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**Oxford City  
Council Local  
Plan 2036**

*Flood Zone 3b  
Assessment Methodology*

BACKGROUND  
PAPER

## INTRODUCTION AND CONTEXT

The National Planning Policy Framework (paragraph 158) states that “The aim of the sequential test is to steer new development to areas with the lowest risk of flooding”. The Flood Risk and Coastal Change Planning Practice Guidance (FRCC PPG) expands on this, and provides criteria and guidance on how Flood Zones are defined, and criteria as to what is acceptable development in these Flood Zones.

Flood Zone 3b is defined in Table 1<sup>1</sup> of the FRCC PPG as *‘The Functional Flood Plain’ – ‘This zone comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency’*. Table 3<sup>2</sup> – Flood Risk Vulnerability and Flood Zone Compatibility – defines the types development permitted in each Flood Zone, in relation to the vulnerability classes defined in Table 2<sup>3</sup> of the same PPG.

The PPG states that the functional floodplain should be defined by a local authority through their strategic flood risk assessment (SFRA)<sup>4</sup> and *‘...should take account of local circumstances and not be defined solely on rigid probability parameters. However, land which would naturally flood with an annual probability of 1 in 20 (5%) or greater in any year, or is designed to flood (such as a flood attenuation scheme) in an extreme (0.1% annual probability) flood, should provide a starting point for consideration...’*.

This is expanded further later in Paragraph 015 of the PPG, which states: *‘The area identified as functional floodplain should take into account the effects of defences and other flood risk management infrastructure. Areas which would naturally flood, but which are prevented from doing so by existing defences and infrastructure or solid buildings, will not normally be identified as functional floodplain’*<sup>5</sup>.

The NPPF and PPG are designed to cater for all Local Authorities, and hence a range of conditions and scenarios – from space rich rural districts, to dense urban areas. The preceding paragraphs allow Local Authorities to tailor policies in order to match the demands and characteristics of their area. Oxford City Council has already demonstrated through the sequential test that in Oxford there is insufficient land to meet Oxford’s housing need on housing sites in lower flood risk Flood Zones. As such, it is necessary to deliver some housing on sites in higher risk Flood Zone 3a. Even with development in

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<sup>1</sup> <https://www.gov.uk/guidance/flood-risk-and-coastal-change#Table-1-Flood-Zones>

<sup>2</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/575184/Table\\_3\\_-\\_Flood\\_risk\\_vulnerability\\_and\\_flood\\_zone\\_compatibility\\_.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/575184/Table_3_-_Flood_risk_vulnerability_and_flood_zone_compatibility_.pdf)

<sup>3</sup> <https://www.gov.uk/guidance/flood-risk-and-coastal-change#Table-2-Flood-Risk-Vulnerability-Classification>

<sup>4</sup> Paragraph: 015 Reference ID: 7-015-20140306

<sup>5</sup> Paragraph: 015 Reference ID: 7-015-20140306).

these higher risk Flood Zones, there is still a shortfall of housing sites to deliver sufficient homes to meet Oxford's affordable housing need. Therefore it is necessary to look at land that falls within Flood Zone 3b.

## **POLICY APPROACH**

Owing to Oxford's urgent need for housing sites, the Oxford Local Plan 2036 Proposed Submission Draft has set out an approach to allow development within the 'Flood Zone 3b Developed' areas, where, through application of the strict conditions within the policy, improvement in the current situation can be gained.

Policy RE3 is as follows:

### ***Policy RE 3: Flood risk management***

*Planning permission will not be granted for development in Flood zone 3b<sup>6</sup> except where it is for water-compatible uses or essential infrastructure; or where it is on previously developed land and it will represent an improvement for the existing situation in terms of flood risk. All of the following criteria must be met:*

- a) it will not lead to a net increase in the built footprint of the existing building; and*
- b) it will not lead to a reduction in flood storage (through the use of flood compensation measures); and*
- c) it will not lead to an increased risk of flooding elsewhere; and*
- d) it will not put any future occupants of the development at risk.*

*New development will be directed towards areas of low flood risk (Flood Zone 1). In considering proposals elsewhere, the sequential and exception tests will be applied.*

*Planning applications for development within Flood Zone 2, 3, on sites larger than 1 ha in Flood Zone 1 and, in areas identified as Critical Drainage Areas, must be accompanied by a Site Specific Flood Risk Assessment (FRA) to align with National Policy. The FRA must be undertaken in accordance with up to date flood data, national and local guidance on flooding and consider flooding from all sources. The suitability of developments proposed will be assessed according to the sequential approach and exceptions test as set out in Planning Practice Guidance.*

*Planning permission will only be granted where the FRA demonstrates that:*

- a) the proposed development will not increase flood risk on site or off site; and*
- b) safe access and egress in the event of a flood can be provided; and*

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<sup>6</sup> The functional floodplain is defined as 'Flood Zone 3b', and corresponds to the 5% (1 in 20 year) chance of flooding on the EA flood model.

c) details of the necessary mitigation measures to be implemented have been provided.

*Minor householder extensions may be permitted in Flood Zone 3b, as they have a lower risk of increasing flooding. Proposals for this type of development will be assessed on a case by case basis, taking into account the effect on flood risk on and off site.*

*Where development sites are within the proposed defended area of the Oxford Flood Alleviation Scheme (OFAS), which will provide protection up to the 1 in 100 year (1%) flood scenario, both the defended and undefended data may be taken into consideration. Where properties lie within Flood Zone 3b, defended levels will be taken into account with regards to whether the development is appropriate, on the condition that flood mitigation measures are included up to the undefended level, to provide some protection in the event of a breach.*

Thus, in order to comply with the policy, any development will have to show that:

- Any proposed developments to fit within existing footprints; and
- To satisfy points b and c of the policy developments need to be raised above the 'design flood' (1% + 35% increase for climate change at time of writing) in line with EA/DEFRA recommendations in order to increase flood plain storage and therefore reduce, not increase, flood risk elsewhere; and must
- Safe access and egress must be demonstrated in line with EA/DEFRA<sup>7</sup> requirements

By enforcing this policy, the volume of buildings currently within the 1 in 20/5% Annual Exceedance Probability (AEP) flood extents, but not currently providing floodplain storage, will be restored to the functional floodplain and therefore will contribute to reducing flood risk.

The approach taken is in line with the general approach described in the FRCC PPG, however by keeping the 'Flood Zone 3b Developed' areas as Flood Zone 3b, and not defaulting to Flood Zone 3a, more control may be exercised in ensuring that any developments do not increase, and in fact reduce, flood risk. The approach has also been approved by the Environment Agency, details of which can be found in *Appendix A*.

Given the high risk of flooding in Oxford, a different approach was taken, in order to control development in flood risk areas more closely. A SFRA was undertaken (Wallingford Hydro solutions, 2017) which identified the areas within the 'Functional Floodplain' (i.e. 1 in 20/5% AEP starting point) that currently contained buildings, and designated these areas 'Flood Zone 3b Developed', and those areas with no development, 'Flood Zone 3b Undeveloped' (it should be noted that these are Oxford City Council terminology,

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<sup>7</sup> EA/DEFRA DocL FD2321/TRS Flood Risks to People

expanding on DEFRA/EA designations). Areas within 'Flood Zone 3b Undeveloped' are therefore the functional floodplain, as they are able to store water in times of flood. Those in 'Flood Zone 3b Developed' are not functional floodplain as, in line with PPG (Paragraph: 015 Reference ID: 7-015-20140306) quoted above, these areas are not providing floodplain storage.

In light of the above, the policy proposes that development will not be permitted in 'Flood Zone 3b Undeveloped', but will be permitted in 'Flood Zone 3b Developed', provided strict conditions are met in order to reduce flood risk compared to the current scenario. By taking this approach, there is no presumption of development (subject to sequential and exception tests where required), and the onus will be on the developer to satisfy the strict criteria in order to not only to prevent increase in flood risk, but to reduce it.

## **APPENDIX A: NOTE OF MEETING WITH ENVIRONMENT AGENCY**

**14 June 2018 at Red Kite House, Howberry Park, Wallingford to discuss emerging Oxford Local Plan 2016-2036 policies.**

### **Present**

*Cathy Harrison – EA*

*Sarah Underhay – EA*

*James Barlow – Oxford City Council (OCC)*

*Sarah Harrison – OCC*

*Amanda Ford - OCC*

The meeting was held to discuss the emerging local plan policies specifically related to flood risk management and sustainable drainage systems. At the meeting EA officers confirmed that they were satisfied with the approach that OCC was taking in its approach to the redevelopment of land within Flood Zone 3b. They acknowledged that owing to the constrained nature of Oxford and the large areas of land falling within Flood Zone 3b development within the city they would raise no objection to this policy.

The EA had no further comments on draft policy 4.6 relating to sustainable drainage and surface groundwater flow as they are not a statutory consultee on these matters.