

30 VALLEY ROAD, CHANDLERS FORD, EASTLEIGH SO53 1EP

29/11/2023 Revision A – Appendix added to end of document

**APPLICATION FOR A REPLACEMENT DWELLING AND RENEWAL OF PLANNING
CONSENT FOR 2 DWELLINGS PREVIOUSLY APPROVED UNDER
Z/03166/008/00 AND F/04/50235**

FLOOD RISK ASSESSMENT (FRA)



1. View east along Valley Road



2. View of location of house 1



3. Stream is visible at rear part of site behind 34 Valley Road

1.0 BACKGROUND AND DETAILS OF PROPOSAL

This FRA is submitted to Eastleigh Borough Council as part of a planning application to replace an existing dwelling and renew 2 previously consented approvals for new dwelling houses.

An enquiry to The Environment Agency flood risk map revealed that the site is located within flood zone 3 where a Flood Risk Assessment is required to accompany an application for planning permission.

2.0 EXISTING SITUATION

There is an existing residential dwelling at the site and it is currently occupied.



2.01 Current O.S. information showing site boundaries.

3.0 FLOOD RISK MAP GENERATED BY ENVIRONMENT AGENCY



Flood map for planning

Your reference
30 VALLEY RD

Location (easting/northing)
443180/121394

Created
2 Jun 2023 10:04

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

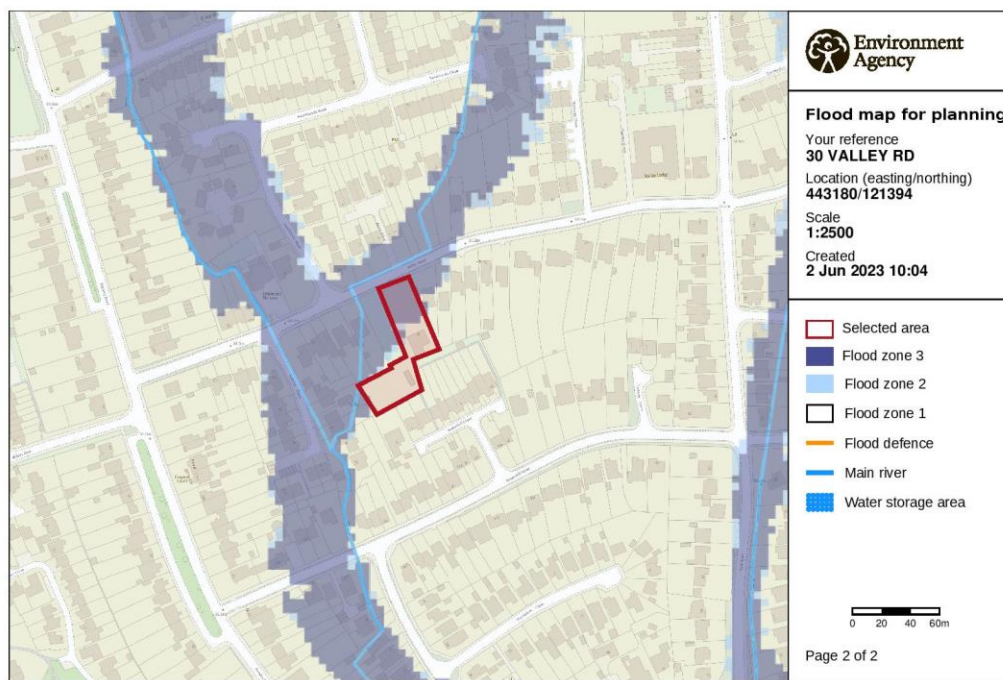
The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

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 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>

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3.01 The existing culverted water course appears to run under 32 Valley Road. Front of site appears most susceptible to a flood event.

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4.00 GUIDANCE FROM EBC FLOOD RISK STUDY – CHANDLERS FORD

4.01 Eastleigh Borough Council (EBC) and Partnership for Urban South Hampshire (PUSH) commissioned a detailed study of the potential areas where flooding may pose a significant issue.

This is as follows:

4.02 PUSH Strategic Flood Risk Assessment – 2016 Update Guidance Document:

Eastleigh Borough Council

1 Flood Risk Overview Sources of Flood Risk Eastleigh Borough lies in the centre of the PUSH sub-region, surrounding the eastern side of the city of Southampton. It covers a total area of approximately 80 km².

The Borough has 6 km of open coastal frontage and 21 km of frontage onto the tidal River Hamble.

The Rivers Itchen and Hamble and the Monks Brook flow through the Borough, with a total main river length of 88km, approximately 8% of the Borough's land area is designated as within Flood Zones 2 and 3 (see SFRA Map: Flood Mapping Dataset).

The SFRA has shown that the primary source of flood risk to Eastleigh Borough is from rivers.

The River Itchen and the Monks Brook have extensive flood outlines which cover a number of existing developed areas in the Borough, including parts of Chandler's Ford, Eastleigh town centre and Bishopstoke.

The secondary source of flood risk to Eastleigh Borough is from the sea.

The key parts of the Borough which are currently at risk of tidal flooding are Netley, Hamble and Bursledon.

Historically, there have been some instances of groundwater flooding at the northern boundary of the Borough, marking the location where the South Downs chalk geology ends and the River Itchen meets less permeable bedrock.

Eastleigh has also been susceptible to flooding from other sources including surface water and flooding caused by infrastructure failure.

5.00 GUIDANCE CONSULTED REGARDING RISK TO PROPERTY AND MEASURES TAKEN TO MAKE THE BUILDING RESILIENT IN THE EVENT OF FLOODING

5.01 DEFRA GUIDANCE - Flood Risk Assessment Guidance for New Development Phase 2 Framework and Guidance for Assessing and Managing Flood Risk for New Development – Full Documentation and Tools R&D Technical Report FD2320/TR2

5.02 CIRIA (Construction Industry Research Information Association) have produced several documents that give guidance on measures to be taken to ensure flooding damage is minimised.

The CIRIA Code of Practice for Property Flood Resilience gives detailed information on practical steps to be taken to ensure that flood risks are understood. It also gives guidance on making buildings able to withstand flooding.

5.03 NPPF

Planning and flood risk

159. Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.

160. Strategic policies should be informed by a strategic flood risk assessment and should manage flood risk from all sources. They should consider cumulative impacts in, or affecting, local areas susceptible to flooding, and take account of advice from the Environment Agency and other relevant flood risk management authorities, such as lead local flood authorities and internal drainage boards.

161. All plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property. They should do this, and manage any residual risk, by:

- a) applying the sequential test and then, if necessary, the exception test as set out below;
- b) safeguarding land from development that is required, or likely to be required, for current or future flood management;
- c) using opportunities provided by new development and improvements in green and other infrastructure to reduce the causes and impacts of flooding, (making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management); and
- d) where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to relocate development, including housing, to more sustainable locations.

162. The aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment will provide the basis for applying this test. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding.

5.04 Annexe 3 of the NPPF also gives guidance on Flood Risk Vulnerability.

5.05 EBC Policies from Eastleigh Borough Local Plan 2016-2036 April 2022

Policy DM5, Managing flood risk

1. Development will only be permitted within the areas at risk of flooding, now and in the future, as identified on the Environment Agency most recent flood maps and the Council's Strategic Flood Risk Assessment provided that:

- a. it meets the sequential and exception test (where required) as outlined in Government guidance;
- b. a site-specific flood risk assessment demonstrates that the development, including the access, will be safe without increasing flooding elsewhere, and where possible, will reduce flood risk overall;
- c. the scheme incorporates flood protection, flood resilience and resistance measures appropriate to the character and biodiversity of the area and the specific requirements of the site and where appropriate takes advantage of opportunities to utilise natural flood management techniques;
- d. appropriate flood warning and evacuation plans are in place; and
- e. new site drainage systems are designed taking account of events which exceed the normal design standard.

2. Development should not increase flooding elsewhere.

3. Sustainable Drainage Systems (SuDS) must be designed in accordance with policy DM6.

Policy DM6, Sustainable surface water management and watercourse management

1. New development (excluding extensions to dwellings and changes of use), will only be permitted if it incorporates Sustainable Drainage Systems (SuDS). Wherever feasible, naturalised filtration should be included within the treatment train as follows:

- a. On sites of 1 hectare or more, or within 100m of the River Itchen SAC or Solent Maritime SAC, SuDS schemes should include at least three forms of naturalised filtration.

On sites within 100m of headwaters and tributaries draining into a SAC, SuDS schemes should include at least three forms of naturalised filtration unless hydrological studies and project-level Habitats Regulations Assessment demonstrate this to be unnecessary to protect the integrity of the SAC and its qualifying features;

- b. On other sites of between 0.5 hectares and 1 hectare, SuDS schemes should include at least two forms of naturalised filtration; and

- c. On other sites of less than 0.5 hectares non-naturalised SuDS e.g. permeable paving will be considered where justified.

2. In order to reduce flooding and maintain water quality (in accordance with DM8) SuDS schemes should:

- a. be designed and monitored in accordance with the CIRIA C753 SuDs Manual or equivalent national or local guidance, noting that all receiving waters in the Borough should be classified as protected waters;
- b. manage surface water runoff as close to its source as possible;

- c. ensure that discharge rates are reduced as far as possible and that on greenfield sites these should at least mirror greenfield rates before development;
 - d. be provided as part of any application for outline or full planning permission;
 - e. where discharge is to a wetland or wet woodland habitat, flows off site must mirror the natural hydrological pathways;
 - f. include clear arrangements for their whole life management and maintenance.
3. Where a watercourse is present on a development site, it should be retained or restored into a natural state and enhanced where possible.

The culverting of any watercourse will not generally be permitted, and development should wherever possible remove any existing culverts and increase onsite flood storage.

Development should be laid out to enable maintenance of the watercourse.

4. Where development drains into a waterway connected to the Natura 2000 or Ramsar network a site-specific Construction Environment Management Plan must be prepared before permission.

6.00 Conclusion - How the above guidance affects the proposal.

6.01 From the EA map, Proposed house 1 has most vulnerability from any future flooding.

This means that the ground floor accommodation will need to be constructed to be robustly detailed in order to resist any flood damage.

The ground floor level will need to be raised to be above the predicted flood level.

In accordance with good practice, new electrical wiring will be routed from above.

Also, the driveway will be finished using permeable block paving as part of a SUDS design.

As the culverted stream lies outside of the ownership of the applicant, no opening of the water course is possible.

6.02 The ground floor levels of the replacement dwelling (house 2) and new house 3 are above any projected flood levels.

The floor levels are therefore above the level of any expected 100-year flood level.

Clearly, there will be disruption to mains drainage during a major flood event causing sanitation issues.

TO BE READ IN CONJUNCTION WITH HARRISON ECOLOGICAL SERVICES LTD. SITE ANALYSIS REPORT, APRIL 2013

KEY:

- **EXISTING**
 - 1. Existing building footprint
 - 2. Existing driveway
 - 3. Existing parking area
 - 4. Existing fence line
 - 5. Existing boundary line
- **PROPOSED**
 - 1. Proposed building footprint
 - 2. Proposed driveway
 - 3. Proposed parking area
 - 4. Proposed fence line
 - 5. Proposed boundary line
- **LANDSCAPING**
 - 1. Existing trees
 - 2. Proposed trees
 - 3. Existing shrubs
 - 4. Proposed shrubs
 - 5. Existing grass
 - 6. Proposed grass
- **UTILITIES**
 - 1. Existing water
 - 2. Proposed water
 - 3. Existing sewer
 - 4. Proposed sewer
 - 5. Existing gas
 - 6. Proposed gas
- **OTHER**
 - 1. Existing road
 - 2. Proposed road
 - 3. Existing footpath
 - 4. Proposed footpath
 - 5. Existing boundary
 - 6. Proposed boundary

PROPOSED SITE PLAN @ 1:200 SCALE

3 NEW DWELLINGS AT 30 VALLEY ROAD CHANNAH-ON-FORD

22-00-00-0000

30 VALLEY ROAD, CHANDLERS FORD, EASTLEIGH SO53 1EP – FLOOD RISK ASSESSMENT - REVISION A

7.0 Additional Guidance

- Flood risk assessment for planning applications; Environment Agency
- Flood risk assessment: standing advice; Environment Agency
- National Planning Policy Framework; DCLG
- National Planning Policy Framework Quick Guide; Environment Agency
- Planning Practice Guidance – Online web-based resource: DCLG
- Flood and coastal risk guidance: climate change allowances: Environment Agency
- Development and Flood Risk: Guidance for the Construction Industry CIRIA (2004)
- Flood Risk Assessment Guidance for New Development: FD2320/TR2 Environment Agency / DEFRA
- Susdrain online resource: The community for sustainable drainage CIRIA
- Eastleigh BC emergency planning flooding – online resource
- Eastleigh BC Local Plan SFRA evidence – Water: supply, wastewater and flooding - online resource
- Surface Water Management Plan for Eastleigh
- Test and Itchen Catchment Flood Management Plan, Environment Agency
- South East Hampshire Catchment Flood Management Plan, Environment Agency
- Local Flood Risk Management Strategy, Hampshire County Council

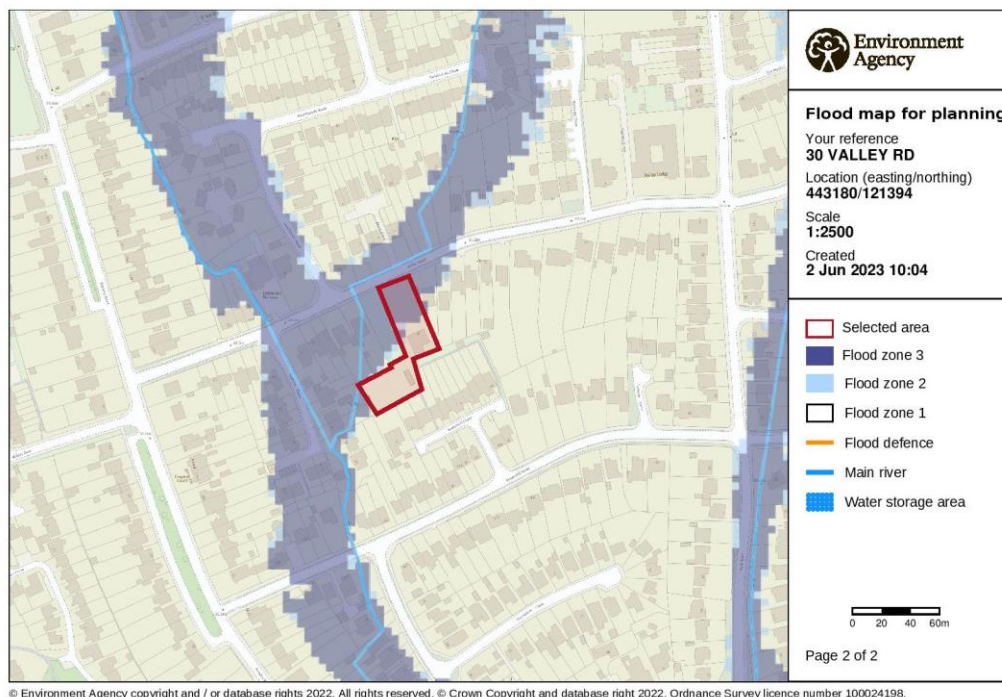
APPENDIX 1 - Additional information added 29th November 2023

8.0 Location

The building is partially located within a designated Flood Zone 3 (see section 3.0).

The Flood Zone affects proposed house 1 and its garden.

The flood risk presented is from a tributary of the Monks Brook stream that runs through various parts of Hiltingbury. It is culverted under part of valley Road.



8.01 Design considerations

The downstairs of House 1 will be designed with the risk of flood considered:

- Furniture will be removable with adequate storage space to put it away.
- Sensitive electrical equipment, wiring and sockets will, as far as possible, be installed at least 600mm above the estimated flood level.
- Floor coverings will be selected with the risk of flood in mind; either being constructed from completely non-permeable materials, or preferably, being of such materials that they can be completely replaced following a flood incident (i.e. carpet tiles).
- Consideration will be given to the usage of flood resistant materials (i.e. lime plaster) to at least 600mm above the estimated flood level.
- Doors, windows and any other openings will be either flood resistant to at least 600mm above the estimated flood level, or, if this is not possible, then mitigations will be put in place (i.e. sandbags, flood barrier).
- Consideration will be given to installing non-return valves on to soil pipes to prevent backflow.

8.02 Preventative actions

- All sensitive paperwork and electronic records will be stored in waterproof containers and kept upstairs within the property to avoid the risk of damage in the event of flooding.
- All portable electrical equipment (for example, personal computers) will be stored above the estimated flood level.
- Removable flood barrier(s) will be provided and kept in an accessible place to cover any doors or windows that are found to not be flood resistant to the requisite standard.
- Enquiries will be made with Eastleigh Borough Council as to how to obtain sandbags in an emergency.
- Flood evacuation plans and packs (see below) will be prepared and stored both upstairs within the property.
- The owner/applicant will sign up to the Environment Agency's flood warning scheme (<https://www.fws.environment-agency.gov.uk/app/olr/register>) to receive text messages and emails when a flood event in the area is likely.

8.04 In the event of a flood

- If a flood alert is received, Floodline (0345 988 1188) will be called to seek further information on the nature of the alert and gain advice on whether an evacuation is required.
- Removable flood barriers will be installed and sandbags collected and positioned.
- Due to the fact that there is direct access from the ground floor to the first floor, evacuation may not be necessary, however it will be considered whether any non-urgent activities would be better carried out elsewhere for the duration of the warning period.
- Evacuation – if evacuation is required, visitors will be encouraged to exit the property and walk in an easterly direction along Valley Road to a point of safety. Alternatively, the upper part of the access drive to houses 2 and 3 is a safe zone and away from the limit of the flood risk.
- Invacuation (remaining within the premises) – invacuation may be required in the case of quick rising flood water. In this situation, all visitors and occupants of the building would be advised to remain on the first floor of the building. Equipment and provisions will be accessed from the flood pack. At this point, Emergency Services would become the lead agencies and would decide when evacuation was necessary/ possible.
- Reoccupation – once evacuated, nobody should re-enter the building until confirmation is received from the Environment Agency, Eastleigh Borough Council and the insurance companies that it is safe to do so. On re-entering, dangers must be carefully assessed and safety equipment used and worn.

- No services should be reinstated until these have all been tested and confirmed safe by a Gas Safe engineer, a NICEIC registered electrician and a water industry approved plumber.

8.05 Flood packs

Flood packs will be kept in the building containing equipment, supplies and plans. Specifically, each pack will contain as a minimum:

8.05.01 Flood pack for house 1

- Evacuation plan (laminated)
- Emergency contact numbers
- Waterproof clothing
- Wellington boots
- Temporary flood barrier
- Plywood sheets and tools and nails to install (if doors/ windows are not able to be protected by a flood barrier or have the strength to withstand flood water to the required height)
- Torch
- Mobile phone – charged and ready to use
- Non-mains disposable phone charger
- Waterproof clothing
- Bottled water
- First Aid kit
- Non-mains powered radio
- Tinned and non-perishable food (and tin opener)
- Blankets
- Hand sanitiser liquid
- Insurance documents

9.0 Conclusion - How the above guidance affects the proposal.

9.01 The flood pack outlined above will be provided.

9.02 Out of the proposed 3 residential dwellings, only dwelling 1 is within the designated Flood Zone 3.

9.03 The floor level of houses 2 and 3 will be above the level of any expected 1 in 200-year flood level.

9.04 Clearly, there will be disruption to mains drainage during a major flood event causing sanitation issues.

9.05 The flood pack will be issued to the occupier of house 1 and will instil within any occupants the need to be vigilant.

9.06 The proposals indicate an awareness of the current risks and the provision of 2 new residential dwellings are appropriate in this location. There are already residential dwellings within Valley Road

9.07 The uses proposed are similar to other uses already existing within Hiltingbury.

No sequential or exception test is required.

9.08 With the safety measures outlined in this report, these changes of use should be welcomed and supported.