

View 6 proposed (minimum parameter)



To achieve the optimum viewing distance of between 300-500mm (as per The Landscape Institute's guidelines), we recommend printing this image edge to edge on A2 landscape and viewing it from a distance of 306mm. Please refer to section 2.8 on page 5 of this document for further information.

View 6 proposed (maximum parameter)



To achieve the optimum viewing distance of between 300-500mm (as per The Landscape Institute's guidelines), we recommend printing this image edge to edge on A2 landscape and viewing it from a distance of 306mm. Please refer to section 2.8 on page 5 of this document for further information.

View 6 proposed (minimum and maximum parameter)



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View 7 existing From bridleway/Aldershot Farm track to gated entrance of the field

Single frame image | Lens 24.278mm | Camera height above survey point 1600mm | Nominal lens rise 0mm | Date 11.11.14 | Time 14:05



View 7 proposed (minimum parameter)



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View 7 proposed (maximum parameter)



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View 7 proposed (minimum and maximum parameter)



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Realm Communications

The Workshop, Old Barn Cottage, Down Lane
Compton, Guildford GU3 1DQ

t +44 (0)1483 813888

w wearerealm.co.uk

Appendix 7.4 Note on Defra Metric for Biodiversity Offsetting

Himley Farm

Note on Defra Metric for Biodiversity Offsetting

Introduction

It has been suggested that calculations of biodiversity offsetting are used at the Himley Farm site to inform evaluation of existing ecological value and to understand what off site compensation might be required to offset any ecological impacts, which cannot be addressed on site.

Biodiversity offsets are '*conservation activities designed to deliver biodiversity benefits in compensation for losses, in a measurable way*' (Defra, 2012). The Biodiversity Offsetting methodology uses a metric to provide an assessment of the biodiversity value of a development site in order to determine any offset requirements.

Impacts at Himley Farm

A significant area of improved grassland (until recently arable land) will be lost as a result of the development at Himley Farm. These fields are of low ecological value floristically, however when they have been managed as arable land, they have contributed to a network of sites which provide valuable feeding and roosting sites for migratory (particularly wintering) birds typical of farmland.

Although there will be some losses where new access roads are created, most of the other habitats at Himley Farm, including hedgerows and ponds will be retained within the development site. There will also be enhancements of hedgerow corridors and the creation of species-rich open spaces and gardens.

It will not be possible to ensure a net gain in biodiversity without some off-site mitigation and compensation. The strategic EIA for NW Bicester Eco-town (of which the Himley Farm site forms a part) has recognised this and has recommended a coordinated approach to off-site biodiversity enhancements. A contribution will be made towards the cost of this by the developer of Himley Farm.

Principles

Biodiversity offsetting seeks to:

- Expand and restore habitats as well as protecting the extent and condition of existing habitats;
- Contribute towards the enhancement the ecological network through the creation of more, bigger, better and joined areas for biodiversity. Such areas should be managed at the local level as far as possible.

The focus of habitat restoration or creation through offsetting should be on UK BAP Priority Habitats (<http://jncc.defra.gov.uk/page-6297>). Where development is taking place on habitats in the low distinctiveness band the offset actions should result in the expansion or restoration of habitats in the medium or preferably high distinctiveness band. No 'trading down' should take place. The location of the offset (s) sites should be agreed with the local authority.

The Metric

The methodology used in this assessment follows Defra's Biodiversity Offsetting Metric (DEFRA 2011, 2012).

The losses resulting from the impact of a development and the gains achieved through offsets are measured in the same way. The condition and quality of habitats is measured in this approach. Habitats are assigned to one of three habitat band types based upon their distinctiveness. The distinctiveness of a habitat is determined by parameters such as '*species richness, diversity, rarity (at local, regional, national and international scales) and the degree to which a habitat supports species rarely found in other habitats*' (DEFRA, 2012).

Table 1: Habitat Bands

Habitat Band	Distinctiveness	Broad habitat type covered	Score (Biodiversity Units/hectare)	Offset required
High	High	UK BAP Priority Habitat	6	Same band type and ideally like for like
Medium	Medium	Semi-natural	4	Within band type or higher
Low	Low	e.g. Intensive agricultural – but may form part of an ecological network	2	Higher band type

The condition of habitats is also taken into consideration. This is assessed using the Higher Level agri-environment Scheme (HLS) condition assessment tool. This tool provides three categories for habitat condition as follows:

Table 2. Condition Weighting

Habitat Condition	Score
Good	3
Moderate	2
Poor	1

The overall score for each habitat is calculated by multiplying the distinctiveness score by the site's current condition as shown in table 3.

Table 3. Biodiversity Units Per Hectare

		Habitat Distinctiveness		
		Low (2)	Medium (4)	High (6)
Condition	Good (3)	6	12	18
	Moderate (2)	4	8	12
	Poor (1)	2	4	6

In order to calculate the scores for the offset site, a future target value is generated by considering condition of the habitat at the start of the offset project and predicting the condition at the end of the project according to the objectives and prescriptions of the management plan. This assessment does not consider the offset site because details are not available at this time.

Assessment of Himley Farm

Habitat types at the Himley Farm are as follows:

Improved grassland – until recently arable, totalling approximately 82% of the Site (72.8ha). Of **Low Local** ecological value. As a result of the Proposed Development the majority of this habitat type will be lost, with small areas of improved grassland would be provided within the green infrastructure network and gardens. When managed as arable fields these areas provided wintering habitat for farmland birds.

Arable - Of **Low Local** ecological value. As a result of the Proposed Development all of this habitat type will be lost. Arable fields provide a valuable habitat for wintering farmland birds. A small area remains on site.

Species-rich intact hedgerows - a UK BAP Habitat of Principal Importance. Of **High District/Borough** ecological value. Estimated losses for this habitat type are 185 linear metres, new hedges to be planted within the Proposed Development total 200 linear metres resulting in no overall loss in area.

Standing water- two ponds - a UK BAP Habitat of Principal Importance. Of **High Local** ecological value. These ponds will be retained and restored as part of the Proposed Development.

Broadleaved plantation woodland – a UK BAP Habitat of Principal Importance. Of **High Local** ecological value. This habitat type is to be retained in the Proposed Development with the exception of a breach for an access road.

Scores for Himley Farm are shown in Table 4.

Table 4. Scores for Himley Farm

Habitat type	Condition (based on the HLS Farm Environmental Plan)	Distinctiveness	Metric score
Improved grassland	Poor (1) – based on the following criteria - at least 2 of the following apply: rye grasses and clover cover 30%+, sward species poor with 8 or less species, wild flower cover less than 10%	Low (2)	2
Arable	Poor (1)	Low (2)	2
Species-rich intact Hedgerow ¹	Moderate overall (2)	3	6
Standing water	Good (3) – do not have high floristic value but support a species of high value (great crested newt)	High (6)	18
Broadleaved plantation woodland	Moderate (2) Free from recent damage, native species dominant (less than 10% non native and invasive species), diverse age and height structure, standing and fallen dead trees over 20cm diameter present, protected from damage by operations	Medium (4)	8

Conclusion

Given that the ponds and woodland will be retained and that there will be no net loss of hedgerow on the development site, the key metric for the off-site compensation is that for the fields (improved grassland and arable) that will be lost.

The score for these areas is **2 biodiversity units per hectare**. The area lost is **72.8 ha**. In order to follow the guidance (DEFRA 2012) the compensatory area must be better quality, although a smaller area of land will be required. Another consideration is that wintering farmland birds do not require intrinsically high value habitats and some farming operations will be required at the offsetting site to maintain habitat that is attractive to wintering farmland birds. RSPB recommends that hedgerow management is relaxed to help wintering birds and areas are sown with species that provide seed for wild birds (e.g. phacelia, kale, winter linseed, quinoa and triticale).² These elements and techniques will ultimately be more important than providing a particular area of farmland at the offsetting site and calculations should only be used as a guide.

¹ See Appendix for hedgerow assessment – a different method is used to assess linear habitats

² <http://www.rspb.org.uk/community/ourwork/b/hopefarm/archive/2005/12/22/wildbird-cover-on-trial.aspx>

References

DEFRA (2005). *Higher Level Stewardship: Farm Environmental Plan Guidance Handbook* Rural Development Service

DEFRA (2011). *Biodiversity offsetting: Guiding principles for biodiversity offsetting* July 2011. On-line available from www.defra.gov.uk/publications/

DEFRA (2012). *Biodiversity Offsetting Pilots, Technical Paper: the metric for the biodiversity offsetting pilot in England* PB 13745 March 2012 On-line available from <https://www.gov.uk/government/publications/technical-paper-the-metric-for-the-biodiversity-offsetting-pilot-in-england>

DEFRA () *Guidance for Developers*

<https://www.gov.uk/government/publications/biodiversity-offsetting-guidance-for-developers>

Natural England (2013). *Higher Level Stewardship: Environmental Stewardship Handbook*. Fourth Edition

Appendix

Hedgerows & Linear Features

A separate method is used to assess hedgerows and other field boundary features, such as lines of trees or habitat banks. These are placed in the high distinctiveness habitat type band, with a requirement for 'like-for-like' offsetting by expansion (planting of new hedges) only due to the complexities for calculating requirements for restoration and lengths.

The amount of hedgerow required to offset each metre of hedgerow lost is dependent upon the quality of that hedge lost to development. Again the HLS Farm Environmental Plan (FEP) handbook (DEFRA, 2005) provides the model used for condition assessment as follows:

Table . Hedge Assessment

Condition of hedgerow	Multiplier
Good	3
Moderate	2
Poor	1

Condition assessment for high environmental value hedges from FEP handbook (for hedges no planted, laid or coppiced within the last 5 years) is based on the following criteria:

1. Height – minimum 2 metres using the most common height from the base of the woody stems, bank height, trees and gaps excluded.
2. Width – minimum threshold of 1.5 metres in width, woody component only between the shoot tips and widest point, using the most common width, gaps excluded.
3. Gappiness – assessment of the horizontal gappiness of the woody component. No more than 10% of the hedge length should be occupied by gaps, no one gap should exceed 5 metres in width.

The majority of hedges at Himley Farm were assessed to be 'important' (i.e Good), however there are some of lower quality (i.e. Moderate) (Hyder Hedgerow assessment, 2010).

UK and Ireland Office Locations

