Metz Way/ Abbeymead Avenue

Ecological Impact Report

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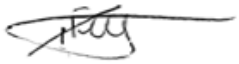
Rev 0	Name: Tegan Fellows Signature:  Date: 29/07/2016	Name: Stuart Graham Signature:  Date:31/07/2016	Name: Michael Peile Signature:  Date:31/07/2016
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Contents

1 Introduction ..... - 1 -
1.1 Background ..... - 1 -
1.2 Study area and location ..... - 2 -
1.3 Objectives ..... - 3 -
1.4 Limitations ..... - 3 -
2 Methodology ..... - 4 -
2.1 Desk Study ..... - 4 -
2.2 Field Survey ..... - 5 -
3 Results ..... - 6 -
3.1 Habitats ..... - 6 -
3.2 Fauna ..... - 7 -
4 Recommendations for Further Work 9
4.1 Habitats 9
4.2 Fauna 9
5 References 11

Tables

Table 1 - Statutory designated sites within a 2km radius of the sites ..... - 4 -

1 Introduction

1.1 Background

Amey Consulting have been commissioned by Gloucestershire County Council to undertake an investigation into the possible ecological constraints at Metz Way, Gloucester prior to the commencement of works. The works are proposed to alleviate congestion along the corridor through increased modal share for buses and cycling. Amey ecologists have been commissioned to carry out a Ecological Impcts Assessment (EIR) at the 2 carriageway widening sites within the scheme extent. The ecological survey associated with the EIR aims to highlight any evidence of (or potential for) protected species or habitats that could result in a constraint to the proposed works.

- Provide baseline information on the current habitats and ecological features both on-site and in the immediate surrounding area;
- Identify the presence or potential presence of any protected species or habitats and provide an appraisal of any potential effects the proposed development may have on these;
- Identify the proximity of any sites designated for nature conservation interest and provide an appraisal of any potential effects the proposed development may have on these;
- Provide recommendations for further survey work and / or mitigation measures, if required and present opportunities for habitat enhancement.

The sites were surveyed by a suitably qualified and experienced Amey ecologist in May 2016. This report details these initial findings and makes recommendations for further targeted surveys and work where necessary.

1.2 Study area and location

Site 1, Eastern Avenue/Metz Way junction, is situated at SO849176 and Site 3 North Upton lane/ Abbeymead (NU/A) avenue is situated at NGR: SO864175, located approximately 2 miles East from the centre of Gloucester. The landscape immediately surrounding NU/A is urban with predominantly residential properties divided by fences, and species-poor ornamental hedgerows; wider surrounds of the scheme also illustrate a cityscape. Site 1 is of a similar landscape although there are more commercial properties within the surrounding area. Present along the carriageway are strips of mixed plantation woodland, which provide visual and audible screening for the surrounding properties, and thin strips of maintained amenity grassland. These ecological corridors have been surveyed in order to assess their potential to support protected/invasive species.

1.3 Objectives

This report is intended to record relevant habitats, including any that are formally designated for nature conservation, and to highlight the potential for legally-protected or otherwise notable species. This appraisal also makes recommendations for further, detailed surveys that may be required to confirm the presence or likely absence of such species. This is in order to ensure that further ecological survey and advice is appropriately targeted and reflects the demands of wildlife legislation and government nature conservation policy (refer to Appendix A for details).

Where this preliminary survey indicates that there may be impacts to such ecologically-sensitive features, a brief outline indication of likely mitigation requirements is also provided.

1.4 Limitations

This report highlights habitats and the potential for notable species evident on the day of the survey visit, combined with recent records obtained from third parties. It does not record any ecological features that may only appear at other times of the year and therefore were not evident at the time of the visit. This includes flowering plants that are not readily identifiable prior to their flowering season. The absence of sightings on the visit also does not constitute the overall absence of the species from the sites.

This report deals with matters of legal significance but does not constitute professional legal advice. The Client may wish to seek professional legal interpretation of the relevant wildlife legislation.

2 Methodology

2.1 Desk Study

The desk study included a review of freely available information, relevant policy and guidance and sought to identify any statutory designated sites for nature conservation through a review of the Natural England, JNCC and Multi Agency Geographic Information for the Countryside (MAGIC). A 2km search radius was adopted for all statutory designated sites.

2.1.1 Designated Sites

A review of MAGIC confirmed that the proposed Scheme footprint is not directly located within any statutory designated site for nature conservation.

Magic did identify the presence of five sites located within a 2km radius of the centre of the Scheme; detailed in table 1, below;

Table 1 - Statutory designated sites within a 2km radius of the sites

Designation Name	Designation Type	NGR	Distance from site	Description of Designation
Barn Wood Arboretum	Local Nature Reserve	SO 861 179	0.34 miles	The arboretum has many mature trees and unimproved grassland, providing habitat for birds, insects and small mammals. The grass is managed by grazing rare breed sheep in the winter.
Hucclecote Roman Villa	Scheduled Monument	SO 87691 17548	0.80 Miles	A Roman settlement has been excavated at Brockworth, 700m east of the site, and Hucclecote Roman villa lies 650m to the west, close to the Horsbere Brook. Archaeological fieldwork undertaken within the immediate vicinity of the villa revealed further Romano-British buildings, a corn dryer and a complex system of enclosures. It was conceivable that these agricultural features might extend into the road corridor.

Designation Name	Designation Type	NGR	Distance from site	Description of Designation
Hucclecote Meadows	Local Nature Reserve and Site of Special Scientific Interest	SO 871 163	0.90 miles	A series of lowland meadows overlying Lower Lias clays in the Severn Vale near the outskirts of Gloucester. They represent one of the few remaining areas of such herb-rich ancient pastures in the county and have traditionally been managed for hay and stock grazing.
Saint bridge balancing pond	Local Nature Reserve	SO 849 166	0.94 miles	Saintbridge Pond is an area of water bodies which supports a broad range of wildlife.
Matson moated site	Scheduled Monument	SO 85001 15797	1.33 miles	The monument includes a moated enclosure set on low-lying ground. The surface of the island is not raised above that of the surrounding ground and is uneven, suggesting that the remains of structures will survive as buried features

2.2 Field Survey

The site was visited by a suitably qualified Ecologist; Tegan Fellows BSc (Hons) and arboriculturist Ellen Boardman BSc (Hons) MSc TechArborA, on 3rd May 2016. Environmental conditions experienced during the survey were noted as being sunny, warm, with no precipitation, and no wind.

Habitats within and immediately adjacent to the sites were recorded, and the potential for protected or otherwise notable species was assessed. Where any incidental sightings or indirect evidence of protected species presence was observed, this was recorded, but no detailed species-specific surveys were undertaken. The presence/absence of invasive plant species was also noted at the time of survey.

3 Results

3.1 Habitats

The habitats recorded within the study area include the following (listed in approximate order of decreasing extent).

- Amenity grassland
- Plantation Broadleaved Woodland
- Hard standing

The following habitat descriptions are based on field survey results at the time of the survey.

3.1.1 Amenity grassland

The primary habitat in the survey sites is amenity grassland comprising mostly of dwarf perennial ryegrass *Lolium perenne* and creeping red fescue *Festuca rubra*, as well as occasional white clover *Trifolium repens* , dandelion *Taraxacum* spp and daisy *Bellis perennis*.

3.1.2 Broadleaved plantation woodland

Strips of plantation woodland boarder the carriageway and offer a level of screening for the adjacent properties. The width of the woodland is approximately 8m at Site 3. Dominant species within the woodland include beech *Fagus sylvatica,* field maple *Acer campestre* and ash *Fraxinus excelsior.* The understory of the woodland was sparse, with some scattered scrub. No trees present on site were mature.

3.1.3 Hard standing

The predominant works areas are on carriageway and adjacent foot paths.

3.2 Fauna

3.2.1 Bats

The area surrounding the scheme extent is largely urban, comprised of hard standing and residential properties (commercial near Site 1). All structures surrounding the scheme are relatively newly constructed houses with no obvious crevices that could be utilised by bats, consequently the sites are assessed as having negligible bat roost potential.

Small strips of amenity grassland boarder the carriageway, alongside narrow corridors of mixed plantation woodland- used as screening for the surrounding properties. The trees within the woodland are immature and do not hold suitable features to host roosting bats; however may provide an ecological corridor for navigation and foraging.

For the purposes of this report, bats have been scoped out.

3.2.2 Great Crested Newt

Local records indicate GCN presence within the Gloucester area, with the closest records to the sites located approximately 2.35km away. Due to distance, availability of ponds and ecological barriers it is unlikely GCN will migrate to the site extents.

For the purposes of this report, GCN have been scoped out.

3.2.3 Hazel Dormice

The Habitats present on site were not optimal for hazel dormice and hence they are not assumed to be present within the extents of the scheme. There are no records of hazel dormice within a 2km radius of the sites.

For the purposes of this report, hazel dormice have been scoped out.

3.2.4 Reptiles

No reptiles were observed during the site walkover, and additionally the survey areas within the site did not have the potential to attract reptiles. Records indicate a presence of common reptiles in the area inclusive of grass snake *Natrix natrix*, (2km from proposed scheme) common lizard *Zootoca vivipara* (3.7km from the proposed scheme) and slow worm *Anguis fragilis* (950m from proposed scheme).

For the purposes of this report, reptiles have been scoped out.

3.2.5 Badger

Badgers are protected under the *Protection of Badger Act*, 1992 and therefore details of sett locations are treated as confidential and not discussed within this report.

3.2.6 Breeding Birds

Birds were heard and observed during the site walkover, hence it can be assumed that the wooded areas hold high nesting potential between the months March – August inclusive.

3.2.7 Invasive Species

No invasive species, floral or faunal were noted on the site walkover.

4 Recommendations for Further Work

The following recommendations have been made in Section 5 based on the results of this preliminary study. These should be implemented with full consideration of wildlife legislation described in Appendix A and seasonal restrictions shown in Appendix B.

4.1 Habitats

4.1.1 Amenity grassland

The amenity grassland to be impacted within the survey extents holds little ecological value and will likely recover quickly from any disturbance after excavations. No recommendations are required.

4.1.2 Broadleaved Woodland

Mitigation for trees will be outlined in the arboricultural report.

4.1.3 Hard standing

No ecological value. No recommendations required.

4.2 Fauna

4.2.1 Bats

No mitigation necessary.

4.2.2 Hazel Dormice

No mitigation necessary.

4.2.3 Reptiles

No mitigation necessary.

4.2.4 Badger

Badgers are protected under the *Protection of Badger Act*, 1992 and therefore details of sett locations are treated as confidential and not discussed within this report.

4.2.5 Breeding Birds

If the works will involve the loss of suitable bird nesting habitat – (hedgerows, shrubs/scrub or trees) this should be undertaken outside of the nesting season (March – August inclusive as a guide) and with consideration to the recommendations made for other species to avoid impacting on birds. This check is generally valid for 48hrs. If nests are present and active the area will need to be clearly marked off and the associated vegetation cannot be removed until the chicks have fledged.

4.2.6 Invasive Species

No recommendations.

5 References

[1] All UK (and individual UK countries) legislation can be viewed at: http://www.legislation.gov.uk/browse

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