The Planning Inspectorate
The Square Temple Quay
Bristol
Avon
BS1 6PN

Our ref: AE/2025/130295/01-L01
Your ref: S62A/2025/0077

Date: 20 March 2025

Dear Sir/Madam

ERECTION OF 28 RESIDENTIAL DWELLINGS (COMPRISING 14 AFFORDABLE & 11 PRIVATE MARKET HOMES TOGETHER WITH 3 SELF-BUILD PLOTS); PROVISION OF PUBLIC OPEN SPACE AND ASSOCIATED LOCAL AMENITY FACILITIES (ACTIVATING LOCAL GREEN SPACE ALLOCATION); TOGETHER WITH INTEGRATED LANDSCAPING AND CAR PARKING (TO INCLUDE ADDITIONAL COMMUNITY PARKING FACILITY)

LAND WEST OF HIGH STREET, STEBBING

Thank you for your consultation dated 17 February 2024. We have reviewed the documents as submitted and we have no objection to this planning application, providing that you have taken into account the flood risk considerations which are your responsibility. We have highlighted these in the flood risk section below. We have also provided comments below on Ecology, Biodiversity Net Gain and the potential requirement for an Environmental Permit.

Environmental Permit for Flood Risk Activities

The applicant may need an environmental permit for flood risk activities if they want to do work in, under, over or within 8 metres (m) from a fluvial main river and from any flood defence structure or culvert or 16m from a tidal main river and from any flood defence structure or culvert. The Stebbing Brook, is designated a ‘main river’.

Application forms and further information can be found at: https://www.gov.uk/guidance/flood-risk-activities-environmental-permits. Anyone carrying out these activities without a permit where one is required, is breaking the law.

Changes to the way we manage flood risk activity permit applications

In 2024 the Environment Agency have moved the management of flood risk activity permit (FRAP) applications from local area teams into the National Permitting Service (NPS).

FRAP applications for activities that take place in this area should be sent to: flood.permitting@environment-agency.gov.uk

Please note that you should send your application in as early as possible to avoid potential delays.

Flood Risk

We have no objection to the planning application on flood risk grounds, providing that you are satisfied that the development would be safe for its lifetime, and you assess the acceptability of the issues within your remit.

The applicant has sequentially sited the all the more vulnerable (dwellings) elements of the proposed development within Flood Zone 1.

Our maps show the site boundary lies within fluvial Flood Zone 3b, 3a and 2 defined by the 'Planning Practice Guidance: Flood Risk and Coastal Change' as being the functional floodplain, having a high and medium probability of flooding respectively. The proposal is for 28 dwellings with the provision of public open space and associated local amenity facilities; together with integrated landscaping and car parking, which is classified as a 'more vulnerable' development, as defined in Annex 3:Flood Vulnerability classification of the Planning Practice Guidance.

We are satisfied that the flood risk assessment (FRA), referenced 332511125/203 and dated 27/09/2023, provides you with the information necessary to make an informed decision.

In particular:

- The 'Landscape Masterplan for North Field (A&B)' Drawing referenced SD 200 and dated 19/09/2023 shows all the 'more vulnerable' (dwellings) elements of the proposed development lies to the eastern part of the site that is within Flood Zone 1. Some of the 'Water Compatible' elements of the proposed development to enhance the wet woodland, including shallow wetland features, pollarding and planting new trees are within Flood Zones 3b, 3a and 2.
- The 'Landscape Masterplan for South Field (C&D)' Drawing referenced SD 201 and dated 19/09/2023 shows all the proposed development lies to the eastern part of the site that is within Flood Zone 1.
- The access and egress route for the North Field (Plants A & B) travels through Flood Zones 1 (fluvial) and the local planning authority should determine whether this provides a safe route of access.
- The access and egress route for the South Field (Plants C & D) travels through Flood Zones 1 (fluvial) and the local planning authority should determine whether this provides a safe route of access.
- Flood depths on the site and within the building remain unknown because the Flood Zones are derived from JFLOW modelling. However, we note that section 5.3 of the FRA looks to estimate the fluvial flood risk, and we highlight the following points in relation to the FRA's assessment.

- For the North Field (Plots A & B) proposed development site, section 5.3.3 details that the FRA has considered it appropriate and proportionate to utilise a method of assessing the fluvial flood risk whereby the EA Flood Zones have been overlaid onto the EA LiDAR mapping for the area to provide an estimate of the reference (undefended) current day and 0.1% (1 in 1000) annual exceedance probability (AEP) flood levels, which define the Flood Zone 3a and Flood Zone 2 extents respectively.
- Sections 5.3.4 and 5.3.5 of the FRA respectively show a figure of the EA Flood Zones overlaid onto the EA LiDAR mapping for the area and a table of the estimated present day flood levels, with the 1% (1 in 100) AEP flood level estimated at 60.00m AOD and the 0.1% (1 in 1000) AEP flood level estimated at 60.30m AOD.
- Section 5.3.6 of the FRA confirms that the ground levels in the western part of the North Field adjacent to Stebbing Brook which is mostly in the wet woodland area have an existing ground level "typically between 59.6m AOD and 60.0m AOD, indicating maximum flood depths of up to 0.4 metres in the present-day 1% (1 in 100) AEP flood event, and up to 0.7 metres in the extreme 0.1% (1 in 1000) AEP flood event.
- Section 5.3.7 of the FRA confirms that the "*ground levels at the location of proposed dwellings exceeding 70.0m AOD (North Field), and over 74.0m AOD (South Field), confirming the significant freeboard for future development above the fluvial flood risk area*".
- Section 5.3.8 of the FRA confirms that to estimate the 1% (1 in 100) AEP, plus 25% fluvial climate change, the FRA has used the present day 0.1% (1 in 1000) AEP as a proxy.
- The ground levels at the location of proposed dwellings on the North field (plots A & B) exceed 70.0m AOD, so provides 9.7 metres of elevation (freeboard) above the estimated 1% (1 in 100) AEP, plus 25% fluvial climate change flood level of 60.30m AOD. It also provides an estimated minimum 90 metre buffer zone between Flood Zones 2 / 3 and the edge of the proposed dwellings.
- The ground levels at the location of proposed dwellings on the South field (plots C & D) exceed 74.0m AOD, so provides 13.7 metres of elevation (freeboard) above the estimated 1% (1 in 100) AEP, plus 25% fluvial climate change flood level of 60.30m AOD. It also provides an estimated minimum 160 metre buffer zone between Flood Zones 2 / 3 and the edge of the proposed dwellings.
- Flood Storage Compensation is not required.
- A Flood Evacuation Plan has not yet been proposed.

Incorporating New Climate Change Allowances

As the applicant has sequentially sited their proposed development to be wholly within Flood Zone 1, we feel it is unnecessary to request the applicant to re-model the Stebbing Brook; designated main river in order to incorporate the new climate change allowances. This is because the majority of the new climate change allowances have not exceeded the current extent of the existing flood zone 2.

JFLOW

The Flood Zone maps in this area are formed of national generalised modelling, which was used in 2004 to create fluvial floodplain maps on a national scale. This modelling was improved more recently, using a more detailed terrain model for the area. This modelling is not a detailed local assessment, it is used to give an indication of areas at risk from flooding.

JFLOW outputs are not suitable for detailed decision making. Normally, in these circumstances, an FRA will need to undertake a modelling exercise in order to derive flood levels and extents, both with and without allowances for climate change, for the watercourse, in order to inform the design for the site.

However, as the applicant has sequentially sited their proposed development to be wholly within Flood Zone 1, we feel it is unnecessary to request the applicant to model the Stebbing Brook*;* designated main river with regards to the safety of the proposed development because the development should remain dry and provide refuge throughout the 0.1% (1 in 1000) annual probability event.

If you feel you do not have sufficient information with regards to flood levels on the access/egress routes, we advise that modelling should be undertaken to accurately establish the risk to the access/egress routes in terms of potential depths and locations of flooding. The watercourse should be modelled in a range of return period events, including the 1 in 20 (5%), 1 in 100 (1%) and 1 in 1000 (0.1%) year events, both with and without the addition of climate change. Please remember to request the new climate change allowances. The flood levels on the access/egress routes should be determined and compared to a topographic site survey to determine the flood depths and extents along the access/egress routes. This should be used to establish a route of safe access.

Other Sources of Flooding

In addition to the above flood risk, the site may be within an area at risk of flooding from surface water, reservoirs, sewer and/or groundwater. We have not considered these risks in any detail, but you should ensure these risks are all considered fully before determining the application.

Further advice on Flood Risk

Further advice is available in the appendix below.

Ecology

We have reviewed the relevant ecological assessments for the proposed housing development and we agree with the recommendations made by Place Services. Their assessment provides a thorough evaluation of the site's ecological constraints and outlines appropriate mitigation measures to minimise impacts on protected species, priority habitats, and nearby watercourses. We have little to add beyond reaffirming what they have suggested, and supporting the proposed conditions to ensure ecological protection and enhancement.

As highlighted by Place Services, the site must be registered under Natural England's District Level Licensing scheme for great crested newts, with an Impact Assessment and Conservation Payment Certificate (IACPC) secured before any works commence. The presence of grass snakes and slow-worms requires a Reptile Mitigation Strategy to safeguard and enhance their habitat. Several trees identified as having potential roost features for bats should be managed in line with a Precautionary Working Method Statement (PWMS), ensuring that replacement roosting features are provided in retained trees.

To mitigate habitat loss, we support the recommendation that any removed hedgerows be replaced with species-rich, native planting, with long-term management secured through a Landscape and Ecological Management Plan (LEMP). The proposed bat-sensitive lighting plan is also necessary to minimise disruption to nocturnal species. Given the site's proximity to Stebbing Brook, it is essential that a Construction and Environmental Management Plan (CEMP: Biodiversity) is in place to prevent pollution or disturbance to this important watercourse.

We recommend a few additional measures to further strengthen ecological protection: considering the potential for increased surface water runoff, the incorporation of sustainable drainage systems (SuDS) should be considered (such as attenuation features, wetland planting and permeable surfaces) to manage water quality and prevent pollution of Stebbing Brook.

Also, while no invasive non-native species have been explicitly identified, a precautionary approach would be beneficial, and an invasive species management plan should be secured to prevent their spread. Ongoing monitoring should be required to ensure the long-term success of biodiversity enhancements, including periodic surveys for key species and habitat condition assessments. We also recommend strengthening riparian protection by securing an undisturbed 3D vegetated buffer zone along Stebbing Brook to reduce sedimentation and nutrient runoff.

BNG Metric - Missing information – Watercourse calculations

The watercourse metric must be applied when there is a watercourse on site or the watercourse bank top is within 10m of the redline boundary (i.e. the red line boundary intersects the riparian zone).

In this application, approximately 150m of the redline boundary for Plot A follows the Stebbings Brook. The watercourse should be surveyed using a River Condition Assessment carried out by an appropriately qualified and accredited agent. The applicant will need to apply the watercourse Unit module irrespective of the impact of development to secure 10% Net Gain. There is also a ditch within Plot D which will be lost as a result of the development which should be assessed and included within the BNG calculations for watercourses

We would encourage the developer to look at suitable options to improve the biodiversity of the riparian zone which could include changes to bank top vegetation

management (appropriate to the priority habitat type). Further information on this watercourse and WFD mitigation measures can be found within the catchment data explorer Catchment Data Explorer - CaBA (catchmentbasedapproach.org)

We trust this advice is useful,

Yours sincerely

Mr Giles Ward
Planning Officer

[redacted]

Appendix – Flood Risk

Guidance on Safety of inhabitants - Safety of Building

The development has been designed to provide refuge above the predicted flood levels. Given that refuge is identified as a fall-back mitigation measure it is important that the building is structurally resilient to withstand the pressures and forces (hydrostatic and hydrodynamic pressures) associated with flood water, as per the requirements of paragraph 005 of the PPG. We advise that supporting information and calculations are submitted to you to provide certainty that the buildings will be constructed to withstand these water pressures.

Guidance on Safety of Inhabitants – Emergency Flood Plan

The Environment Agency does 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.

Planning practice guidance (PPG) to the National Planning Policy Framework (NPPF) 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 173 of the NPPF and the guiding principles of the PPG.

We have considered the findings of the likely duration, depths, velocities and flood hazard rating against the design flood event for the development proposals. This indicates that there will be:

At the proposed dwellings and across most of the site:
- No danger to people

Within the wet woodland area on the North field:
- A danger to most people (e.g. there will be danger of loss of life for the general public)

This does not mean we consider that the access is safe, or the proposals acceptable in this regard. We remind you to consult with your Emergency Planners and the Emergency Services on the evacuation proposals.

Sequential Test and Exception Tests

The site is located within Flood Zone 1 with a ‘low probability’ of flooding, with less than a 0.1% (1 in 1000) annual exceedance probability of fluvial flooding. Therefore, the Sequential and Exception Tests will not need to be undertaken as part of this planning application.