentile
 - Extreme allowance is based on the 95th percentile
- 7.1.4 To manage river flooding in on the site, any flood assessment should use the:
- Central allowance as your design allowance
 - Higher central allowance to test the impacts of higher scenarios of climate change and any extra mitigation
 - Extreme allowance to test your option under more extreme climate change and exceedance events
 - 2080s epoch allowances for changes beyond the 2080s epoch and up to 2115

7.2 Climate Change Allowances

- 7.2.1 The Environment Agency have prepared a River Catchment map (**Climate change allowances for peak river flow in England (data.gov.uk)**) that identifies the percentage allowances required for a specific postcode.

Baseline	Central	Higher	Upper
2020s	19%	24%	37%
2050s	22%	30%	51%
2080s	37%	51%	88%

8.0 Flood Data

- 8.1.1 Havant Borough Council Coastal Partners objected to the Planning Application, stating that there was evidence within the PfSH SFRA that indicated that the site would be at risk using an epoch baseline. The following zones are present within the site:

Baseline	Model Outline	Affects the Site
2025	Fluvial FZ3 2025 (WMS)	NO
	Tidal FZ2 2025 (WMS)	NO
	Tidal FZ3 2025 (WMS)	NO
2055	Fluvial FZ3 2055 (WMS)	NO
	Tidal FZ2 2055 (WMS)	NO
	Tidal FZ3 2055 (WMS)	NO
2085	Fluvial FZ3 2085 (WMS)	NO
	Tidal FZ2 2085 (WMS)	NO
	Tidal FZ3 2085 (WMS)	NO
2085	Fluvial FZ3 2115 (WMS)	NO
	Tidal FZ2 2115 (WMS)	NO
	Tidal FZ3 2115 (WMS)	NO

- 8.1.2 The Environment Agency provided tidal flood levels for the site, following a new data request. These levels have been taken from the East Solent Coastal model that was produced in 2018 by JBA Consulting. The resulting water levels are as follows:

Year	1 in 200 Year (0.5% AEP) Flood Zone 3	1 in 1000 Year (0.1% AEP) Flood Zone 3
2015	3.32	3.51
2065	3.65	3.83
2115	4.07	4.26

- 8.1.3 The report uses different baselines for the tidal flood model, so there is no requirement to apply additional climate change uplift to the flood levels.

9.0 Flood Risk Assessment

9.1 Fluvial Flooding Risk

- 9.1.1 The Environment Agency flood information indicates some risk from fluvial sources on the site in the epoch tidal events. The design flood level for the 2015 baseline is 3.32m AOD, for the 2065 baseline is 3.65m AOD and for the 2115 baseline is 4.07m AOD.
- 9.1.2 The ground level on site varies but higher than all noted tidal flood levels. Therefore, it can be stated that there is no risk from fluvial flooding on the site.

9.2 Historic Flood Data

- 9.2.1 The Environment Agency and Havant SFRA have no information indicating that the site was flooded historically from fluvial sources.

9.3 Groundwater

- 9.3.1 Groundwater flooding is caused by the emergence of water originating from sub-surface permeable strata. A ground water flood event results from a rise in ground water level, sufficient for the water table to intersect the ground surface and inundate low lying land. Groundwater floods may emerge from either a single point or diffuse locations.
- 9.3.2 The underlying strata throughout the area and investigations into the SFRA geology data suggest that there is a risk of groundwater emergence which is likely to relate to the geology of the area. However, groundwater flooding risks are often highly localised, and dependent upon geological interfaces between permeable and impermeable subsoils. Therefore, sustainable construction techniques for surfacing will minimise any potential groundwater risk.
- 9.3.3 The Havant SFRA indicates that the site is within an area with low permeability but does not identify any historic groundwater flood incidents.

9.4 Flooding from Sewers

- 9.4.1 Flooding from sewers can occur because of different reasons; if sewers are blocked during the heavy rainfalls, or if a sewer cannot provide adequate capacity, then flooding can cause a large amount of damage.
- 9.4.2 The Havant SFRA has no information indicating the site has been flooded by artificial sources historically.

9.5 Flooding from Reservoirs

- 9.5.1 Reservoir flooding is extremely unlikely to happen. There has been no loss of life in the UK from reservoir flooding since 1925. All large reservoirs must be inspected and supervised by reservoir panel engineers. As the enforcement authority for the Reservoirs Act 1975 in

England, the Environment Agency ensures that reservoirs are inspected regularly, and essential safety work is carried out.

9.5.2 However, in the unlikely event that a reservoir dam failed, a large volume of water would escape at once and flooding could happen with little or no warning. If the site is within a risk area, plans should be made for safe evacuation and escape. Residents may need to evacuate immediately, know the safest route to safety, and be ready to follow the advice of emergency services.

9.5.3 The EA data indicates that the site is at no risk from reservoir flooding.

9.6 Surface Water Flooding

9.6.1 Overland flow / surface water flooding typically arise because of intense rainfall, often of short duration, that is unable to soak into the ground or enter drainage systems. It can run quickly off land and result in localised flooding.

9.6.2 The Environment Agency has produced illustrative mapping (Flood Map for Surface Water) relating to flooding risks from surface water. They are classified as Flood Hazard Maps for the purpose of the Flood Risk Regulations 2009. These maps are the next generation on from the previous "Area Susceptible to Surface Water Flooding" maps, which are contained within the SFRA.

9.6.3 The EA maps show high resolution image and indicative flow paths for pluvial events. The maps are based on coarse level data and indicate ridges, valleys and flat spots where water would collect. Typically, the flow paths follow valleys, rivers and watercourses.

9.6.4 The surface water maps and the associated information are intended for guidance only and cannot provide details for individual properties. They do, however, provide high level information and indicate areas in which surface water flooding issues should be investigated further. The risk categories are classified as follows:

- Very low probability of flooding – This zone is assessed as having less than a 1 in 1000 annual probability of surface water flooding.
- Low probability of flooding – This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of surface water flooding.
- Medium probability of flooding - This zone comprises land assessed as having between a 1 in 30 and 1 in 100 annual probability of surface water flooding.
- High probability of flooding – This zone is assessed as having greater than a 1 in 30 annual probability of surface water flooding.

9.6.5 A review of the EA mapping indicates there is no/minimal risk of surface water flooding to the site.

10.0 Route of Escape

10.1.1 In an extreme storm event, there is not likely to be flood water on site and safe escape can be achieved via the main access to site.

10.1.2 It is not envisaged that there would be any problem for access of emergency vehicles in an extreme storm event as there is no flood depth unless the extreme storm scenario occurs. Emergency vehicles may operate in depths of 0.5m with velocity of 5 metres per second (with some operating at depths of 1m).

10.1.3 The Planning Authority must be in consultation with the emergency services as to the appropriate access and safe routes for the site during an extreme storm event, in accordance with Section 13.S3.3 of the FRA Guidance for New Developments. Emergency Response Plans for the local area are available on the council website and would require updating for the proposed residence. It is not envisaged that there will be any additional burden on emergency services during a flood event.

10.1.4 General Evacuation Advice:

- Avoid walking or driving through flood water, as only 150mm of fast flowing flood water is able to knock a person over and 600mm is able to float a car. Flooding can cause manhole covers to come off, leaving hidden dangers.
- Do not walk on sea defences or riverbanks.
- Take care or avoid crossing bridges when water levels are high.
- Take care crossing culverts as they are dangerous when flooded.
- Look out for other hazards such as fallen power lines and trees.
- Keep Children away from flood water.
- Wash hands thoroughly if you come into contact with flood water as it may be contaminated with sewage.
- Always follow the advice provided at the time by the Emergency Services. The Emergency Services may direct you to a Local Authority Evacuation Centre, which has been specially prepared for people being evacuated from their homes. Free food and bedding is provided, however spare clothing should be taken, essential medication and any baby care products should an infant be involved in the evacuation.

11.0 Flood Compensation

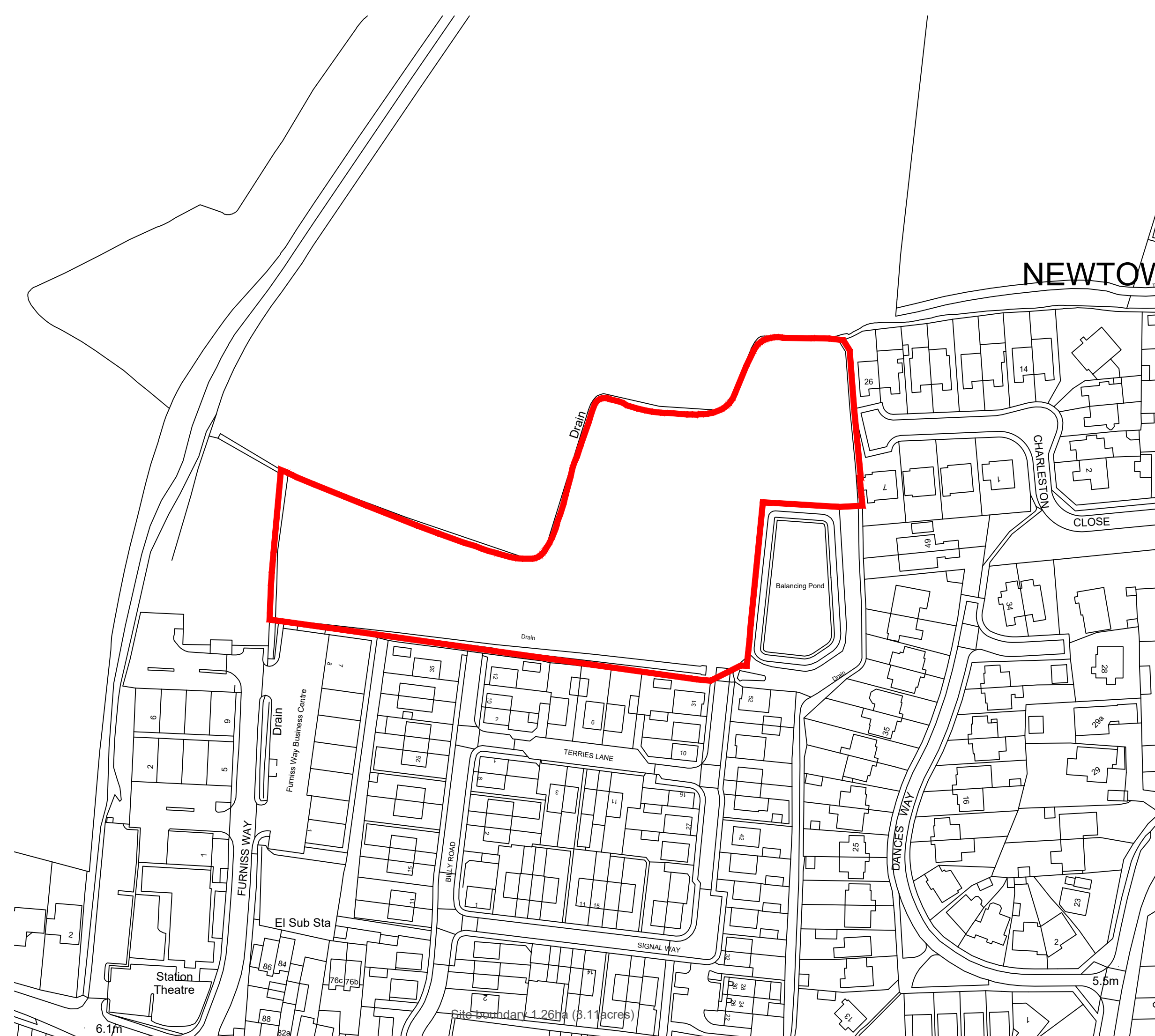
11.1.1 The site is not within a Flood Zone for planning so there is no statutory requirement to assess the requirement for flood compensation.

12.0 Summary and Conclusions

- 12.1.1 Hayling Island Builders Limited is planning a proposed development on the site at Land North of The Oysters, Furniss Way, Hayling Island, PO11 0FG.
- 12.1.2 Patrick Parsons has been instructed by Hayling Island Builders Limited, to produce a Flood Risk Assessment under National Planning Policy Framework (NPPF) to support the Planning Application.
- 12.1.3 The Environment Agency mapping indicates that the site is within Flood Zone 1 and has a very low risk of fluvial flooding.
- 12.1.4 All other sources of flooding for the site have been investigated and shown to be of minimal or no risk.
- 12.1.5 The proposed development is appropriate and sustainable in the terms as set out in NPPF.

Appendix A Location Plan

Site boundary 1.26ha (3.11acres)



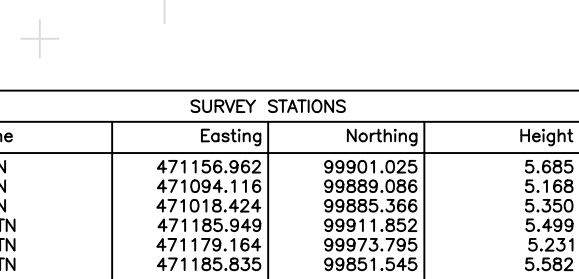
Project
Land North of the Oysters

Drawing Title
Site Location Plan

Date	Scale	Drawn by	Check by
08/03/2021	1:1,250 at A3	ML	SR
Project No	Drawing No	Revision	
1239	001	-	

Appendix B

Topographical Survey



SURVEY STATIONS			
Name	Easting	Northing	Height
1STN	471156.962	99901.025	5.685
2STN	471094.116	99889.086	5.168
3STN	471018.424	99885.366	5.350
L1STN	471185.949	99911.852	5.499
L2STN	471179.164	99973.795	5.231
L3STN	471185.835	99851.545	5.582

1. The survey grid is a local grid, coincident with Ordnance Survey National Grid at 257N.
2. Succeeded industry features are not necessarily legal or boundary lines.
3. Dimensions should not be scaled. All dimensions should be taken from the original survey.
4. Copyright of all data produced by Technics Group shall remain with Technics Group unless otherwise specifically agreed. Information provided should not be altered or modified in any way. The data should not be used for any other purpose than that which was intended and should not be issued to other parties without prior agreement of Technics Group.
5. The Technics Group shall not be responsible for any damage to computer systems which may result from viruses which may be contained in the data provided.
6. The data shall not be read by any system other than AutoCAD it should be checked against a hard copy. Technics Group cannot accept liability for omissions.
7. The data have been prepared by the Technics Group using its knowledge. The correct identification of the utility types can not be 100% guaranteed, therefore these should be independently checked by the user.
8. External elevations are surveyed to lowest tide position.

ALL LEVELS ARE ORTHOMETRIC HEIGHTS RELATED TO OSGM15
GPS DATUM, COMPUTED USING LEICA SMARTNET RTK NETWORK

[illegible]

	Single Gate		Building Face
	Double Gate		Overhead Feature
	Banking		Trench Scar
	Step Up		Tree Canopy
	Diameter shown in mm		Bushes/Foliage/Overgro
	Survey Station		

-----	Telecom Overhead
-----	Power Overhead
-----	Foul Water
-----	Surface Water
-----	Combined Water
-----	Unknown Services
-----	Change of Surface
-----	Drop Kerb
-----	Fence
-----	Wall
-----	Kerb
-----	Building Face
-----	Overhead Feature
-----	Trench Scar
-----	Tree Canopy
-----	Bushes/Foliage/Overgrowth

SPECIES ABBREVIATION			
AL	Alder	HL	Hemlock
BE	Beech	HO	Holly
CE	Cedar	HZ	Hazel
CH	Cherry	LA	Larch
CO	Cornus	LM	Lime
CY	Cypress	LL	Loblolly
DE	Dead	LO	Locust
DEC	Deciduous	LU	Laurel
DI	Dioecious	ME	Myrtle
EU	Eucalyptus	MG	Magnolia
FR	Fruit	NS	Nowsey Spruce
HA	Hawthorn	PI	Pine
HE	Hemlock	PO	Poplar
HC	Horse Chestnut	PL	Plane
		RH	Rhododendron
		RO	Rowan
		SAP	Sapling
		SB	Sliver Birch
		SCN	Shrub Chestnut
		SH	Shrub
		ST	Stump
		SY	Sycamore
		WE	Whitebark
		WG	Weglingtonia
		WI	Willow
		WN	Walnut

NOTES:

1. The tree species have been identified to the best of the surveyors knowledge. They have not been verified by an arborist and are not guaranteed. If they are important they should be verified.
2. Tree heights are estimated.
3. A CAD layer exists with the full tree canopies intact which is turned off.
4. Trees with bole diameters below the specified minimum size may not have been surveyed.
5. Multibole sizes are indicative.

CLIENT

Hayling Island Builders Limited

SITE
Parcel 1
Land North of 'The Oysters' Development
Station Road PO11 0EL

DRAWING TITLE
Topographical Survey

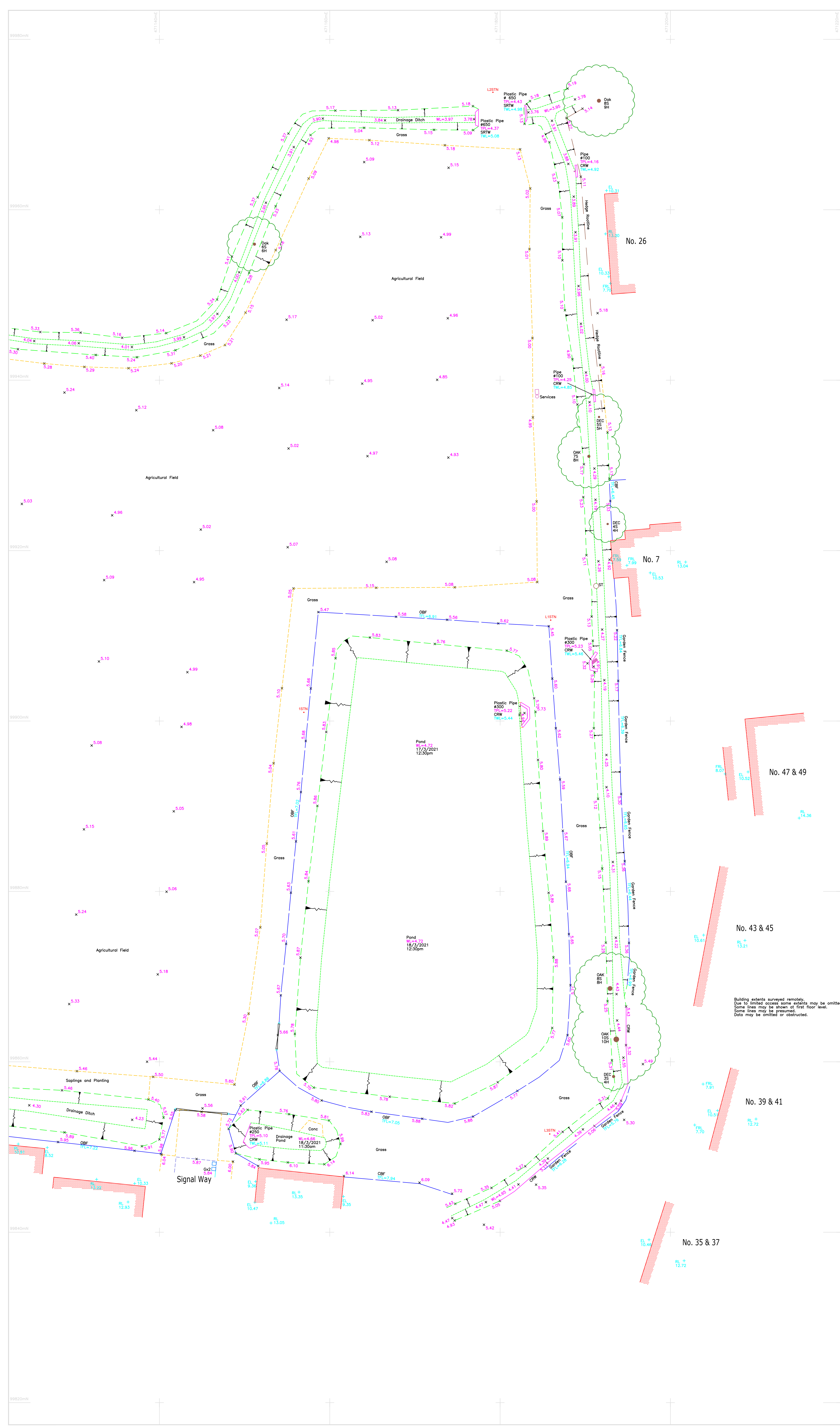
PROJECT NUMBER	DRAWING NUMBER	DATE
SP21219	SD21219-01	Mar 2021
SURVEYED BY	DRAWN BY	CHECKED BY
CJ	CJ	CJ
SCALE	SHEET SIZE	SHEET
1:200	A1	1 OF 4



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Building extents surveyed remotely.
Due to limited access some extents may be omitted
Some lines may be shown at first floor level.
Some lines may be presumed.
Data may be omitted or obstructed.



Appendix C

Magic Map Geology Information

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- ☐ Access
- ☐ Administrative Geographies
- ☐ Countryside Stewardship Targeting & Scoring Layers
- ☐ Designations
- ☐ Habitats and Species
- ☐ Land Based Schemes
- ☒ Landscape

☒ Geology and Soils☒ Aquifer Designation Map (Bedrock) (England)

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

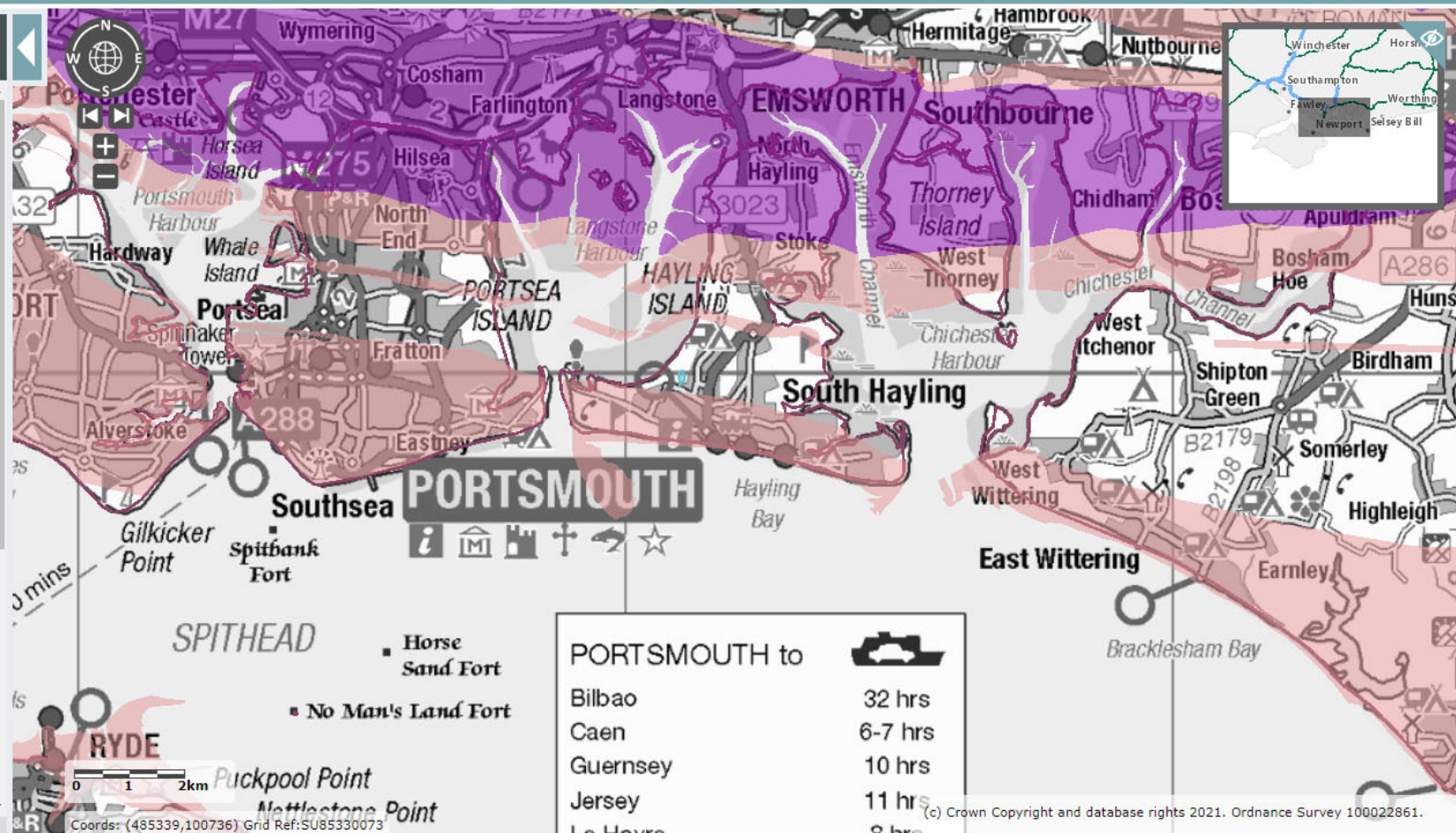
☐ Aquifer Designation Map (Superficial Drift) (England)☐ Groundwater Vulnerability Map (England)☐ Geological Places to Visit (England)☐ Geological Descriptions

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- ☐ Access
- ☐ Administrative Geographies
- ☐ Countryside Stewardship Targeting & Scoring Layers
- ☐ Designations
- ☐ Habitats and Species
- ☐ Land Based Schemes
- ☒ Landscape
- ☒ Geology and Soils
 - ☐ Aquifer Designation Map (Bedrock) (England)
 - ☒ Aquifer Designation Map (Superficial Drift) (England)
 - ☐ Principal
 - ☐ Secondary A
 - ☐ Secondary B
 - ☐ Secondary (undifferentiated)
 - ☐ Unknown (lakes+landslip)
 - ☐ Unproductive
 - ☐ Groundwater Vulnerability Map (England)
 - ☐ Geological Places to Visit (England)

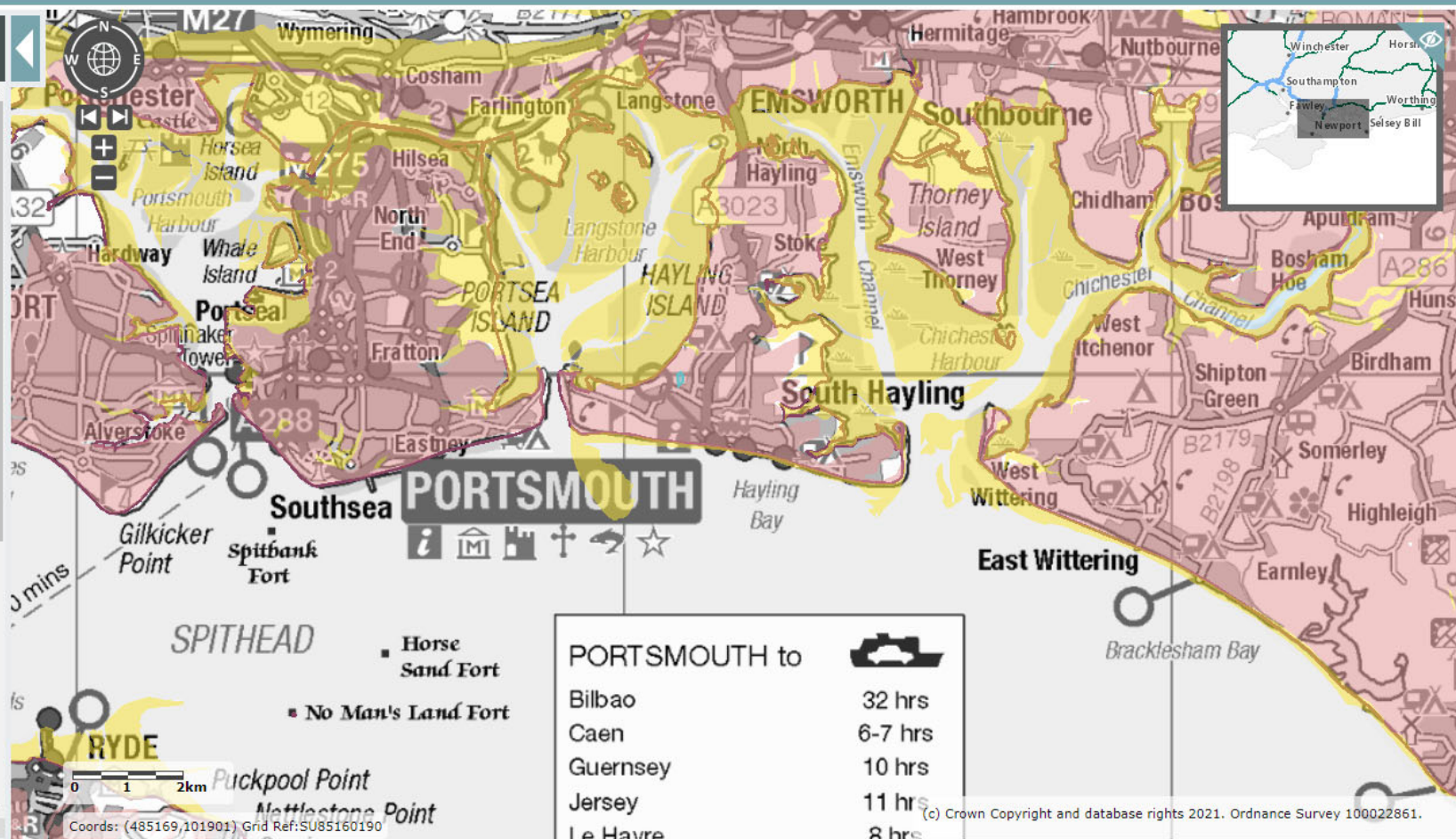


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☐ Countryside Stewardship Targeting & Scoring Layers☐ Designations☐ Habitats and Species☐ Land Based Schemes☒ Landscape☒ Geology and Soils☐ Aquifer Designation Map (Bedrock) (England)☐ Aquifer Designation Map (Superficial Drift) (England)☒ Groundwater Vulnerability Map (England)

Local Information

Soluble Rock Risk

High

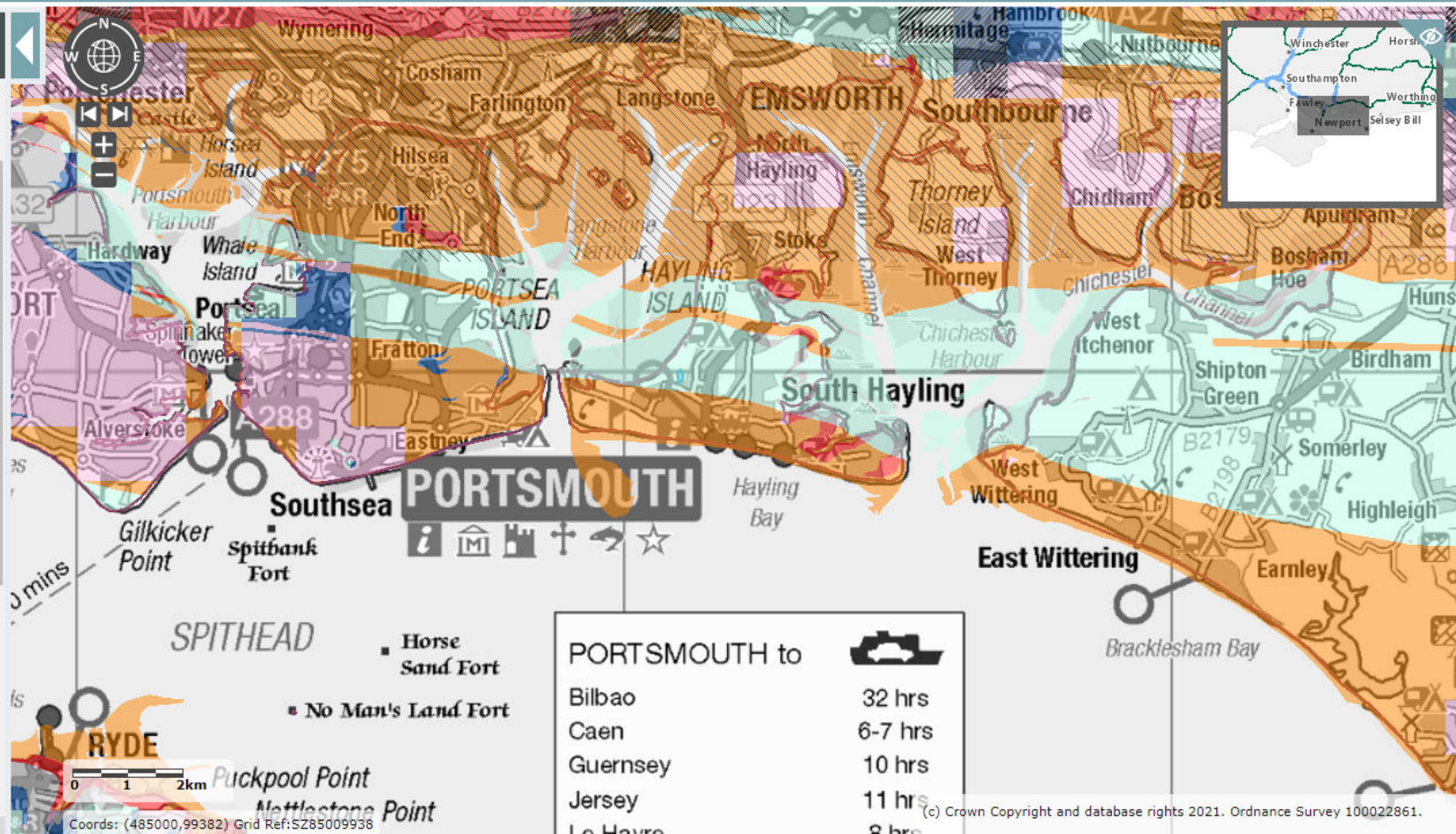
Medium - High

Medium

Medium - Low

Low

Unproductive

☐ Geological Places to Visit (England)☐ Geological Descriptions (England)

Appendix D

Site Plan



0 50
metres
(1:1,250)

Site boundary 1.24ha (3.06acres)

Project
Land North of the Oysters

Drawing Title
Illustrative Masterplan

Date 13/10/2021	Scale 1:1,250 at A3	Drawn by CT	Check by SR
Project No 1239	Drawing No 003	Revision J	

Mosaic

Appendix E

Environment Agency Flood Map (For Planning)

Flood map for planning

Your reference
A21078

Location (easting/northing)
471093/99915

Created
24 Mar 2021 12:43

Your selected location is in flood zone 1, an area with a low probability of flooding.

This means:

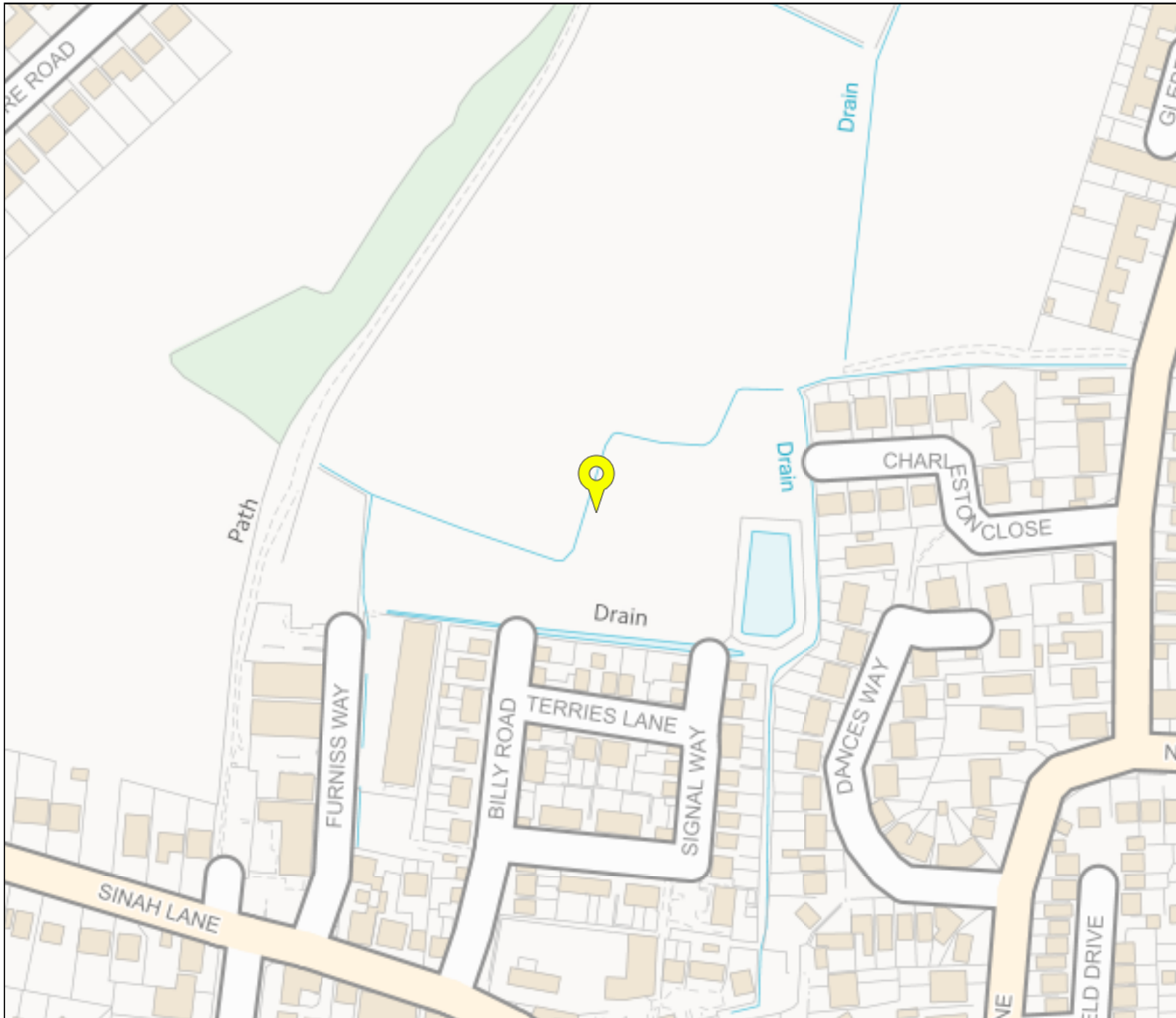
- you don't need to do a flood risk assessment if your development is smaller than 1 hectare and not affected by other sources of flooding
- you may need to do a flood risk assessment if your development is larger than 1 hectare or affected by other sources of flooding or in an area with critical drainage problems

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.

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



Flood map for planning

Your reference

A21078

Location (easting/northing)

471093/99915

Scale

1:2500

Created

24 Mar 2021 12:43

-  Selected point
-  Flood zone 3
-  Flood zone 3: areas benefitting from flood defences
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Flood storage area

0 20 40 60m

Appendix F

Environment Agency Flood Data

From: [Partnership and Strategic Overview team, HIOW](#)
To: [Andy Johnson](#)
Cc: [SSD Enquiries](#)
Subject: Flood Risk Information (Product 4) for Saltmarsh Lane - Ref: SSD/265551 [Filed 23 Jun 2022 13:16]
Date: 23 June 2022 13:08:55
Attachments: [Defences Map.pdf](#)
[Flood Map for Planning \(Rivers and Sea\).pdf](#)
[Risk of Flooding from Surface Water.pdf](#)
[Open Government Licence.pdf](#)
[Use of EA Information for FRAs.pdf](#)

Dear Andy,

Enquiry regarding Product 4 for Land South of Saltmarsh Lane, Hayling Island, PO11 0JT.

Thank you for your enquiry which was received on 16 May 2022.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004. The information is attached.

We can confirm that the above property/site is located in Flood Zone 1 - an area where the chance of flooding from both rivers and the sea has been assessed as less than 0.1% in any year (1 chance in 1,000 in any year).

The Environment Agency has no record of flooding to this property/area. Please note our records are not comprehensive and may not include all events. I recommend contacting the Lead Local Flooding Authority, Hampshire County Council or the Local Authority, Havant Borough Council for a more comprehensive flood history check.

Defences – See attached map.

Tidal flood levels for the 0.5% (1:200) and the 0.1% (1:1000) annual exceedance probabilities relevant to your site are provided in the table below. These levels have been taken from the East Solent Coastal model that was produced in 2018 by JBA Consulting.

Year	Tide Level (mAOD*)	
	0.5% annual exceedance probability/1 in 200 Year (Flood Zone 3)	0.1% annual exceedance probability/1 in 1000 Year (Flood Zone 2)
2015	3.32	3.51
2065	3.65	3.83
2115	4.07	4.26

* Levels in metres above Ordnance Datum Newlyn.

Climate change

The climate change data included in the models may not include the latest [Flood risk assessments: climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding. The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

[FRA advisory text](#)

Name	Product 4
Description	Basic / Detailed Flood Risk Assessment Map for Land South of Saltmarsh Lane, Hayling Island, PO11 0JT
Licence	Open Government Licence
Information Warnings	The majority of our models will not have the new climate change allowances. +20% is not suitable for the majority of planning purposes and the new allowances to use should be checked here: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances
Information Warning - OS background mapping	<i>The mapping of features provided as a background in this product is © Ordnance Survey. It is provided to give context to this product. The Open Government Licence does not apply to this background mapping. You are granted a non-exclusive, royalty free, revocable licence solely to view the Licensed Data for non-commercial purposes for the period during which the Environment Agency makes it available. You are not permitted to copy, sub-license, distribute, sell or otherwise make available the Licensed Data to third parties in any form. Third party rights to enforce the terms of this licence shall be reserved to OS.</i>
Attribution	Contains Environment Agency information © Environment Agency and/or database rights. Contains Ordnance Survey data © Crown copyright 2017 Ordnance Survey 100024198.

Data Available Online

Many of our flood datasets are available online:

- Flood Map For Planning ([Flood Zone 2](#), [Flood Zone 3](#), [Flood Storage Areas](#), [Flood Defences](#), [Areas Benefiting from Defences](#))
- [Risk of Flooding from Rivers and Sea](#)
- [Historic Flood Map](#)
- [Current Flood Warnings](#)

Does Your Proposal Have Environmental Issues or Opportunities? Speak To Us Early!

If you are planning a new project or development, we want to work with you to make the process as smooth as possible. Early engagement can improve subsequent planning applications to you and your clients' benefit and deliver environmental outcomes. For a cost recovery fee of £100 per hour plus VAT we will provide you with a project manager who will coordinate all meetings and reviews in order to give you detailed specialist advice with guaranteed delivery dates. More information can be found on our website [here](#).

Please get in touch if you have any further queries or contact us within two months if you'd like us to review the information we have sent.

Yours sincerely,

Aimee Etheridge
Partnership and Strategic Overview team, Hampshire and Isle of Wight
Environment Agency

Direct dial 020 8474 5815

Email psohiow@environment-agency.gov.uk

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Defences Centred on Saltmarsh Lane - Created 23 June 2022



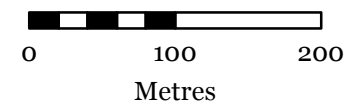
Legend

asset_id

- 45739
- 182062
- 182063
- 459642
- 459738
- 470019

Asset ID	Asset sub-type	Length	Maintainer	Current condition	Design Standard of Protection	Date of last inspection	Actual downstream crest level (mAOD)	Actual upstream crest level (mAOD)	Effective crest level (mAOD)
45739	Embankment	150.98	Environment Agency	Fair	1:25	30/03/2022	3.46	3.48	2.95
182062	Natural High Ground	135.59	Private individual, Company or Charity		1:25	30/03/2022			
182063	Natural High Ground	136.75	Private individual, Company or Charity		1:25	30/03/2022			
459642	Engineered High Ground	356.3	Unknown			04/10/2021			4.15
459738	Engineered High Ground	345.3	Unknown			04/10/2021			4.40
470019	Engineered High Ground	407.53	Unknown			04/10/2021			4.60

1:5,189^{*}
^{*}when printed at A4.



UK Locations

Ash Vale
Birmingham
London
Wakefield

