Flood Risk Assessment

Landscaping and Flood Defence Works

9 Harbourside
Langstone
Havant

July 2025

Introduction

A Flood Risk Assessment is required to accompany a planning application to carry out minor development.

The Site

The site is wholly within the curtilage of 9 Harbourside, Langstone.

From topographical surveys, ground levels in the main garden area vary from approx. 3.10m at the north of the garden to north end to approx 2.70m OD at the southern end.
The west section of the garden is lower at approx. 2.60m to 2.20m OD.

The seawall along the front of Harbourside has a crest level of approx. 3.95m.
However, the seawall is in a poor and deteriorating condition and sections require substantial repair. The seawall is owned by each individual frontage householder.

To the west of the site, the tidal flood defences are earth bunds. Again these are in different ownership.

The ground floor level of 9 Harbourside is 3.30m OD.

The Proposed Development

The proposed landscaping and flood defence work includes the construction of low-level walling surrounding the property at 9 Harbourside.

The walls will be between 600 and 1200mm above the existing local ground levels.

The visual impact of the walling will be softened by sloped landscaping.

Flood Risk Mapping

The Environment Agency flood mapping has been consulted and the plans are included at the end of this assessment.
The risk in this location is from tidal flooding, such as might occur with an adverse combination of spring tides and meteorological conditions.

The site is within Flood Zone 3.

The EA mapping appears to make no allowance for the existing sea defences.

The current 1 in 200 year flood level is predicted at 3.20m OD.

And the 2115 flood level, on the same basis, is 4.30m OD.

Risk Assessment

Considering the theoretical 2115 design tidal level of 4.30m OD, without any defences, the ground floor of the property would flood to a depth of 1.0m, while the first floor would be 1.70m above flood level.

Drainage, Foul and Storm systems

Existing foul drainage is to public sewer in Harbourside.
To prevent backflooding via the connecting house drains it will be necessary to install non-return valves in the 100mm pipework.

Rainwater from the roofs is discharged to soakaways in the lawn south of the works, with possible connections to the Southern Water storm drain and outfall in Harbourside.
It will be necessary to trace and locate the storm drains and install non-return valves.

Surface water from the gardens is discharged via french drains to an outfall through the sea defences in the garden of the house to the west. It will be necessary make additional connections to receive the discharges from the slot drains at the perimeter of the pavings in the new landscaping scheme.

Flood water displacement, surface water

On this site, the main risk arises from tidal flooding rather than fluvial flooding.
Tidal floodwater cannot be deflected in the same manner as surface floodwater. Obstacles tend to obstruct and reduce the spread of floodwater.
The proposal will not increase the risk of tidal flooding to adjacent properties.

Within the Harbourside development, the concrete foundations of the houses and garages, walling, kerbing and other features in close proximity provide little scope for surface water to run from one garden to another.

The adjacent garden of 10 Harbourside falls westwards to lower lying ground from approx. 3.10m alongside the house to 2.50m OD at the west boundary.

The other adjacent garden is 8 Harbourside and here the lawn falls southwards.

At the southern end of Harbourside, the highway, is at approx. 2.70m OD.
In extreme rainfall surface run-off from the front gardens and drives of the Harbourside houses flows towards the street, Harbourside, and then to Langstone Harbour via the 600mm storm sewer between 7 and 8 Harbourside.

The proposed walling will not significantly affect the existing groundwater and surface run-off patterns.

Sequential Test

This is not a development or type of construction which could be steered towards another lower risk site.

Conclusion

This proposal will not increase the flood risk to adjacent properties.

RG Carrell BSc ACGI
6 July 2025

6

FB

Slipway

Brick

Brick Wall

Wall Top3.94

Wall Top3.84

Wall Top3.88

PNR Ht 1.10m

PNR Ht 1.10m

10000
E 471525.290
N 104782.249
H 2.154

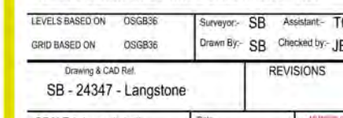
Abbreviations

wl	brick wall	re	rodding eye
bol	bollard	rnp	road name plate
bs	bus stop	rwp	rainwater pipe
bt	tel inspection chamber	rs	road sign
ctv	cable tv cover	▲ Stn	survey station
di	drainage channel	sc	stop cock
dk	dropped kerb	st	step
d	diameter	sv	stop valve
ep	electricity pole	tl	traffic light
er	earth rod	tp	telegraph pole
fb	flower bed	vp	vent pipe
fh	fire hydrant	wm	water meter
fp	footpath	wsc	water stop cock
g	gully	wsv	water stop valve
gsc	gas stop cock		
gsv	gas stop valve	Fence details	
fh	hydrant	bwf	barbed wire
ic	inspection chamber	cb	crash barrier
jbx	junction box	ci	corrugated iron
kb	kerb	clf	chain link
lbx	letter box	cnp	chestnut paling
lp	lamp post	ir	iron railing
mh	manhole	pnw	post and wire
mkr	marker	pwm	post and wire mesh
h	height	pnr	post and rail
p	post	cbf	close board fence
pb	post box		
lp	lamp post		

Line types

- Fences
- Kerb
- Walls
- Stairs
- Change of Surface
- Footpath
- Bank Top
- Bank Bottom
- Building
- Building Overhead
- Roof heights
- Flower Bed
- Overhead Cable
- Road Edge
- Hedge Row
- Canopy
- Edge of vegitation

Multi directional tree canopy



Notes

Tree species should be confirmed by a arboricultural consultant if critical
Trunk sizes are measured at 1.5m above ground level

Eaves heights (where shown) are taken at the end of the tile / top of guttering.
Ridge heights are taken at the top of the ridge tile.
Service covers indicated where visible at time of survey

Grid North

J. Brotherton & Partners
Land Surveyors & Engineers

'Firdown' 113 Frogmore Lane
Waterlooville, Hampshire PO8 9RD

Tel: 023 9259 1979
Email: enquiries@jbpsurveys.co.uk
Web: www.jbpsurveys.co.uk

Client	Robert Carrell
Drawing Title	Topographic Land Survey
Location	9 Harbourside, Havant PO9 1TJ
Revisions / Status / Notes	The grid and datum for this survey is based on the Ordinance Survey grid OSGB36, site centered on control station GPS1 with a scale factor of 1.00
LEVELS BASED ON OSGB36	Surveyor:- SB Assistant:- TC
GRID BASED ON OSGB36	Drawn By:- SB Checked by:- JB
Drawing & CAD Ref.	SB - 24347 - Langstone
REVISIONS	
SCALE (when prtinted)	1:200 @ A1
Date	08 May 2024

Removal of this block also removes all warranties
This drawing has been created for use at a scale of 1:200
All critical dimensions, positions and levels to be checked on site

© Crown copyright 2017. Supplied by mapserve.co.uk a licensed Ordnance Survey partner number 100053143

Flood map for planning

Your reference	Location (easting/northing)	Created
Flood Risk Ma	**471532/104822**	**26 Oct 2024 13:33**

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

This means:

- you must complete a flood risk assessment for development in this area
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (see www.gov.uk/guidance/flood-risk-assessment-standing-advice)

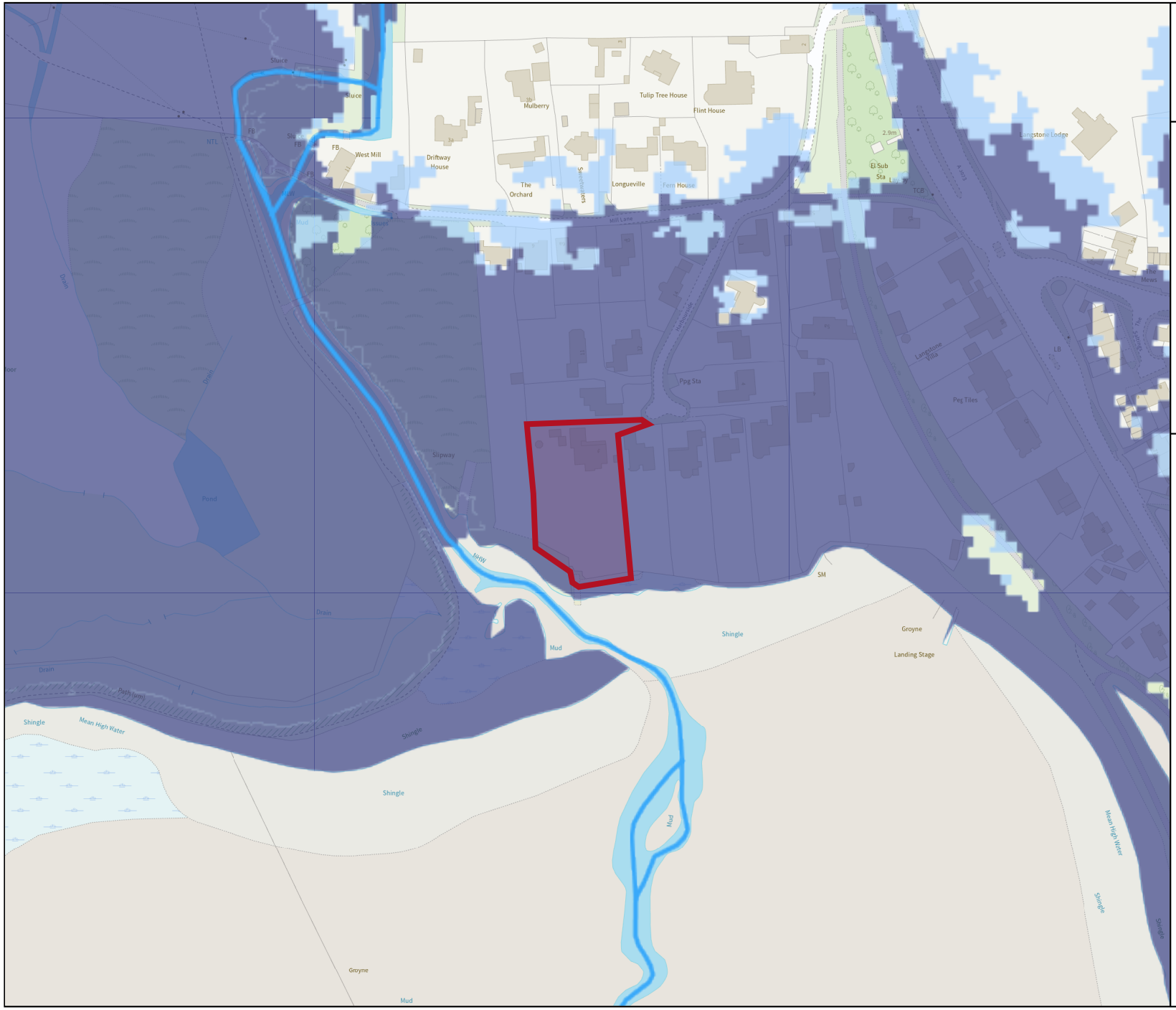
Notes

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 2024 OS AC0000807064. https://flood-map-for-planning.service.gov.uk/os-terms



Environment Agency

Flood map for planning

Your reference
Flood Risk Ma

Location (easting/northing)
471532/104822

Scale
1:2500

Created
26 Oct 2024 13:33

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

0 20 40 60m

© Environment Agency copyright and / or database rights 2024. All rights reserved. © Crown Copyright and database right 2024. Ordnance Survey licence number AC0000807064.