



1 Darwin Close, Reading

Ecological Appraisal



For The White Partnership

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Executive Summary

Contents	Summary
Site Location	The site is located at 1 Darwin Close in Reading and is centred at Ordnance Survey National Grid Reference SU 71333 70399. The site is surrounded on all sides by industrial and residential development.
Proposals	Development proposals include the demolition of the existing building within the site, after which, the site will be re-developed into another B1 business use. Finalised plans are not yet available.
Scope of this Survey(s)	WYG was commissioned by The White Partnership to undertake an Ecological Appraisal of the site. The survey involved an extended Phase 1 survey of the site to record habitat types and dominant vegetation, including any invasive species, and a reconnaissance survey for evidence of protected fauna or habitats capable of supporting such species. The survey was carried out on 4th September 2017 by WYG Principal Ecologist Vivienne Greenough MCIEEM, MSc, BSc.
Results	The nearest wildlife designated site is located 800m north west of the site, this is the River Kennet/ Kennet and Avon Canal Local Wildlife Site. A total of five habitats were recorded on site, of which the scattered trees and species-poor hedgerow are the most ecologically valuable (albeit low ecological value). Building B1 and the scattered trees were assigned as having a negligible suitability for roosting bats. The scattered trees, species-poor hedgerow and buildings are likely to support common breeding birds and invertebrates.
Recommendations	Pollution measures during demolition and construction. Clearance of habitats and demolition of building B1 should be undertaken outside the bird breeding season, i.e. clearance between October and February inclusive. Ecological enhancements should be incorporated into the design of the new building / site layout in line with national and local planning policy.



Glossary

AONB	Area(s) of Outstanding Natural Beauty
Badger Act	Protection of Badgers Act 1994
BCT	Bat Conservation Trust
BoCC	Bird(s) of Conservation Concern
BTO	British Trust for Ornithology
CEco	Chartered Ecologist
CEnv	Chartered Environmentalist
CIEEM	Chartered Institute of Ecology & Environmental Management
CRoW Act	Countryside and Rights of Way Act 2000
EcIA	Ecological Impact Assessment
ECoW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
EMP	Ecological Management Plan
EPS	European Protected Species
EPSL	European Protected Species Licence
GCN	Great crested newt
Habitat Regulations	Conservation of Habitats and Species Regulations 2010 (as amended)
HAP	Habitat Action Plan
Hedgerow Regulations	Hedgerow Regulations 1997
HPI	Habitat(s) of Principal Importance
HSI	Habitat Suitability Index
HRA	Habitats Regulations Assessment
JNCC	Join Nature Conservancy Council
LERC	Local Ecological Record Centre
LBAP	Local Biodiversity Action Plan
LNR	Local Nature Reserve
LPA	Local Planning Authority
LWS	Local Wildlife Site
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
Natura 2000 site	A European site designated for its nature conservation value
NE	Natural England
NERC Act	Natural Environment and Rural Communities Act 2006
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
PEA	Preliminary Ecological Appraisal
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SAP	Species Action Plan
SNCO	Statutory Nature Conservation Organisations
SPA	Special Protection Area
SPI	Species of Principal Importance
SSSI	Site(s) of Special Scientific Interest
W&CA	Wildlife & Countryside Act 1981



1.0 Introduction

1.1 Background

WYG was commissioned by The White Partnership on 22nd August 2017 to undertake an Ecological Appraisal of the site known as 1 Darwin Way, Reading.

This survey was completed by and report prepared by WYG Principal Ecologist Vivienne Greenough MCIEEM, MSc, BSc.

1.2 Site Location

The site is located at 1 Darwin Close in Reading, is approximately 0.3ha in size and is centred at Ordnance Survey National Grid Reference SU 71333 70399. The site is surrounded on all sides by industrial and residential development. Commercial Road borders the northern boundary, Darwin Close borders the western boundary and commercial development border the south and east of the site. Residential development is found north of Commercial Road.

The survey area, hereafter referred to as the 'site', is shown on Figure 1 and comprises a disused commercial laundry building with associated access.

1.3 Development Proposals

Development proposals include the demolition of the existing building within the site, after which, the site will be re-developed into another B1 business use. Finalised plans are not yet available.

A planning application for the proposals will be submitted to Reading Borough Council in the near future.

1.4 Purpose of the Report

The objectives of this assessment are to carry-out:

- A desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence;
- A preliminary ecological appraisal involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species, and a reconnaissance survey for evidence of protected fauna or habitats capable of supporting such species;
- An assessment of the potential ecological receptors present on site, any constraints they pose to future development and any recommendations for any further surveys, avoidance, mitigation or enhancement measures that are needed (as appropriate).

Note that, where possible, common names for flora and fauna have been used throughout this report for ease of reading.



2.0 Methodology

2.1 Desk Study

2.1.1 Local Ecological Records Centre

Information was requested from the Thames Valley Environmental Records Centre (TVERC) for information on any nature conservation designations and protected or notable species records within 2km of the site.

The data search covers:

- Statutory designated sites for nature conservation, namely SACs, SPAs, Ramsar sites, SSSIs, NNRs and LNRs;
- Non-statutory designated sites for nature conservation, namely LWS;
- Legally protected species, such as great crested newts, bats and badger;
- Notable habitats and species, such as those listed as Habitats or Species of Principal Importance; and,
- Priority habitats or species within the Reading Borough LBAP.

Only records from the last ten years have been included in this report.

The data search did not cover:

- Tree Preservation Orders (TPOs); or
- Conservation Areas designated for their special architectural and historic interest.

2.1.2 Online Resources

A search for relevant information was also made on the following websites:

- MAGIC www.magic.gov.uk - DEFRA's interactive, web-based database for statutory designations and information on any EPSL applications that have been granted in the local area since 2015.

2.2 Field Surveys

The following methodologies have been used to identify the ecological receptors present on or near the site, which are relevant to the proposed development.

2.2.1 Habitats

An extended Phase 1 habitat survey was undertaken on the site on 4th September 2017 by WYG Principal Ecologist Vivienne Greenough MCIEEM, MSc, BSc. The weather conditions were dry, 100% cloud, beaufort wind scale 1 – 2 and 18°C.

The vegetation and broad habitat types within the site were noted during the survey in accordance with the categories specified for a Phase 1 Vegetation and Habitat Survey (Joint Nature Conservation Committee, 2010). Dominant plant species were recorded for each habitat present using nomenclature according to Stace (2010). The site was also appraised for its suitability to support notable flora, with regard to the CIEEM Guidelines for Preliminary Ecological Appraisal (2013).

2.2.2 Protected & Notable Species

The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitat Regulations, Schedule 5 of the W&CA, the CRoW Act, those given extra protection under the NERC Act, and species included in the Reading LBAP.

Great Crested Newt

The site was appraised for its suitability to support GCN. The assessment was based on Guidance outlined in the Joint Nature Conservation Committees' published *Herpetofauna Workers' Manual* (Gent & Gibson, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, Becket & Foster, 2001).

Bats

Roosting bats – Buildings/structures/trees

Any suitable buildings, structures or trees on site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016 3rd ed) – hereafter referred to as the 'BCT Guidelines'. The following system has therefore been used to categorise the bat roost suitability of any features found:

Table 1 Categories of Bat Roost Suitability (BCT Guidelines)

Suitability	Typical Roosting Features
Negligible	Negligible habitat feature on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis & potentially for longer periods of time due to their size, shelter, protection, conditions & surrounding habitat.

Foraging/commuting bats

The BCT Guidelines use the following criteria to categorise the potential value of habitats and features for use by foraging and commuting bats and these have been used to characterise the value of this site:

Table 2 Categories of Habitat Suitability (BCT Guidelines)

Suitability	Typical Foraging & Commuting Features
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Reptiles

The site was appraised for its suitability to support reptiles. The assessment was based on guidance outlined in the Joint Nature Conservation Committees' published *Herpetofauna Workers' Manual* (Gent & Gibson, 2003).

Badgers

The site was surveyed for evidence of badger setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, Cresswell & Jefferies, 1989).

Hazel Dormice

The site was surveyed for its suitability to support hazel dormice. The assessment was based on guidance outlined in Bright *et al.* (2006).

Other Species

The site was also appraised for its suitability to support other protected or notable fauna including mammals, amphibians, birds and invertebrates with regard to CIEEM's *Guidelines for Preliminary Ecological Appraisal* (2013) and *BS42020:2013 Biodiversity – Code of Practice for Planning and Development*. Evidence of any current or historical presence of such species was recorded.

2.2.3 Invasive Species

The site was searched for evidence of invasive plant species, such as Japanese knotweed, Himalayan balsam, giant hogweed, wall cotoneaster and rhododendron – however see Appendix A for a full list.



2.3 Limitations

The optimal period to undertake an extended Phase 1 habitat survey is April-September. The survey was completed in August which is within the optimal survey window.

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. As a result, this survey focuses on assessing the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation. This report cannot therefore be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day the site was visited and highlights areas where further survey work may be recommended.

The details of this report will remain valid for a period of **two years** from the date of the survey (until September 2019), after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

3.0 Baseline Conditions

3.1 Designated Sites

Table 3 details the designated sites of nature conservation importance that have been identified within 2km of the site.

Table 3 Designated Sites within 2km

Designation	Site Name	Distance & Direction	Summary of features
LWS	River Kennet/ Kennet and Avon Canal	0.8km NW	This contains the UK Priority / SPI Habitat chalk river, and supports a variety of protected wildlife.
LWS	Fobney and Kennet Valley Meadows	0.9km NW	Areas of wet grassland and swamp, supporting a variety of invertebrates and plants.
LWS	The Cowsey	1.3km E	Contains mostly broadleaved woodland, with areas of grassland and some natural springs. Due to the range of habitats a variety of plants are supported.
LWS	Holy Brook	1.5km NW	Carries water to the river Kennet and provides habitat for notable invertebrate species and water vole.
LWS	Shinfield Park, Nores Hill	1.7km SE	Some ancient semi-natural woodland, supporting dormouse and woodland plant species.
LWS	Whitely Park Farm/ St Patrick's Hill	1.7km NE	Contains semi-natural deciduous woodland, ponds and associated habitats. It provides habitat for some birds of conservation concern.
LWS	Burghfield Gravel Pits	1.8km W	Provides habitat for a good variety of wildfowl and other birds.
LWS	Great Lea Pond	1.8km S	A variety of wet habitats, with a good diversity of pond plant life.

In addition to the above designations, the nearest Natura 2000 site is the Thames Basin Heath SPA located approximately 8km south of the site.

3.2 Habitats of Principle Importance and Ancient Woodland

Within the 2km search radius, a total of seven HPI were found. This includes: fourteen parcels of lowland mixed deciduous woodland, four areas of eutrophic standing water, two parcels of coastal and floodplain grazing marsh, two areas of lowland fen and two parcels of wet woodland. The closest of these HPI's to the site is a parcel of deciduous woodland located 460m west.

There are two parcels of ancient woodland present within the 2km search area, both of these are located approximately 1.6km south-east from the site.

3.3 Habitats

The following habitats have been identified through our assessment and the below descriptions should be read with reference to Figure 2, which show the locations and extent of the habitats:

3.3.1 Dense scrub / tall ruderal mosaic

A small parcel of dense scrub / tall ruderal mosaic is present in the north-west of the site. Species comprise bramble, thistle species, wall barley, yarrow, Canadian fleabane, black nightshade, elder and dandelion. This area is isolated in nature being surrounded by hardstanding, as such it has minimal ecological value.

Photograph 1: Dense scrub / tall ruderal mosaic in north-west corner of site



3.3.2 Coniferous scattered trees

A row of scattered leylandii trees is present along the western half of the northern boundary of the site. The trees are relatively mature, being approximately 8 to 10m in height. The trees do not look to be in good condition, foliage around the lower areas of the stems is lacking. The trees are likely to provide nesting habitat for common birds such as wood pigeon and robin. It is notable that the trees are very isolated within the wider environment which reduces the ecological value of these trees.

Photograph 2: Coniferous trees along northern site boundary



3.3.3 Species-poor hedge (intact)

One species poor hedge is present along the eastern boundary of the site. The hedge comprises bramble, ivy and bindweed, which are growing along a wire chain link fence. The hedge is approximately 1.5 to 2m in height.

Photograph 3: Species poor hedge along western site boundary



3.3.4 Amenity grassland / tall ruderal / bare ground

This habitat is found in the north-west corner of the site and underneath the leylandii trees. The amenity grassland / tall ruderal / bare ground mosaic is an extension to the dense scrub / tall ruderal habitat. Species composition is Yorkshire fog, yarrow, perennial rye-grass and common nettle dominating the species assemblage. This habitat has been left unmanaged for some time and the over-shading of the trees is likely to have inhibited growth of this habitat.

Photograph 4: Habitat underneath conifer trees



3.3.5 Hard standing

Large areas of hard standing are present around the building within the site. The area to the east are devoid of vegetation however some pioneering colonising vegetation, such as Canadian fleabane, sow thistle and wall barley are found growing between cracks in the hardstanding area to the west.

Photograph 5: Hard standing



3.3.6 Buildings

The site is occupied by one large building with a few ancillary buildings to the north (see B1 and TN1 Figure 2), which were previous in use as a commercial dry cleaners / laundry. The buildings are constructed of brick with plastic / metal cladding in places. Most parts of the building have a pitched roof with corrugating asbestos / cement type sheeting which include skylights in the pitched roof in a number of areas. Other smaller areas of the building have a flat roof with either plastic sheeting or bitumen roofing felt. There are no loft voids present in the building.

Photograph 6: B1, western elevation (northern half)



Photograph 7: B1, western elevation (southern half)



Photograph 8: B1, internal area



3.3.7 Surrounding Area

The site is surrounded by industrial and residential development on all sides. The nearest green space, Foundry Brook and associated habitat, is located 250m west of the site and runs in a northerly direction along the A33 road. The site is not ecologically connected to these habitat features.

3.3.8 Target Notes

Three target notes were recorded within the site (see TN1 to TN3 on Figure 2). These are detailed in Table 4 below.

Table 4 Target Notes Recorded within the site

Target Note (TN)	Description
1	Water storage, oil tank ancillary buildings
2	Old pigeon nest
3	Scrap metal pile

3.4 Protected & Notable Species

3.4.1 Great Crested Newts

The desk study found one record of great crested newt from 2011 found 1.6km south of the site. There were also three records of smooth newt and nine records of common frog. MAGIC provided details of one ESPL for great crested newt within 2km which was located 0.8km east of site and was issued for the destruction of a resting place.

There are two ponds present within 500m of the site, see waterbody (WB)1 and WB2 on Figure 1 and results of the HSI assessment below.

HSI Assessment

WB1, located approximately 290m north of the site is an artificial water feature created as part of the residential housing north of the site. Being artificial in structure and lacking any vegetation or sufficient water depth, this water body has negligible suitability for GCN.

Photograph 9: WB1



WB2 is Foundry Brook, located approximately 250m west of the site. At the nearest point to the site, the brook has concrete vertical banks, with a slow flow. Terrestrial habitat either side of the brook was good for amphibians, however, the brook is likely to support water fowl populations and fish. The HSI assessment for WB2 was 0.30, which is 'poor' for GCN. Therefore, it is considered highly unlikely that GCN would be found within WB2.

Photograph 10: WB2



In addition, there are no suitable terrestrial habitats for GCN within the site and the site is isolated within the wider environment. As such, the site has a **negligible** value for GCN or other amphibians.

3.4.2 Reptiles

The desk study returned 26 records of slow worm, the most recent from 2015 and the nearest 0.8km south-east, and 15 records of grass snake, the most recent from 2015 and the nearest from 0.6km north-west from the site.

There are no suitable habitats for reptiles within the site and the site is isolated within the wider environment. As such, the site has a **negligible** value for reptiles.

3.4.3 Bats

The desk study returned multiple records of bats including serotine, *myotis* sp., noctule, brown long-eared bat, soprano pipistrelle and common pipistrelle. The most recent record is from 2016 and the nearest is 0.9km south. MAGIC provided details of four ESPLs within 2km, the nearest was 1km north-west from 2015, and was granted for the destruction of a common pipistrelle and brown long-eared bat resting place.

Roosting Bats

The building within the site (B1) were assessed for their potential to support roosting bats.

B1 is a large, one storey building constructed of brick with plastic / metal cladding in places. Most parts of the building have a pitched roof with corrugating asbestos / cement type sheeting which include skylights in the pitched roof in a number of areas. No soffits are present and the brickwork / cladding is in good condition. Some gaps in the mortar were found along the northern elevation, however these were heavily cobwebbed indicating that they are not used by bats (or any other animal). Overall, no roosting features suitable for roosting bats were observed.

Internally, the building does not have any loft voids. In addition, the presence of skylights in the roof makes the internal space further unsuitable for roosting bats.

As such, B1 is assessed as having **negligible** suitability to support roosting bats.

In addition the scattered trees along the northern boundary were assessed as having a **negligible** suitability to support roosting bats due to the lack of potential roosting features.



Foraging and Commuting Bats

The site has no habitats which would provide suitable habitat for foraging and commuting bats. In addition, the site is isolated in a very urban environment, lit up by artificial lighting and is not linked to any suitable habitat corridors. As such, the site is assessed as having a **negligible** suitability for foraging and commuting bats.

3.4.4 Birds

The desk study found multiple records of birds including two W&CA Schedule 1 species, red kite and kingfisher; five SPIs, including cuckoo and dunnock; and four BoCC red listed species, such as song thrush and starling.

During the survey, five species of birds were recorded, including crow, wood pigeon, robin, pied wagtail and house sparrow. House sparrow is an SPI species as well as a red listed bird under BOCC. Crow, woodpigeon and robin may breed within the Leylandii trees whereas house sparrow and wood pigeon may breed within / on the building. No suitable cavities were observed in B1 however an old pigeon nest was observed on the supporting metal framework of B1 (see TN2 on Figure 2). In addition, the species-poor hedgerow may provide suitable habitat for species such as robin.

Overall, the site has **low** value for common breeding birds.

3.4.5 Invertebrates

Five records of stag beetle were returned from the data search, the most recent record is from 2009 and the closest was found 1.7km north-east of the site.

The site contains no habitat suitable to support stag beetle, which favour dead wood / woodland / garden habitats. Furthermore, the site has minimal habitat which could be used by invertebrates, being comprised mostly of hard standing and building. The dense scrub / tall ruderal habitats may be used by invertebrates, but given the very small size of the area and the isolation, the habitats are of no more than **very low** value to invertebrates.

3.4.6 Other Mammals

Multiple records for badger were found, the closest was 1.3km north and the most recent was from 2016. There were also multiple records for hedgehog, the most recent record was from 2015 and the nearest was 1.4km south.

The site does not contain suitable habitat to support any of these species (or other species).

3.4.7 Flora

The desk study returned five records of bluebell, protected by the W&CA, and three records of grape-hyacinth, an SPI species. The most recent record for both of these are from 2014, the nearest record for bluebell is 1.4km east, and the nearest record for grape-hyacinth is 1.3km north.

The site does not contain any suitable habitat for bluebell or grape hyacinth (which require woodland, hedgerow, and dry calcareous grassland). Furthermore, the site is highly unlikely to support any other notable plant species.



3.5 Importance of Ecological Features

In line with the CIEEM PEA Guidelines, and based on the above baseline information, each ecological feature recorded within the study area is considered to have the following importance, as defined within the CIEEM EcIA Guidelines (2016) Please note that only features of site value or higher / or of relevance to the site are detailed:

Table 5 Importance of Ecological Features

Feature	Importance	Rationale
Eight LWS	County	A variety of sites designated for woodland (some ancient), waterbodies and species rich grassland.
Scattered trees	Site	Low value habitat for common breeding birds
Dense scrub / tall ruderal	Site	Low value habitat for common breeding birds and invertebrates
Species poor hedgerow	Site	Low value habitat for common breeding birds and invertebrates
Amenity grassland / tall ruderal / bare ground	Site	Low value habitat for common breeding birds and invertebrates
Breeding birds	Site	Trees, species poor hedgerow and parts of building likely to support common breeding and foraging birds
Invertebrates	Site	Trees, species poor hedgerow, dense scrub / tall ruderal mosaic, amenity grassland / tall ruderal likely to support common invertebrates
Either: International (incl. European) / National / Regional / County / Local / Site level Or: Unknown (i.e. further surveys/information needed)		

The potential for the proposals to have adverse or beneficial impacts on these features, along with the need for any mitigation or enhancement measures are discussed in detail below.



4.0 Relevant Planning Policy & Legislation

4.1 National Planning Policy Framework

The NPPF was adopted in March 2012. Section 11 of the NPPF, *Conserving and Enhancing the Natural Environment* replaces *Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation*. However, government Circular 06/2005, *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*, which relates to PPS9 remains valid and is referenced within Paragraph 113 of the NPPF.

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. The NPPF also states that '*planning policies should promote the protection of priority species populations linked to national and local targets*'.

Furthermore, central and local government policy now points towards ecological enhancement on development sites. The NPPF considers enhancement in the statement '*The planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes....and minimising impacts on biodiversity and providing net gains in biodiversity*'.

4.2 Biodiversity 2020: A strategy for England's wildlife & ecosystem services

Biodiversity 2020 replaces the previous UK Biodiversity Action Plan and sets national targets to be achieved. The intent of Biodiversity 2020, however, is much broader than the protection and enhancement of less common species, and is meant to embrace the wider countryside as a whole.

The priority species and habitats considered under Biodiversity 2020 are the SPI & HPI detailed under NERC Act (see Appendix A for further details).

4.3 Local Biodiversity Action Plan

Local Biodiversity Action Plans (LBAPs) identify habitat and species conservation priorities at a local level (typically County by County) and are usually drawn up by a consortium of local Government organisations and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

The Reading LBAP is the relevant document for this site and it contains various Habitat & Species Action Plans. Of most relevance to the site are:

- Urban I and II;
- House sparrow;
- Black redstart;
- Bat species.

It should be noted that the existence of a SAP or HAP does not always infer an elevated level importance for those features. These plans may be designed to encourage an increase in these habitats/species, rather than to protect a county-scarce feature (for example).



4.4 Reading Borough Core Strategy 2008

The Core Strategy was originally adopted on 29th January 2008. Policy CS36: Biodiversity and Geology states:

a) Development should retain, protect and incorporate features of biodiversity or geological interest (including protected species and their habitats) found within the application site into their schemes.

On sites with recognised biodiversity or geological value, development will not be permitted where there would be a direct or indirect adverse impact on the site, unless it can be clearly demonstrated that: -

- i. The need for development clearly outweighs the need to protect the value of the site; and*
- ii. Appropriate compensation, impact minimisation, mitigation and compensation are provided.*

b) Local Nature Reserves and Wildlife Heritage Sites will be safeguarded and where possible, enhanced. Permission will not be granted for any development that would adversely affect a designated nature reserve or Wildlife Heritage Site.

c) Any development that would sever or threaten the integrity of an established wildlife link, as indicated on an adopted proposals map, will not be permitted. Where applicable, developments should be designed to protect, consolidate, extend and enhance the network of wildlife links and corridors in and adjoining the Borough, working with neighbouring authorities where appropriate.

In addition, Policy CS38: Trees, Hedges and Woodlands states:

Individual trees, groups of trees, hedges and woodlands will be protected from damage or removal, and the Borough's vegetation cover will be extended.

4.5 Legislation

Full details of the UK legislation and offences which are relevant to the ecological receptors identified are included in Appendix A. However, based on the findings of our assessment, it is considered that the proposals will need to consider the following legal provisions:

- Disturbance of nesting wild birds.



5.0 Discussion

5.1 Designated Sites

5.1.1 Natura 2000 Sites

The nearest Natura 2000 site is the Thames Basin Heath SPA located approximately 8km south of the site. Due to the distance from the site, it is considered unlikely that the development will have any negative direct or indirect impacts on the designated features of the site.

5.1.2 Sites of Special Scientific Interest

No SSSIs are located within 2km of the site. The closest SSSI is the Stanford End Mill and River Loddon located 5.1km south of the site. Due to the distance from the site, nature of its designations and the small scale of the proposals, it is highly unlikely that the development will have any negative impacts on the designated features of the site.

5.1.3 Local Wildlife Sites

There are eight LWS Verge located within 2km of the site. The closest of these is the River Kennet/ Kennet and Avon Canal LWS and Fobney and Kennet Valley Meadows LWS located 0.8km and 0.9km north-west respectively. As the site is isolated by urban infrastructure, it is unlikely that the development would have an adverse impact on these sites through demolition and construction activities. Nonetheless, as a matter of best practice, mitigation measures should be adopted throughout the construction phase of the development. These should include:

- Measures to minimise dust arising, when necessary, including the use of dust control machinery and wet machinery;
- Measures to prevent pollution / contamination events through surface run-off; and
- Measures to minimise other pollution events such as noise, vibration and wind-blown litter.

5.1.4 Ancient Woodland and HPI

The nearest ancient woodland is located 1.6km south-east from the site beyond industrial development. The nearest HPI (deciduous woodland) is located 460m west. Again, the site is not connected to this ancient woodland or HPI so no adverse impacts are likely.

5.2 Habitats

The site is dominated by manmade habitats (hardstanding and buildings) which are of negligible ecological value. There are no habitats of principal importance within the site. Habitats of most value are the scattered trees along the northern boundary, however these comprise coniferous non-native species of little ecological value with the exception that common breeding birds may breed within the trees. These trees will be felled to facilitate the development, due to their poor quality, non-native status and low ecological value, compensation planting for the loss of these trees is not deemed necessary.

5.3 Protected & Notable Species

Only those species that could be adversely impacted by the proposals are discussed in this section.



5.3.1 Birds

All bird's eggs and active nests are protected from damage and destruction under the W&CA. The trees, species-poor hedgerow and building B1 within the site may support common breeding and foraging birds and these habitats will be removed to facilitate the development.

It is recommended that habitat clearance and demolition of building B1 takes place outside of the bird breeding season, which is generally considered to extend between March and September inclusive (i.e. habitat clearance / building demolition should be cleared between October to February). If this timing is not possible, then a suitably experienced ecologist should check for active bird nests immediately prior to demolition or clearance of vegetation (within 48 hours). If an active nest is discovered, then work in that area must cease and an appropriate buffer zone installed around the nest site where no works are undertaken until such a time that the young have fledged and the nest is no longer in use. The extent of this buffer zone will depend on the nature of the works to be undertaken and the species of bird nesting, but this would be advised by an ecologist (as a minimum this would be 5m).

5.4 Ecological Enhancements

In line with national and local planning policy (Policy CS36 of Reading Borough Core Strategy), the development design should incorporate enhancements for the benefit of wildlife. Enhancements for biodiversity are recommended and outlined below:

- The use of locally sourced native trees, shrubs and insect attracting plants to be included in the landscape design for the site (see Appendix D for a wildlife friendly planting list);
- Two house sparrow terraces to be installed on new buildings; and
- Consideration should be given to incorporate integrated swift bricks within the new buildings.



6.0 Summary & Recommendations

6.1 Designated Sites

- No significant impacts are predicted on any designated site as a result of the development.

6.2 Habitats

- No habitats of significant ecological value will be impacted by the development.

6.3 Protected & Notable Species

- All vegetation and buildings to be cleared / demolished outside of the breeding bird season (i.e. between October to February). If this is not possible, all clearance must be subject to a nesting bird check.

6.4 Ecological Enhancements

- Enhancements including locally native landscape planting and bird boxes (as well as other considerations) have been recommended in Section 5.4.



7.0 References

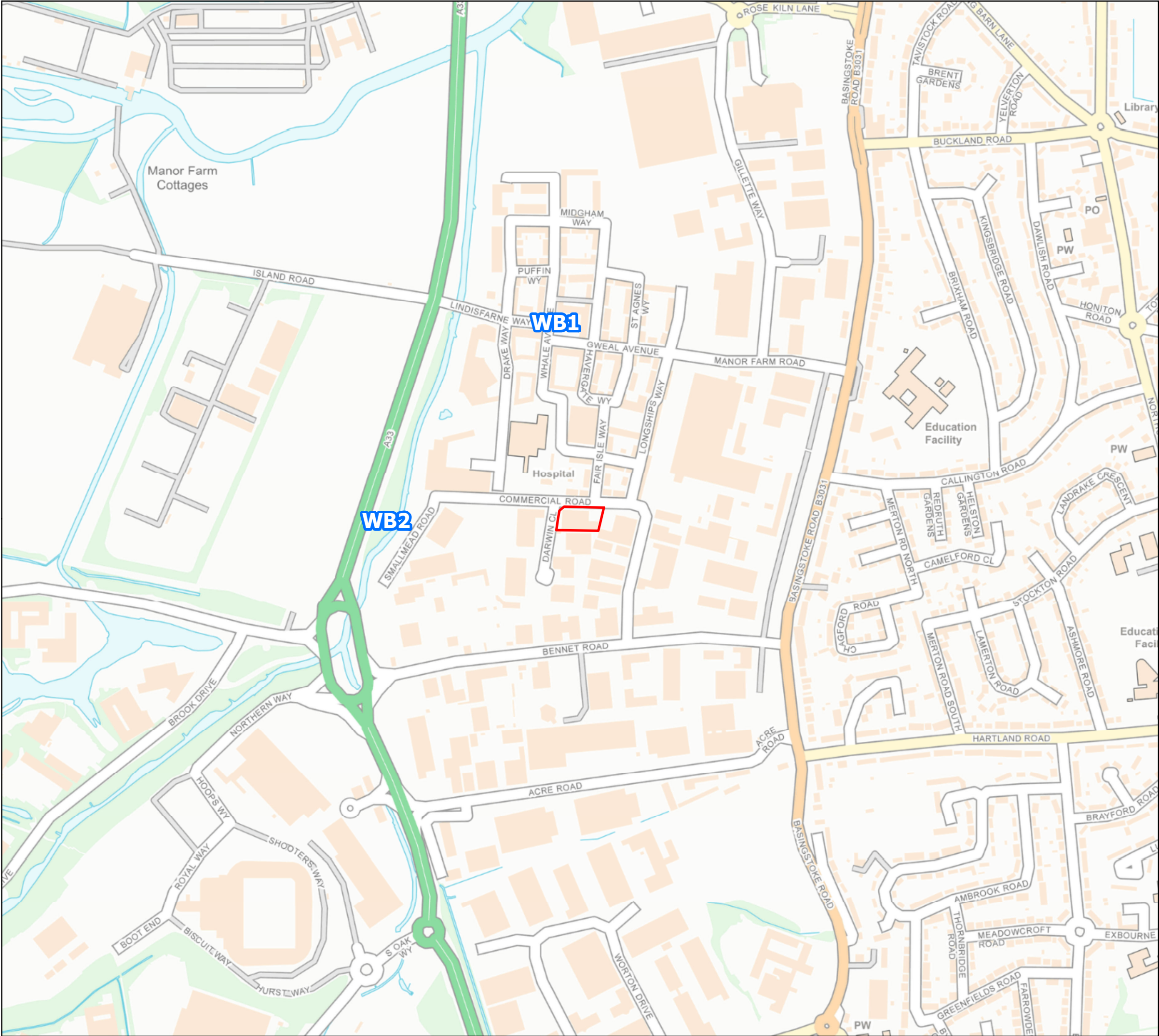
- BS42020:2013 Biodiversity – Code of Practice for Planning and Development (2013)
- Bright PW, Morris PA and Mitchell-Jones A (2006). Dormouse Conservation Handbook, 2nd Edition. English Nature, Peterborough.
- Chartered Institute for Ecology and Environmental Management (2013). Guidelines for Preliminary Ecological Appraisal.
- Chartered Institute for Ecology and Environmental Management (2016). Guidelines for Ecological Impact Assessment in the UK and Ireland.
- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed). The Bat Conservation Trust, London.
- Communities and Local Government (2012) National Planning Policy Framework.
- English Nature (2011). Badgers and Development. English Nature, Peterborough, UK.
- Gent, T. & Gibson, S. (2003). Herpetofauna Workers' Manual. JNCC, Peterborough.
- Harris, S, Cresswell, P and Jefferies, D 1989 *Surveying Badgers*. The Mammal Society, London, UK
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit. JNCC, Peterborough.
- Langton, T.E.S, Beckett, C.L and Foster, J.P. (2001). Great Crested Newt Conservation Handbook. Froglife, Halesworth.
- Oldham R.S., Keeble J., Swan M.J.S & Jeffcote M., (2000). Evaluating the Suitability of Habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10 (4), 143-155.
- Reading Borough Local Development Framework (2008) Core Strategy
- The Reading Biodiversity Action Plan (2006)
- Stace, C. (2010) New Flora of the British Isles (3rd edition). Cambridge University Press, Cambridge.



FIGURES

Figure 1 – Site Location Plan

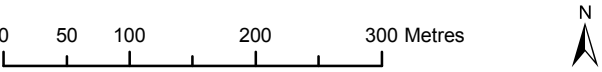
Figure 2 – Phase 1 Habitat Plan



Rev	Date	Notes
A	20/09/17	Initial map production

Legend

- Site boundary
- WB Waterbody

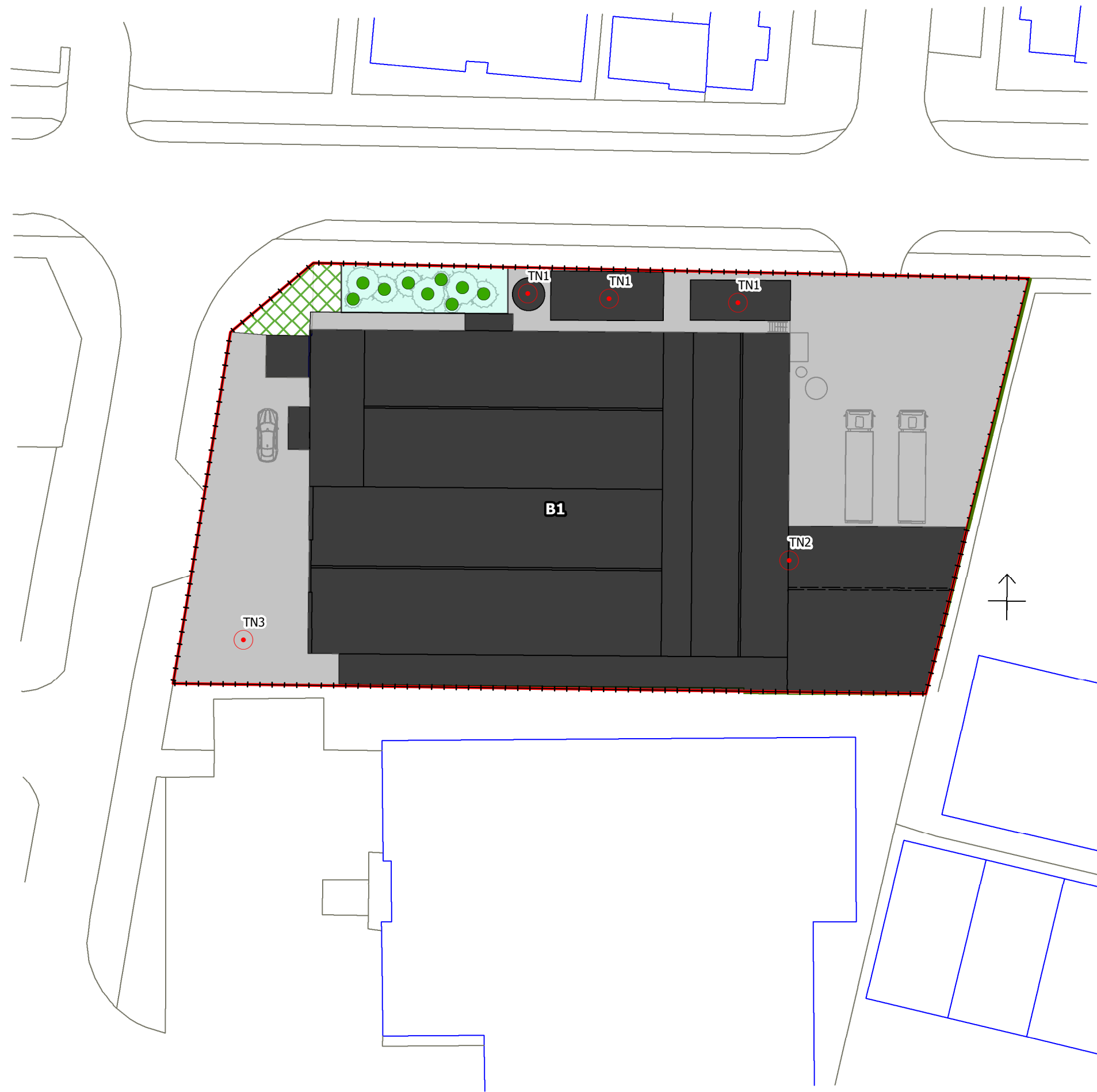


Site Location and Waterbody Locations

1 Darwin Close, Reading
The White Partnership

Scale at A3: 1:6,000	Project No: A105319	Drawing No: Figure 1	Revision: A
Drawn by: Ben Blowers	Drawn date: 20/09/2017	Approved by: Viv Greenough	

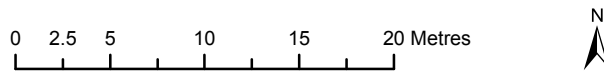
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Rev	Date	Notes
A	20/09/17	Initial map production

Legend

- Site boundary
- Amenity grassland, tall ruderal & bare ground mosaic
- Buildings
- Dense scrub & tall ruderal
- Hardstanding
- Intact hedge (species-poor)
- Fence
- Scattered tree
- Target note



Phase 1 Habitat Map

1 Darwin Close, Reading
The White Partnership

Scale at A3: 1:400	Project No: A105319	Drawing No: Figure 2	Revision: A
Drawn by: Ben Blowers	Drawn date: 20/09/2017	Approved by: Viv Greenough	

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