

Appendix 13-7 Broken Brow Preliminary Ecological Appraisal



Preliminary Ecological Appraisal – Broken Brow

Client: Wokingham Borough Council

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Data contained within this report is considered most relevant during the season in which it was collected. For medium or high impact schemes or for multi-plot or phased developments, surveys should not be more than two years old.

Contents

1	Summary	3
2	Introduction.....	4
2.1	Background and Development Proposals	4
2.2	Site Information	4
2.3	Ecology Background.....	4
2.4	Purpose and Scope	5
3	Methodology	6
3.1	Desk Study.....	6
3.2	Field Survey.....	7
4	Survey Findings	10
4.1	Desk Study.....	10
4.2	Field Survey – Habitats.....	13
4.3	Field Survey - Protected and Notable Species.....	17
5	Evaluation, Potential Impacts and Recommendations	20
5.1	Designated Sites and Ancient Woodland.....	20
5.2	Habitats.....	20
5.3	Biodiversity Gains.....	25
6	References.....	27
7	Appendix 1 – Survey Results	28
8	Appendix 2 – Target Note List & Incidental Species	34

1 Summary

Proposal Outline	The current plans are for the development of 376 car parking spaces, along with bays for motorbikes and cycles, to support the Thames Valley Park (TVP) Park & Ride scheme.
Site Description	The site comprises a broadly triangular plot of land between the River Thames and the main railway line out of Reading. The land is currently unused and has been subject to scrub encroachment, such that much of the site is impenetrable.
Surveys Undertaken	As part of a Preliminary Ecological Assessment a Phase 1 habitat survey was undertaken in September 2015. This was supported by a desk study. An assessment of the potential of the site to support protected or notable species was also made.
Results	The site comprises broadleaved woodland, dense scrub, calcareous grassland, amenity grassland, introduced shrub, hedgerow with trees, buildings and bare ground. The site has potential to support a range of protected and notable species including: badgers, bats, birds, great crested newts, common reptiles, hedgehogs, stag beetles and cinnabar moths.
Limitations	The survey was undertaken at a sub-optimal time of year for conducting phase 1 surveys. It was possible however to identify sufficient species in order to characterise each habitat type. This is therefore not considered a significant limitation.
Recommendations	Where possible plans for the site should be altered to avoid the loss of the woodland, hedgerows and calcareous grassland which are habitats of principal importance. This would also help to buffer the effects of the development, provide connectivity across the site and increase the scope for on-site biodiversity enhancement. Further survey for bats, reptiles, badgers, and great crested newts will be required. Measures to protect badgers, birds, stag beetles and hedgehogs will need to be included along with appropriate mitigation in an environmental mitigation and management plan.

2 Introduction

2.1 Background and Development Proposals

- 2.1.1 A consultation process is currently underway for plans for a new Park & Ride. The scheme is being advanced by the unitary authority of Reading with the full support of Wokingham Borough Council. A planning application for the scheme is shortly to be submitted. The proposals include a facility with 360 standard car parking spaces and a further 16 disabled spaces, along with motorbike bays and cycle stands. A small toilet block and bus stop also form part of the proposals.

2.2 Site Information

- 2.2.1 The site comprises a broadly triangular plot of land approximately 1.9 hectares in size and known as Broken Brow. The southern boundary of the site is formed by the First Great Western railway line and associated rail estate and to the north by the River Thames and the Thames Path National Trail running parallel to the southern bank of the river. Wokingham Waterside Centre lies immediately to the north of the site with a carpark to the northeast. The remainder of the eastern boundary is formed by Thames Valley Park (TVP) Drive, beyond which is the TVP Business Park. Between the river and the site there is also a boathouse and administration centre owned by Reading University. The site appears to be largely unmanaged except for grassy paths through the scrub which provide access to various services. The area is largely a former grassland plot but has become almost entirely overgrown with encroaching scrub. In recent years the site has been used by vagrants as a camp site. The grid reference for the centre of the site is SU733738, site plan is shown in Figure 1.
- 2.2.2 The site falls in Wokingham on the outskirts of Reading and forms part of a continuous strip of green space which runs through Reading and out to Sonning along the Thames. The area surrounding the site on three sides is highly urbanised, however to the north of the site and following the river is the Thames and Kennet Marina and a series of lakes, beyond which is a patchwork of woodland and farmland.

2.3 Ecology Background

- 2.3.1 It is understood that following a walkover of the site by WSP/Parsons Brinckerhoff that preliminary bat and bird surveys were commissioned.

- 2.3.2 A five visit breeding bird survey was planned. However, due to a number of health and safety constraints only a single visit to the site was made in March 2015, during which 24 species were recorded across the survey area. The survey confirmed one species breeding on the site, one species probably breeding on site and a further 14 species identified as possible breeders, including two species of principal importance. The report made recommendations for avoidance and mitigation including retention of trees and scrub where possible, especially on the boundaries of the site. It was also recommended that necessary site clearance take place outside of the breeding bird season along with compensation and enhancement measures and concluded that further survey for breeding birds was unlikely to be necessary.
- 2.3.3 A single session of remote monitoring was carried out in July 2015 which involved the deployment of a Song Meter 2 bat detector in situ between the 6th and the 9th of July. The detector was in place behind the Waterside Centre. Three species of bats were recorded and activity was dominated by soprano pipistrelle which accounted for over 80% of calls recorded.

2.4 Purpose and Scope

- 2.4.1 CA Ecology Ltd were contracted to conduct a Preliminary Ecological Appraisal (PEA). The purpose of a PEA is to identify the habitats present and undertake a site walkover. This is to assess the potential for the site to be used by species that receive legal protection (at a UK and/or European level) and species that are otherwise notable, including Species of Principal Importance or those of Conservation Concern. The report then evaluates the ecological features present, identifies potential constraints to any proposed development schemes and where possible provides recommendations for mitigation. The key aims and objectives of the survey are to:
- Establish baseline conditions and determine the importance of any ecological features present, as far as is possible.
 - Establish any requirements for detailed/ further surveys.
 - To identify key constraints to the project and make recommendations for design options to avoid significant effects on important ecological features.
 - Identify the mitigation and enhancement measures as far as possible.

3 Methodology

3.1 Desk Study

3.1.1 A desk study is conducted to identify the presence of designated and protected sites along with records of protected and notable species. The purpose of this is to provide a context for the habitats and protected species occurring in the wider area. This helps when conducting the assessment of whether a given species is likely to occur on site if suitable habitat is present and forms the basis of any impact assessment. It should however be noted that the data search relies mainly on ad-hoc records submitted usually by volunteers and conservation organisations and does not represent an exhaustive search. A number of sources were consulted as follows:

- The Multi-Agency Geographical Information for the Countryside (MAGIC) website (<http://magic.defra.gov.uk/> accessed 16.06.15) was reviewed for information on designated sites, along with protected habitats and records of past European Protected Species Licences (EPSL) within 2km radius of the site.
- A combination of OS maps and online aerial imagery was reviewed to assess the proportion of suitable habitat and degree of connectivity surrounding the site. This includes a search for waterbodies within 500m of the site.
- The Thames Valley Environmental Records centre was contacted and asked to provide details of sites designated for nature conservation (both statutory and non-statutory), along with records of protected and notable species for the site and a surrounding radius of 2km.
- A request for all records of bats within 2km of the site was sent to the Berkshire and South Buckinghamshire Bat Group
- Berkshire Ornithological Society were also contacted for records within 2km
- Wokingham Borough Council Action Plan, which defines the habitats that have been targeted for conservation effort within the area, was consulted.

3.2 Field Survey

Habitats

- 3.2.1 A Phase 1 habitat survey was undertaken and all accessible areas of the site were investigated. The vegetation and habitat types were classified, recorded and mapped in accordance with the Handbook for Phase 1 Habitat Survey (JNCC, 2010). This allows a rapid visual assessment of the extent and distribution of different habitat types. All readily identifiable higher plant species from each habitat type were recorded, with an estimate of cover and their relative abundance noted using the DAFOR scale (Dominant, Abundant, Frequent, Occasional and Rare).

Protected and Notable Species

- 3.2.2 The site was further assessed for its potential to support protected and notable species, including those that receive protection under the following:
- The Conservation of Habitats and Species (amendment) Regulations 2012.
 - Wildlife and Countryside Act 1981 (as amended) and the amendments of the Countryside and Rights of Way (CROW) Act 2000.
 - Species on the Section 41 list protected under the Natural Environment and Rural Communities (NERC) Act 2006.
 - The Protection of Badgers Act 1992.
 - Species listed on the local BAP.
- 3.2.3 The assessment was based on the presence of key habitat features and a review of information provided by the desk study. However, no specific faunal surveys were undertaken. Table 1 sets out the species for which the site was assessed along with the relevant guidelines.

Table 1: Protected and Notable Species Assessment Methodology

Species	Outline of methodology	Relevant Guidelines
Badgers	The site was searched for evidence of setts or badger activity such as paths, latrines or signs of foraging.	Following guidance and published criteria; Surveying Badgers (Harris, Cresswell, & Jefferies, 1989).
Bats	The habitat on site was assessed for its suitability for commuting and foraging. The site was searched for structures or trees that may have potential to support roosting bats.	Methodology in line with Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (Hundt, 2012) and Natural England's Bat Mitigation Guidelines (Mitchell-Jones, 2004).

Great Crested Newts	An assessment of the suitability of the site to support great crested newts in their terrestrial phase was made. A Habitat Suitability Assessment (HSI) was conducted on any water body within site. A review of ordnance survey maps and aerial imagery was also undertaken to identify water bodies on or within 500m of the site.	Based on guidance from Herpetofauna Workers Manual (Gent & Gibson, 2003) along with Great Crested Newt Conservation Handbook (Langton, Beckett, & Foster, 2001). Evaluating the suitability of habitat for the great crested newt. (Oldham, Keeble, Swan, & Jeffcote, 2000).
Reptiles	An assessment of the suitability of the site to support reptiles and features suitable for hibernation were noted.	Herpetofauna Workers Manual (Gent & Gibson, 2003).
Other Species	The suitability of the site for other protected or notable species including invertebrates, birds and mammals was also assessed. This included vascular plants as listed on Schedule 8 of the Wildlife and Countryside Act (1981) as amended (WCA 1918) & plant species listed on the local BAP.	CIEEM Guidelines for Preliminary Ecological Appraisal (CIEEM, 2013).
Invasive Species	The site was checked for the presence of invasive plant species as listed on Schedule 9 of WCA 1981.	CIEEM Guidelines for Preliminary Ecological Appraisal (CIEEM, 2013).

Limitations

- 3.2.4 Much of the site has been overtaken by dense scrub and as such it was not possible to search these areas thoroughly for burrows or other signs of protected species, or obtain a full species list from these areas. It was however possible to get some information from peripheral areas and from paths that remain or have been created through the scrub. Using these it was possible to see all parts of the site, if not directly access all parts of it and for this reason lack of access was not considered a significant limitation in conducting the Phase 1 habitat survey. It was also possible to assess the potential of the site to support protected species or species of conservation concern, therefore the lack of access was not considered a significant limitation to this survey.

Surveyor Competence

- 3.2.5 Claire Andrews BSc (Hons) MCIEEM visited the site. Claire possesses over ten years' experience as a professional ecologist and is well versed in conducting ecological appraisals. Claire also holds bat and great crested newt licences and has substantial experience in undertaking scoping surveys for protected species.

4 Survey Findings

4.1 Desk Study

Statutory Sites

- 4.1.1 There is one statutory designated site within 2km, namely Highwood which is some 1.6km away to the south and is isolated from the site by urban development.

Non-statutory Sites

- 4.1.2 There are 6 non-statutory sites within 2km, all of which are local wildlife sites. The three closest sites are Henley Road Gravel Pit which is 150m away on the opposite side of the river. It is a large former pit that supports a range of wildfowl. The Coal and Kennetmouth and Kings Meadow East is 270m away at the nearest point and can be reached by following the river to the west; it comprises a mosaic of habitat types running alongside the river. Along the river across two large meadows and 1.3km to the east of the site, is the TVP Nature Reserve which forms part of the Thames Floodplain and is a mosaic of habitats created when the TVP business park was constructed. The remaining local wildlife sites; Reading Cemetery, High Wood, Whiteknights Park and Bulmershe College are separated from the site by large areas of urban development.

Sites of Importance for Nature Conservation (SINC)

- 4.1.3 There are no SINCs within 2km of the site.

Ancient Woodland

- 4.1.4 Only one small parcel of ancient woodland exists within 2km of the site and can be found 1.2km to the north on an isolated island in the middle of Henley Road Gravel Pit.

Protected and Notable Species

4.1.5 Table 2 provides a summary of records of protected and notable species as provided by the desk study (full desk study is included in Appendix 2).

Table 2 Records of Protected and Notable Species

Species	Records
Badgers	There are nine records of the Eurasian Badger (<i>Meles meles</i>) within 2km of the site. However, five of these records are north of the river. The nearest are two records 1.5km to the west along the river, but these are 15 years old.
Bats	There are 318 recent (within 10 years) bat records with 2km of the site with 76 roosts, the majority of which are from within the surrounding urban area. Notable roosts include a Daubenton's bat (<i>Myotis daubentonii</i>) maternity roost 1.2km further along the river to the west and regular records of Nathusius pipistrelle (<i>Pipistrellus nathusii</i>) in bat boxes 2.3km along the river to the east. The nearest roost (and the only record within 1km) is a common pipistrelle (<i>Pipistrellus pipistrellus</i>) roost 300m to the south, in a house in Newtown. Other roosts include those of soprano pipistrelle (<i>Pipistrellus pygmaeus</i>), noctule bat (<i>Nyctalus noctula</i>), natterer's (<i>Myotis nattereri</i>) bat and several brown long-eared (<i>Plecotus auritus</i>) bat roosts. Other non-roost records within 5km include; 55 records of Brown Long-eared bats, 29 records of common pipistrelles, 15 records of soprano pipistrelle, 4 records of Daubenton's (<i>Myotis daubentonii</i>), 1 record of lesser noctule (<i>Nyctalus leisleri</i>), 10 records of noctule Bats (<i>Nyctalus noctula</i>), 5 records of serotine bats (<i>Eptesicus serotinus</i>), 10 records of unidentified <i>Myotis</i> bats and 1 record of a natterer's bat (<i>Myotis nattereri</i>). Within 2km there have been eight derogation licences for common pipistrelle and five for soprano pipistrelle.
Birds	There are 7,791 bird records across 206 species within 5km, including records of two Schedule 1 species; Kingfisher (<i>Alcedo atthis</i>) which are recorded from both Thames Valley Park and Kennetmouth and Black redstarts (<i>Phoenicurus ochruros</i>) which were recorded in the town centre and adjacent to the site at the gas tower. There are a further 54 records of 12 different Schedule 1 species, all of which are from the gravel pits. Species of Principal Importance such as common starling (<i>Sturnus vulgaris</i>), song thrush (<i>Turdus philomelos</i>) and turtle dove (<i>Streptopelia turtur</i>) are also recorded within 2km. There are no records derived from within the site itself. The nearest record is for mallard duck on the river. The desk study did not identify any statutory or non-statutory designated nature conservation sites around the site (2km for statutory national level sites and non-statutory designated sites and 10km for European statutory designated sites) for which breeding bird assemblages form part of the reasons for designation.
Dormice	There are no nearby records of Dormice within 2km of the site.
Great Crested Newts	There are no records of Great Crested Newts within 2km of the site.
Hedgehog	There are four records of the Western European Hedgehog (<i>Erinaceus europaeus</i>), which were recorded within the urban area south of the railway line, 1.3km and 1.4km away.
Invertebrates	There are 149 records of invertebrates within 2km of the site. The records are dominated (132 records) by stag beetle (<i>Lucanus cervus</i>). The remaining 17 records include five species of Principal Importance such as small heath (<i>Coenonympha pamphilus</i>), latticed heath (<i>Chiasmia clathrate</i>) and cinnabar (<i>Tyria jacobaeae</i>) recorded 800m away from the site. There are no records from within the site.

Otters	There are 5 records between 2009 and 2011 from along the river corridor. The closest of these was 500m away, within the gravel pits on the other side of the river.
Water voles	There is a single unconfirmed record of a water vole east of the site within TVP.
Reptiles	There are 15 records of reptiles south of the river, including records of Grass snakes (<i>Natrix natrix</i>) a Slow-worm (<i>Anguis fragilis</i>) and common lizards. The nearest records are from TVP and Kennetmouth.
Plants	There are three records of Schedule 8 plants within 2 km of the site including Rough marsh-mallow (<i>Althaea hirsute</i>) from the Sonning Gravel Pit and greater yellow rattle (<i>Rhinanthus angustifolius</i>) from TVP. There are a total of 34 records including nationally scarce and section 41 species including summer snowflake (<i>Leucojum aestivum</i>) and marshmallow. There are no records from within the site.

4.2 Field Survey – Habitats

- 4.2.1 During September 2015 Claire Andrews BSc (Hons) MCIEEM attended the site across three visits. A proportion of the site is not directly accessible at ground level because of the dense nature of the scrub. Using various vantage points it was possible to look over all parts of the site. Figure 2 shows the extent locations of each habitat parcel along with Target Notes. Photographs of the main habitat types can be found on Photo-sheets 1–3.

Planted Broadleaved Woodland (PBW1 –PBW3)

- 4.2.2 Three parcels of woodland exist at the eastern end of the site. PBW1 forms the boundary with the railway. PBW2 exists on a steep bank between the boundary of the site running along TVP Drive and the Amenity Grassland and PBW3 exists in two sections and effectively splits the upper and lower sections of the Amenity Grassland behind the Waterside Centre. Dominant species in PBW1 are lime (*Tilia cordata*) and hazel (*Corylus avellana*) with dogwood (*Thelycrania sanguinea*) and privet (*Ligustrum vulgare*) in the understory. PBW2 is dominated by ash (*Fraxinus excelsior*) and field maple (*Acer campestre*) with buddleia (*Buddleia davidii*), dogwood and dog rose (*Rosa cana*) frequently occurring. The canopy cover is dense and few shrub layer or ground layer species exist, however towards the edges species such as hedge woundwort (*Stachys sylvatica*) and burdock (*Arctium minus*) occur rarely. There is a compost heap comprising mainly grass clippings (shown as Target Note (TN) 1 on Figure 2). There is also a bird box attached to a tree towards the edge of this parcel (shown as TN2 on Figure 2). Sycamore (*Acer pseudoplatanus*) and hawthorn (*Crataegus monogyna*) dominate in PBW3 with abundant guelder-rose (*Viburnum opulus*), dog rose and dogwood.

Dense / Continuous Scrub (DS)

DS1, DS2 and DS3

- 4.2.3 DS1 is a pocket on the eastern boundary with the roundabout of Thames Valley Park (TVP) Drive where the scrub has formed on top of an earth mound. DS2 is a small pocket the rear of the Waterside Centre. DS3 has formed along the top of a retaining wall that forms part of the boundary of the site running away from the Waterside Centre. The vegative composition of DS1 – DS3 are similar where each is dominated by bramble (*Rubus fruticosus agg*) with dog rose, dogwood and buddleia. A variety of other ruderal species occur occasionally such as common nettle (*Urtica dioica*), perforate St. John's Wort (*Hypericum perforatum*) Jack by the Hedge (*Alliaria petiolata*) and mugwort (*Artemisia vulgaris*). Other species include white dead nettle (*Lamium album*), ground ivy (*Glechoma hederacea*) and hedge bindweed (*Calystegia sepium*).

DS4

- 4.2.4 Dense Scrub 4 is the dominant habitat across the site and forms an almost continuous stand from the edge of the amenity grassland surrounding the Waterside Centre, continuing across much of the site to the railway on the south and then west across the site, to join with a hedge with trees which is a remnant of a former boundary. The parcel is interrupted by sometimes very narrow grass pathways that have been cleared/maintained for access to services by vagrants, or by rabbits. Aerial photography sourced online shows the site in 2004 with grassy areas with some scrub beginning to encroach. In the centre of the most impenetrable areas buddleia appears to dominate. Towards the edges bramble dominates with dogwood and dog rose occurring frequently. There are a number of scattered trees throughout the parcel and some self-seeded saplings. Interspersed and at the edges of the parcel, ruderal species such as nettle, perforate St. Johns Wort, willowherb (*Chamerion spp.*), mugwort and teasel (*Dipsacus fullonum*) are present. Towards the northern boundary there is a single reptile mat left over from a previous survey (shown as TN10 on Figure 2). TN12 denotes the location of a small camp of vagrants and TN 14 shows the location of a rabbit burrow.

Unimproved Calcareous Grassland (CG1)

- 4.2.5 Only small grassy areas exist in between the scrub, these appear to have been maintained as pathways to allow access for maintenance, by animals and/or by rough sleepers using the site. There is however one distinct area of grassland in the south east of the site close to the railway which has been heavily grazed by rabbits. Forbs form 50% or more of the sward including frequent spring cinquefoil (*Potentilla tabernaemontani*), argimony (*Argemone eupatoria*), common centaury (*Centaureum erythraea*), yarrow (*Achillea millefolium*) and perforate St. Johns-Wort (*Hypericum perforatum*). Dominant and abundant grasses include Yorkshire fog (*Holcus lanatus*), false oat grass (*Arrhenatherum elatius*) and cocksfoot (*Dactylis glomerata*) along with red/sheeps fescue (*Festuca rubra/ovina*) TN 13 shows the location of some construction materials within this area.

Amenity Grassland (AM1)

- 4.2.6 Immediately surrounding the Waterside Centre is an area of amenity grassland with scattered trees. The area is split over two levels separated by planted broadleaved woodland. The area is regularly mown and appears to be used as a camping facility with a large communal BBQ area (see TN 4). There is evidence of rabbits across the patch and these were frequently recorded feeding on the lower section. Scattered trees across the area include elder (*Sambucus nigra*), sycamore and hawthorn. Yorkshire fog and cocksfoot are frequent across the patch with a number of abundant herb species including selfheal (*Prunella vulgaris*) yarrow, white clover (*Trifolium repens*) and creeping cinquefoil (*Potentilla reptans*) and other species occasionally or rarely occurring such as dandelions (*Taraxacum* spp.), daisy (*Bellis prennis*) and oxeye daisy (*Leucanthemum vulgare*). TN3 gives the location of a bird box fixed to a pylon. TN5 denotes the location of a retaining wall.

Introduced Shrub (IS1)

- 4.2.7 A small patch of introduced shrub exists to the rear of the Waterside Centre which at one time would have been gardened but now appears not to be. Spindle (*Euonymus europaea*) and field maple along with hawthorn and dogwood are present. Planted columbine (*Aquilegia vulgaris*) and sisyrinchium (*Sisyrinchium striatum*) are also present along with nettle and wood avens (*Geum urbanum*).

Species Rich Hedge with Trees (RHT1)

- 4.2.8 This hedgerow appears to follow a boundary line but is now very overgrown and hard to define. In places the hedge becomes defunct and is difficult to distinguish from the surrounding scrub. The dominant species is hawthorn with dogwood and privet frequently occurring. Elm and blackthorn (*Prunus spinosa*) can also be found occasionally with ash and horse chestnut and Lombardy poplar (*Populus nigra 'italica'*) trees also occurring.

Buildings (B1)

- 4.2.9 Building 1 is a wooden shed situated behind the Waterside centre on the edge of the amenity grassland. It appears to have a single skinned wooden exterior.

Bare Ground (BG1)

- 4.2.10 One area of bare ground exists just off TVP drive and appears to have been a parking or storage area with a concrete base. The area is littered with rubbish and some damaged and deteriorating stored materials.
- 4.2.11 The remaining targets notes fall outside the site boundary – see table in Appendix 2 for description.

4.3 Field Survey - Protected and Notable Species

Badgers

- 4.3.1 There are animal paths between the bramble and other vegetation. Many of these are used by rabbits which are much in evidence on the site. Hair traps placed across these paths on two occasions did not return any positive results. On one occasion (30.09.15) a fresh scat was recorded in a shallow depression within grassland near to the railway. No further droppings were recorded (4 visits across October) therefore it does not appear to be a regularly used latrine. Optimal habitat for badgers is a mixture of deciduous woodland and earthworm rich pasture (short grass). Setts can be located in a variety of situations including within scrub and hedgerows. It is possible that setts could be concealed within areas of dense and continuous scrub.

Bats

- 4.3.2 None of the trees on site have any potential to support roosting bats. One building, a wooden storage shed, falls within the red line boundary. Further survey is necessary to determine its suitability for bats.
- 4.3.3 The hedgerow and hedgerow with trees, scrub and grassland represent good quality commuting and foraging habitat and the remainder of the site is good quality foraging habitat.

Great Crested Newts

- 4.3.4 There is one pond within 250m which is the only one within 500m of the site. Much of the site has habitat including the scrub, rough grassland and hedgerows which is suitable for great crested newts.

Reptiles

- 4.3.5 Reptiles tend to favour sunny, open, undisturbed sites including; brownfield sites, allotments, embankments, south facing banks, rough grassland and areas where there is a diverse structure. The grassland and scrub on site provides suitable habitat for reptiles to forage and bask. There is a compost heap within BW2 that could be suitable for egg laying by grass snakes. There are also a number of potential refugia such as the construction materials at TN13 and the debris at TN8.

Other Species

Birds

- 4.3.6** The hedgerows, woodland and dense scrub provide ideal habitat for nesting birds. Given the habitats present, it is considered most likely to be used by common and widespread species. During the survey, woodpigeon (*Columba palumbus*), blue tit (*Cyanistes caeruleus*), starling (*Sturnus vulgaris*), wren (*Troglodytes troglodytes*), blackbird (*Turdus merula*), robin (*Erithacus rubecula*) and red kite (*Milvus milvus*) were recorded and all of which, with the exception of the red kite, have the potential to nest on site.

Dormice

- 4.3.7** The overgrown hedgerows surrounding the site could provide an important dispersal corridor for dormice if they were to provide connectivity to nearby woodland. However, the site is isolated and there is no connectivity to the wider area therefore the likelihood of dormice using the site is negligible.

Otters and Water Voles

- 4.3.8** Water voles are usually found within 2m of the water's edge along densely vegetated banks of slow flowing rivers, ditches, streams and marshes. Steep loamy or sandy banks with tall vegetation and high foliage diversity are also important (Yalden, 2008). Otters live along rivers, streams and wetland habitats with secure breeding and resting sites (Yalden, 2008). There is no suitable habitat for otters or water voles on or immediately adjacent to the site. No further survey or mitigation will be required for these species.

Hedgehogs

- 4.3.9** The site supports habitat suitable for hedgehogs, which may nest or rest up in areas of dense scrub and forage across the wider site.

4.3.10 Terrestrial Invertebrates

- 4.3.11 Given that the site is small and the majority of protected invertebrates are found within protected sites, it is not expected that any protected species of invertebrate will be present. The habitats on site will support a diversity of insect species; notably there is habitat on site suitable for two species of Principal Importance that were recorded in the desk study, namely stag beetles which may lay eggs underground near rotting wood. Stag beetle larvae develop in decaying tree stumps and fallen timber of broad-leaved trees in contact with the ground, especially of Apple, Elm, Lime, Beech and Oak. TN 15 – 19 show the location of rotting wood or stumps which may provide suitable habitat (N.B.: this is not an exhaustive list). Also there is potential for cinnabar moth to breed on site as suitable food plant for this species was also recorded.

Invasive species

- 4.3.12 No invasive species other than buddleia were noted during the survey.

5 Evaluation, Potential Impacts and Recommendations

5.1 Designated Sites and Ancient Woodland

- 5.1.1 With the exception of the three closest Local Wildlife Sites (Henley Road Gravel Pits, The Coal and Kennetmouth and Kings Meadow East and TVP Nature Reserve), the designated sites and ancient woodlands are isolated from the site by distance and/or surrounding urban development. Given the size and nature of the proposal it is not expected that the proposed development would have any impact on these sites.
- 5.1.2 Measures will need to be taken to prevent indirect impacts upon the Henley Road Gravel Pits which should include sensitive lighting design to prevent light spill and retention of connectivity across to site to maintain a viable corridor along the river.
- 5.1.3 Providing pollution will be controlled during construction works in accordance with Environment Agency pollution prevention guidelines, it is anticipated that development proposals will be compliant with the relevant legislation and policy, with respect to statutory designated sites.

5.2 Habitats

- 5.2.1 The hedgerow, woodland and calcareous grassland represent habitats of Principal Importance and are listed on the Wokingham Borough Council Biodiversity Action Plan; removal or loss of these habitats should be avoided and where removal is unavoidable, it should be replaced on a like-for-like basis. Replacement hedgerows should ideally comprise at least five woody species per 30m length and include the native species found in the affected hedgerow.

5.2.2 Protected and Notable Species

Badgers

- 5.2.3 There is some evidence that badgers may use the site. Further survey over the winter months is planned to estimate the level of use, employing camera traps and also searching the site for evidence of setts once the vegetation has died down a little. If no further evidence of badgers is discovered, scrub clearance should proceed with caution and if any evidence of a sett or other animal hole is discovered then works should cease until such time as the species and level of use can be determined. In the event that a sett was discovered during scrub clearance, work would need to cease until it could be determined whether the sett was active and a licence from Natural England may then be required to lawfully proceed. If other mammal species are discovered, the area would need to be dug by hand to avoid committing an offence under the Animal Welfare Act. As the scrub is very dense and there is potential for other species such as rabbits and hedgehogs (see below) to use the site scrub clearance should be undertaken under a watching brief. The methodology for site clearance, along with measures to provide, retain and enhance habitat on site for badgers as necessary, should be included within the Environmental Mitigation and Management Plan for the site.

Bats

- 5.2.4 All bats and their roosts are fully protected under European and domestic legislation and policy. There are recent records of bat roosts within 300m of the site and the habitat is suitable for commuting, foraging and roosting bats. As the proposals for the site include the removal of the wooden storage shed, further survey to fully ascertain the potential for this building to support roosting bats should be undertaken. As a large amount of habitat will be removed and the land use changes significantly, bat activity surveys should be carried out to assess the potential impacts of the proposed development upon commuting and foraging bats. Measures to provide, retain and enhance habitat on site for bats and mitigate for any negative effects should be included within the Environmental Mitigation and Management Plan for the site.

Great Crested Newts

- 5.2.5 There is no habitat on site suitable for breeding great crested newts. However, some of the habitat is suitable for great crested newts during their terrestrial phase. There is one waterbody within 250m of the site, however no recent records are present of great crested newts within 1km and therefore it is considered that the risk of great crested newts being present on site is low.

- 5.2.6 As great crested newts and their habitats are protected under European and domestic legislation, there is a low risk of newts being present on site and the proposals for the site include removal of a significant proportion of the suitable habitat, an assessment of the suitability of the water bodies within 500m to support newts should be undertaken using Habitat Suitability Index (HSI). If the water bodies have good suitability, an E-DNA test could be undertaken to ascertain the presence or likely absence of great crested newts from these ponds to further inform the likely risk of committing an offence. E-DNA tests can be carried out between the 15th April and the 30th June.

Reptiles

- 5.2.7 Habitat within the site is suitable for reptiles and there are recent records of slow-worm, common lizard and grass snake within 2km of the site. All species of native reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) from intentional and reckless killing and injury.
- 5.2.8 As the proposals involve removal of suitable habitat, further survey will be required to determine the presence or absence of reptiles from the site and to inform mitigation proposals. The optimal period to undertake reptile surveys is from March to September, with May and June most favourable for the species likely to be present on site.
- 5.2.9 Should reptiles be discovered on site, a translocation program may need to be carried out with the agreement of the Local Planning Authority. A method statement for any translocation, along with measures to provide, retain and enhance habitat on site for reptiles should be included within the Environmental Mitigation and Management Plan for the site.

Other Species

Birds

- 5.2.10 It is likely that nesting birds will be present on site within the hedgerows, woodland and scrub. The WSP/PB bird report also indicated that B1 could also be used by breeding birds. The recognised nesting season falls between March and August inclusive. All birds are protected from disturbance whilst nesting under the Wildlife and Countryside Act 1981 (as amended). To avoid committing an offence, necessary site clearance should be undertaken outside of the breeding bird season (i.e. works should be conducted from the end of August to February inclusive). If site clearance needs to occur within the breeding bird season, a check for the presence of birds and their nests should be undertaken by a suitably qualified ecologist immediately before vegetation removal. If an active nest is discovered, then work in that area should cease until the young have fledged or the nest is no longer active. Kingfishers and Black redstarts were recorded within 2km of the site, however there are no habitats suitable for nesting for these species on site. Measures to provide, retain and enhance habitat on site for birds should be included within the Environmental Mitigation and Management Plan for the site.

Dormice

- 5.2.11 As no suitable habitat is present in the vicinity of the site and there are no records of dormice within 2km, the likelihood of dormice being present on site is negligible. No further survey or mitigation will be required for this species.

Hedgehogs

- 5.2.12 It is likely that hedgehogs will be present. The hedgehog benefits from partial protection under the Wildlife & Countryside Act (1981) (as amended). To avoid committing an offence, necessary site clearance should be undertaken with care to avoid injuring any hedgehogs present. If any of the trees or scrub is to be removed, this material should immediately be shredded, burned or removed from site to avoid attracting hedgehogs which may later become injured. The hedgehog is also a species of Principal Importance (SPI). Where a SPI could be affected by a planning proposal, Natural England recommends that surveys and mitigation for any impacts are secured from the applicant prior to a decision being taken. Measures to provide, retain and enhance habitat on site for this species should be included within the Environmental Mitigation and Management Plan for the site.

Otters and Water Voles

- 5.2.13 There is no suitable habitat for otters or water voles on, or immediately adjacent to the site. No further survey or mitigation will be required for these species.

Terrestrial Invertebrates

- 5.2.14 It is likely that stag beetles, which are a species of principal importance (SPI), will be present. Where an SPI could be affected by a planning proposal, Natural England recommends that surveys and mitigation for any impacts are secured from the applicant prior to a decision being taken. It is recommended that where possible suitable deadwood habitat is retained. If some or all of the habitat is to be removed, surveys can be carried out mid-May to mid-July to ascertain the presence or likely absence of the species from the site. Alternatively, log piles and the soil under rotting wood can be dismantled/dug by hand to allow the resulting material to be searched carefully and if invertebrates are found they can be moved to a suitable part of the site.
- 5.2.15 Habitat and the food plant preferred by the caterpillars of cinnabar moth have been recorded on site. Cinnabar moths are also a SPI.
- 5.2.16 Measures to provide, retain and enhance habitat on site for these species should be included within the Environmental Mitigation and Management Plan for the site

Invasive Species

- 5.2.17 No invasive species were noted during the survey, therefore no further survey or mitigation will be required for these species.

Other Mammals

- 5.2.18 Rabbits and rabbit burrows are present and it is likely that foxes are also present across the site. These species are not currently of conservation concern, they do however receive some protection under the Wild Mammals (Protection) Act 1996. Under the Act it is an offence to intentionally cause unnecessary suffering and includes actions such as crushing or asphyxiation which could occur as a result of site clearance.
- 5.2.19 As an ecological watching brief will be required to prevent offences being committed with respect to badgers, other mammals can be included and the measures required to protect them, should they be discovered, set out in the Environmental Mitigation and Management Plan for the site.

5.3 Biodiversity Gains

5.3.1 In line with the National Planning Policy Framework (NPPF) and local planning policy, measures to minimise impacts on and to provide gains in biodiversity on site should be incorporated into the proposals. An appropriate scheme should be developed further, using information in this report along with information from the desk study and any further surveys once complete. Wherever relevant, enhancement suggestions should be linked to goals and targets contained within local planning policy documents, including targets for the restoration and re-creation of priority habitats and the recovery of priority species populations. Measures which could be considered for inclusion in the final scheme are given in Table 3 below.

Table 3: Biodiversity enhancement measures suitable for inclusion on site.

Item	Ease (++++ easiest)	Effectiveness (++++ most effective)	Species most likely to benefit
Create large log piles and/or stumperies in areas of retained habitat around the site.	++++	++++	Hedgehogs Insects – Stag beetle Birds Bats Reptiles
Include suitable roost features for bats in any new building. Suitable features include bat bricks and integrated roost features such as those produced by Schwegler or Habitat.	++++	++	Bats
Incorporate a range of native species into hedgerows or between parking bays. Species should be selected to provide food throughout the year: Willow, blackthorn - early spring Hawthorn, bramble, rose- summer flowers/ winter berries Ivy - autumn nectar/late winter berries	++++	++++	Hedgehogs Insects Birds Bats
To maximise invertebrate diversity, some or all of the following could be included within the scheme: living walls, habitat walls, bee bricks, bug houses and insect hotels, green or brown roof.	+++	+++	Insects Birds Bats
Consider creating areas for planting scarce species found locally, such as summer snowflake, bluebell, and rough marsh-mallow	++	+++	Insects Birds Bats

- 5.3.2 N.B for maximum effect combine one or more of the above features. For example, in addition to using native species in planting between parking bays and incorporating suitable roost features into any building, some of the retained habitat could be enhanced with wildlife in mind.
- 5.3.3 Following completion of further surveys, more specific recommendations may be made with regard to these species.

6 References

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7 Appendix 1 – Survey Results

Extended Phase 1 Habitat Survey; plant species lists

BW1 (Boundary with the railway)

Common Name	Species Name	DAFOR
Dog wood	<i>Thelycrania sanguinea</i>	F
Privet	<i>Ligustrum vulgare</i>	D
Ash	<i>Fraxinus excelsior</i>	F
Small-leaved Lime	<i>Tilia cordata</i>	D
Hazel	<i>Corylus avellana</i>	F
Bramble	<i>Rubus fruticosus agg.</i>	F
Hawthorn	<i>Crataegus monogyna</i>	F
Silver birch	<i>Betula pendula</i>	R

BW2

Common Name	Species Name	DAFOR
Field maple	<i>Acer campestre</i>	D
Ash	<i>Fraxinus excelsior</i>	D
Buddleia	<i>Buddleia davidii</i>	F
Dog rose	<i>Rosa canina</i>	F
Dog wood	<i>Thelycrania sanguinea</i>	F
Privet	<i>Ligustrum vulgare</i>	F
Bramble	<i>Rubus fruticosus agg.</i>	F
Hazel	<i>Corylus avellana</i>	F
Common nettle	<i>Urtica dioica</i>	F
Hawthorn	<i>Crataegus monogyna</i>	F
Sycamore	<i>Acer pseudoplatanus</i>	O
Elder	<i>Sambucus nigra</i>	O
Oak	<i>Quercus robur</i>	R
Rowan	<i>Sorbus aucuparia</i>	R
Cherry sp.	<i>Prunus sp.</i>	O
Hedge woundwort	<i>Stachys sylvatica</i>	R
Lesser burdock	<i>Arctium minus</i>	R

BW3:

Common Name	Species Name	DAFOR
Rosebay willowherb	<i>Chamerion angustifolium</i>	R
Sycamore	<i>Acer pseudoplatanus</i>	D
Hawthorn	<i>Crataegus monogyna</i>	D
Buddleia	<i>Buddleia davidii</i>	O
Horse chestnut	<i>Aesculus hippocastanum</i>	R
Ivy	<i>Hedera sp.</i>	A
Elder	<i>Sambucus nigra</i>	O

Bramble	<i>Rubus fruticosus agg.</i>	D
Common nettle	<i>Urtica dioica</i>	D
Ash	<i>Fraxinus excelsior</i>	R
Creeping thistle	<i>Cirsium arvense</i>	O
Hogweed	<i>Heracleum sphondylium</i>	O
White deadnettle	<i>Lamium album</i>	O
Guelder-rose	<i>Viburnum opulus</i>	A
Dog wood	<i>Thelycrania sanguinea</i>	D
Dog rose	<i>Rosa canina</i>	A
Cherry sp.	<i>Prunus sp.</i>	O
Field maple	<i>Acer campestre</i>	R

DS1

Common Name	Species Name	DAFOR
Dog rose	<i>Rosa canina</i>	O
Common nettle	<i>Urtica dioica</i>	O
Creeping thistle	<i>Cirsium arvense</i>	O
Creeping buttercup	<i>Ranunculus repens</i>	O
Dock sp.	<i>Rumex Sp.</i>	O
Dogwood	<i>Thelycrania sanguinea</i>	O
Bramble	<i>Rubus fruticosus agg.</i>	D
Buddleia	<i>Buddleia davidii</i>	F
Jack-by-the-hedge	<i>Alliaria petiolata</i>	O
Red dead nettle	<i>Lamium purpureum</i>	O
Perforate St.John's-Wort	<i>Hypericum perforatum</i>	O
Silene sp.	<i>Silene Sp</i>	O

DS3:

Common Name	Species Name	DAFOR
Bramble	<i>Rubus fruticosus agg.</i>	D
Common nettle	<i>Urtica dioica</i>	D
Buddleia	<i>Buddleia davidii</i>	F
Sycamore	<i>Acer pseudoplatanus</i>	O
Field maple	<i>Acer campestre</i>	R
Dog rose	<i>Rosa canina</i>	O
Mugwort	<i>Artemisia vulgaris</i>	O
Field woundwort	<i>Stachys arvensis</i>	O

DS2:

Common Name	Species Name	DAFOR
Red dead nettle	<i>Lamium purpureum</i>	O
Teasel	<i>Dipsacus fullonum</i>	R
White deadnettle	<i>Lamium album</i>	O
Mugwort	<i>Artemisia vulgaris</i>	O
Sycamore	<i>Acer pseudoplatanus</i>	A

Common Name	Species Name	DAFOR
Buddleia	<i>Buddleia davidii</i>	O
Elder	<i>Sambucus nigra</i>	A
Common nettle	<i>Urtica dioica</i>	F
Field woundwort	<i>Stachys arvensis</i>	O
Spear thistle	<i>Cirsium vulgare</i>	O
Ragwort	<i>Senecio jacobea</i>	R
Hedge bindweed	<i>Calystegia sepium</i>	F
Walnut	<i>Juglans regia</i>	R
Ground ivy	<i>Glechoma hederacea</i>	R
White bryony	<i>Bryonia dioica</i>	R
Ivy	<i>Hedera helix</i>	O
Forget-me-not	<i>Myosotis sp.</i>	R
Hedgerow crane's bill	<i>Geranium pyrenaicum</i>	O
Water avens	<i>Geum rivale</i>	R
Rosebay willowherb	<i>Chamerion angustifolium</i>	

DS4:

Common Name	Species Name	DAFOR
Bramble	<i>Rubus fruticosus agg.</i>	D
Buddleia	<i>Buddleia davidii</i>	D
Perforate St.John's-Wort	<i>Hypericum perforatum</i>	R
Walnut	<i>Juglans regia</i>	R
Teasel	<i>Dipsacus fullonum</i>	R
Rosebay willowherb	<i>Chamerion angustifolium</i>	O
Elm	<i>Ulmus procera</i>	R
Lesser burdock	<i>Arctium minus</i>	R
Dogwood	<i>Thelycrania sanguinea</i>	D
Ash	<i>Fraxinus excelsior</i>	R
Snowberry	<i>Symphoricarpos albus</i>	R
Field maple	<i>Acre campestre</i>	R
Dog rose	<i>Rosa canina</i>	A
Privet	<i>Ligustrum vulgare</i>	R
Creeping thistle	<i>Cirsium arvense</i>	R
Nettle	<i>Urtica dioica</i>	F
Hedge bindweed	<i>Calystegia sepium</i>	O
Great willow herb	<i>Epilobium hirsutum</i>	R
Ragwort	<i>Senecio jacobea</i>	O
Red dead nettle	<i>Lamium purpureum</i>	R
Mugwort	<i>Artemisia vulgaris</i>	R
Ivy	<i>Hedra helix</i>	O
Field bindweed	<i>Convolvulus arvensis</i>	R
White deadnettle	<i>Lamium album</i>	R
Hogweed	<i>Heracleum sphondylium</i>	R
Michaelmas daisy	<i>Aster spp</i>	R
Cherry	<i>Prunus avium</i>	R
Blackthorn	<i>Prunus spinosa</i>	F

Common Name	Species Name	DAFOR
Creeping buttercup	<i>Ranunculus repens</i>	R
Bittersweet	<i>Solanum dulcamara</i>	R
Hoary willowherb	<i>Epilobium parviflorum</i>	R
Great willowherb	<i>Epilobium hirsutum</i>	R
Green alkanet	<i>Pentaglottis sempervirens</i>	R
Scattered trees		
Sycamore	<i>Acer pseudoplatanus</i>	O
Hawthorn	<i>Crataegus monogyna</i>	O
Ash	<i>Fraxinus excelsior</i>	O
Walnut	<i>Juglans regia</i>	O
Horse chestnut	<i>Aesculus hippocastanum</i>	O

CG1: Unimproved Calcareous Grassland

Common Name	Species Name	DAFOR
Argimony	<i>Argrmonia eupatoria</i>	F
Bird's-foot trefoil	<i>Lotus corniculatus</i>	R
Bramble	<i>Rubus fruticosus agg.</i>	R
Bristly oxtongue	<i>Picris echioides</i>	O
Cocks foot	<i>Dactylis glomerata</i>	D
Common centaury	<i>Centaureum erythraea</i>	F
Common chickweed	<i>Stellaria media</i>	R
Daisy	<i>Bellis perennis</i>	F
Dock	<i>Rumex sp</i>	R
False oat grass	<i>Arrhenatherum elatius</i>	R
Germander speedwell	<i>Veronica chamaedrys</i>	R
Ground ivy	<i>Glechoma hederacea</i>	R
Green field speedwell	<i>Veronica agrestis</i>	O
Hop trifol	<i>Trifolium campestre</i>	R
Oxeye daisy	<i>Leucanthemum vulgare</i>	R
Perforate St.John's-Wort	<i>Hypericum perforatum</i>	F
Selfheal	<i>Prunella vulgaris</i>	F
Ragwort	<i>Senecio jacobaea</i>	O
Spring cinquefoil	<i>Potentilla tabernaemontani</i>	D/F
Teasel	<i>Dipsacus fullonum</i>	O
White clover	<i>Trifolium repens</i>	F
Wild carrot	<i>Daucus carota</i>	O
Yarrow	<i>Achillea millefolium</i>	F
Yorkshire fog	<i>Holcus lanatus</i>	D
Sheeps/red fescue	<i>Festuca ovina/rubra</i>	D

AM1

Common Name	Species Name	DAFOR
Greater plantain	<i>Plantago major</i>	A
Self-heal	<i>Prunella vulgaris</i>	F
Yarrow	<i>Achillea millefolium</i>	A
White clover	<i>Trifolium repens</i>	A
Hop trefoil	<i>Trifolium campestre</i>	R
Dove's foot crane's bill	<i>Geranium molle</i>	O
Ribwort plantain	<i>Plantago lanceolata</i>	O
Common chickweed	<i>Stellaria media</i>	O
White deadnettle	<i>Lamium album</i>	O
Wild carrot	<i>Daucus carota</i>	R
Hedge bedstraw	<i>Galium mollugo</i>	R
Common sorrel	<i>Rumex acetosa</i>	R
Fescue (sheep/red)	<i>Festuca rubra/ovina</i>	O
Oxeye daisy	<i>Leucanthemum vulgare</i>	R
Perforate St.John's-Wort	<i>Hypericum perforatum</i>	O
Spear thistle	<i>Cirsium vulgare</i>	R
Field bindweed	<i>Convolvulus arvensis</i>	R
Creeping buttercup	<i>Ranunculus repens</i>	O
Bristly oxtongue	<i>Picris echioides</i>	R
Cocksfoot	<i>Dactylis glomerata</i>	F
Yorkshire fog	<i>Holcus lanatus</i>	F
Dandelion	<i>Taraxacum spp</i>	O
Creeping cinquefoil	<i>Potentilla reptans</i>	A
Scattered trees		
Elder	<i>Sambucus nigra</i>	
Sycamore	<i>Acer pseudoplatanus</i>	
Hawthorn	<i>Crataegus monogyna</i>	

Introduced Scrub

Common Name	Species Name	DAFOR
Common nettle	<i>Urtica dioica</i>	F
Field maple	<i>Acer campestre</i>	D
Columbine	<i>Aquilegia vulgaris</i>	F
Sisyrinchium	<i>Sisyrinchium striatum</i>	D
Hawthorn	<i>Crataegus monogyna</i>	F
Wood avens	<i>Geum urbanum</i>	O
Field woundwort	<i>Stachys arvensis</i>	O
Spindle	<i>Euonymus europaea</i>	F

RHT1

Common Name	Species Name	DAFOR
Privet	<i>Ligustrum vulgare</i>	D
Hawthorn	<i>Crataegus monogyna</i>	D
Nettle	<i>Urtica dioica</i>	F
Lombardy popular	<i>Populus nigra 'italica'</i>	R
Blackthorn	<i>Prunus spinosa</i>	O
Walnut	<i>Juglans regia</i>	O
Ash	<i>Fraxinus excelsior</i>	R
Horse chestnut	<i>Aesculus hippocastanum</i>	R
Ivy	<i>Hedra helix</i>	F
Wood avens	<i>Geum urbanum</i>	A
Jack-by-the-hedge	<i>Alliaria petiolata</i>	A

8 Appendix 2 – Target Note List & Incidental Species

Target Notes

Number	Description
1	Compost heap – mainly grass cuttings
2	Bird Box
3	Bird box
4	BBQ area
5	Concrete retaining wall
6	Rabbit evidence
7	Access point
8	Litter, camping debris and dumped metal
9	Access point
10	Reptile refugia from previous survey
11	Tents
12	Tents
13	Construction materials
14	Rabbit burrow
15 - 18	Stumps, log pile or rotting wood suitable for stag beetles

Species incidentally recorded during survey

Species	Notes
Woodpigeon	Regularly recorded on site
Starling	Regularly recorded on site
Wren	Regularly recorded on site
Robin	Regularly recorded on site
Large white butterfly	Seen once in Amenity Grassland
Rabbits	Regularly recorded – also see target notes
Common shrew	Recorded under reptile mats

Client	Wokingham Borough Council
Project	TVP park & Ride
Title	Location Plan
Date	November 2014
Scale	Schematic Only

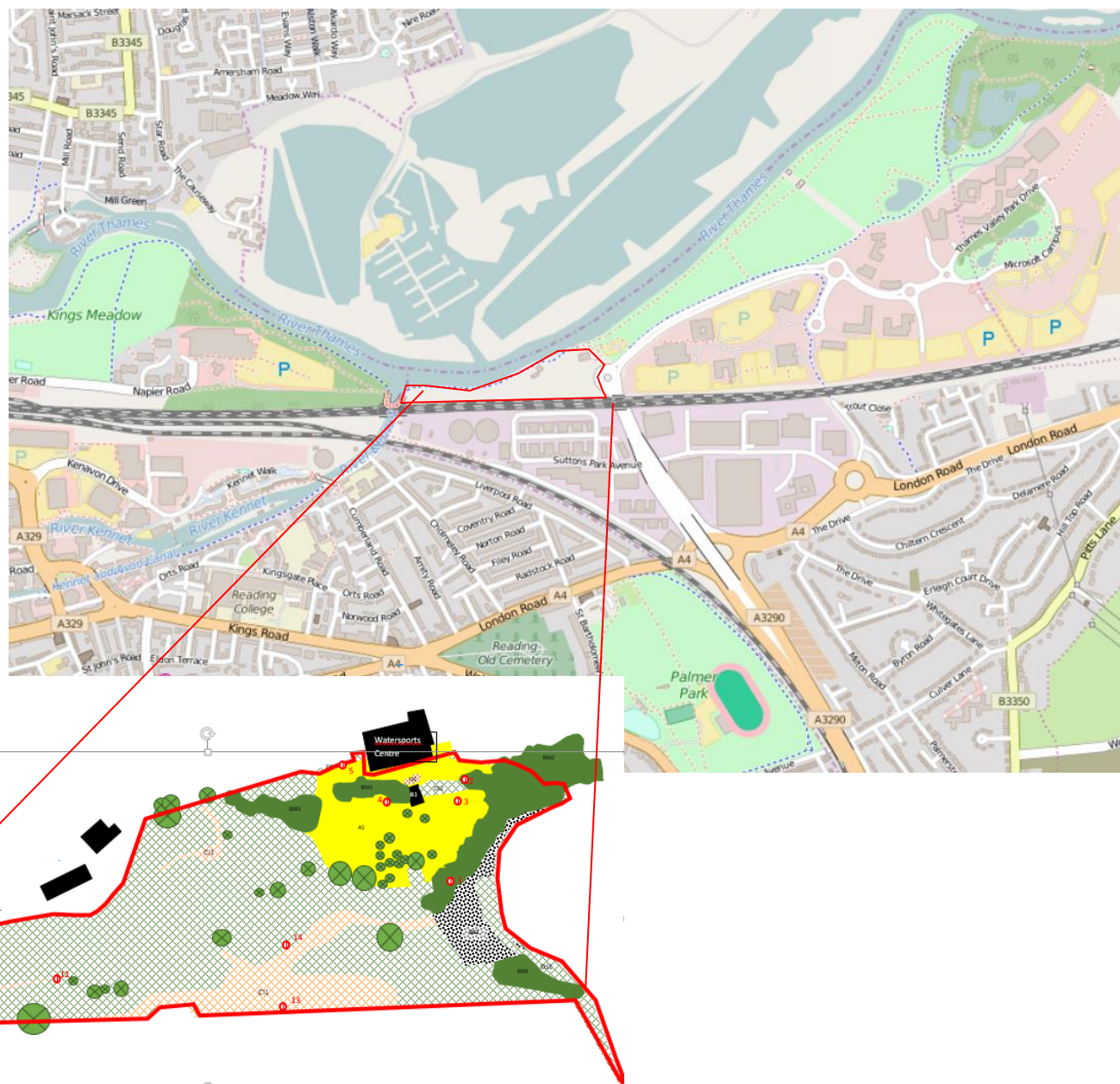
Figure 1



Location Information

Postcode: RG1 1PQ

GR At Centre:
 SU 73477 73898



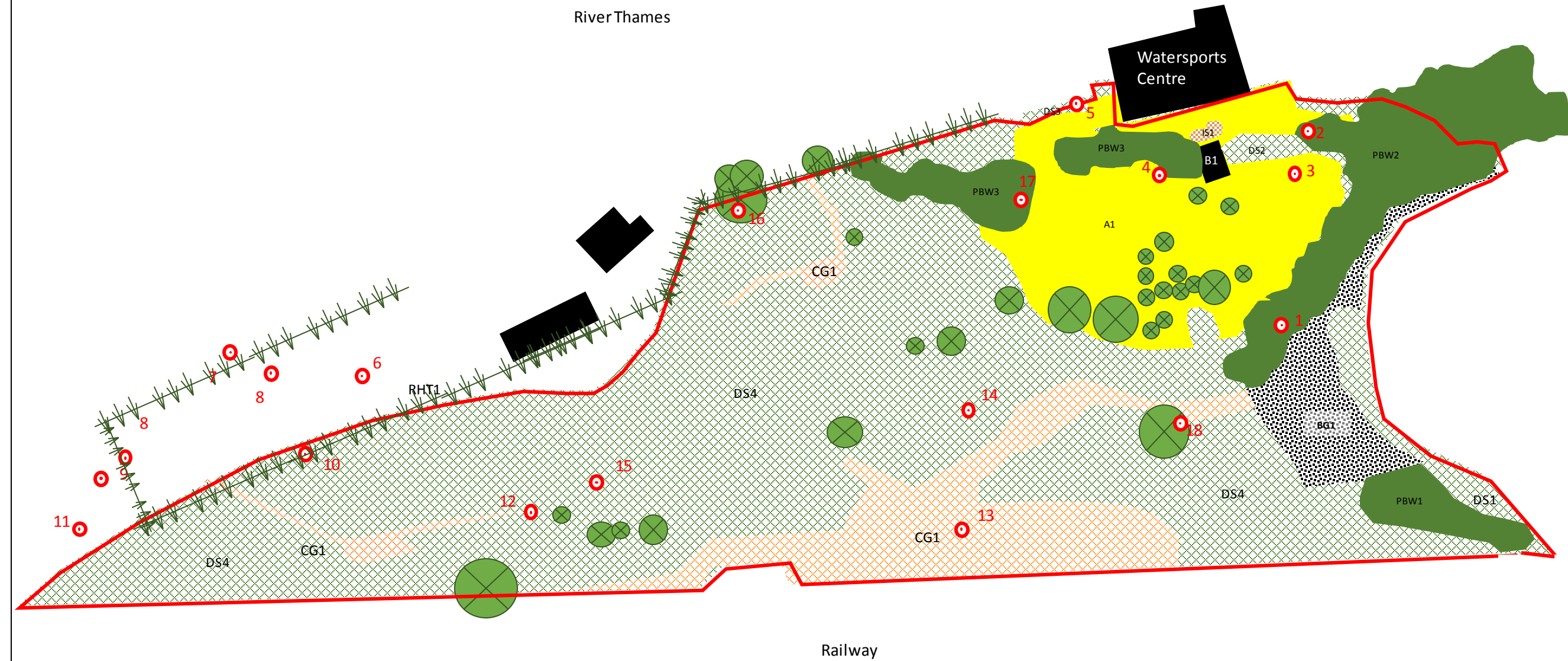
Client	Wokingham Borough Council
Project	TVP Park & Ride
Title	Phase 1 habitat Survey map
Date	September 2015
Scale	Schematic Only

Figure 2

N ↑

Key

-  Dense Scrub
-  Target Note
-  Site boundary
-  Bare ground
-  Unimproved Calcareous Grassland
-  Scattered trees
-  Amenity Grassland
-  Introduced shrub
-  Species rich hedge with trees
-  Planted broadleaved woodland





DS1: Along boundary with TVP Drive



DS4: Looking in from Northern boundary

DS4; Looking across from Southern boundary



DS4: Looking across from edge of Amenity Grassland



Client	Wokingham Borough Council
Project	TVP P&R
Title	Photos of site
Date	Taken September 2015



CG1: Central part of area



▲ CG1: Looking west

◀ CG1: Looking east

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Client	Wokingham Borough Council
Project	TVP P&R
Title	Photos of site
Date	Taken September 2015



TN4: BBQ area



TN13: Construction materials



B1: Rear view of building



BG1: Looking west



A1: Looking across to the west



PBW3: Looking from Amenity grassland



RHT1: Looking from south side



PBW3: looking from lower section of A1



PBW2: Looking from A1

Client	Wokingham Borough Council
Project	TVP P&R
Title	Photos of site
Date	Taken September/November 2015