

FLOOD RISK ASSESSEMENT



326 Mawney Road

Romford

RM7 8DP

Flood Risk Assessement.



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FLOOD RISK ASSESSEMENT



SCHEME

1 House holder planning permission is being sought from the London Borough of Havering for the conversion of the existing garage to a habitable room of 326 Mawney Road Romford RM7 8DP. This Flood Risk Assessment accompanies the Planning Application

2 The site is level with no sloping and naturally there is no change in level.



OBJECTIVES

1 The proposed development was shown on the Environment Agency Flood Map as Flood Zone 2- an area at low flood risk. Under Surface Water Medium Risk and a Low risk under rivers and seas. Flood Risk Assessment was carried out This was to assess flood risk from all sources, address how the development would not affect flood risk elsewhere and how surface water run-off would be dealt with. The development was classified under PPS25 as residential development . The application relates to the land of RM7 8DP. A site location plan, with the plot of land proposed for development hatched in Red is shown.

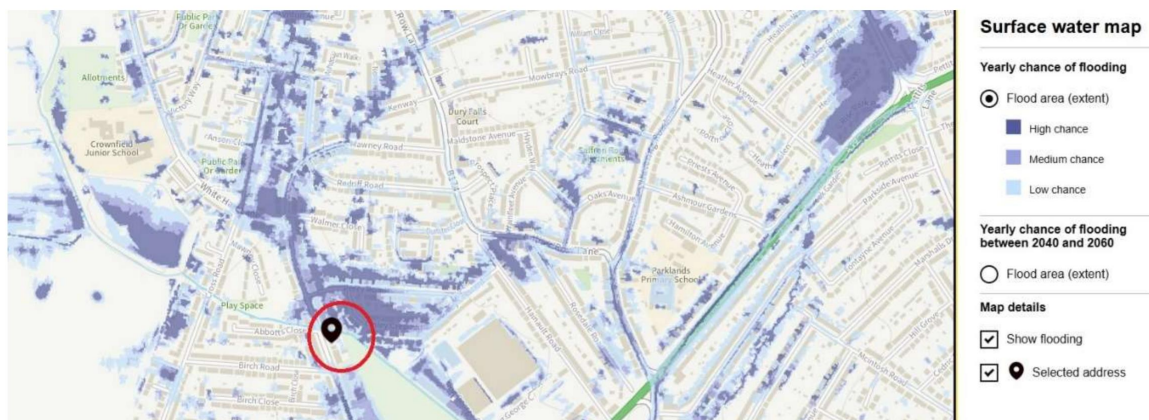


THE SITE



2 A measured survey, was carried out The site is shown on drawing GC200 .To address the issue of impermeable surfaces a site survey was undertaken and drawings are included. Most of the area is residential in character, with existing housing surrounding the site. The property fronts Mawney Road and the frontage this is blocked paved with a channel gully and with surface run-off. A soakaway to the front is also proposed for attenuation.

Factsheets from the Environment Agency for the local environs were also consulted. This was to provide a qualitative appraisal of flood risk



posed to the site and the potential impacts the development would have elsewhere.

1 The Environment Agency was consulted and confirmed that the sequential test did not need to be applied, as the development was considered appropriate.

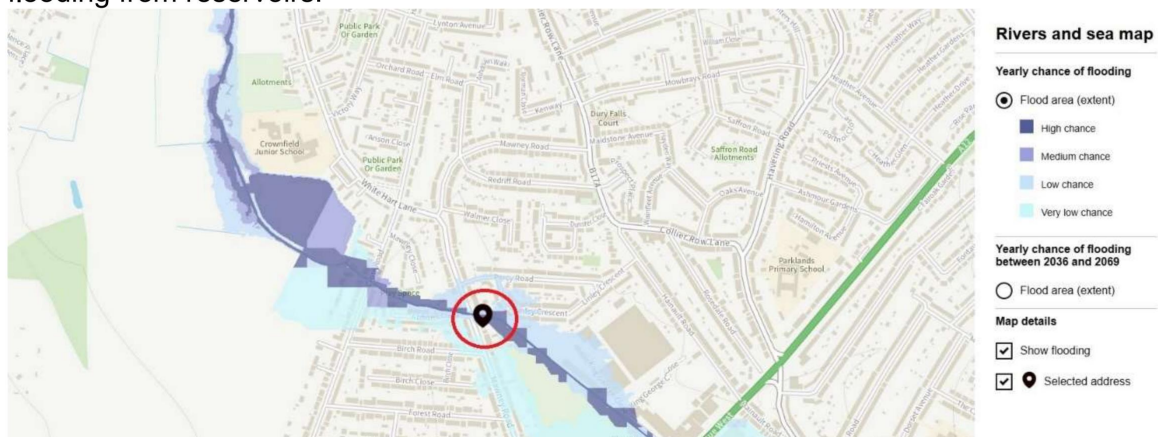
Reservoirs Flooding from reservoirs is unlikely in this area.

What a reservoir is A reservoir is a large natural or artificial lake that is designed to



collect and store water.

How we check an area's risk We use predicted scenarios to understand the risk of flooding from reservoirs.



Flooding from reservoirs is extremely unlikely. An area is considered at risk if people's lives could be threatened in the event of a dam or reservoir failure.

Other flood risks:

Groundwater Flooding from groundwater is unlikely in this area.

What groundwater is Groundwater is the water that is usually held in rocks and soil underground. Groundwater flooding happens when this water rises and flows above the surface. How we check an area's risk. We use flood alert data to check the risk of flooding from groundwater.

Groundwater and reservoirs: understand your flood risk

Your selected location: 326, Mawney Road, Romford, RM7 8DP
This information tells you the flood risk of the land around a building, not the building itself.

Groundwater

Flooding from groundwater is unlikely in this area.

What groundwater is

Groundwater is the water that is usually held in rocks and soil underground.

Groundwater flooding happens when this water rises and flows above the surface.

We use flood alert data to check the risk of flooding from groundwater.

Reservoirs

Flooding from reservoirs is unlikely in this area.

What a reservoir is and how we check an area's risk

A reservoir is a large natural or artificial lake that is designed to collect and store water.

Surface Water

Low risk depth less than 300mm and a flow rate of 0.25m/s



Flood risk summary

Your selected location: 326, Mawney Road, Romford, RM7 8DP

This information tells you the flood risk of the land around a building, not the building itself.

► [How we assess an area's flood risk](#)

► [Flood risk and climate change](#)

Surface water [More about your surface water flood risk](#)

Yearly chance of flooding

Very low

Low

Medium

High

Yearly chance of flooding between 2040 and 2060

Very low

Low

Medium

High

What surface water is
Surface water flooding is sometimes known as flash flooding. It happens when rainwater cannot drain away through normal drainage systems.
► [Why surface water flooding is a problem](#)

Rivers and the sea [More about your rivers and sea flood risk](#)

Yearly chance of flooding

Very low

Low

Medium

High

Yearly chance of flooding between 2036 and 2069

No data available

This data is currently unavailable. We'll publish the data when it becomes available.

What makes rivers and sea flooding more likely
Low-lying areas that are close to rivers or the sea are more likely to flood when water levels rise.
This information takes into account any flood defences.
► [Why flood defences cannot completely prevent flooding](#)

Other flood risks [More about groundwater and reservoirs](#)

Groundwater
Flooding from groundwater is unlikely in this area.

The design of the building or development should keep water out as much as possible. Materials that have low permeability (materials that water cannot pass through, for example, impermeable concrete).

Yearly chance of flooding

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The yearly chance of surface water flooding is: Low Risk

The yearly chance of surface water flooding is:

Very low, staying at Very low between 2040 to 2060

▼ What the flood risk ratings mean

High

More than 3.3% chance of a flood each year

Medium

Between 1% and 3.3% chance of a flood each year

Low

Between 0.1% and 1% chance of a flood each year

Very low

Less than 0.1% chance of a flood each year

How likely a river or sea flood is

The yearly chance of flooding from rivers and the sea is Very low

▼ What the flood risk ratings mean

High

More than 3.3% chance of a flood each year

Medium

Between 1% and 3.3% chance of a flood each year

Low

Between 0.1% and 1% chance of a flood each year

Very low

Less than 0.1% chance of a flood each year

Rivers and the sea: understand your flood risk

Your selected location: 326, Mawney Road, Romford, RM7 8DP

This information tells you the flood risk of the land around a building, not the building itself.

How likely a river or sea flood is

The yearly chance of flooding from rivers and the sea is Very low

► [What the flood risk ratings mean](#)

[View a rivers and sea map](#) to see where any flood water might spread to.

How deep any flood water could be

This data is currently unavailable. We'll publish the data when it becomes available.

What to do next

Read about how to [prepare yourself and your property for flooding](#).

You should check your flood risk regularly because the information may change.



Chance of flooding to 20cm



At this location there's a **Very low** chance of flooding to **20cm** (or 8 inches).

Between 2040 and 2060 this stays at a **Very low** chance of flooding to **20cm** (or 8 inches).

At 20cm, flood water can get into some homes and buildings, especially if the property has a basement. At this level, water can also damage your car or cause a breakdown.

Chance of flooding to 30cm



At this location there's a **Very low** chance of flooding to **30cm** (or 1ft)

Between 2040 and 2060 this stays at a **Very low** chance of flooding to **30cm** (or 1ft)

At 30cm, flood water can get into homes and buildings. Water at this level can also move a car, damage roads and cause major traffic disruption.

Chance of flooding to 60cm



At this location there's a **Very low** chance of flooding to **60cm** (or 2ft)

Between 2040 and 2060 this stays at a **Very low** chance of flooding to **60cm** (or 2ft)

At 60cm, we expect flood water to get into homes and buildings. Water at this level can float most vehicles, including 4x4s.

Flood protection measures are usually effective up to 60cm. You should not try and keep flood water out of buildings if it's over 90cm. Water at this level can cause collapse or permanent structural damage.

Return to [surface water](#) to read advice on how to manage your risk from flooding.



SOLUTIONS

The proposed development would decrease the impermeable area through the introduction of gardens/landscaped areas and therefore reduce the surface water run-off flows, and with addition of soak ways ensuring the proposed development would not increase flood risk elsewhere. High water demand trees and shrubs located on the site.

All possible sources of flooding which may affect the site were assessed.

This was to assess flood risk from all sources, address how the development would not affect flood risk elsewhere and how surface water run-off would be dealt with.

Potentially the primary source of fluvial flooding to the site was from the River Rom. The Environment Agency's predicted flood levels were obtained and compared to the site levels. This showed that the lower end of the site, nearest to the River Rom would be affected during a 1 in 1000 year flood event but the higher end of the site would be unaffected. The proposed dwelling were to be located on the higher ground but as the dwellings are split level there is a portion that is at a lower level but still above flood risk levels. However, it is reasonable to assume that during extreme weather conditions or flooding that the properties will have to have strategies in place both designed and managed eg the storage at higher level will include water proof and resilient compartmentation. An evacuation route to higher ground was identified, which would be used in the event of people being on site during atypical flood events. The proposed development would not lead to an increase in impermeable area leading to an increase in peak rate and volume of surface water run-off. This FRA to be submitted with the Planning Application,

This information tells you the highest chance of flooding on the land 15 metres around a property.

What the flood risk ratings mean

See surface water flood risk on a map

View a surface water map for information on:

where any flood water might spread to (extent)

how deep any flood water could be (depth)

Lead local flood authority is Havering.

How to protect in case of flood the property and personal available from Environment Agency

Personal flood plan

Business flood plan

Rivers and Sea

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Risk Very Low

'Very low' means less than 0.1% chance of a flood each year. It is therefore our view that this development presents an opportunity to provide a sustainable residential development that maximises an available site, thus according with the aims of the adopted London Plan. No windows are proposed in either flank elevation, and therefore The rear elevation shall have two windows, one providing access into the rear garden via the lounge by patio doors, and the other on the south east elevation for the proposed bedroom.

The proposed dwelling shall be accessed via a flush ground floor entry. This door shall be accessed by a drained/grated pathway that will provide a firm and level form of approach.

Here there is some central landscaping permeable but there are no trees or shrubs planted to reduce run off high water demanding trees/shrubs to be incorporated eg Fig tree (Ficus) This is also a holy tree .

Surface water will be harvested and reused any overflow would be diverted to soak away.

The highest risk of flooding at this location is from surface water.

What surface water is Surface water flooding is sometimes known as flash flooding. It happens when rainwater cannot drain away through normal drainage systems. Surface water flooding is a problem because: it often happens in places you don't expect, like up hills it's hard to predict, as heavy rain sometimes only affects a small part of an area where there's lots of tarmac and concrete the water has nowhere to go