

Planning Policy Team

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Green Spaces

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1. Introduction

The Oxford Local Plan 2036 recognises the importance of green and open spaces. Oxford benefits from a wide range of green and blue spaces which, individually and as a network, perform important social, environmental and economic functions and are valued by local people. In a compact city where development needs to be accommodated, it is the quality and accessibility of a network of spaces that will be important.

Purpose of this TAN

The intention of this TAN is to provide additional advice and guidance to developers, landowners and planning officers on the detailed application of several policies in Chapter 5 of the Oxford Local Plan 2036: 'Protecting and enhancing Oxford's green and blue infrastructure network'. It provides further guidance on the importance of the Green and Blue Infrastructure Network and how it was identified (Policy G1); it references further information about biodiversity calculators and what is expected in terms of biodiversity net gain (Policy G2); it provides further details relating to Policy G5 and expectations in terms of protection of sites, when sites may be considered to be surplus (which is not expected to be common in Oxford) or for compensation. Finally it references further information relating to Policy G7 and G8 regarding protecting, enhancing and creating green infrastructure features.

2. Protecting the Green and Blue Infrastructure Network (Policy G1)

How was the Green and Blue Infrastructure network identified?

The Oxford Green Infrastructure Study includes both green and blue spaces in accordance with the Planning Practice Guidance. This is not limited to usable open space and a range of types of sites were audited including Conservation Target Areas (CTAs) and Sites of Special Scientific Interest (SSSIs) which are found across Oxfordshire, allotments, private gardens, and cemeteries among others. Sites over 0.1ha were assessed and the criteria for including Green Spaces in the audit of Green Spaces can be found in [Appendix 1](#) of the Oxford Green Infrastructure Study (March 2019).

Using the green infrastructure approach to consider the current and future roles of Oxford's green and blue spaces allows us to make the best use of Oxford's limited land and to prepare for future change by thinking about multi-functionality. Instead of considering a site in terms of its individual features and functions, we can consider sites as part of a city-network, maximising the benefits they provide.

Expectations in terms of the Green and Blue Infrastructure network

Protection

It is expected that sites in the Green and Blue Infrastructure Network will need to be protected in situ. The multi-functional nature of green infrastructure means that it can also contribute to achieving wider objectives relating to sustainable development set out in the NPPF. Sites were considered to form part of the Green and Blue Infrastructure Network if they have a multi-functional use or are clearly important as part of a network. Whilst small, isolated green infrastructure features are also important, these are protected through other policies of the Plan (Policy G7 and Policy G8).

Enhancement

The Network provides potential opportunities for improvements to existing spaces and network enhancement. This will often be expected from possible improvements to walking and cycling connections, enhancement of the biodiversity network and increase in landscape value. The results of this are shown in [Appendix 3](#) of the Oxford Green Infrastructure Study (2019) in the 'Local Value' and 'Opportunities' columns.

3. Protection of biodiversity and geodiversity (Policy G2)

Expectations for protected sites

The primary focus of policy G2 is the protection and safeguarding of sites and species of ecological importance. Development would not be permitted on sites of national and international significance (i.e. SAC and SSSI's), other than works related to maintenance or enhancements to the site's ecological features. The policy also contains requirements for development schemes that are adjacent to such important sites, which often have an impact area outside of their boundaries. To avoid disturbance to such sites during the construction period and to protect their integrity, development schemes would be required to include a buffer zone.

A useful resource is the 'Local Sites of Biodiversity Importance' [background paper](#) that forms part of the Oxford Local Plan submission documents. It contains the details of SSSIs within the city boundary and includes a Source Pathway Receptor Analysis (SPRA). The SPRA is a method to understand the linkages between potential hazards and risks to a SSSI. The analysis also includes recommendations for the mitigation of potential hazards.

There are other sites that are detailed in the policy, including those of importance to local wildlife, that have a biodiversity network function and habitats that have local biodiversity importance but which do not meet the criteria for national/international recognition. These sites include Local Wildlife Sites and Oxford City Wildlife Sites. Local Wildlife Sites are those with county level importance that have been assessed against criteria applied across the county. Oxford City Wildlife Sites were assessed against a set of criteria developed with Thames Valley Environmental Records

Centre, considered to be of local importance in Oxford. Potential sites were selected based on existing data, previous surveys and protections and were re-surveyed where necessary and then assessed against the new criteria. Development directly affecting such sites is not expected and would only be permitted under exceptional circumstances as follows:

- a) there is an exceptional need for the new development – described in a planning statement or similar document - and the need cannot be met by development on an alternative site with less biodiversity interest; and
- b) adequate onsite mitigation measures to achieve a net gain of biodiversity are proposed; and
- c) where this is shown not to be feasible then compensation measures will be required, secured by a planning obligation.

When a net gain will be expected

Policy G2 sets out the expectation that compensation and mitigation measures must offset any loss of and in fact achieve an overall net gain for biodiversity. For all major developments on sites that have a biodiversity interest this should be demonstrated through use of a recognised biodiversity calculator. Biodiversity calculators are used to assess whether a project would result in a loss of biodiversity, no overall loss or a net positive outcome. Existing biodiversity 'units' are calculated by considering the distinctiveness, condition and size of a habitat. The anticipated number of 'units' following implementation of proposals are then also calculated. Considerations include the time it will take for newly introduced biodiversity features to achieve their biodiversity potential. While there is no specific biodiversity calculator mandated for use by the policy, developers would need to be clear and specific as to which methodology is being followed in order for us to effectively assess its merits. Section 7 of the Biodiversity TAN gives more detail about calculating biodiversity net gain.

Policy G2 specifies greenfield sites and brownfield sites that have become vegetated as sites that this requirement will apply to. These are the sites that are likely to have a biodiversity interest that should be mitigated or compensated for. Brownfield sites with a small amount of vegetation, such as weeds in cracked hardstanding, are not considered likely to have a biodiversity interest that should be compensated for, but any more substantial amounts of vegetation will do. The 'mitigation hierarchy' would be to considered to apply: avoiding loss of habitats and environmental features wherever possible; then minimising impacts or, if not possible, adequately mitigating (remediation/restoring); or, as a last resort, compensating for those losses. Compensation or mitigation measures are expected to demonstrate net gains in features of the same or higher biodiversity value as those affected by the development. They are also expected to demonstrate equivalent or better levels of ecological functionality and improve on the extent or condition of biodiversity. They should ensure that lost or damaged features are not replaced by features of lower biodiversity.

As a form of mitigation offsetting involves the introduction of biodiversity improvements on an offsite location or project, where it can be demonstrated that such works cannot be feasibly carried out on the development site. The amount of offsetting would be on the basis of biodiversity units as ascertained by a biodiversity calculator. The onus will primarily be on the developer to identify suitable sites for improvements, although the council's Active Communities team might be able to advise on current improvement projects within the city. The preferred scenario would always remain that biodiversity improvements to be carried out on the development site, and this will be expected unless it can be shown that it is not feasible.

Proposed Environment Bill

The Government's proposed Environment Bill sets out the intended approach to securing biodiversity net gain and mitigating measures towards net loss through the planning system. The key proposed measure is a mandatory requirement for all developments, bar a few exceptions, to secure a biodiversity net gain of 10%. The net loss or gain would be required to be ascertained through DEFRA's own biodiversity metric, which is currently available online as a beta version. Where on-site improvements are deemed not to be feasible, the favoured approach is the use of a mandatory tariff system based on this biodiversity metric.

At the time of writing the policy the Environment Bill is yet to have gone through the Parliamentary process and as such, the 5% net gain requirement in policy G2 would continue to apply pending any future reviews of the policy. However the expectation is this requirement is a minimum figure and not a target, and developers are encouraged to seek opportunities to exceed this level of provision wherever possible.

4. Protection of existing open space, indoor and outdoor sports and recreation facilities (Policy G5)

Policy G1 protects the Green Infrastructure network, and many sites within this are also protected as biodiversity sites (G2), Green Belt (Policy G3), allotments (Policy G4). Policy G5 protects outdoor sports and recreation facilities. It is also relevant to the 'other' outdoor spaces that do not have individual protections on the Policies map under policies G1-G5.

Policy G5 says that existing open space, indoor and outdoor sports and recreational facilities should not be lost unless:

- a) an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or
- b) the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or

- c) the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use.

It should be noted that sites that were assessed as being part of the Green Infrastructure network (Policy G1) are highly unlikely to be considered surplus to requirements. Green Belt has separate, clear protections under Policy G3 and the NPPF. Likewise allotments are protected by Policy G2 and biodiversity sites protected under Policy G2 are not surplus and need to be protected in situ.

Outdoor sport and recreation facilities shown on the Policies Map as protected by Policy G5 are in use and not surplus. Other open spaces that are not protected on the Policies Map would need to be considered on a case-by-case basis, with strong evidence that they are surplus, if an attempt is to be made to argue that they are. It is likely this case would need to demonstrate a long-term lack of public access and/or use. Even in the case of disused playing pitches it should be remembered that the information from the [Playing Pitch Strategy](#) shows that there is not spare pitch capacity given the need for improvements to some pitches and especially over time as the population of the city grows. Disused pitches offer the potential to be brought back in to use, but if they are lost without compensation then so is that opportunity. Therefore, only in exceptional circumstances is it likely that they would be considered surplus.

Criterion b allows the loss of open spaces (particularly this applies to sports and recreation sites and otherwise unprotected open spaces) if they would be replaced by equivalent or better provision in terms of quality or quantity in a suitable location. In the case of little used open spaces with limited green infrastructure value, this might be achievable on site, alongside development. In other cases, where possible alongside on-site improvements, contributions to enhance other facilities may be acceptable. The first consideration will what is already provided on site. Equivalent re-provision will be required. This does not mean that re-provision has to be the same size or exactly the same use. We will consider need in the area and the city. This is particularly the case for playing pitches, where we will be guided by the findings of the playing pitches strategy. In some cases a different type of pitch may be more appropriate.

Reprovision of playing pitches

In terms of replacement pitches, a key consideration will be the capacity created by the re-provision or contributions. This should fully replace what is lost in terms of amount of games that can be played, or pitch capacity. Capacity of nearby pitches would need to be enhanced to a degree that mitigates what is lost. Potential to mitigate through contributions to enhance capacity elsewhere will depend on the opportunities for enhancement in the local area. Improving pitch quality, facilities and flood lighting are some enhancements that may be considered. The impact on capacity will be key. It is very unlikely that a suitable mitigation should be found for loss of a high-capacity pitch in an area

with limited other opportunities, either because there are few other pitches or because they are already of high quality.

Re-provision of open space and sports facilities should be able to serve the same community as the lost provision. This means that it should be easily accessible to the same community by walking, cycling and/or public transport. For green spaces, which may also have a townscape and biodiversity network function, even if limited, provision within the community may be particularly important.

Use of microplastics in artificial pitches

In terms of artificial pitches, consideration should be given to avoiding or at least containing the use of microplastics. Artificial turf generally uses microplastics. Because of their negative environmental impacts the EU is to introduce a ban on the deliberate addition of microplastic particles in products. In the case of pitches this may mean either that these materials will no longer be able to be used, or that containment measures will be necessary. This impacts on plastic derived infill commonly used in 3G pitches. Organic alternatives include sand-dressed and sand-filled pitches. For future-proofing and to limit harmful environmental impacts, if organic materials cannot achieve the capacity increases necessary, then containment measures should be introduced. These include elevated edges, solid surfaces surrounding the pitch, silt traps in drainage systems and 'stamp off' trays at the entrance points to the pitch.

5. Protecting existing green infrastructure features

Green infrastructure features to protect

Policy G7 sets out the expectations in terms of protecting existing green infrastructure features. Green infrastructure features may include hedgerows, trees and woodland. The objective of the policy is to safeguard such features and it does not support development that would adversely affect them particularly where there is ecological interest or public amenity. The policy sets out specific details relating to trees. Trees perform several important ecological functions, including supporting biodiversity, capturing and storing carbon and reducing air pollution. They can also have amenity value in terms of the character and appearance of an area and its setting, particularly in an urban environment. Developers are therefore encouraged to incorporate established trees within the design of their schemes, in addition to planting of new ones where possible.

Ancient woodland or veteran trees should be retained except in wholly exceptional circumstances – at the minimum it would be required to demonstrate that there is an exceptional need for the development on the site and that the need cannot be met by developing on a less sensitive location.

Other trees should be retained unless not feasible and if they are lost the loss must be mitigated for on-site with replacement tree canopy cover. If that is not possible other onsite mitigation measures will be possible.

When might protection not be feasible

There may be occasions where it is not possible to incorporate the existing trees into the design of the development, but developers will need to demonstrate that alternative site layouts are not achievable. For example, existing trees may be located adjacent to the only access point of the site or they may be located in the middle of the site, where on small sites in particular it would be difficult to achieve any layout that would not require the removal of the existing trees. The constraints from trees may prevent a level of development that is viable, which is another consideration. In these circumstances, replacement tree planting on site should be considered in the first instance. If this is not possible due to an inadequate amount of space remaining on site that would not accommodate the replacement trees, it will have to be demonstrated that alternative proposals for new Green Infrastructure will mitigate the loss of trees. This could include features such as green roofs or walls.

What is expected in terms of replacement tree canopy cover

If it is shown not to be feasible to retain trees on site then replacement tree canopy cover should be provided. The level of detail in the assessment to show that adequate tree canopy cover is proposed to compensate for any loss of trees should be proportionate to the size of the proposed development. Appendix 1 sets out when assessments will be required and the varying level of detail in the assessments.

Infrastructure features that can't be protected or replaced on site

Where replacement tree canopy cover cannot be provided, the policy allows for alternatives to be considered. Because of the multiple benefits brought about by trees and tree canopies, it would not be easy to directly translate these into a quantifiable form that can be provided on a like-for-like basis by alternatives such as green walls or green roofs. This option should therefore only be considered as a last resort after all other avenues to retain the tree or adequately provide an onsite replacement have been fully explored. If alternatives are accepted it will be important that they are Intensive setups that are more likely to provide multiple functions. For example consideration should be given to the amenity (including aesthetic and functional) value of green roofs or alternatives, as well as the range of biodiversity and impacts on carbon.

6. Enhancing and creating new green infrastructure features

Possible enhancement features

Policy G8 sets out requirements for new and enhanced green and blue infrastructure features. This includes a requirement that all major developments with flat or gently sloping roofs include green or brown roofs where feasible. Another requirement of the policy is that residential sites of 1.5ha or above include public open space that is 10% of the site area (the area of the site used for residential will be counted for mixed-use sites). The policy also requires new or enhanced green or blue infrastructure features to be incorporated for proposals requiring a Design and Access Statement.

Policy G8 includes a list of potential benefits of green infrastructure features, which the proposed additional and enhancements should contribute to where relevant. These are:

- i. public access
- ii. health and wellbeing, considering opportunities for food growing, recreation and play
- iii. biodiversity
- iv. creating linkages with the wider Green Infrastructure Network (and the countryside)
- v. climate change (including flood risk and sustainable drainage)
- vi. character/sense of place
- vii. SuDS
- viii. connectivity of walking and cycling routes

Enhancements may include enhancing existing habitat, creating new habitat on land of low existing nature conservation value and including features within the development targeted at specific species. It should be noted that habitat management proposals cannot be counted as enhancement linked to development where habitat management is already a legal requirement on the landowner, e.g. to achieve favourable condition on a SSSI. Features targeted at specific species include, for example, purpose-made nesting or roosting spaces for building-dependent birds and bats, an artificial otter holt in a river bank, hedgehog homes, log piles and so on. Artificial nest/roosts for birds and bats will be expected unless there are clear reasons why they cannot be accommodated. Internal bricks and voids are less visually intrusive than external boxes, and acceptable design solutions are possible for most buildings. Expectations are set out more fully in the Biodiversity TAN, with extensive examples and advice.

The biodiversity TAN includes a lot of advice regarding biodiversity habitat enhancements. A key principle is that the long-term management of enhancement features will be achieved.

Enhancements should also respect and respond to the context of the site, taking opportunities such as improving connectivity and extending habitats. Potential for multifunctionality should also be considered, for example how to enhance biodiversity alongside SuDS and as part of new routes.

Compensation for sites that have been removed from Green Belt

The NPPF says that where it has been concluded that it is necessary to release Green Belt land for development, plans should “*set out ways in which the impact of removing land from the Green Belt can be offset through compensatory improvements to the environmental quality and accessibility of remaining Green Belt land.*” The enhancement of remaining Green Belt land necessitates the delivery of initiatives for land which is not proposed for release for development. This could be through the delivery of strategic initiatives i.e. the creation of a new community woodland, local nature reserve etc. somewhere within the Green Belt within the City Council area, or through enhancements next to the sites proposed for release, or a combination of both.

LUC was appointed by Oxford City Council to undertake a [review](#) of the opportunities to enhance Green Belt land surrounding Green Belt sites which were proposed to be allocated for housing development. These potential opportunities are shown on the map on page 25 of that report. These sites are now removed from the Green Belt and allocated for development in the Oxford Local Plan (Policies SP23-SP30). In line with the expectation set out in the NPPF, these policies note the requirement for compensatory enhancements to surrounding Green Belt. Subsequently to this a [statement of intent](#) between the Planning and Active Communities teams at the City Council set out some more specific details relating to opportunities relating to previous Green Belt sites.

7. Appendix

Which types of planning application does Tree Canopy Cover Assessment apply to?

Type of Application	Tree Canopy Cover – net gain (compared with baseline + 25 years)	Tree Canopy Cover –no net loss (compared with baseline + 25 years)	Simple Tree Canopy Cover Assessment	Detailed Tree Canopy Cover Assessment
Householder		*		
Minor (2-9)		*	*	
Major residential of 10-199 units and major non-residential		*		*
Major (200+)	*			*

Types of Tree Canopy Cover Assessment

Type of Tree Canopy Cover Assessment	Methodology
Simple	<ol style="list-style-type: none"> 1. Calculate area of tree canopy cover lost as a result of intended tree removals. 2. Estimate area of tree canopy cover gained after 25 years as a result of new tree planting. 3. Calculate impact on existing tree canopy cover by subtracting area of tree canopy cover lost from area gained.
Detailed	<ol style="list-style-type: none"> 1. Calculate total area of existing baseline tree canopy cover within the application site. 2. Calculate existing baseline tree canopy cover as % of total application site area. 3. Taking account of key site specific tree canopy cover dynamics (e.g. tree growth, tree age, tree life expectancy/ potential to contribute etc.) project forward over time to predict total tree canopy cover within the application site at baseline + 10 , +20 and + 30 years for the following scenarios: <ol style="list-style-type: none"> a. No development. b. With development. 4. Calculate impact on existing tree canopy cover by subtracting area of tree canopy cover for no development scenario from area of tree canopy for with development scenario, both at baseline + 25 years.

