

Devizes HQ

Preliminary Ecological Appraisal

Date: June 2023

For: Ridge and Partners LLP

Ref: C651

Produced By:

Cotswold Ecology Ltd

www.cotswoldecology.co.uk

General Notes

Project No.: C651

Title: Devizes HQ - Preliminary Ecological Appraisal

Client: Ridge and Partners LLP

Date: June 2023

Office: Stroud

Status: Rev 0

Author	<u>James Pattenden</u>	Technical reviewer	<u></u>
Signature		Signature	<u></u>
Date:	<u>19/06/2023</u>	Date:	<u></u>
Project manager	<u>James Pattenden</u>	Quality reviewer	<u>Lisa Collett</u>
Signature		Signature:	
Date:	<u>19/06/2023</u>	Date:	<u>19/06/2023</u>

Cotswold Ecology Ltd has prepared this report for the sole use of the client, showing reasonable skill and care, for the intended purposes as stated in the agreement under which this work was completed. The report may not be relied upon by any other party without the express agreement of the client and Cotswold Ecology Ltd. No other warranty, expressed or implied, is made as to the professional advice included in this report.

Where any data supplied by the client or from other sources have been used, it has been assumed that the information is correct. No responsibility can be accepted by Cotswold Ecology Ltd for inaccuracies in the data supplied by any other party. The conclusions and recommendations in this report are based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.

No part of this report may be copied or duplicated without the express permission of Cotswold Ecology Ltd and the party for whom it was prepared.

Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of Cotswold Ecology Ltd.

Contents

1	Introduction.....	5
1.1	Purpose of the Report	5
1.2	Ecological Context	5
1.3	Structure of the Report	5
2	Methods.....	7
2.1	General.....	7
2.2	Background Data Search	7
2.3	Extended Phase 1 Habitat Survey	7
2.4	Invasive Plant Species.....	8
2.5	Assessing the Value of Habitats	8
2.6	Habitat Assessment for Protected Species	8
2.6.1	General	8
2.6.2	Badger	9
2.6.3	Bats	9
2.6.4	Great Crested Newt	12
2.6.5	Nesting Birds	12
2.6.6	Common Reptiles	12
2.7	Criteria for Assessment	13
3	Results.....	14
3.1	Background Data Search	14
3.1.1	Statutory Designated Sites.....	14
3.1.2	Protected Species	14
3.2	Habitats.....	15
3.2.1	Introduction.....	15
3.2.2	Trees	15
3.2.3	Hedgerows	17
3.2.4	Amenity Grassland.....	18
3.2.5	Ornamental Planting	19
3.2.6	Buildings and Hardstanding	19
3.3	Protected Species	20
3.3.1	Badgers	20
3.3.2	Bats	20
3.3.3	Great Crested Newt	2
3.3.4	Nesting Birds	3
3.3.5	Common Reptiles	3
4	Evaluation and Conclusions	4
4.1	Designated Sites	4
4.1.1	Statutory Designated Sites.....	4
4.2	Habitats and Plant Species	4

4.2.1 Habitats4

4.2.2 Plant Species5

4.2.3 Invasive Plant Species5

4.3 Protected Species5

4.3.1 Badgers5

4.3.2 Bats5

4.3.3 Nesting Birds6

4.3.4 Common Reptiles7

4.4 Enhancements7

5 References8

6 Figures.....10

APPENDIX 1 – TARGET NOTES.....11

Executive Summary

1. This report describes the results of a Preliminary Ecological Appraisal carried out by Cotswold Ecology at the Police and Crime Commissioner (PCC) for Wiltshire and Swindon Headquarters on London Road, Devizes, SN10 2DN (Ordnance Survey Grid Reference: SU012618). A location map is given in Figure 1.
2. A field survey was undertaken on 22nd May 2023 and included a Phase 1 Habitat Survey and an assessment of the site's potential to support protected species.
3. Roundway Down and Covert Site of Special Scientific Interest is located approximately 1.45 km to the north and Drews Pond Wood Local Nature Reserve is located 1.98 km to the south of the site. The integrity of the designated sites will not be affected by the proposals.
4. The trees provide the greatest nature conservation interest on the site but it is unlikely that many of the trees will be affected, being located on the boundaries or with the amenity areas along the frontage of the site. We would recommend that all mature trees are retained within the proposals if possible. The remainder of the habitats to be affected by the proposals contain common and easily replaceable species and are generally of low or negligible nature conservation interest, comprising largely ornamental areas, amenity grassland and hardstanding.
5. No Badger setts will be affected by the proposals, but Badgers are using the site to pass through. This access will remain unaffected following the completion of the extension. However, as a precaution during construction, any excavations should not be left overnight without means of escape for Badgers (i.e. scaffold board left as a ramp).
6. Three of the buildings were classified as having Low bat roosting potential. We would suggest that each of the three buildings are subject to a single emergence and/or re-entry survey prior to works commencing.
7. All wild birds are protected by law when nesting and as such, should any nesting habitat be cleared during the works, this should be completed outside the bird nesting season (March

to August). In the event that clearance works are due to commence inside this period, a check for nests should be carried out by a suitably qualified ecologist prior to clearance. If any active nests are recorded, the nest should be left undisturbed until the chicks have fledged.

8. We have suggested a package of ecological enhancements including the provision of bat and bird boxes and a hedgehog house. A landscaping and maintenance scheme that would maximise biodiversity would be hugely beneficial for the site.

1 Introduction

1.1 Purpose of the Report

This report describes the results of a Preliminary Ecological Appraisal carried out by Cotswold Ecology Ltd at the Police and Crime Commissioner (PCC) for Wiltshire and Swindon Headquarters on London Road, Devizes, SN10 2DN (Ordnance Survey Grid Reference: SU012618). A site location map is given in Figure 1.

Proposals for the site include the redevelopment of the site, including the renovation of some buildings and the demolition of others, to allow for the construction of new buildings to provide a facility fit for modern policing.

The purpose of the survey was to assess the ecological value of the site and to assess its potential to support protected animal species and any important plant communities.

1.2 Ecological Context

The site comprises a series of buildings of varying age and in use as the police headquarters. The grounds largely comprise amenity grassland with mature trees and hardstanding parking and access roads. The A361 London Road lies on the eastern boundary beyond which lies a row of residential houses and the Kennet & Avon Canal. The canal is also located approximately 84 m to the south, separated from the site by houses and sports pitches. The sports pitches extend around the site to the south-west and west, beyond which lies a residential estate. There are allotments located approximately 197m to the south-west which are connected to the site by a line of trees and hedgerows. Beyond the allotments to the west lies Devizes cemetery and open countryside. Quakers road lies on the northern boundary beyond which lies some recreational space with mature trees, surrounded by residential development and a school. Open countryside lies approximately 335m to the north.

1.3 Structure of the Report

The remainder of this report is structured as follows:

- Section 2 describes the survey and assessment methods;
- Section 3 presents the survey results;
- Section 4 gives an evaluation of the results and provides recommendations for enhancements;

Devizes HQ
Preliminary Ecological Appraisal

- Section 5 lists the references;
- Section 6 provides the figures; and
- Appendix 1 provides Target Notes from the Phase 1 Habitat Survey.

2 Methods

2.1 General

A field survey was undertaken by James Pattenden on 22nd May 2023 and included a Phase 1 Habitat Survey and an assessment of the site's potential to support protected species.

James Pattenden holds Natural England protected species survey licences for bats (Class 2 licence number 2015-106-CLS-CLS and Bat Low Impact Class Licence RC162, Annex B and D), Great Crested Newts, Dormice and Barn Owls. James is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and has 18 years of experience in ecological surveying for developments.

2.2 Background Data Search

Records of protected and notable species were requested from Wiltshire and Swindon Biological Records Centre (WSBRC) but were unable to return the records in time for the publication of the report. Given the habitats and species likely to be present on the site, the lack of records are not considered a constraint to the conclusions and recommendations of this assessment. The MAGIC (the Multi-Agency Geographic Information for the Countryside) website was searched for records of European Protected Species (EPS) licence applications in the area. Internationally and nationally designated sites up to a 1km from the site and Special Areas of Conservation (SAC) designated for bat species up to 10km from the site were also identified. Aerial photographs and Ordnance Survey maps were also reviewed to assess the site in context of surrounding habitats.

2.3 Extended Phase 1 Habitat Survey

The botanical survey centred on the Phase 1 Habitat Survey approach (Joint Nature Conservation Committee 2010) as extended for use in Environmental Impact Assessment (Institute of Environmental Assessment 1995). This involves the following elements.

- Habitat mapping using a set of standard colour codes to indicate habitat types on a Phase 1 Habitat Map (these are shown in Figure 3).
- Description of features of ecological or nature conservation interest in notes relating to numbered locations on the Phase 1 Habitat Map, called target notes (provided in Appendix 1).

Basic Phase 1 Habitat Survey methods are described in detail in Joint Nature Conservation Committee 2010. Limits to the achievable reliability of the method are discussed in Cherrill & McClean (1999).

Plant nomenclature in this report follows Stace (2019) for vascular plants. Plant names in text are given with scientific names first, followed by the English name in brackets. Doubtful identifications are preceded by 'cf.' placed before the specific epithet where the plant is very probably the species indicated, but it is impossible to distinguish it from similar members of the genus with certainty.

2.4 Invasive Plant Species

The list of invasive plant species included on *Schedule 9 of The Wildlife and Countryside Act 1981* (as amended) is extensive and these plants are found in a range of different habitats. The walkover survey checked in particular for the presence of the most commonly found and problematic species: *Impatiens glandulifera* (Indian Balsam), *Heracleum trachyloma* (Giant Hogweed), *Fallopia japonica* (Japanese Knotweed) and *Fallopia sachalinensis* (Giant Knotweed).

2.5 Assessing the Value of Habitats

The scientific value of habitats for nature conservation is assessed according to widely accepted criteria of which the most important are naturalness, extent, rarity, and diversity. These and others are described in an extensive literature (Ratcliffe 1977, Usher 1986). In addition, the following criteria were used.

- A list of priority habitat types have been identified in connection with UK implementation of the EC 'Habitats Directive'. Other important habitats and species are identified in National Biodiversity Action Plans (UK BAP website: www.ukbap.org.uk).
- Special importance attaches to ancient semi-natural habitats that depend for their survival on traditional types of land management, especially where these have suffered large reductions over the last fifty years due to agricultural intensification and extensification. Habitats in these categories are discussed in Rackham (1986).

2.6 Habitat Assessment for Protected Species

2.6.1 General

The site was assessed for protected species and recognisable areas (habitat, land parcels or locations) that are suitable for protected species were identified and recorded as numbered

locations on the Phase 1 Habitat Map (Figure 3). Obvious signs and incidental sightings of protected species would have been noted where present, although this type of survey cannot usually confirm whether species are actually present or absent.

Taking into consideration the geographical region and the habitat types at the site, protected animals that could be encountered are:

- Badger (*Meles meles*);
- bats;
- Great Crested Newt (*Triturus cristatus*);
- nesting birds; and
- common reptiles.

2.6.2 Badger

An initial assessment was carried out to identify areas that might be used by Badgers (*Meles meles*) for commuting, foraging or sett-building within 30 m of all areas potentially affected by works (where access was possible). The area was searched for signs of Badgers such as setts, foraging signs, paths (runs) and latrines.

2.6.3 Bats

General

The bat survey was carried out according to standard bat surveying guidelines issued by the Bat Conservation Trust (Collins, 2016). This comprised a habitat assessment and detailed inspection of the buildings and trees.

Habitat Assessment

Habitats were assessed for their suitability for roosting, foraging and commuting bats. Although foraging requirements differ between species, good bat foraging habitat generally includes sheltered areas and habitats with good numbers of insects, such as woodland, scrub, hedges, watercourses, ponds, lakes and more species-rich or rough grassland. For commuting, well-connected hedgerows, woodland edge, watercourses and other linear features are generally considered to be of high value.

Daytime Bat Survey

As bats are crevice-dwelling mammals it is often difficult to thoroughly inspect buildings for bats and evidence of bats without a destructive search, which is not generally practical or acceptable. An example of this would be where bats roost in between the roof tiles and the lining. These areas cannot be inspected, but a surveyor would know that bats might roost here because there are places where bats could gain entry from the outside.

The buildings were therefore assessed for bat roost potential according to the following factors that influence the likelihood of bat roosting:

- Surrounding habitat: whether there are potential flight-lines and bat foraging areas nearby.
- Construction detail: the type and construction of architectural features such as attics, soffit boxes, lead flashing and hanging tiles that could be used by roosting bats. Some construction details and materials are more favourable to bat occupation than others.
- Building condition: whether the building has no roof or has a sound roof without any potential bat-access points.
- Internal conditions: bats favour sheltered locations with a stable temperature regime, protection from the elements and little wind/light/rain penetration.
- Potential bat-access points: whether there is flight and crawl access.
- Potential roosting locations: descriptions of all bat-accessible voids, cracks and crevices.

A description of the buildings were recorded and digital photographs were taken as a record. The development was categorised into a standard scheme as detailed in Table 1 on the following page.

Table 1. Classification criteria for Bat Roosting Potential (BRP) of Buildings and Built structures

Category (Potential to support roosting bats)	Description
Negligible Potential	Buildings with no features suitable for supporting roosting bats. Modern, well maintained buildings or built structures that provide few opportunities for bat access/roosting (i.e. with no cracks or crevices); composed of prefabricated steel and sheet materials; no internal loft space; high level of regular disturbance; high interior light levels and subject to large temperature fluctuations. Buildings may be surrounded by poor or sub-optimal bat foraging habitat. No evidence of bats found.
Low Potential	Buildings with limited features to support roosting bats - shallow crevices where mortar is missing between brickwork. Buildings may have large open locations subject to large temperature fluctuations. Buildings may be surrounded by poor or sub-optimal bat foraging habitat. No evidence of bats found.
Moderate Potential	Buildings with some features suitable for roosting bats – building usually of brick or stone construction with a small number of features suitable for roosting bats – loose roof or ridge tiles, gaps in brickwork, gaps under fascia boards, and/or sealed internal loft space. No evidence of bats found.
High Potential	Buildings with a large number of features or extensive areas with potential for roosting bats. Sheltered locations with a stable temperature regime and suitable access points. Features can include: weatherboarding and/or hanging tiles with gaps/large (>20cm) roof timbers with mortise joints, cracks, holes); poorly maintained fabric providing ready access into roofs, walls, but at the same time not being draughty and cool; large and complicated roof void with unobstructed flying spaces. No evidence of bats found.
Confirmed Roost	Bats or evidence of bats recorded within the building during the initial inspection surveys or during dusk/dawn surveys. A confirmed record (supplied by records centre/local bat group) would also apply.

Features of the buildings were then inspected for evidence of bats. In this case, visual, systematic examinations were made for bats and evidence of bats, both internally and externally.

Evidence of roosting bats includes droppings, urine stains, staining from fur-oils, scratch marks, wear marks, feeding remains, dead bats, odour, squeaking and chattering, and in some cases the absence of cobwebs.

Tree Survey

An assessment of the trees on the site from ground level using a Clu-lite torch and binoculars where necessary was also made to identify any Potential Roosting Features (PRF) such as cracks, splits and holes that may be used by roosting bats. Any PRF observed were recorded using criteria set out in the Bat Tree Habitat Key (BTHK, 2018).

2.6.4 Great Crested Newt

There are no ponds on the site. The suitability of aquatic and terrestrial habitat on the site and in the immediate vicinity (up to 500m from the site, a distance that this species can travel between ponds and terrestrial habitat) was considered, along with the habitat-connectivity between suitable habitat areas. Aerial photography and Ordnance Survey maps were searched for signs of ponds or other suitable breeding habitat within 500 m of the site.

2.6.5 Nesting Birds

Habitat that might be used by nesting birds was identified.

2.6.6 Common Reptiles

The site was assessed for reptiles, with particular attention paid to those features that provide suitable basking areas (e.g. south-facing slopes), hibernation sites (e.g. banks, walls, piles of rotting vegetation) and opportunities for foraging (rough grassland and scrub).

The site was assessed for its suitability for each of the four common reptile species. The specific habitat requirements differ between species. Common Lizards (*Zootoca vivipara*) use a variety of

habitats from woodland glades to walls and pastures, although one of their favoured habitats is rough grassland. Slow-worms (*Anguis fragilis*) use similar habitats to Common Lizards, and are often found in rank grassland, gardens and derelict land. Grass Snakes (*Natrix natrix*) have broadly similar requirements to Common Lizards with a greater reliance on ponds and wetlands, where they prey on Common Frogs. Adders (*Vipera berus*) use a range of fairly open habitats with some cover, but are most often found in dry heath (Beebee & Griffiths 2000).

2.7 Criteria for Assessment

The nature conservation value of habitats is assessed according to widely accepted criteria that relates to important factors such as naturalness, extent, rarity, and diversity. These and others are described in an extensive literature (Ratcliffe 1977, Usher 1986). In addition, the following criteria were used:

- relevance to International, European and wildlife law;
- relevance to the UK Government's duty to the Convention on Biological Diversity (CBD) through national and local Biodiversity Action Plans;
- semi-natural habitats, such as ancient woodland (Rackham 1986),

Significant species were defined as follows:

- species protected by International, European and wildlife law;
- IUCN Red List species;
- County Red Data Book species (Cheffings and Farrell 2005);
- Priority habitats and species listed within national and local BAPs; and
- other notable species listed as rare or scarce in literature issued by conservation organisations or learned societies (e.g. Stewart et al. 1994).

3 Results

3.1 Background Data Search

3.1.1 Statutory Designated Sites

Roundway Down and Covert Site of Special Scientific Interest (SSSI) is located approximately 1.45 km to the north. The site is designated for its unimproved chalk grassland and mixture of scrub and woodland habitat, all of which provide excellent habitat for biodiversity, especially butterflies.

Drews Pond Wood Local Nature Reserve (LNR) is located 1.98 km to the south of the site. The site is designated for the woodland habitat and butterfly interest.

There are no statutory designated sites for bats within 10 km of the site.

3.1.2 Protected Species

Bats

An EPS development licence has been obtained for works at Ordnance Survey (OS) Grid Reference SU 0168 6229 (licence reference 2017-30665-EPS-MIT), located approximately 340 m north-east of the site. The licence was for the destruction of a non-breeding Common Pipistrelle (*Pipistrellus pipistrellus*) roost.

There are a series of other development licences in the west of Devizes (approximately 1.2 km to the west for the nearest site) for works affecting Serotine (*Eptesicus serotinus*), Brown Long-eared Bat (*Plecotus auritus*), Natterer's Bat (*Myotis nattereri*) and Soprano Pipistrelle (*Pipistrellus pygmaeus*). This includes a licence to impact a breeding site (licence reference 2015-7620-EPS-MIT-1), although it is not known which species was using the site for breeding.

There has also been an EPS development licence issued (EPSM2010-2271) for works affecting Lesser Horseshoe (*Rhinolophus hipposideros*) amongst other species at a site located approximately 1.5 km to the north-east.

Great Crested Newts

There are records of ponds being surveyed for Great Crested Newts from licence returns on www.magic.gov.uk, the closest being approximately 2.1 km to the north-west. However, all ponds surveyed within 5 km of the site returned negative results for Great Crested Newts when surveyed. The nearest pond returning a positive presence of the species is located 5.8 km to the north-west of the site.

The nearest EPS development licence for works affecting Great Crested Newt is located at OS Grid Reference ST91966305, located approximately 7.4 km to the north on the edge of Calne (licence reference 2015-9393-EPS-MIT-2).

No other species were the subject of EPS development licences in the area.

3.2 Habitats

3.2.1 Introduction

The site comprises a collection of buildings in use as the police headquarters with associated amenity space, trees and hardstanding areas. The site therefore contains the following broad habitat types:

- Trees;
- Hedgerows;
- Amenity Grassland;
- Ornamental Planting; and
- Buildings and hardstanding.

The habitats are shown in Figure 3 and are described in more detail below.

3.2.2 Trees

There several areas of mature trees on the site, largely around the boundaries of the site but with some interspersed within the buildings and car parks. The frontage of the site contains amenity

planting areas with several collections of mature and semi-mature trees present. There are mature trees at *Target Note 2* comprising *Acer campestre* (Field Maple), *Acer platanoides* (Norway Maple), *Robinia pseudoacacia* (False Acacia), *Pinus sylvestris* (Scots Pine), *Prunus avium* (Wild Cherry) and *Tilia x europaea* (Common Lime). There is also a large *Platanus x hispanica* (London Plane) within the ornamental planting area at *Target Note 1*.

The area amenity grassland at *Target Note 10* contains a row of mature *Acer pseudoplatanus* (Sycamore) with *Salix fragilis* (Crack Willow), *Sorbus aucuparia* (Rowan) and *Tilia x europaea* (Common Lime). There are also mature trees on the frontage within this areas including *Pinus sylvestris* (Scots Pine) and *Sorbus aria* (Whitebeam).

There is also a row of *Sorbus intermedia* (Swedish Whitebeam) at *Target Note 12* within an area of amenity grassland.

There is a line of mature trees on the site boundary comprising *Fagus sylvatica* (Beech) and *Fagus sylvatica* f. *purpurea* (Copper Beech) at *Target Note 7* which may have a Tree Preservation Order (TPO).

There is a less managed line of trees between the site and the adjacent sport's club to the south (*Target Note 8*) comprising *Cupressus x leylandii* (Leyland Cypress) and *Aesculus hippocastanum* (Horse Chestnut) with a dense understorey of *Crataegus monogyna* (Hawthorn) and *Sambucus nigra* (Elder).



Plate 1. View of the trees within the lawn at *Target Note 2*.



Plate 2. The line of mature trees on the site boundary at *Target Note 7*



Plate 3. The line of trees between the site and the adjacent sport's club to the south (*Target Note 8*).



Plate 4. Mature and semi-mature trees at *Target Note 10*.

3.2.3 Hedgerows

The hedgerows around the site are largely located on the boundaries and maintained as amenity hedgerows. For example, there is a amenity hedgerow on the boundary at *Target Note 6* dominated by *Carpinus betulus* (Hornbeam) with the occasional and small *Fagus sylvatica* (Beech) and *Fagus sylvatica* f. *purpurea* (Copper Beech). A similar *Carpinus betulus* (Hornbeam) hedgerow is located on the edge of the grassland at *Target Note 4*.

There is also a hedgerow on the edge of the site at *Target Note 3* which is dominated by *Crataegus monogyna* (Hawthorn) with *Acer campestre* (Field Maple), *Carpinus betulus* (Hornbeam) and small *Fagus sylvatica* (Beech) trees. There is some *Geum urbanum* (Wood Avens), *Hedera helix* (Ivy), *Rubus fruticosus* agg. (Bramble) and *Urtica dioica* (Common Nettle) in the understorey.



Plate 5. View of some of the amenity hedgerows at *Target Note 4*.



Plate 6. The boundary hedgerow at *Target Note 6*.

3.2.4 Amenity Grassland

There is a section of amenity grassland at the front of the site at *Target Note 2* which is overgrown in places. Discussion with the groundsman indicated that the grassland is not cut during May and then cut to a similar short length to the remainder of the amenity grassland. The grassland sward is dominated by *Holcus lanatus* (Yorkshire Fog) with *Agrostis stolonifera* (Creeping Bent), *Anisantha sterilis* (Barren Brome) and *Phleum pratense* (Timothy). There is a good herb element present including species such as *Achillea millefolium* (Yarrow), *Bellis perennis* (Daisy), *Cerastium fontanum* (Common Mouse-ear), *Cirsium vulgare* (Spear Thistle), *Geranium molle* (Dove's-foot Crane's-bill), *Lamium purpureum* (Red Dead-nettle), *Ranunculus repens* (Creeping Buttercup), *Rumex obtusifolius* (Broad-leaved Dock), *Senecio jacobaea* (Common Ragwort), *Senecio vulgaris* (Groundsel), *Sonchus arvensis* (Perennial Sow-thistle), *Sonchus oleraceus* (Smooth Sow-thistle) and *Taraxacum sect. Ruderalia* (Common Dandelion).

The largest section of grassland is located at *Target Note 5* and used for recreational activities and police dog training. The grassland has a similar composition to that described in *Target Note 2* and is dominated by *Holcus lanatus* (Yorkshire Fog) but with *Arrhenatherum elatius* (False Oat-grass) and *Dactylis glomerata* (Cock's-foot) notable. The herb content was also similar with the addition of *Cardamine pratensis* (Cockoo Flower), *Cirsium arvense* (Creeping Thistle), *Cirsium vulgare* (Spear

Thistle), *Heracleum sphondylium* (Hogweed), *Lamium album* (White Dead-nettle), *Medicago lupulina* (Black Medick), *Trifolium repens* (White Clover), *Vicia cracca* (Tufted Vetch) and *Veronica chamaedrys* (Germander Speedwell).

3.2.5 Ornamental Planting

There are a few areas of ornamental planting around the buildings and within the amenity grassland areas. For example, there are some small areas around a hardstanding car park at *Target Note 11* with *Betula utilis jacquemontii* (Himalayan Birch), *Cotinus coggygria* (Smoke Bush), *Sorbus aucuparia* (Rowan) and *Sambucus nigra* (Elder).



Plate 7. The largest area of amenity grassland at *Target Note 5*, prior to cutting in June.



Plate 8. Typical ornamental planting area at *Target Note 11*.

3.2.6 Buildings and Hardstanding

The site also contains several buildings which are all occupied and are described in more detail in Section 3.3.2. There are also hardstanding areas in the form of car parks, footpaths and roads throughout the site, all of which appear to be regularly used with little if any vegetation present.

3.3 Protected Species

3.3.1 Badgers

No Badger setts were recorded within the site or within 30m of the site. A mammal pathway was recorded leading from the eastern boundary, through the grassland at *Target Note 5* to a 'push-through' under the fence between the site and the adjacent land to the north-west. Badger hair was observed caught on the fencing and a Badger latrine was recorded in the area. The evidence is shown in Figure 3. No evidence of foraging was observed on the site and so it is likely that Badgers are just using the site to pass through on occasion.



Plate 9. Mammal pathway, likely to be used by Badger in the amenity grassland at Target Note 5.



Plate 10. Badger hair caught in the barbed wire fence on the north-western boundary.

3.3.2 Bats

Foraging and commuting

The site has existing external lighting around the buildings which reduces the suitability for bat foraging and commuting for some species. However, there are many areas that would be dark and suitable for foraging bats, including the mature trees on the boundaries. The site is connected to open countryside to the west via lines of trees to the south. The landscape in the wider areas

comprises woodland blocks and pasture fields which would provide good habitat for foraging and commuting bats.

Daytime Bat Survey

Buildings

A brief description of the buildings and the bat roosting potential is provided in Table 2 on the following page. Building locations are shown in Figure 3.

No evidence of bats was recorded during the survey. Buildings B1, B2 and B5 were classified as having Low bat roosting potential. The remaining buildings and structures were classified as having Negligible bat roosting potential.

Trees

The trees on the site are generally well managed and as such, many of the naturally occurring splits cracks and rot holes that occur over time are likely to have been removed from the trees. The following potential roosting features (PRF) were recorded during the survey (locations are shown in Figure 3):

- BT1 – *Robinia pseudoacacia* (False Acacia) with a small vertical split that may extend into a suitable roosting cavity. NE aspect; 3.5m in height; 0.25m from the centre of the tree.
- BT2 - *Sorbus aucuparia* (Rowan) with a trunk cavity, extending upwards into the trunk. West aspect at 1.5m in height.

Both of the PRF identified were classified as having Low bat roosting potential.

Table 2. Bat Survey Results

Building Number	Name	Description	Potential bat-access points	Potential roosting locations	Bat Roosting Potential classification
B1	Office Building	Brick walls, metal and glazed porch, metal roof edging. Roof covered in concrete ridge and roof tiles.	Gaps under roof tiles	Space between the tiles and the lining	Low
B2	Golden House	Brick walls, Hipped roof covered in concrete tiles. Loft space present, 2.5m from floor to apex with boarded walkway. Lined internally with sarking boards.	Gaps under tiles on NW and SW elevations and SE gable.	Space between the tiles and the lining	Low
B3	Operational Training Facility and Gym	Brick walls, metal clad to the rear. Roof flat with sections covered in felt and corrugated asbestos-type material.	None	None	Negligible
B4	Office Building	Brick walls, roof flat with sections covered in felt, metal panelling and corrugated asbestos-type material. Soffits present.	Occasional small gap into soffit. Gap under metal edging but loose and blowing in the wind.	There is some limited potential for bat-access into the soffit but the locations are far from ideal and unlikely to be used.	Negligible
B5	Tower Block and connected sections	Brick walls, Roof pitched and hipped and covered in concrete ridge and roof tiles. Loft void present measuring 2-2.25m from floor to apex. Lined internally with sarking boards and insulation on the floor. Dry and dusty.	Very few gaps present under tiles. Small gaps on the south elevation of the 4-storey section. Small gap on the south elevation of the rear section.	Space between the tiles and the lining	Low
B6	Facilities Department	Metal walls and curved metal roof.	None	None	Negligible
B7	Dog Section	Brick walls with flat roof covered in felt or corrugated asbestos-type material.	None	None	Negligible



Plate11. View of B1 from the south



Plate 12. View of B2 from the south



Plate 13. View of B4 from the north-east.



Plate 14. View of B5 from the south.

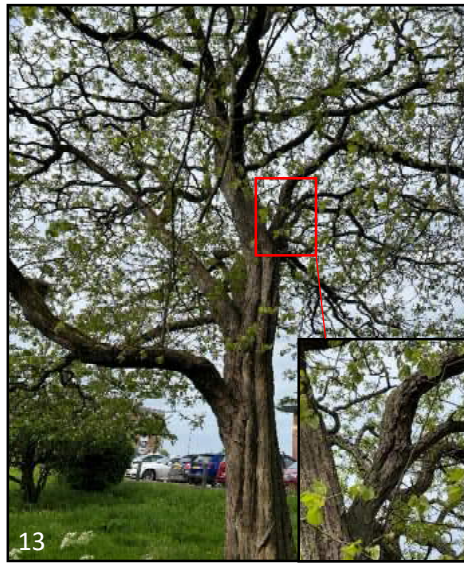


Plate 13. View of B4 from the north-east.



Plate 14. View of B5 from the south.

3.3.3 Great Crested Newt

There are no ponds on the site. The majority of the habitats on the site are unsuitable for newts being comprised of closely cut amenity grassland. The areas of longer grassland are suitable in the more shaded areas, although discussions with the groundsman indicate that these are regularly mowed and as such, would not be suitable for newts for much of the year. Otherwise the site is generally unsuitable for newts being comprised of ornamental planting areas and hardstanding.

The nearest waterbody is Kennet & Avon Canal located approximately 84m to the south at its nearest point. The remainder of the canal is located to the east of the site, beyond the A361 which would act as a physical barrier for any newts crossing onto the site. The stretch of the canal to the south appears accessible for any newts crossing from the waterbody to the site. However, the canal is likely to contain fish which would reduce the suitability of the waterbody for breeding newts. As a result, it is likely they are absent from the canal.

There are no other waterbodies within 500m of the site and as such, it is unlikely that newts would be using suitable terrestrial habitat on the site. As a result, newts are considered absent from the site and are therefore not considered further in this report.

3.3.4 Nesting Birds

The trees on the site provide the greatest potential for nesting birds on the site, especially the lines of trees at *Target Notes 7* and *8*. The ornamental hedgerows have some potential but are generally well managed and are considered sub-optimal. The buildings are generally in good condition and are in use and as such, provide little, if any, potential for nesting birds.

3.3.5 Common Reptiles

The majority of the habitats on the site are unsuitable for reptiles being comprised of closely cut amenity grassland. The areas of longer grassland are suitable in the more shaded areas, although discussions with the groundsman indicate that these are regularly mowed and as such, would not be suitable for reptiles for much of the year. Otherwise the site is generally unsuitable for common reptiles being comprised of ornamental planting areas and hardstanding.

4 Evaluation and Conclusions

4.1 Designated Sites

4.1.1 Statutory Designated Sites

Roundway Down and Covert SSSI is located approximately 1.45 km to the north and Drews Pond Wood LNR is located 1.98 km to the south of the site. The designated sites are located a sufficient distance from the site to not be directly affected during the construction period. The proposals are for the redevelopment of the police headquarters and so would not result in any increase in recreational pressure or other indirect impacts. The integrity of the designated sites will therefore not be affected by the proposals.

4.2 Habitats and Plant Species

4.2.1 Habitats

The trees provide the greatest nature conservation interest on the site. The proposals were not confirmed at the time of writing but it is unlikely that many of the trees will be affected, being located on the boundaries or with the amenity areas along the frontage of the site. We would recommend that all mature trees are retained within the proposals if possible. The roots of the trees should be protected during the construction period. If any trees need to be removed, two trees should be planted for every tree removed. The proposals also represent an opportunity to increase the number of trees on the site as part of a full package of landscaping proposals.

The remainder of the habitats to be affected by the proposals contain common and easily replaceable species and are generally of low or negligible nature conservation interest, comprising largely ornamental areas, amenity grassland and hardstanding. However, the amenity grassland currently has good potential for biodiversity, although the current mowing regime limits this potential. The proposals represent a good opportunity for change in the way the site is managed which would reduce maintenance and associated costs. We would suggest that any retained areas of amenity grassland be subject to a change in mowing regime that maximise flowering plants, insect populations and biodiversity. New larger areas of amenity grassland for recreation could include areas that are retained as biodiversity areas, with paths mown into the longer grassland to allow both recreational space and areas for wildlife.

4.2.2 Plant Species

No rare or Nationally Scarce plants were recorded.

4.2.3 Invasive Plant Species

No invasive species were observed during the survey.

4.3 Protected Species

4.3.1 Badgers

No Badger setts will be affected by the proposals, but evidence that Badgers are using the site to pass through was observed. This access will remain unaffected following the completion of the proposals. However, as a precaution during construction, any excavations should not be left overnight without means of escape for Badgers (i.e. scaffold board left as a ramp).

4.3.2 Bats

Buildings

No evidence of bats was recorded during the survey. Three of the buildings were classified as having Low Bat Roosting Potential. Best practice guidelines (Collins, 2016) suggest that buildings with low bat roosting potential should be subject to a single dusk emergence and/or dawn re-entry survey to confirm presence or likely absence of bats. We would suggest that this level of survey would be appropriate in this instance. Surveys would need to be carried out in the active bat period (May to September) but given there is only a single survey suggested for each building, we would recommend that this be carried out in the bat breeding period of mid-May to August inclusive. This would allow time for further surveys in the same survey season if evidence of roosting bats is recorded.

If roosting bats are recorded, further surveys and a Natural England European Protected Species (EPS) development licence may be required prior to works commencing.

Trees

Two of the trees were recorded as having potential roosting features. Both trees are located in areas where they are likely to be retained under the proposals. However, should the trees be required to be removed, they should be subject to further survey prior to felling. Given the trees only have low bat roosting potential, we would suggest a pre-fell check would be sufficient to determine presence and/or likely absence of roosting bats. This should be carried out by a Natural England licensed surveyor experienced in surveying trees for roosting bats.

Lighting

The site currently has external lighting around the buildings and as such, the use of new external lighting around the proposed buildings will have negligible effect on local wildlife populations. The trees around the boundaries of the site should be retained in darkness. Any lighting installed as part of the proposals should follow best practice, as outlined in *Bats and Artificial Lighting in the UK - Guidance Note 08/18* (ILP and BCT, 2018). This includes:

- No mercury or metal halide lamps;
- Lighting will be directed to where needed and spillage will be avoided e.g. lighting directed only into doorways and luminaire designed appropriately, including the use of hoods, cowls, shields etc to avoid spillage;
- Downward-facing wall-mounted lighting should be used to keep light spill below 3m from ground level;
- Only light areas which need to be lit, and use the minimal level of lighting required to comply with guidance such as Institute of Lighting Engineers Guidance Notes for the Reduction of Obtrusive Light (2005);
- Use movement sensors short (1 minute) timers; and
- No lamps greater than 150W for security lighting.

4.3.3 Nesting Birds

All wild birds are protected by law when nesting and as such, should any nesting habitat be cleared during the works, this should be completed outside the bird nesting season (March to August). In the event that clearance works are due to commence inside this period, a check for nests should be

carried out by a suitably qualified ecologist prior to clearance. If any active nests are recorded, the nest should be left undisturbed until the chicks have fledged.

Provisions for nesting birds should be made on the site as part of a package of ecological enhancements detailed in Section 4.4.

4.3.4 Common Reptiles

It is unlikely that a significant reptile population is present on the site and as such, we do not recommend further surveys for reptiles in this instance. However it is possible that individual common reptiles such as Slow-worm may be present on the site, especially if the grassland is left without being mown for a period of time prior to construction. As such, we suggest a precautionary approach to construction to ensure they are not killed or injured if present. If there are any areas of longer grassland at the time of construction, these should be cut in stages prior to works commencing to allow any reptiles present to move out of the area and ensure any reptiles present are not killed or injured in the construction period.

4.4 Enhancements

A package of ecological enhancements will be required as part of any proposals. We would therefore suggest the following:

- Four mixed bird boxes (e.g. general purpose woodstone bird boxes and open fronted bird box) to be erected on retained trees on the boundaries of the site;
- Three woodcrete (or other long-lasting material, not wood) bat boxes of varying designs for small and medium sized crevice dwelling bats to be erected on retained trees on the boundaries of the site (at a height of 3m+);
- A hedgehog house to be installed along the northern or western boundary;
- Any new fences to include 'hedgehog highways' to ensure hedgehogs are able to move freely throughout the site.

5 References

Bat Conservation Trust and Institute of Lighting Professionals. *Bats and Artificial Lighting in the UK – Guidance Note 08/18*.

BTHK 2018. Bat Roosts in Trees – *A Guide to Identification and Assessment for Tree-Care and Ecology Professionals*. Exeter: Pelagic Publishing.

Beebee, T.J.C. & Griffith, R.A. (2000). *Amphibians and reptiles*. HarperCollins, London.

Cheffings, C.M. & Farrell, L. (eds), Dines, T.D., Jones, R.A., Leach, S.J., McKean, D.R., Pearman, D.A., Preston, C.D., Rumsey, F.J. & Taylor, I. (2005). The vascular plant Red Data list for Great Britain. *Species Status*, **7**, 1-116.

Cherrill, A. & McClean, C. (1999). Between-observer variation in the application of a standard method of habitat mapping by environmental consultants in the UK. *Journal of Applied Ecology*, **36**, 989-1000.

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn.) The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1.

Hill, D., Fasham, M., Tucker, G., Shewry, M. & Shaw, P. (2005). *Handbook of Biodiversity Methods*. Cambridge University Press, Cambridge.

Institute of Environmental Assessment (1995). *Guidelines for Baseline Ecological Assessment*. Spon, London.

Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit* (revised reprint). Joint Nature Conservation Committee, Peterborough.

Rackham, O. (1986). *The History of the Countryside*. Dent, London.

Ratcliffe, D.A. (1977). *A Nature Conservation Review*. Cambridge University Press, Cambridge.

Stace, C.A. (2019). *New Flora of the British Isles*, 4th edition. C & M Floristics.

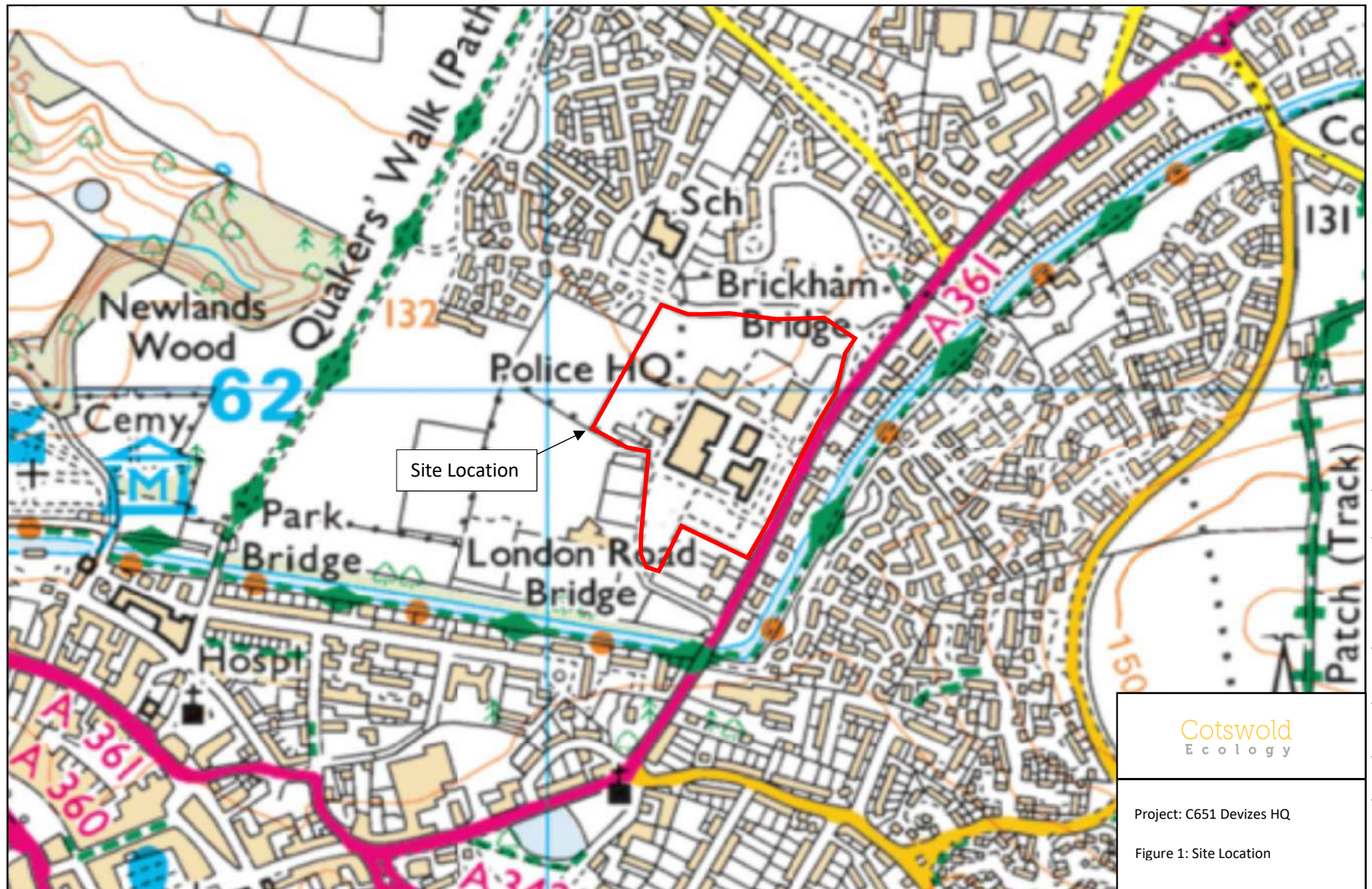
Usher M.B. (1986). *Nature Conservation Evaluation*. Chapman & Hall, London.

6 Figures

Figure 1. Site Location Plan

Figure 2. Aerial Photograph

Figure 3. Phase 1 Habitat Map





Cotswold
Ecology

Project: C651 Devizes HQ

Figure 2: Aerial Photograph



Key:

-  Site Boundary
-  Amenity Grassland
-  Ornamental Planting
-  Building
-  Hedgerow
-  Broad leaved Tree
-  Hard standing
-  Mammal Pathway
-  Badger Latrine

Cotswold
Ecology

Project: C651 Devizes HQ

Figure 3: Phase 1 Habitat Map

APPENDIX 1 – TARGET NOTES

Target Note 1. Ornamental planting area with *Platanus x hispanica* (London Plane),

Target Note 2. Ornamental planting area with amenity grassland which is overgrown in places. The grassland sward is dominated by *Holcus lanatus* (Yorkshire Fog) with *Agrostis stolonifera* (Creeping Bent), *Anisantha sterilis* (Barren Brome) and *Phleum pratense* (Timothy). There is a good herb element present including species such as *Achillea millefolium* (Yarrow), *Bellis perennis* (Daisy), *Cerastium fontanum* (Common Mouse-ear), *Cirsium vulgare* (Spear Thistle), *Geranium molle* (Dove's-foot Crane's-bill), *Lamium purpureum* (Red Dead-nettle), *Ranunculus repens* (Creeping Buttercup), *Rumex obtusifolius* (Broad-leaved Dock), *Senecio jacobaea* (Common Ragwort), *Senecio vulgaris* (Groundsel), *Sonchus arvensis* (Perennial Sow-thistle), *Sonchus oleraceus* (Smooth Sow-thistle) and *Taraxacum sect. Ruderalia* (Common Dandelion). There are also several mature trees in the area comprising *Acer campestre* (Field Maple), *Acer platanoides* (Norway Maple), *Robinia pseudoacacia* (False Acacia), *Pinus sylvestris* (Scots Pine), *Prunus avium* (Wild Cherry) and *Tilia x europaea* (Common Lime).

Target Note 3. Hedgerow on the edge of the site dominated by *Crataegus monogyna* (Hawthorn) with *Acer campestre* (Field Maple), *Carpinus betulus* (Hornbeam) and small *Fagus sylvatica* (Beech) trees. There is some *Geum urbanum* (Wood Avens), *Hedera helix* (Ivy), *Rubus fruticosus* agg. (Bramble) and *Urtica dioica* (Common Nettle) in the understorey.

Target Note 4. A *Carpinus betulus* (Hornbeam) hedgerow on the edge of the grassland, managed for amenity purposes.

Target Note 5. Amenity grassland with a similar composition to that described in *Target Note 2* and dominated by *Holcus lanatus* (Yorkshire Fog) but with *Arrhenatherum elatius* (False Oat-grass) and *Dactylis glomerata* (Cock's-foot) notable. The herb content was also similar with the addition of *Cardamine pratensis* (Cockoo Flower), *Cirsium arvense* (Creeping Thistle), *Cirsium vulgare* (Spear Thistle), *Heracleum sphondylium* (Hogweed), *Lamium album* (White Dead-nettle), *Medicago lupulina*

(Black Medick), *Trifolium repens* (White Clover), *Vicia cracca* (Tufted Vetch) and *Veronica chamaedrys* (Germander Speedwell).

Target Note 6. A boundary amenity hedgerow dominated by *Carpinus betulus* (Hornbeam) with the occasional and small *Fagus sylvatica* (Beech) and *Fagus sylvatica* f. *purpurea* (Copper Beech).

Target Note 7. A line of mature trees on the site boundary comprising *Fagus sylvatica* (Beech) and *Fagus sylvatica* f. *purpurea* (Copper Beech).

Target Note 8. A line of trees with *Leylandii* and *Aesculus hippocastanum* (Horse Chestnut) with a dense understorey of *Crataegus monogyna* (Hawthorn) and *Sambucus nigra* (Elder).

Target Note 9. A row of mature non-native *Acer* sp. (an Acer)

Target Note 10. An area of amenity grassland with a row of mature *Acer pseudoplatanus* (Sycamore), *Salix fragilis* (Crack Willow), *Sorbus aucuparia* (Rowan) and *Tilia x europaea* (Common Lime). The grassland continues towards the front of the within an area of amenity grassland with other tree species present including *Pinus sylvestris* (Scots Pine) and *Sorbus aria* (Whitebeam).

Target Note 11. Ornamental planting areas around a hardstanding car park with *Betula utilis jacquemontii* (Himalayan Birch) and *Cotinus coggygria* (Smoke Bush), *Sorbus aucuparia* (Rowan) and *Sambucus nigra* (Elder).

Target Note 12. A row of *Sorbus intermedia* (Swedish Whitebeam) within an area of amenity grassland. The trees are mature but without bat roosting potential.