

Cherwell District Council  
Planning & Development Services  
Bodicote House White Post Road  
Bodicote  
Banbury  
OX15 4AA

**Our ref:** WA/2023/130772/04-L01

**Your ref:** 23/02098/OUT

**Date:** 03 January 2025

Dear Sir/Madam

**Outline Application, With All Matters Reserved, For A Phased (Severable), Comprehensive Residential-Led Mixed Use Development Comprising: Up To 215,000 Square Metres Gross External Area Of Residential Floorspace Within Use Class C3/C4 And Large Houses Of Multiple Occupation (Sui Generis); Supporting Social Infrastructure Including Secondary School/Primary School(S) (Use Class F1); Health, Indoor Sport And Recreation, Emergency And Nursery Facilities (Class E(D)-(F)) Supporting Retail, Leisure And Community Uses, Including Retail (Class E(A)), Cafes And Restaurants (Class E(B)), Commercial And Professional Services (Class E(C)), Local Community Uses (Class F2), And Other Local Centre Uses Within A Sui Generis Use Including Public Houses, Bars And Drinking Establishments (Including With Expanded Food Provision), Hot Food Takeaways, Venues For Live Music Performance, Theatre, And Cinema. Up To 155,000 Net Additional Square Metres (Gross External Area) Of Flexible Employment Uses Including Research And Development, Office And Workspace And Associated Uses (Use E(G)), Industrial (Use Class B2) And Storage (Use Class B8) In Connection With The Expansion Of Begbroke Science Park; Highway Works, Including New Vehicular, Cyclist And Pedestrian Roads And Paths, Improvements To The Existing Sandy Lane And Begbroke Hill Road, A Bridge Over The Oxford Canal, Safeguarded Land For A Rail Halt, And Car And Cycle Parking With Associated Electric Vehicle Charging Infrastructure; Landscape And Public Realm, Including Areas For Sustainable Urban Drainage Systems, Allotments, Biodiversity Areas, Outdoor Play And Sports Facilities (Use Class F2(C)); Utility, Energy, Water, And Waste Water Facilities And Infrastructure; Together With Enabling, Site Clearance, Demolition And Associated Works, Including Temporary Meanwhile Uses.**

### **Begbroke Science Park and Surrounding Land**

Did you know that in the UK, 6.6 million tonnes of household food waste a year is thrown away? Almost three quarters of that is food which could have been eaten. Do your bit to avoid domestic food waste to fight climate change! [www.lovefoodhatewaste.com](http://www.lovefoodhatewaste.com) [www.wrap.org.uk](http://www.wrap.org.uk)

Thank you for re-consulting us on the above application on 30 October 2024. Following further engagement with the applicant and planning authority, we received the latest information regarding the modelling on 12 December 2024.

We have reviewed the following documents with regards to our planning remit:

- Updated Model Report (revision E, dated 28 June 2024 and prepared by EdenvaleYoung) and model files
- Letter from Quod to Environment Agency and appendices (dated 29 October 2024)
- Technical Note (dated 19 September 2024 and prepared by Buro Happold)

### **Environment Agency position**

We are now satisfied that the applicant has provided enough information on their flood modelling for the Outline application. Please be aware that further information would be required at the detailed design stage.

However, we are **not** satisfied that the swale and flood storage area (FSA) as proposed would be appropriate mitigation for losses of floodplain storage on site. This is because it has not been demonstrated that both features would drain following rainfall or a flood event. This is required to ensure these features do not store water after an event and so become unavailable as floodplain storage in future flood events. If these features are unable to drain, they will not function as required and so could increase flood risk onsite and elsewhere.

Please also be aware that the proposed FSA has had to be enlarged since the previous consultation to ensure it is large enough to prevent an increase in flood risk on and offsite. From comparing plans, the FSA may now be required where dwellings are proposed. This has not been discussed in the applicant's additional information and no new site plan has been provided.

We therefore **maintain our objection** set out in our responses dated 15 February, 3 June 2024 and 28 August 2024. We understand that some details can be left for the detailed design stage, however we do not have enough information at this stage in order to appropriately condition key flood risk aspects of the proposals. Without this additional information, there is the risk that the proposed development cannot be delivered without increasing flood risk onsite (including to new dwellings) or elsewhere (including neighbouring farmland and potentially the A44).

### **Reasons**

#### Flood risk information

We have reviewed the additional modelling information and are now satisfied that this overcomes our concerns on the applicant's flood model and model outputs. Please be aware that this only applies to this outline application, and that further information may be required at the detailed design stage. **Please note that this is an acceptance of the soundness of the model only and not an agreement of the model as a flood risk assessment. We remain to be concerned with what the outputs of the model are showing in terms of flood risk impact (namely that these features would not drain after heavy rainfall).**

The previous review included a number of amber comments relating to a lack of information within the hydraulic model report. The applicant has responded to explain that information has been provided to us. Whilst we have downgraded these comments to green now, in order to have a clear paper trail it would be advisable to include all the information in the updated hydraulic model report or at least to reference it.

We have also left some comments in green for now given that we are at the outline design stage. We would recommend these are looked at again at the detailed design stage to ensure they are still appropriate. This relates in particular to the sensitivity analysis conducted on model inflows. The model is sensitive to inflows so it is important that this uncertainty is accounted for e.g. through the 300mm freeboard they are applying to the design of the flood storage area. We would expect the applicant to include a discussion on this in the reporting at detailed design stage. Please see the attached hydraulic model review for more information.

Please note, the results of the modelling return periods do not match the Flood Map for Planning. Should you wish to challenge the flood map, as the model review for the application does not cover if the model is acceptable for an Evidence Review Request, you can email [enquiries\\_THM@environment-agency.gov.uk](mailto:enquiries_THM@environment-agency.gov.uk) for further guidance on this.

### Sequential Approach

No new information has been submitted in relation to the sequential approach. Only more vulnerable development is proposed in areas at high fluvial flood risk, whilst water compatible and less vulnerable development are proposed in areas at low fluvial flood risk. This is not in accordance with the sequential approach. We note there may be reasons why it is not possible to locate lower vulnerabilities in the areas at high flood risk that we are unaware of.

### Floodplain compensation

Compensation works can be considered as either direct or indirect methods. Direct, or 'level for level' methods, re-grade the land at the same level as that occupied by the development. Direct schemes therefore provide a direct replacement for the lost storage volume.

Indirect methods, also known as volume for volume, rely on water entering a storage area which then releases water at a slower rate. The storage area can be remote from the floodplain. Indirect schemes are complicated to design and construct, and require a more intensive maintenance regime, which must be continued indefinitely. For these reasons we are generally opposed to indirect schemes unless it is the only remaining option.

Both mitigation options proposed by the applicant, namely the FSA in the south of the site and the swale in the northwest, are indirect schemes. Whilst the applicant's modelling shows that there would be no increase in flood risk on or offsite if the schemes were functioning as intended in a single rainfall/flood event, if the schemes are not maintained or if there are further flood events, then the proposed schemes may increase flood risk onsite and offsite. Please be aware that, if either feature fails to function then new residential properties may be at increased risk of flooding.

### Proposed School Site and Flood Storage Area (FSA)

The previous submission did not model the impacts of a FSA, and only showed that without one there would be an increase in flood risk on and off site which is not acceptable. The submitted modelling now proposed mitigation in the form of a Flood Storage Area (FSA). Three proposed designs for the FSA have been modelled and assessed in this submission. We are satisfied with the quality of the modelling undertaken and that in a single rainfall event that option D8 should prevent increases in flood risk offsite.

However, we have concerns with the proposed design of the FSA in the modelling and are not satisfied the issue can be conditioned at this stage. In the 1% annual exceedance probability (AEP) plus 41% climate change scenario, the model shows the water level in the FSA after 40 hours is kept at 60.5mAOD which is roughly a depth of 65cm (levels in the FSA peak at about 1m as per the design). The north bank of the ditch which runs alongside the flood storage area acts as a weir with a crest level of 60.5mAOD. This is represented in the model but there is no clear way beyond this to enable the FSA to drain.

The technical note suggests that the water will discharge onward to the ditch network outside of the site boundary but this does not appear to be represented in the current modelling. It is not clear how the FSA would drain further, this may require some kind of control structure. At this stage, it is not known whether it is feasible for the FSA to drain fully without having to redesign the scheme. Details of how the FSA could fully drain in theory should be provided, including identifying if a control structure would be required and if so what type of control structure this would need to be.

This additional information will also help identify future maintenance requirements so it can be determined if these are acceptable and would be provided for the lifetime of the development. As currently designed, it is likely that over time the FSA would fill with water and/or fine sediment so that during extreme events it may already be full and therefore offer no storage during a flood. The is not 'level for level' and may require periodic maintenance to ensure the required storage.

The Technical Note states that the applicant and LPA have agreed that a Planning Condition could control the use of the southern area of the school site and could only come forward if further detailed modelling was prepared to demonstrate the effectiveness and compliance to NPPF of the future proposed solution. We are not satisfied that a condition is possible at this stage. Further information is required in order to demonstrate that an appropriate mitigation option exists that ensures adequate floodplain storage is available for all future flood events.

### Swale

Similarly to the proposed FSA, the proposed swale in the northwest of the site would not drain freely as currently proposed in the model, and no details have been provided by applicant on how this swale could be designed to allow flood water to drain away. Therefore, it has not been demonstrated that a feasible design option exists that will prevent increases in flood risk on and offsite.

In the applicant's modelling, the swale is activated during the 1% AEP + 41% climate change event and the 0.1% AEP scenarios as this is when flood waters overtop Woodstock Road sufficiently to spill into the swale. The swale does not seem to have a structure to enable it to drain and levels in the 0.1% AEP scenario rise from 67.6mAOD to 68mAOD and stay there until the end of the 40hour simulation. In the 1% AEP + 41% climate change scenario the same happens and the level in the swale rises to 67.7mAOD and stays there until the end of the simulation again suggesting there is no way for the water to drain out.

We previously requested information on how the swale would drain, however no new information on this has been provided.

### Flood Zone 3b

Our concerns in relation to Flood Zone 3b related to the relocation of the watercourse in the south of the site to enable the Secondary School to be entirely outside of Flood

Zones 2 and 3. This in turn is linked to the proposed FSA. Currently the modelling shows that a larger FSA than previously proposed would be required in order to prevent increases in flood risk to new dwellings and offsite. This larger FSA appears to be where dwellings are proposed. Whilst we don't believe the applicant proposes to put dwellings within their FSA, Proposed Plans should be provided to demonstrate this is not the case and that a feasible design option exists.

#### Climate change

No new information has been provided. Please refer to our earlier comments – this is for information only and not part of our objection.

#### Bridges

We understand that the proposals do not include a bridge over the Oxford canal, and that any such bridge would be applied for under a separate planning application. The applicant has not commented on whether any other bridges are proposed as part of this live planning application. Therefore, should our objection be overcome, we would suggest a standalone planning condition is applied to ensure no new bridges over watercourses shall be included in the Reserved Matters application/s, other than with the written consent of the local planning authority.

#### **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. Please see our previous letters for more information.

#### **Environmental permit - advice to applicant**

The applicant will require a Flood Risk Activity Permit (FRAP) to undertake the proposed works within 8 metres of main rivers Rowel Brook, Thrupp Ditch and North Yarnton Ditches (called Southern Drainage Ditch in Figure 3 of the FRA) which run through and/or adjacent to the site. 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 river bank, 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](mailto:enquiries@environment-agency.gov.uk).

### **Exception test – advice to Planning Authority**

In accordance with the National Planning Policy Framework (paragraphs 170 and 171), the proposed development is appropriate provided that the site meets the requirements of the exception test. Our comments on the proposals relate to the part of the exception test that demonstrates the development is safe. The local planning authority must decide whether or not the proposal provides wider sustainability benefits to the community that outweigh flood risk.

The exception test should only be applied as set out in flood risk table 3 of the Planning Practice Guidance (PPG) following application of the sequential test. The exception test should not be used to justify the grant of planning permission in flood risk areas when the sequential test has shown that there are reasonably available, lower risk sites, appropriate for the proposed development.

In those circumstances, planning permission should be refused, unless you consider that sustainable development objectives make steering development to these lower risk sites inappropriate as outlined in PPG (ref ID: 7-033-20140306).

#### Our role in the exception test

The exception test is in two parts, described in the NPPF (paragraph 170). In order for the test to be passed it must be demonstrated that

1. The development would provide wider sustainability benefits to the community that outweigh flood risk; and
2. The development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

Paragraph 171 of the NPPF makes clear that both parts need to be met for the test to be satisfied. It is for the applicant to demonstrate this.

We provide advice on the second part of the test, but it is for you, as the local planning authority, to consider the first part of the test, accounting for the findings of the flood risk assessment and our flood risk advice, and to determine whether the test, overall, has been satisfied. Development that does not satisfy both parts of the exception test should be refused.

#### Where the flood risk assessment shows the development will be safe throughout its lifetime without increasing flood risk elsewhere

Even where a flood risk assessment shows the development can be made safe throughout its lifetime without increasing risk elsewhere, there will always be some remaining risk that the development will be affected either directly or indirectly by flooding. You will need to weigh these risks against any wider sustainability benefits to the community.

### **Other Consents – advice to applicant**

As you are aware we also have a regulatory role in issuing legally required consents, permits or licences for various activities. We have not assessed whether consent will be required under our regulatory role and therefore this letter does not indicate that permission will be given by the Environment Agency as a regulatory body.

The applicant should contact 03708 506 506 or consult our website to establish if consent will be required for the works they are proposing. Please see <http://www.environment-agency.gov.uk/business/topics/permitting/default.aspx>

## **Final Comments**

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. **Subject to our flood risk objection being overcome, we have planning conditions we would recommend in regards to biodiversity, foul drainage and groundwater and contaminated land.**

If you are minded to approve this application for major development contrary to our flood risk objection, we request that you contact us to allow further discussion and/or representations from us in line with the [Town and Country Planning \(Consultation\) \(England\) Direction 2021](#).

This statutory instrument prevents you from issuing planning permission without first referring the application to the Secretary of State for Housing, Communities and Local Government (via the National Planning Casework Unit) to give them the opportunity to call-in the application for their own determination. This process must be followed unless we are able to withdraw our objection to you in writing. A failure to follow this statutory process could render any decision unlawful, and the resultant permission vulnerable to legal challenge.

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

**Miss Chloe Alma-Daykin**  
**Planning Advisor**

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