

1. CONTEXT

1.1 Landscape

Historic

1.1.1 Historically the Site comprised of arable farmland. In 1973 the Site was developed into an 18-hole golf course and has remained as such until present day.

Present

1.1.2 The Site is located within land to the east of the M40 motorway and south of the A4095 main road, Chesterton, Bicester, Oxfordshire OX26 1TE; approximately centred on national grid reference SP549216.

1.1.3 The Site, approximately 18.39 ha, comprises of part of a golf course, associated with the Bicester Hotel Golf and Spa within the wider site. The Site features a range of habitat types including ponds, woodland, hedgerow, grasslands, scrub, tall ruderal and bare ground.

1.1.4 In the wider landscape context, the village of Chesterton lies to the east beyond another section of the golf course. Bignell Park Farm lies to the north beyond the A4095 main road. The M40 motorway runs along the western boundary of the Site with arable land beyond. Directly to the south lies the golf course carpark and associated buildings with open sports and pasture fields beyond.

1.2 Ecological

1.2.1 This section considers and summarises the key points made during the previous ecological assessments of the Site.

Statutory Designated Sites

1.2.2 There are no statutory designated sites of nature conservation importance within 2 km of the Site.

Non-Statutory Designated Sites

1.2.3 There are no non-statutory designated sites of nature conservation importance within 2 km of the Site.

Area Habitats – Previous Assessment

1.2.4 Broad area habitat types identified on the Site during previous ecological assessments (WSP, 2018) were described as follows:

1.2.5 **Plantation broadleaved woodland:** Two plantation broadleaved woodland parcels are located within the Site (PBW1-2). These parcels of plantation woodland were identified within the north-west of the Site. PBW1 is dominated by semi-mature white poplar all of similar age and structure. PBW 2 forms a boundary to the Site in the north and contain a variety of species including field maple and hawthorn.

- 1.2.6 **Plantation broadleaved woodland/poor semi-improved grassland mosaic:** The remaining parcels of plantation broadleaved woodland are mosaic habitats with poor semi-improved grassland (PBW/SI (P) 1-4). These parcels are comprised of younger trees predominately silver birch, white poplar and ash. They have coarse grassland ground cover, typically dominated by cock's foot.
- 1.2.7 **Plantation mixed woodland:** There are two parcels of plantation mixed woodland within the Site (PMW1-2). One parcel of mixed plantation (PMW1) was identified between the amenity grasslands of the golf course. PMW1 has some taller sward grassland and tall ruderal edges, and has a uniform age and height structure, but is noticeably denser than PMW1. PMW2 is located in the west of the Site and is uniform in age and structure. It forms a boundary with the M40 motorway but also encroaches into the golf course. The dominant species within the woodland are Cypress species, ash and field maple.
- 1.2.8 **Dense scrub:** One parcel of dense scrub was identified between Building 5 (B5) and PMW1, joining the adjacent hedgerow RHT2. This parcel of scrub was approximately 1.5 m in height and was dominated by bramble.
- 1.2.9 **Scattered scrub:** Scattered scrub was identified across the Site in a number of different habitat types including; poor semi-improved grassland, semi-improved neutral grassland, amenity grassland, plantation woodland and on the banks of standing water. Scattered scrub was dominated by bramble, but also included species such as rose and gorse.
- 1.2.10 **Broadleaved/coniferous/mixed parkland & scattered trees:** Scattered broadleaved, coniferous and mixed trees were located throughout the golf course as part of the landscape design. These trees were planted to give the golf course structure and subsequently formed parcels of varying sizes and structure. A number of tree species were recorded within these parcels.
- 1.2.11 **Semi-improved neutral grassland:** One parcel of semi-improved neutral grassland (SNG 4) is located on the boundary of the Site and the M40 verge to the west of standing water. The sward within this parcel appeared to have little management and was approximately 10-20 cm in height at time of survey. The grasslands exhibited a moderate diversity of grass and forb species including selfheal, carrot and creeping cinquefoil. Within SNG4 there were a number of scattered trees and scrub parcels.
- 1.2.12 **Poor semi-improved grassland:** Four small parcels of poor semi-improved grassland were identified within the Site (SI (P) 1-4). These grassland parcels were located adjacent to the amenity grassland of the golf course and were identified by their increased sward height and abundance of coarse grass species including Yorkshire fog and cock's foot. Scattered scrub, predominately bramble, was identified across the grasslands on occasion.
- 1.2.13 **Standing water:** Standing water is located throughout the Site. Eleven waterbodies of a variety of shapes and sizes were identified during the Phase 1 habitat survey. One waterbody (SW10) was identified within a group of trees in the south of the Site. This waterbody is shallow with some marginal vegetation (rush species) and may be ephemeral in nature. The remaining ponds appear to have been engineered as part of the golf course landscaping design (SW2-13). These ponds are deep, with good water quality and have with some marginal and emergent vegetation (including bulrush and rush). The marginal vegetation had

been cut prior to the survey, indicating the regular management. SW9 is densely choked by bulrush but does contain water. No fish were observed in the ponds at the time of survey. Many of the ponds have shallow grassland banks with occasional trees (alder, willow and silver birch). The grasslands immediately surrounding the waterbodies and their banks are managed.

- 1.2.14 **Amenity grassland:** Amenity grassland is the dominant habitat type identified within the Site. The grassland has been landscaped for the purpose of the golf course and has a very short sward height. Management does however vary between the sections of each golf hole, to form the different playing areas. The amenity grassland is dominated by perennial rye, with locally abundant red fescue and occasional common daisy. The 'rough' areas of the golf course may develop into a taller and more species rich sward during the spring and summer months.
- 1.2.15 **Ephemeral short perennial & bare ground:** Bare ground and ephemeral short perennial vegetation areas were located across the Site. Species present include Yorkshire fog and geranium. Bare ground was identified around the periphery of the golf clubhouse and hotel, with bare ground tracks and pathways leading across the golf course.
- 1.2.16 **Other habitats:** Other habitats located within the Site include sand bunkers which are located throughout the golf course.

Linear Features – Previous Assessment

- 1.2.17 Broad linear feature types identified on the Site during previous ecological assessments were described as follows:
- 1.2.18 **Running water:** Running water was identified within the east of the Site (RW1). RW1 is a narrow and shallow stream running from PBW1 southeast towards the main club house (B1), where it flows underneath and to the south. The amenity grassland banks of RW1 are very steep.
- 1.2.19 **Intact-species poor hedgerow:** One species poor hedgerow (PH1) was identified adjacent a bare ground track leading to the main clubhouse from the north. The hedgerow is dominated by blackthorn and is approximately 2 m in height and 2 m in width.
- 1.2.20 **Species-rich hedgerow with trees:** RHT1 is located along the boundary. The hedgerow is unmanaged and is associated with a running water ditch. The height of the hedgerow ranges from 3 m to 8 m, with an average width of approximately 4 m. The hedgerow is diverse, typically containing abundant hawthorn as well as crab apple, rose, hazel, field maple and mature ash.
- 1.2.21 **Species-poor hedgerow with trees:** PHT1 is located to the east of the main car park, forming a boundary between the golf course and area of bare ground.

2. SURVEY

- 2.1.1 A walkover survey was undertaken on Site on the 5th January 2021 to assess the area affected by the proposed development and with particular reference to habitat type, condition and distribution compared to the baseline data presented in the Biodiversity Net Gain assessment.
- 2.1.2 The survey will inform a review of the Biodiversity Net Gain assessment carried out by WSP in December 2019, through verifying the baseline habitat survey used within the Biodiversity Net Gain assessment.
- 2.1.3 The extent of the survey area is presented on the Plan in Appendix. The detailed Phase 1 Habitat Plans including detailed labels associated with the habitat features are also appended for reference.

3. RESULTS

3.1 Introduction

3.1.1 The results of the Ecological Verification Walkover, in relation to the condition of the Site in January 2021, are set out below. Reference is made to the previous survey features as per the detailed WSP Phase 1 Habitat Plans presented in the Appendix.

3.2 Area Habitats

3.2.1 **Amenity grassland (AM2):** The majority of the Site comprises of short mown amenity grassland with occasional forbs such as daisy, doves foot cranesbill, weld, meadow buttercup, spear thistle, common chickweed and ragwort. The grassland lacks structure and diversity due to very limited rough grass areas and managed large open areas of short grass (Photo 1). Occasional rabbit grazing, digging and droppings are present within this habitat.

3.2.2 **Semi-improved neutral grassland (SNG4):** On the top of M40 motorway embankment, dropping down towards the Site there is an area of semi-improved neutral grassland in poor condition (Photo 2). There are areas of bramble scrub and scattered broadleaved trees, the habitat is generally limited and shaded. Species within this habitat include teasel, spear thistle, willowherb, wild carrot. The grassland has significant areas of bramble and young trees developing in patches.

3.2.3 Poor semi-improved grassland:

- **PBW/SI(P)2** - Area of poor semi-improved grassland to the northeast of pond SW8 (Photo 3).
- **PBW/SI(P)3** - Area of poor semi-improved rough grassland with young trees above, on the cusp of succession into a plantation woodland.
- **SI(P)3** - Small area of poor semi-improved rough grassland with occasional small planted broadleaved trees. There are limited species within in this habitat dominated by cocks foot, Yorkshire fog with occasional mugwort, nettle, Dove's-foot crane's-bill and dead nettle.
- **PBW/SI(P)1** - Poor semi-improved rough grassland with young broadleaved trees above. These overlapping habitats are both in poor condition. Tree species include ash, oak, elder and holly. Grassland species include cocks foot, ragwort, Yorkshire fog, meadow buttercup, dock and occasional oxeye daisy. An active rabbit warren is also present within these habitats.

3.2.4 Broadleaved woodland plantation:

- **PBW2** - Broadleaved woodland plantation with semi mature tree species including ash, field maple, and occasional hazel, blackthorn etc (Photo 4).
- **PBW1** - Broadleaved woodland plantation featuring poplar with understorey limited to blackthorn, ivy and cleavers. This habitat is in poor condition due to a lack of species diversity and its limited structure (Photo 5).

3.2.5 **Mixed woodland plantation:**

- **PMW1** - Block of semi mature mixed woodland plantation formed of scots pine and field maple. This habitat lacks diversity and has a limited structure with no significant ground flora present (Photo 6).
- **PMW2** - Mixed woodland plantation within a narrow tree belt against the south-western boundary of the Site (Photo 7). The structure of the woodland is limited to the main canopy with only a few ground flora species present. Species within this habitat include field maple, cherry, cypress, pine, oak, larch and hawthorn, with ground flora limited to cleavers, cow parsley, ground ivy, ivy and occasional lords and ladies. The woodland is generally in poor condition and is planted on a formed bund, so limited ground flora is expected. A number of the trees also remain in their protective tubes. There is a more open section of the mixed woodland plantation towards the north of the Site with paths and low level of ground flora dominated by cleavers (Photo 8).

3.2.6 **Broadleaved Parkland/Scattered Trees:**

- **BP12** - Young broadleaved trees scattered above amenity grassland.
- **BP13, BP15, BP6 & BP7** - Groups of trees in this area are relatively semi mature with amenity grassland below and occasional patches of scrub. All of these groups are in poor condition in terms of diversity and structure (Photo 9).
- **BP14** - Group of semi mature willow and poplars in the west and south of the Site.
- **BP17** - Group of semi mature poplar with amenity grassland below (Photo 10).

3.2.7 **Coniferous Parkland/Scattered Trees CP3, CP4 & CP5:** There are three areas of coniferous parkland/scattered trees within the Site, CP3 and CP4 formed of cypress (Photo 11) and CP5 formed of Norway spruce (Photo 12).

3.2.8 **Mixed Parkland/Scattered Trees (MP6):** Group of mixed scattered trees dominated by leyland cypress with a lack of structure and species diversity above short grassland.

3.2.9 **Introduced Shrub (IS5):** Area of planted dogwood with scattered broadleaved trees (Photo 13).

3.2.10 **Standing water:**

- **SW2** - Pond feature with limited margins and good water condition (Photo 14). There are occasional patches of soft and hard rush, pendulous sedge and reedmace. The banks feature occasional willow scrub and trees with large area of reedmace at its northern end. The eastern slope down to the pond is species-poor rough grassland with occasional wild carrot but appears to be subject to some form of mowing as not as established as other areas of poor semi-improved grassland.
- **SW4** - Dry towards its southern end (at the time of survey) and shallow pond feature towards its northern end. There are limited margins of hard rush only.

- **SW5** - Large pond feature with deep central section and patches of marginal plants limited to hard rush, reedmace, willowherb and soft rush. The banks are formed of poor semi-improved grassland with occasional wild carrot, dogwood and willow.
- **SW6** - Pond feature with deep central section and margins limited to rush and willowherb. The banks have a narrow band of poor semi-improved grassland with water plantain at the western end, patches of reedmace and occasional willow.
- **SW7** - Pond feature with limited margins but some denser areas of willow forming a more enclosed pond.
- **SW8** - Moderate pond with narrow edges and young broadleaved plantation to the northwest (Photo 3).
- **SW9** - Shallow pond feature choked with reedmace with narrow margins of rush and willowherb (Photo 15).
- **SW10** - Relatively shallow small pond feature with no margins and limited aquatic plants. Semi mature willow and poplars are present to the west and south of the pond.
- **SW11** – A large deep water pond with limited narrow margins, amenity grassland down to water's edge on the eastern side and occasional patches of rush. Dense patches of alder and willow are also present.
- **SW12** - Small pond feature with occasional rush margins and areas of amenity grassland margins (Photo 16). Aquatic species within this pond include floating sweet grass, water crowfoot and foals water cress.

Linear Features

- 3.2.11 **Linear trees:** Line of cypress trees planted along the northwest boundary of the Site along the M40 (Photo 17).
- 3.2.12 **Species-poor hedgerow with trees PHT1:** Species-poor hedge and trees with species including hawthorn and occasional ash trees (Photo 18).
- 3.2.13 **Species-rich hedgerow with trees RHT1:** Section of species-rich hedge with trees along the eastern boundary (Photo 19). This is an over mature hedge feature with ash, field maple, crab apple, blackthorn, ivy, Corsican pine, privet and dog rose. An active rabbit warren is present within this feature.
- 3.2.14 **Intact species-poor hedgerow:** Intact species-poor blackthorn hedge. This linear feature is just offsite, but could be impacted by development.
- 3.2.15 **Dry ditch:** Dry ditch feature with low winter water level (at the time of survey) in its north-western section (Photo 20). The south-eastern section is dry and hawthorn lined in its southern section. The ditch is in poor condition lacking marginal plants and formed of amenity grassland banks.
- 3.2.16 **Running water (RW1):** Section of low flow running water ditch with short kept grassland banks (Photo 21). The ditch is generally lacking in marginal and aquatic plants other than the occasional floating sweet grass. A spur from the ditch is general dry and also lacks marginal and aquatic vegetation.

3.3 Habitat Condition

- 3.3.1 The WSP Biodiversity Net Gain Report assigns habitat condition to the above habitat types. The Habitat Condition table in Appendix reviews the previous condition assessment based on the relevant criteria, previous baseline and findings from this report

4. CONCLUSIONS

4.1.1 Further to the verification survey undertaken in January 2021 the following conclusions can be drawn:

- No significant changes to the baseline ecology of the Site were identified with reference to the findings of the verification survey January 2021 compared to the baseline habitats utilised in the WSP Biodiversity Net Gain assessment.
- Generally, the habitat types, distribution and condition remain as previously assessed.
- Some areas of habitat are degrading such as neutral semi-improved grassland with increased areas of bramble/trees along the western boundary.
- The amenity grassland area dominates the Site and is subject to intensive management. Amenity grassland areas extend beneath the scattered trees so rough grassland areas are restricted to edges and occasional patches against plantations/ponds as previously mapped.

5. REFERENCES AND BIBLIOGRAPHY

- British Standards Institute (BSI) (2013). BS42020 - Biodiversity Code of Practice for Planning and Development. BSI, London.
- CIEEM (2017). Guidelines on Ecological Report Writing (2nd edn). Winchester: CIEEM.
- CIEEM (2017). Guidelines for Preliminary Ecological Appraisal (2nd edn). Winchester: CIEEM.
- JNCC (2010). *Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit*. Peterborough: JNCC.
- Maddock, A (ed.) (2008). UK Biodiversity Action Plan; Priority Habitat Descriptions (Updated Dec 2011).
- Natural England (2010). Higher Level Stewardship Farm Environment Plan Manual (3rd ed).
- WSP (2019). Great Wolf Resorts. Biodiversity Net Gain Assessment
- WSP (2018). Great Wolf Resorts. Preliminary Ecological Appraisal.

6. GLOSSARY

6.1 Scientific Terms and Acronyms

CIEEM Chartered Institute of Ecology and Environmental Management, the professional organisation and provider of professional codes of conduct for ecological consultancy.

EPS European Protected Species For the purposes of this report EPS are species that require particular licences to allow certain works to go ahead. Species falling within the following situations are not considered as EPS within this report:

Level of protection – ‘EU’ Protected under the Conservation of Habitats and Species Regulations (2017).

Level of protection – ‘UK’ Protected under the Wildlife and Countryside Act 1981 (as amended).

Non-native invasive species For the purposes of this report: species listed on Schedule 9 of the wildlife and Countryside Act 1981 (as amended). Widely naturalised species, such as grey squirrel, are excluded.

Notable species A species which is listed as a UK Priority Species, carries an unfavourable conservation status (e.g. scarce, rare, threatened, Red-listed), is invasive or is otherwise worthy of note from an ecological perspective.

Protected species A species protected under specific UK or European legislation, including Habitats Directive, Wildlife and Countryside Act.

SAC Special Area of Conservation. Designated under European Union Habitat Directive (92/43/EEC) to protect species and habitat of European interest.

SPA Special Protection Area. A site designated under the European Union Directive on the Conservation of Wild Birds.

SSSI Site of Species Scientific Interest. Statutory designation of biological or geological importance.

UK Priority Habitat and species A habitat or species identified as a priority for conservation in accordance with Section 40 of the Natural Environment and Rural Communities Act (2006). Section 40 of the Act places a duty on public authorities to have regard for the conservation objectives of these habitats and species.

6.2 Scientific Names

6.2.1 Scientific names of species mentioned in this report are outlined in Table 6.1. This table excludes fauna species recorded on Site during the survey; see Appendix B

Table 6.1 Scientific names of species mentioned within this report

English Name	Scientific Name
Mammals	
Rabbit	<i>Oryctolagus cuniculus</i>
Plants	
Alder	<i>Alnus glutinosa</i>
Ash	<i>Fraxinus excelsior</i>
Blackthorn	<i>Prunus spinosa</i>
Bramble	<i>Rubus fruticosus</i>
Cherry	<i>Prunus avium</i>
Cleavers	<i>Galium</i> sp.
Cock's foot	<i>Dactylis glomerata</i>
Common chickweed	<i>Stellaria media</i>

English Name	Scientific Name
Corsican pine	<i>Pinus nigra</i>
Cow parsley	<i>Anthriscus sylvestris</i>
Crabapple	<i>Malus sp.</i>
Creeping cinquefoil	<i>Potentilla reptans</i>
Cypress	<i>Cupressus x leylandii</i>
Daisy	<i>Bellis perennis</i>
Dead nettle	<i>Lamium sp.</i>
Dock	<i>Rumex sp.</i>
Dogrose	<i>Rosa canina</i>
Dove's-foot cranes-bill	<i>Geranium molle</i>
Field maple	<i>Acer campestre</i>
Floating sweet grass	<i>Glyceria fluitans</i>
Fools watercress	<i>Apium nodiflorum</i>
Gorse	<i>Ulex europaeus</i>
Ground ivy	<i>Glechoma hederacea</i>
Hard rush	<i>Juncus inflexus</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Ivy	<i>Hedera helix</i>
Larch	<i>Larix decidua</i>
Lords-and-ladies	<i>Arum maculatum</i>
Meadow buttercup	<i>Ranunculus acris</i>
Mugwort	<i>Artemisia vulgaris</i>
Nettle	<i>Urtica dioica</i>
Oak	<i>Quercus sp.</i>
Oxeye daisy	<i>Leucanthemum vulgare</i>
Pendulous sedge	<i>Carex pendula</i>
Pine	<i>Pinus sp.</i>
Poplar	<i>Populus nigra</i>
Privet	<i>Ligustrum vulgare</i>
Ragwort	<i>Jacobaea vulgaris</i>
Reedmace	<i>Typha latifoli</i>
Rose	<i>Rosa sp.</i>
Rush	<i>Juncus sp.</i>
Scots pine	<i>Pinus sylvestris</i>
Selfheal	<i>Prunella vulgaris</i>
Soft rush	<i>Juncus effusus</i>
Spear thistle	<i>Cirsium vulgare</i>
Teasel	<i>Dipsacus fullonum</i>
Water crowfoot	<i>Ranunculus aquatilis</i>
Weld	<i>Reseda luteola</i>
Wild carrot	<i>Daucus carota</i>
Willow	<i>Salix sp.</i>
Willowherb	<i>Epilobium sp.</i>
Yorkshire Fog	<i>Holcus lanatus</i>

APPENDIX

Plans

WSP Phase 1 Habitat Plan – October 2019

WSP detailed phase 1 Plan – February 2018

Habitat Condition Review



Key

Red Line Boundary

Lines

Running Water

Intact Hedge - Species-Poor

Hedge with Trees - Species-Rich

Hedge with Trees - Species-Poor

Dry Ditch

Polygons

Broadleaved Woodland - Plantation

Mixed Woodland - Plantation

Dense Scrub

Broadleaved Parkland/Scattered Trees

Coniferous Parkland/Scattered Trees

Mixed Parkland/Scattered Trees

Neutral Grassland - Semi-Improved

Species Poor Semi-Improved Grassland

Standing Water

Amenity Grassland

Ephemeral/Short Perennial

Introduced Shrub

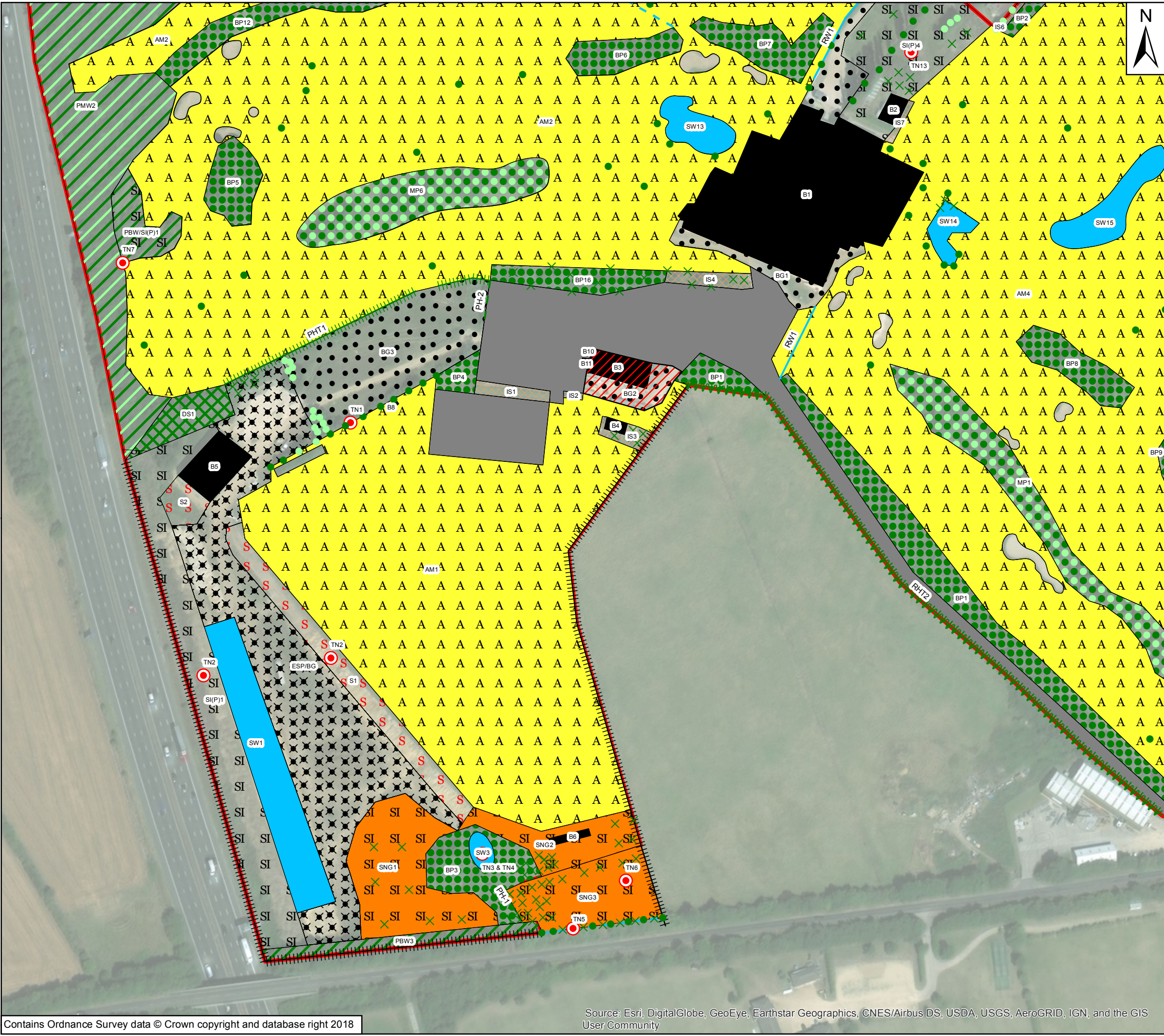
Bare Ground

Other Habitat (Sand)

0 0.035 0.07 0.105 0.14

km

Client:	DP9
Project:	Bicester
Title:	Phase 1 Habitat Survey
Drawing No:	Figure 1
Date:	October 2019
Scale:	2,500 @ A3
Drawn:	BW
Checked:	LR
Approved:	VP



Key

- Site Boundary
- Scattered Broadleaved Trees
- Scattered Coniferous Trees
- × Scattered Scrub
- Target Note
- Defunct Hedge - Species-Poor
- Dry Ditch
- Fence
- Hedge with Trees - Species-Poor
- Hedge with Trees - Species-Rich
- Intact Hedge - Species-Poor
- Running Water
- Amenity Grassland
- Bare Ground
- Broadleaved Parkland/Scattered Trees
- Broadleaved Woodland - Plantation
- Buildings
- Ephemeral/Short Perennial
- Introduced Shrub
- Mixed Parkland/Scattered Trees
- Mixed Woodland - Plantation
- Neutral Grassland - Semi-Improved
- Other Habitat
- Poor Semi-Improved Grassland
- Scrub - Dense/Continuous
- Spoil
- Standing Water
- Hardstanding
- No Access

0 0.03 0.06 0.09 0.12 km



Client:	DP9		
Project:	Bicester		
Title:	Phase 1 Habitat Survey		
Drawing No:	Figure 4b	Drawn:	BW
Date:	February 2018	Checked:	LR
Scale:	2,000 @ A3	Approved:	AH

Baseline Habitat Condition Review - January 2021

JNCC habitat code	Phase 1 habitat type	Criteria type	Criteria list	Criteria failed based on WSP PEA/ES Chapter & BMD verification findings.	WSP condition score	BMD condition verification
A1.1.2	Woodland: Broadleaved plantation	FEP (Native semi-natural woodland)	<p>1) Native species are dominant. Non-native and invasive species account for less than 10% of the vegetation cover.</p> <p>2) A diverse age and height structure.</p> <p>3) Free from damage (in the last five years) from stock or wild mammals – there should be evidence of tree regeneration such as seedlings, saplings and young trees.</p> <p>4) Standing and fallen dead trees of over 20 centimetres diameter are present.</p> <p>5) The area is protected from damage by agricultural and other adjacent operations.</p>	<p>2) A diverse age and height structure.</p> <p>3) Free from damage (in the last five years) from stock or wild mammals – there should be evidence of tree regeneration such as seedlings, saplings and young trees.</p> <p>4) Standing and fallen dead trees of over 20 centimetres diameter are present.</p>	Poor	Poor
A1.2.2	Woodland: Mixed plantation	FEP (Mixed woodland)	<p>1) This should be an area of trees with complete canopy cover.</p> <p>2) The woodland must be free from damage (in the last five years) by stock or wild mammals.</p> <p>3) There should be no evidence of machinery storage, signage or other inappropriate management.</p>	<p>1) This should be an area of trees with complete canopy cover.</p> <p>2) The woodland must be free from damage (in the last five years) by stock or wild mammals.</p>	Poor	Poor (although some areas of complete canopy cover are present, the mixed woodland areas are patchy and species poor)

A2.1	Scrub: Dense/continuous	FEP (Scrub of high environmental value)	<p>1) There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be 100% cover).</p> <p>2) There is a good age range – a mixture of seedlings, saplings, young shrubs and mature shrubs.</p> <p>3) Pernicious weeds and invasive species make up less than 5% of the ground cover.</p> <p>4) The scrub has a well-developed edge with ungrazed tall herbs.</p> <p>5) There are many clearings and glades within the scrub.</p>	<p>1) There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be 100% cover).</p> <p>2) There is a good age range – a mixture of seedlings, saplings, young shrubs and mature shrubs.</p> <p>5) There are many clearings and glades within the scrub.</p>	Poor	Poor
A3.1	Parkland/scattered trees: Broadleaved	FEP (Wood pasture and parkland – BAP habitat)	<p>1) Trees should have a wide age range. There should be some young trees and saplings present.</p> <p>2) The balance between the trees, scrub and grassland should be typical of wood pasture in the local area.</p> <p>3) There should be minimal bare earth and no evidence of poaching by livestock.</p> <p>4) Native species should be dominant. Non-native and invasive species should account for less than 10% of the vegetation cover.</p> <p>5) Standing and fallen dead trees of over 20 cm dbh should be present.</p>	<p>1) Trees should have a wide age range. There should be some young trees and saplings present.</p> <p>2) The balance between the trees, scrub and grassland should be typical of wood pasture in the local area.</p> <p>5) Standing and fallen dead trees of over 20 cm dbh should be present.</p>	Poor	Poor
B2.2	Neutral grassland: Semi-improved	BREEAM default	<p>1) A diverse age range.</p> <p>2) A diverse species mix.</p>	<p>1) A diverse age range.</p> <p>3) Diverse structure variety/diverse form.</p>	Poor	Poor (extensive areas of

			<p>3) Diverse structure variety/diverse form.</p> <p>4) Presence of protected species.</p> <p>5) None or a limited presence of invasive species.</p> <p>6) No or limited damage for example by machinery.</p>			<p>bramble and natural regenerating trees limited the habitat value)</p>
B6	Poor semi-improved grassland	BREEAM default	<p>1) A diverse age range.</p> <p>2) A diverse species mix.</p> <p>3) Diverse structure variety/diverse form.</p> <p>4) Presence of protected species.</p> <p>5) None or a limited presence of invasive species.</p> <p>6) No or limited damage for example by machinery.</p>	<p>1) A diverse age range.</p> <p>2) A diverse species mix.</p> <p>3) Diverse structure variety/diverse form.</p>	Poor	Poor
G1	Standing water: Eutrophic	FEP (Ponds – BAP habitat)	<p>1) The pond should be set within a semi-natural habitat.</p> <p>2) It should be within 500 m of another wetland feature (such as a pond, river or fen).</p> <p>3) There should be no obvious sign of pollution or of inappropriate quality of the water supply.</p> <p>4) There should be an absence of damaging non-native plant or animal species. (Damaging plants include water fern, Australian swamp stonecrop, parrot’s feather, floating pennywort and Japanese knotweed (on the bank). Damaging animals include non-native crayfish, reptiles and amphibians.)</p> <p>5) The pond should not be stocked with fish or support damaging</p>	<p>1) The pond should be set within a semi-natural habitat.</p>	Moderate	Moderate

			<p>numbers of wildfowl.</p> <p>6) It should experience only natural fluctuations in water levels.</p>			
J1.2	Cultivated/disturbed land: amenity grassland	BREEAM default	<p>1) A diverse age range.</p> <p>2) A diverse species mix.</p> <p>3) Diverse structure variety/diverse form.</p> <p>4) Presence of protected species.</p> <p>5) None or a limited presence of invasive species.</p> <p>6) No or limited damage for example by machinery.</p>	<p>1) A diverse age range.</p> <p>2) A diverse species mix.</p> <p>3) Diverse structure variety/diverse form.</p> <p>4) Presence of protected species.</p>	Poor	Poor
J4	Bare ground	BREEAM default	<p>1) A diverse age range.</p> <p>2) A diverse species mix.</p> <p>3) Diverse structure variety/diverse form.</p> <p>4) Presence of protected species.</p> <p>5) None or a limited presence of invasive species.</p> <p>6) No or limited damage for example by machinery.</p>	<p>1) A diverse age range.</p> <p>2) A diverse species mix.</p> <p>3) Diverse structure variety/diverse form.</p> <p>4) Presence of protected species.</p> <p>6) No or limited damage for example by machinery.</p>	Poor	Poor
A3.3	Parkland/scattered trees: Mixed	FEP (Wood pasture and parkland – BAP habitat)	<p>1) Trees should have a wide age range. There should be some young trees and saplings present.</p> <p>2) The balance between the trees, scrub and grassland should be typical of wood pasture in the local area.</p> <p>3) There should be minimal bare earth and no evidence of poaching by livestock.</p> <p>4) Native species should be dominant. Non-native and invasive</p>	<p>1) Trees should have a wide age range. There should be some young trees and saplings present.</p> <p>2) The balance between the trees, scrub and grassland should be typical of wood pasture in the local area.</p> <p>5) Standing and fallen dead trees of over 20 cm dbh should be present.</p>	Poor	Poor

			species should account for less than 10% of the vegetation cover. 5) Standing and fallen dead trees of over 20 cm dbh should be present.			
A3.2	Parkland/scattered trees: Coniferous	FEP (Wood pasture and parkland – BAP habitat)	<ol style="list-style-type: none"> 1) Trees should have a wide age range. There should be some young trees and saplings present. 2) The balance between the trees, scrub and grassland should be typical of wood pasture in the local area. 3) There should be minimal bare earth and no evidence of poaching by livestock. 4) Native species should be dominant. Non-native and invasive species should account for less than 10% of the vegetation cover. 5) Standing and fallen dead trees of over 20 cm dbh should be present. 	<ol style="list-style-type: none"> 1) Trees should have a wide age range. There should be some young trees and saplings present. 2) The balance between the trees, scrub and grassland should be typical of wood pasture in the local area. 5) Standing and fallen dead trees of over 20 cm dbh should be present. 	Poor	Poor
J1.3	Cultivated/disturbed land: Ephemeral/short perennial	BREEAM default	<ol style="list-style-type: none"> 1) A diverse age range. 2) A diverse species mix. 3) Diverse structure variety/diverse form. 4) Presence of protected species. 5) None or a limited presence of invasive species. 6) No or limited damage for example by machinery. 	<ol style="list-style-type: none"> 1) A diverse age range. 2) A diverse species mix. 3) Diverse structure variety/diverse form. 4) Presence of protected species. 	Poor	Poor
J1.4	Cultivated/disturbed land: Introduced shrub	BREEAM default	<ol style="list-style-type: none"> 1) A diverse age range. 2) A diverse species mix. 3) Diverse structure variety/diverse form. 4) Presence of protected species. 	<ol style="list-style-type: none"> 1) A diverse age range. 2) A diverse species mix. 3) Diverse structure variety/diverse form. 4) Presence of protected species. 	Poor	Poor

			<ul style="list-style-type: none"> 5) None or a limited presence of invasive species. 6) No or limited damage for example by machinery. 			
J5	Other habitat: Bunkers	BREEAM default	<ul style="list-style-type: none"> 1) A diverse age range. 2) A diverse species mix. 3) Diverse structure variety/diverse form. 4) Presence of protected species. 5) None or a limited presence of invasive species. 6) No or limited damage for example by machinery. 	<ul style="list-style-type: none"> 1) A diverse age range. 2) A diverse species mix. 3) Diverse structure variety/diverse form. 4) Presence of protected species. 	Poor	Poor

SITE PHOTOGRAPHS



Photograph 1: Short mown amenity grassland with occasional forbs (AM2).



Photograph 2: Semi-improved neutral grassland along M40 embankment (SNG4).



Photograph 3: Poor semi-improved grassland, pond feature (SW8) and young broadleaved plantation (PBW/SI(P)2).



Photograph 4: Broadleaved woodland plantation (PBW2).



Photograph 5: Broadleaved woodland plantation (PBW1).



Photograph 6: Mixed woodland plantation, more mature than others on Site (PMW1).



Photograph 7: Mixed woodland plantation (PMW2).



Photograph 8: Mixed woodland plantation with a more open structure and paths (PMW2).



Photograph 9: Broadleaved parkland/scattered trees ranging from young to semi mature above amenity grassland.



Photograph 10: Broadleaved parkland/scattered trees formed of semi mature poplar with amenity grassland below (BP17).



Photograph 11: Coniferous Parkland/Scattered Trees formed of cypress (CP3 & CP4).



Photograph 13: Introduced Shrub formed of dogwood with scattered broadleaved trees (IS5).



Photograph 15: Shallow pond feature choked with reedmace with narrow margins (SW9).

Photograph 12: Coniferous Parkland/Scattered Trees formed of Norway spruce (CP5).



Photograph 14: Pond with limited margins (SW2).



Photograph 16: Small pond feature with occasional rush margins and some amenity grassland margins (SW12).



Photograph 17: Linear trees formed of cypress planted along the northwestern boundary.



Photograph 18: Species-poor hedgerow with trees (PHT1).



Photograph 19: Species-Rich hedgerow with trees (RHT1).



Photograph 20: Dry ditch with amenity grassland bank (currently with low winter water level in north western section).



Photograph 21: Running water ditch with short grassland banks (RW1).

A. METADATA, SURVEY CONDITIONS AND LIMITATIONS

A.1 Metadata

Factor	Detail
Data	Ecological verification assessment
Reason for collection	To verify previous baseline habitat assessments and to identify any habitat change since the previous baseline habitat assessment.
Location	Land to the East of M40 and South of A4095, Chesterton, Bicester Oxfordshire OX26 1TE; approximately centred on national grid reference: SP549216
Date	5 th January 2021
Method of collection	Ecological verification assessment based on JNCC Phase 1 Habitat Survey
Who collected	James Patmore CEcol CEnv MCIEEM

A.2 Survey Conditions

Date	Time	Preceding days	Cloud (%)	Sun	Temperature (°C)	Precipitation	Wind (Beaufort scale)
05/01/21	11:00-15:00	Cold, sun, cloud	50	Sunny spells	5	None	2

A.3 Limitations Review

Consideration	Comment
Survey & data	
Personal competence, i.e. qualifications, training, skills, understanding, experience	All survey works were undertaken by or directly supervised by personnel experienced in ecological surveying (see meta data). <u>James Patmore CEcol CEnv MCIEEM</u> has over 18 years of experience in ecological consultancy, including an extensive amount of experience performing and directing ecological survey work and assessments.
Resources (equipment and/or personnel)	Appropriate resources and suitably qualified personnel were used.
Time spent surveying	Sufficient time was spent on site to undertake all surveys. No surveys were 'cut short'.
Data (e.g. arising from incomplete or inappropriate surveys)	The data collected were sufficient for the purpose of the works.
Lack of statistical robustness and higher uncertainties	Statistical analysis of data was not deemed necessary for the purpose of the current works.
Old and out of date data	The data used to complete this Ecological Verification Assessments were current and up to date.
Timing or seasonal constraints and suboptimal survey periods	The survey was conducted in January 2021, although early in the season, based on the habitat types present and existing data available for the Site no significant limitations were identified with regard to broad habitat assessment.
Partial use of and/or departures from good practice guidelines	All surveys accorded with the relevant best practice guidelines.
Site conditions & other factors	
Adverse weather conditions	Weather conditions were favourable and did not significantly negatively affect the survey.
Restricted access to site or part of site	Access was not restricted.

Consideration	Comment
Unrealistic deadlines	No restrictions on survey data collected or analysed to date are as a result of unrealistic deadlines.
Unproven or untested measures for mitigation and compensation	N/A
Evaluation of conservation value and impacts	The evaluation of the conservation value of habitats and species associated (or potentially associated) with the Site and impacts of the development, are based on the current information available. This evaluation will need to be reviewed and updated as necessary should a considerable period of time (24 months) elapse and/or more data from other survey work (on and within 1 km of the site) becomes available.

B. DETAILED SURVEY RESULTS

B.1 Species Recorded on Site

English Name	Scientific Name
Birds	
Blackbird	<i>Turdus merula</i>
Chaffinch	<i>Fringilla coelebs</i>
Coot	<i>Fulica atra</i>
Herring gull	<i>Larus argentatus</i>
Kestrel	<i>Falco tinnunculus</i>
Mallard	<i>Anas platyrhynchos</i>
Moorhen	<i>Gallinula chloropus</i>
Red kite	<i>Milvus milvus</i>
Redwing	<i>Turdus iliacus</i>
Robin	<i>Erithacus rubecula</i>