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Reading Borough Council
Development Control
PO Box 17
Reading
Berkshire
RG1 7TD

Our ref: WA/2025/131946/03-L01
Your ref: PL/24/1614
Date: 12 May 2025

Dear Sir/Madam,

Demolition Of Existing Dwelling And Outbuildings And The Erection Of A4-Bed Detached Dwelling With Garage.

Warren Creek, The Warren, Reading, RG4 7TQ

Thank you for consulting us on the above application on 20/01/2025. We have reviewed the application in line with our planning remit.

Environment Agency position

The additional information provided does not satisfactorily address our previous concerns therefore we **maintain our previous objection** set out in our previous response to you (dated 8 April 2025, our reference WA/2025/131946/02)

Reasons

The submitted Flood Risk Assessment & Suds Report for Warren Creek (document No C3429-R1-REV-C, compiled by Nimbus Engineering Consultants Limited, dated March 2025) does not comply with the requirements for site-specific flood risk assessments, as set out in paragraphs 20 to 21 of the Flood Risk and Coastal Change planning practice guidance and its site-specific flood risk assessment checklist. This proposal is also contrary to Readings adopted local policy EN18 - Flooding and Sustainable Drainage Systems (adopted November 2019) The FRA does not therefore adequately assess the flood risks posed by the development.

Specifically, the Flood Risk Assessment (FRA) fails to:

- Demonstrate the development will not increase flood risk elsewhere - It has not been demonstrated that the loss of floodplain storage within the 1% annual exceedance probability (AEP) flood extent with an appropriate allowance for climate change caused by the proposed development can be mitigated for. Voids are not an appropriate means of mitigating for the loss of floodplain storage within the 1% annual exceedance probability (AEP) flood extent with an appropriate allowance for climate change caused by the proposed development

On 25 March 2025, we published updated Flood Zones alongside other datasets for use in development. Planners and flood risk professionals – find out more at [Development planning \(including Flood Map for Planning\)](#). Guidance for developers is available through the Town and Country Planning Association [New national flood and coastal erosion risk information - Town and Country Planning Association](#)

- Demonstrate that finished floor levels will be set above the 1% annual exceedance probability (AEP) flood level with an appropriate allowance for climate change. Consequently, there would be an unacceptable risk to the health and safety of the occupants in a flood event.
- Demonstrate the development will be appropriately flood resistant and resilient for its lifetime. For example, the proposed finished floor level is not based on the appropriate climate change allowance.

Overcoming our objection

To overcome our objection, the applicant should submit a revised FRA which addresses the points highlighted above. If this cannot be achieved, we are likely to maintain our objection. Please re-consult us on any revised FRA submitted and we'll respond within 21 days of receiving it.

Specifically, the FRA will need to:

- Calculate an appropriate allowance for climate change using those advised in ['Flood risk assessments: climate change allowances'](#)
- Demonstrate that any loss of floodplain storage within the 1% AEP plus an appropriate allowance for climate change can be directly compensated for to prevent an increase in flood risk elsewhere.
- Demonstrate that finished floor levels are set above the 1% AEP plus climate change flood level to reduce the risk of flooding to people and property.

Please review the additional information below clarifying our objection points highlighted above:

Climate change allowances

The design flood level provided has not been calculated using the appropriate climate change allowance. This proposal is for more vulnerable development (regarding flood risk) situated within Flood Zone 3b (defined as the functional floodplain per the Planning Practice Guidance for Flood Risk and Coastal Change (PPG)) Whilst more vulnerable development should not take place within Flood Zone 3b (FZ3b) we note that the application site already contains built footprint and therefore development matching the existing built footprint may be permitted. The Planning Guidance Document titled "Flood Risk Allowances: Climate Change Allowances" ([Flood risk assessments: climate change allowances - GOV.UK](#)) confirms that, regarding climate change allowances: "If the local planning authority consider the development is appropriate, even though it will not follow the [flood zone compatibility categories](#) for flood zones 2, 3a or 3b, use the higher central allowance"

The higher central allowance should therefore be considered when determining the design flood level for this application. The climate change allowance provided within the FRA is 35%, the higher central allowance for the Thames and South Chilterns Catchment is 43% (2080's Epoch). It appears the 'rainfall event' was used to identify the 35% climate change level, for future reference, regarding the EAs remit, the 'peak river flow allowances' should be used to calculate the correct climate change level.

Finished floor levels

As the incorrect climate change allowance has been used to identify the design flood level, this has subsequently resulted in the finished floor levels (FFL) being set at the incorrect level. We recommend the finished floor levels being set 300mm (freeboard) above the 1% AEP + the correct climate change allowance level.

Floodplain storage

As previously stated, we do not consider voids an acceptable method to mitigate the loss of floodplain storage, in accordance with paragraph 049 of the PPG. Whilst no definition is provided for the status of 'not normally be relied upon' we require evidence to show why the preferred method of floodplain compensation (direct level for level) cannot be provided as part of this application. Currently no alternative methods besides voids have been considered to offset the loss of floodplain storage that would result from this development.

Additionally, we have reviewed: Flood Storage Area Lost & Gained on Proposed Plan: Drawing No C4329-04, Revision D, drawn by Nimbus Engineering Consultants, dated 6th March 2024. This sets out the assessment of floodplain storage lost and gained resulting from this proposal. It should be noted that unless proven otherwise existing outbuildings are considered floodable structures and therefore do not contribute to the existing footprint. Considering this, the existing built footprint would be set at 96.65m², the proposed built footprint would be set to 173.04m², resulting in a 76.39m² increase in built footprint within the functional floodplain.

Further information regarding level for level floodplain compensation has been provided below:

Level for level floodplain compensation

Level for level floodplain compensation is the matching of floodplain storage volumes lost with new floodplain storage volume gained through the reduction of ground levels. We recommend that level for level floodplain storage calculations are provided in a table that sets out the change in volumes across the site using 100mm or 200mm slices (dependent on-site specific considerations), stating the losses and gains for each slice. It will need to be demonstrated that there would be no net loss in storage volume for any slice. The location of the changes in floodplain storage should also be clearly identified in a plan or drawing that demonstrates the scheme would be hydraulically connected for each slice.

Excavation of the proposed floodplain compensation scheme should be completed prior to the construction of development to ensure floodplain capacity is maintained. If level for level compensation is unachievable then the applicant should amend the development to ensure that there will be no increase in flood risk elsewhere (for example by reducing built footprint or amount of land raising proposed).

Advice to the local authority – Flood warning and emergency response

We do not normally comment on or approve the adequacy of flood emergency response procedures accompanying development proposals, as we do not carry out these roles during a flood. Our involvement with this development during an emergency will be limited to delivering flood warnings to occupants/users covered by our flood warning network.

The [planning practice guidance](#) (PPG) to the National Planning Policy Framework states that, in determining whether a development is safe, the ability of residents and users to safely access and exit a building during a [design flood](#) and to evacuate before an extreme flood needs to be considered. One of the key considerations to ensure that any new development is safe is whether adequate flood warnings would be available to people using the development.

In all circumstances where warning and emergency response is fundamental to managing flood risk, we advise local planning authorities to formally consider the emergency planning and rescue implications of new development in making their decisions.

As such, we recommend you refer to '[Flood risk emergency plans for new development](#)' and undertake appropriate consultation with your emergency planners and the emergency services to determine whether the proposals are safe in accordance with paragraph 181 of the NPPF and the guiding principles of the PPG.

We have considered the findings of the flood risk assessment in relation to the likely duration, depths, velocities and flood hazard rating against the design flood for the proposal.

We can confirm that this indicates that there will be:

- A danger to most people (e.g. there will be danger of loss of life for the general public).
- A danger for all people (e.g. there will be danger of loss of life for the general public and the emergency services).

We recommend you consulting with your emergency planners and the emergency services to confirm the adequacy of the evacuation proposals.

Advice to applicant – Flood Risk Activity Permit (FRAP)

The applicant will require a Flood Risk Activity Permit (FRAP) to undertake the proposed works as the main river, the River Thames, runs adjacent to the site. As submitted, it is **unlikely that a permit would be granted**. The applicant would need to demonstrate that the proposed works will not adversely impact on flood risk or the watercourse.

The Environmental Permitting (England and Wales) Regulations 2016 require a permit or exemption to be obtained for any activities which will take place:

- On or within 8 metres of a main river (16 metres if tidal)
- On or within 8 metres of a flood defence structure or culverted main river (16 metres if tidal)
- On or within 16 metres of a sea defence
- Involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert

- In a floodplain more than 8 metres from the riverbank, culvert or flood defence structure (16 metres if it's a tidal main river) and you don't already have planning permission

The applicant should not assume that a permit will automatically be forthcoming once planning permission has been granted, and we advise them to consult with us at the earliest opportunity.

For further guidance please visit <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits> or contact our National Customer Contact Centre on 03708 506 506 (Monday to Friday, 8am to 6pm) or by emailing enquiries@environment-agency.gov.uk.

Closing comments

If you are minded approving this planning application, contrary to our advice please contact us prior to doing so, to explain why material considerations outweigh our objection. This will allow us to make further representations. Should our objection be removed, it is likely we will recommend the inclusion of condition(s) on any subsequent approval.

Thank you again for consulting us on this application. Our comments are based on the best available data and the information as presented to us. Should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me. Please quote our reference number in any future correspondence.

Yours faithfully,

Mr Nathan Davis on behalf of Sarah Warriss-Simmons
Planning Advisor

Direct e-mail: Planning_THM@environment-agency.gov.uk