

Flood risk and mitigation.

153, Southwood Road, Hayling Island, PO11 9PY

The proposed Orangery is considered a minor development, and the dwelling is location is within flood zone 3, an area with a high probability of flooding from rivers and the sea. (map attached below). The site is however considered a low risk of flooding from surface water (maps below).

Floor Level

The new conservatory's finished floor level will be the same level as the existing dwelling floor level, however 1000mm above natural ground level. The finished floor level is shown on the existing and proposed elevations attached to the application.

Foundations

The proposed is using the existing foundation. The floor is constructed as a solid floor. The footings are a trench foundation to comply with building control. Above the concrete trench fill to floor level and DPM engineering bricks (class A or B) are used. Engineering bricks give a good resilience to water penetration and drying ability is also good. Mortars below DPM are 1:3 (cement/sand). Concrete blocks used within the foundations are sealed with an impermeable material or encased in concrete to prevent water movement from the ground to the wall construction. The concrete slab is at least 150mm thickness. Damp Proof Membranes (DPM) will be included in the base to minimise the passage of water through ground floors, as per building regulations. Impermeable polythene membranes will be at least 1200 gauge to minimise ripping. Effective methods of joining membrane sections are overlaps of 300mm and also taping (mastic tape with an overlap of 50mm minimum) again as per building control.

Walls

The proposed will be using the existing walls. the existing walls have engineering bricks to floor level and DPM. Mortar joints to the bricks are thoroughly filled to reduce the risk of water penetration.

Door & frame

The doors and frames which have a greater probability of flooding are to be upvc double glazed. The doors will have double weather seals to the frame and is weather tested to British Standards. The door threshold will be as high as possible, while complying with level access requirements.

Waste Drainage

There are no waste drainage services within the proposed.

Internal finish

The internal wall will be sealed and plastered.

Electric sockets

These are to be positioned above 600mm from internal floor level.

Heating

There is no proposed heating to be installed but if heating was to be added, like other flood mitigation strategies they are to accord to environment agency guidelines.

Surface water drainage

The applicant is proposing to link the rainwater pipe to a water butt, but the overflow will link to the existing house gully and pipe network. By using a water Butt the amount of surface water discharging into the existing house gully will be reduced and this will have no impact on flooding. The proposed roof area of the conservatory is modest at 10.2msq. The existing garden area will not be altered and remain mainly lawn.

This location is in flood zone 3

In your proposed development site there is a risk of flooding from:

- the sea (tidal)

Flood risk assessments

Based on our flood risk data, you need to carry out a flood risk assessment (FRA) as part of the planning application for this development.

If the flood risk to your site is affected by flood defences, you will also need to assess [residual risk](#) from flood defence breach in this location. If available, we will provide breach hazard mapping data to help you do this.

Review the flood risks for your location then complete the next steps for your planning application.

Rivers and the sea

[See this risk on the map](#)

What flood zone 3 means

Land within flood zone 3 has a high probability of flooding from rivers and the sea.

You need to carry out a flood risk assessment (FRA) as part of the planning application for this development.

[Find out more about flood zones and what they mean.](#)

Get data for your location

Add or edit a location boundary

☒ Hide

☐ Add polygon

☐ Add square

☐ Edit shape

☐ Delete shape

Datasets

Flood zones 2 and 3

☒ Hide

☒ Flood zones 2 and 3

☐ Surface water

☐ None

Climate change

Present day

☒ Show

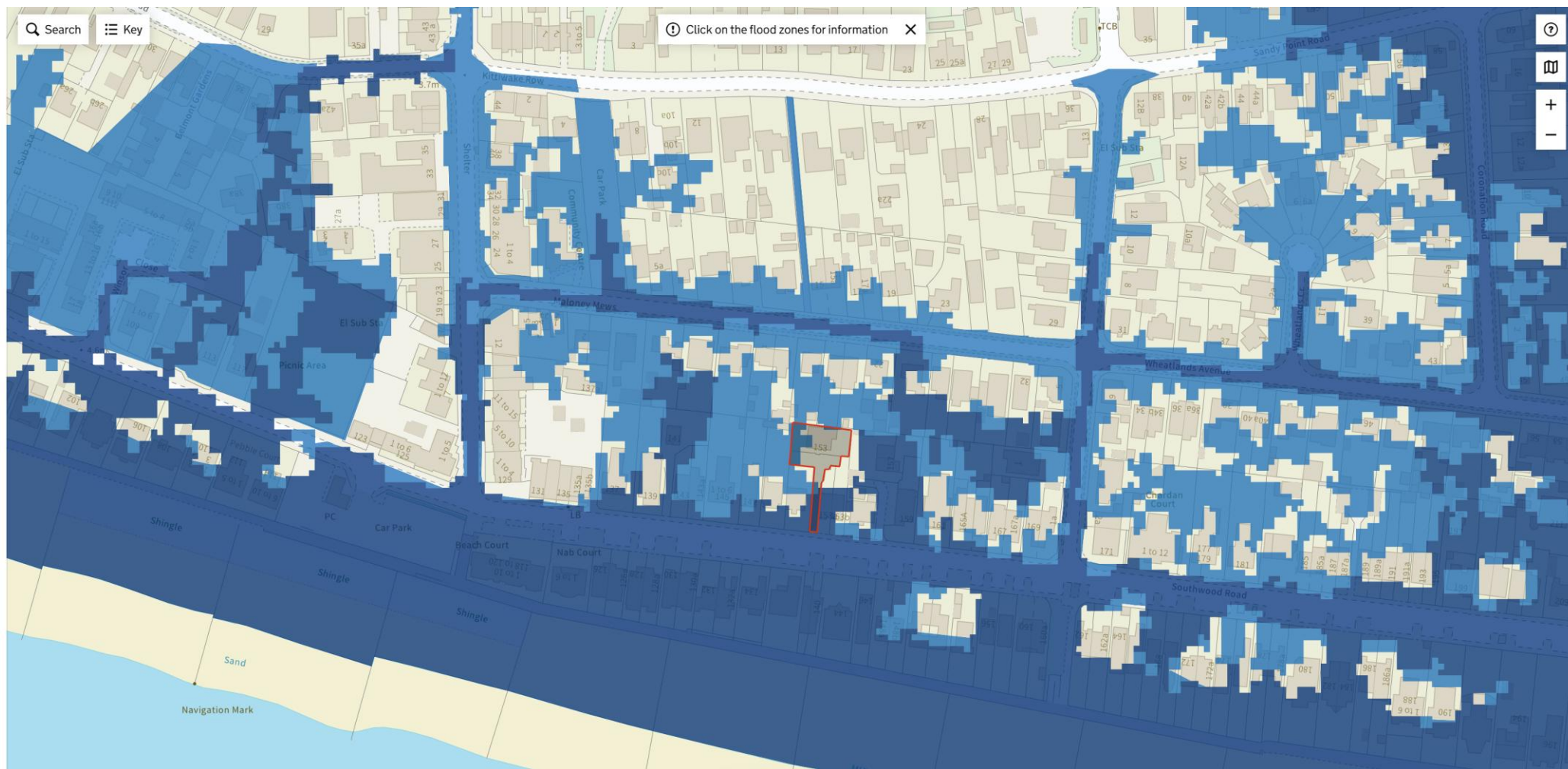
Map features

None selected

☒ Show

Layer opacity

75



Get data for your location

Add or edit a location boundary

[Hide](#)

☐ Add polygon

☐ Add square

[Edit shape](#)

[Delete shape](#)

Datasets

Surface water

[Hide](#)

☐ Flood zones 2 and 3

☒ Surface water

☐ None

Annual likelihood of flooding

1 in 30

[Show](#)

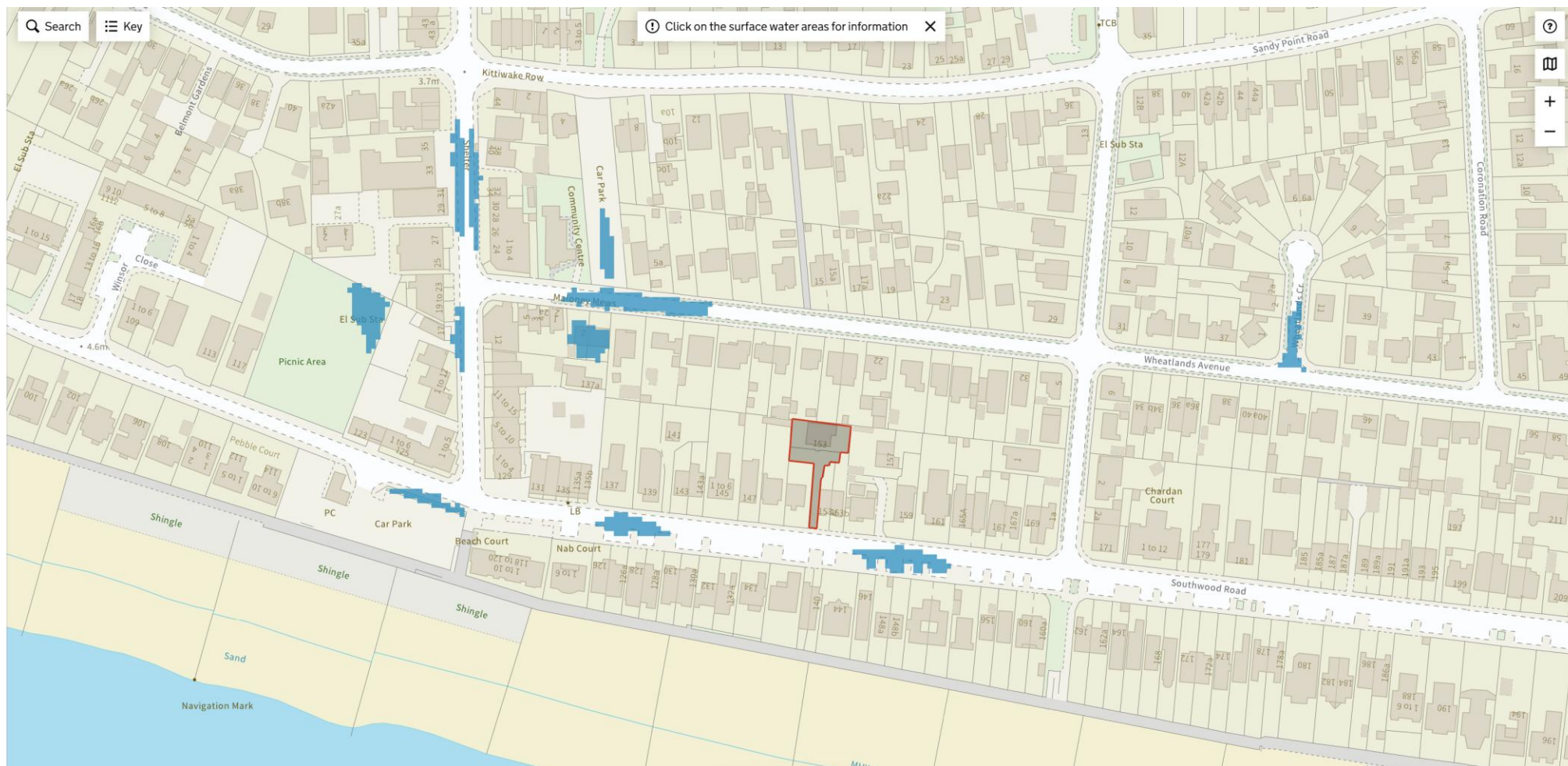
Map features

None selected

[Show](#)

Layer opacity

75



Householder and other minor extensions in Flood Zones 2 and 3

Applications for planning permission should be accompanied by a completed form. An electronic version can be submitted by 'printing' it to a PDF writer.

This guidance is for domestic extensions and non-domestic extensions where the additional footprint created by the development does not exceed 250 sq. metres. It should NOT be applied if an additional dwelling is being created, e.g. a self contained annex.

We recommend that:

Planning Authorities:

- 1) Refer the applicant to the standing advice pages on the Environment Agency website or provide them with a copy of this page for them to include as part of the planning application submission.
- 2) Check the planning application to ensure that one or other of the mitigation measures from the table below has been incorporated.

Applicants:

Complete the table below and include it with the planning application submission. The table, together with the supporting evidence, will form the Flood Risk Assessment (FRA) and will act as an assurance to the Local Planning Authority (LPA) that flood risk issues have been adequately addressed.

Applicant to choose one or other of the flood mitigation measures below	Applicant to provide the LPA with the supporting information detailed below as part of their FRA	Applicant to indicate their choice in the box below. Enter 'yes' or 'no'
Either ; Floor levels within the proposed development will be set no lower than existing levels AND, flood proofing of the proposed development has been incorporated where appropriate.	Details of any flood proofing / resilience and resistance techniques, to be included in accordance with ' <i>Improving the flood performance of new buildings</i> ' CLG (2007)	YES
Or; Floor levels within the extension will be set 300mm above the known or modelled 1 in 100 annual probability river flood (1%) or 1 in 200 annual probability sea flood (0.5%) in any year. This flood level is the extent of the Flood Zones	This must be demonstrated by a plan that shows finished floor levels relative to the known or modelled flood level. All levels should be stated in relation to Ordnance Datum ¹	NO

Subterranean/basement extensions

Due to the risk of rapid inundation by floodwater basements should be avoided in areas at risk of flooding. The LPA may hold additional guidance for basement extensions.

Self-contained basement dwellings are 'highly vulnerable' development and should not be permitted in Flood Zone 3. We are opposed to these developments.

Continued...

¹ Ordnance Datum or the abbreviation 'OD' is the mean level of the sea at Newlyn in Cornwall from which heights above sea level are taken. The contour lines on Ordnance Survey maps measure heights above OD for example, though these are not accurate enough for a flood risk assessment.

Cumulative impact of minor extensions and the removal of Permitted Development rights.

There is potential for the cumulative impact of minor extensions to have a significant effect on flood risk. Where local knowledge (Strategic Flood Risk Assessment held by the LPA/information provided by the parish council) suggests this is the case the guidance contained in FRA guidance note 2 should be applied. FRA guidance note 2 can also be applied where permitted development rights have been removed for flood risk reasons. The Environment Agency does not usually comment on minor development in this category.

Permeable paving and changes to permitted development rights for householders

On the 1st October 2008 the General Permitted Development Order (GPDO) in England was amended by the Government (Statutory Instrument 2008 No. 2362).

One of the changes introduced by the GPDO amendment is the removal of permitted development rights for householders wishing to install hard surfacing in front gardens which exceeds 5sq. metres (i.e. 1m x 5 m) without making provision to ensure permeability. This means that use of traditional materials, such as impermeable concrete, where there is no facility in place to ensure permeability, requires an application for planning permission.

In order to help and advise householders of the options for achieving permeability and meeting the condition for permitted development status the Department for Communities and Local Government (CLG) has produced guidance on permeable paving which can be found on the following link <http://www.communities.gov.uk/publications/planningandbuilding/pavingfrontgardens>

The Environment Agency supports the GPDO amendment as it is in line with the recommendations of the Pitt Report regarding the need to better tackle the impact of surface water flooding. However, Local Planning Authorities should determine these applications in accordance with the CLG guidance **without** consulting the Environment Agency.

End of comment