

Ecological Walkover Survey

Project Information & Site Context

Site Name & Location	Land off of Hoad Way, Theale, Berkshire	Grid Reference	SU 64755 71463	
Client Name	CP Logistics UK Reading Propco Ltd.	Report Number	159730-04	
Site Area (ha)	c5.5 ha	Topography	The site is largely flat, with slopes located off site to the north, south and west abutting the site boundaries.	
Project Background	<p>Middlemarch have previously undertaken a series of ecological and arboricultural surveys and assessments on site for Panattoni c/o Turley including:</p> <ul style="list-style-type: none"> - Preliminary Arboricultural Assessment: Report RT-MME-150244 (2019); - Preliminary Ecological Appraisal: Report RT-MME-150244-02 (2019); - Arboricultural Impact Assessment: Report RT-MME-150244-03 (2019); - Bat Surveys: RT-MME-150545-01 (2019); - Badger Survey: RT-MME-150545-02 (2019); - Reptile Survey: RT-MME-150545-03 (2019); - Ecological Walkover Survey: Report RT-MME-155397-01 (2021); - Bat Surveys: Report RT-MME-155397-02 (2021); and, - Preliminary Arboricultural Assessment: Report 159730-01 (2023). 			
Summary of Proposals	This assessment is required to inform a planning application associated with the construction of an employment facility, with associated access infrastructure, drainage and landscaping.			
Methods				
Field Survey	<p>An ecological walkover survey of the site was undertaken on 27th July 2023 by Jamie Fletcher (Principal Ecological Consultant) during which the location and extent of all habitat types present within the site were noted. During the survey, a Habitat Condition Assessment was carried out to determine the ecological status of each habitat recorded. The condition assessment was undertaken using criteria published by Natural England (2023)¹, the details of which are presented in Appendix 1.</p> <p>The presence, or likely presence, of protected species within the site was also recorded.</p>			
Weather Conditions	Temperature (°C)	Cloud Cover (%)	Wind Force (Beaufort)	Precipitation
	18	25-75	F0-F1	Nil
Constraints	No survey constraints were experienced and all areas of the site could be fully accessed.			

¹ Natural England (2023) *The Biodiversity Metric 4.0 – User Guide: Technical Annex 1 Condition Sheets and Methodology*. Natural England Joint Publication JP039. Available <http://publications.naturalengland.org.uk/publication/6049804846366720>

Results

Overview of Habitats

The site comprised a large field dominated by unmanaged semi-improved neutral grassland with boundary habitats including a defunct species-poor hedgerow with trees, semi-natural broadleaved woodland, tall ruderal, dense scrub and scattered trees. The site did not appear to have been subject to any form of management in recent years, with no evidence of recent human disturbance to any of the habitats on site noted during the field survey undertaken.

Defunct Species-Poor Hedgerow / h2a6: Other Native Hedgerow:

An unmanaged, species-poor hedgerow dominated by hawthorn *Crataegus monogyna* (representing >90% of the hedgerow composition) lined the sites northern/north-western boundary. The hedgerow measured approximately 4-6 m tall and approximately 4-8 m wide, with much of the hedgerow being >0.5 m from ground level and with gaps present along much of its length as a result of an absence of hedgerow management. Additional species including bramble *Rubus fruticosus* agg., buddleia *Buddleia davidii*, ash *Fraxinus excelsior*, elder *Sambucus nigra*, elm *Ulmus* sp., hazel *Corylus avellana* and pedunculate oak *Quercus robur* having colonised the hedgerow, with each species being present in variable degrees of abundance, with elm and bramble being most frequent and abundant. Much of the elm present within the hedgerow was either dead or in poor health, indicative of Dutch elm disease symptoms. The hedgerow abutted a belt of tall ruderal and scattered and dense scrub to the north and south, with the hedgerow planted along a bank sloping southwards and ranging in steepness from approximately 30° to 60°. Large amounts of waste and fly-tip were present along the base of the hedgerow.

Dense Scrub/h3d: Bramble Scrub:

Several patches of dense bramble scrub abutted the sites northern, eastern and western boundaries, with the areas of scrub present being dense and impenetrable and expanding into adjacent areas of tall ruderal and semi-improved neutral grassland as a result of an absence of site management. The dense bramble scrub on site provided high value habitat for a range of species, with several bird and invertebrate species recorded using the patches of dense bramble present. The dense bramble scrub formed part of an ecologically valuable ecotone in several parts of the site, with the dense bramble scrub located between either hedgerow or semi-natural broadleaved woodland edge and tall ruderal and semi-improved neutral grassland.

Dense Scrub/h3j: Willow Scrub:

A belt of unmanaged, dense scrub dominated by goat willow *Salix caprea*, grey willow *Salix cinerea*, osier willow *Salix viminalis* and white willow *Salix alba* abutting the sites southern/south-eastern boundary. Additional species including bramble, elder and common alder *Alnus glutinosa* were also present, with tall ruderal also growing among the dense scrub including stinging nettle *Urtica dioica*, comfrey *Symphytum officinale*, field thistle *Cirsium arvensis*, mugwort *Artemisia vulgaris*, lords and ladies *Arum maculatum*, black horehound *Ballota nigra*, hedge bindweed *Calystegia sepium*, ground ivy *Glechoma hederacea*, hemlock *Conium maculatum*, common hogweed *Heracleum sphondylium*, and cleavers *Galium aparine*. The dense scrub abutted a belt of semi-natural broadleaved woodland located on a bank running parallel to Bath Road located off site to the south.

Scattered Trees/Secondary Code 32: Scattered Trees:

A single mature Lombardy poplar *Populus nigra* var. *Italica* was present along the sites western boundary, located within semi-improved neutral grassland. The tree

measured approximately 25 m tall, with a diameter at breast height >2.5 m. The tree appeared to be in good health.

Scattered Trees/Secondary Code 33: Line of Trees:

A line of mature common alder trees all measuring c8-10 m tall and with a diameter at breast height of c1.2 m located in the south of the site within semi-improved neutral grassland. All trees appeared to have been planted at the same time, with the reason for their planting potentially being to create a screen between the site and the adjacent road network or to increase water uptake in the southern part of the site, with the grassland and parcel of semi-natural broadleaved woodland in proximity to the scattered trees/line of trees being notably wet. All trees were multi-stemmed and were in good health, with no notable features considered to be suitable for roosting bats or cavity nesting birds present.

Semi-Improved Neutral Grassland/g3c5: *Arrhenatherum* Neutral Grassland:

The site was dominated by semi-improved neutral grassland/*Arrhenatherum* neutral grassland which did not appear to have been subject to any form of recent management or usage (e.g. hay/silage cut, livestock grazing, recreational use). The sward measured c0.5-1.5 m tall, with species present including cocksfoot *Dactylis glomerata*, false oat *Arrhenatherum elatius*, Yorkshire fog *Holcus lanatus*, annual meadow grass *Poa annua*, couch grass *Elymus repens*, tall fescue *Schedonorus arundinaceus*, comfrey, common vetch *Vicia sativa*, tufted vetch *Vicia cracca*, field thistle, chicory *Cichorium intybus*, common fleabane *Pulicaria dysenterica*, wild marjoram *Origanum majorana*, wild basil *Clinopodium vulgare*, wild carrot *Daucus carota*, wild parsnip *Pastinaca sativa*, field horsetail *Equisetum arvense*, mugwort, common ragwort *Jacobaea vulgaris*, ground ivy, teasel *Dipsacus fullonum*, stinging nettle, white clover *Trifolium repens*, red clover *Trifolium pratense*, common sorrel *Rumex acetosa*, hedge woundwort *Stachys sylvatica*, bristly ox-tongue *Helminthotheca echoides*, perennial ryegrass *Lolium perenne*, red fescue *Festuca rubra*, white campion *Silene latifolia*, ribwort plantain *Plantago lanceolata*, creeping buttercup *Ranunculus repens*, purple loosestrife *Lythrum salicaria*, common hogweed, soft rush *Juncus effusus*, hard rush *Juncus inflexus*, hop trefoil *Trifolium campestre*, curled dock *Rumex crispus*, deadly nightshade *Atropa belladonna*, autumn hawkbit *Leontodon hispidus*, dandelion *Taraxacum* sp., common knapweed *Centaurea nigra*, oxeye daisy *Leucanthemum vulgare*, cut-leaved cranesbill *Geranium dissectum*, spear thistle *Cirsium vulgare*, broad-leaved dock *Rumex obtusifolius*, ladies bedstraw *Galium verum*, red dead-nettle *Lamium purpureum*, creeping cinquefoil *Potentilla repens*, silverweed *Potentilla anserina*, nipplewort *Lapsana communis*, gypsywort *Lycopus europaeus*, great willowherb *Epilobium hirsutum* and rosebay willowherb *Chamaenerion angustifolium*. The grassland comprised a range of species indicative of alternative grassland types, including calcareous grassland (with indicator species including wild marjoram, wild basil and wild carrot present), with several species indicative of wet grassland also present (including hard rush, soft rush, purple loosestrife and gypsywort). The area of scattered rushes is represented by Secondary Code 14.

Semi-Natural Broadleaved Woodland/w1f7: Other Lowland Mixed Deciduous Woodland:

A small copse of semi-natural broadleaved woodland, measuring approximately 0.05 ha abutted the sites south-western boundary. The woodland canopy comprised a low number of 12-14 m tall ash and common alder trees, with an understory comprising scattered elder and hawthorn and ground flora consisting of stinging nettle, ground ivy, hedge bindweed and cow parsley *Anthriscus sylvestris*. The woodland comprised a significant amount of standing and fallen deadwood, with evidence of previous water inundation also present in the form of wet, soft soil and areas of sparse vegetation. Several of the trees present included features suitable

	<p>for roosting bats and nesting birds, with standing deadwood, woodpecker holes, cavities and lifted bark all present.</p> <p><u>Semi-Natural Broadleaved Woodland/w1f: Lowland Mixed Deciduous Woodland:</u></p> <p>A belt of semi-natural broadleaved woodland/lowland mixed deciduous woodland occupied the sites north-eastern boundary, forming part of a larger parcel of semi-natural broadleaved woodland/lowland mixed deciduous woodland located off site to the east. The woodland did not appear to be subject to any form of management, with a canopy comprising ash, sycamore <i>Acer pseudoplatanus</i>, English elm <i>Ulmus procera</i> and white willow, an understorey comprising elm, hawthorn, bramble, buddleia, pedunculate oak saplings and young trees, hazel, blackthorn <i>Prunus spinosa</i> and damson <i>Prunus domestica</i> subsp. <i>insititia</i>. The ground flora largely corresponded to the semi-improved neutral grassland abutting the woodland to the west, with black horehound, mugwort, stinging nettle, field horsetail, black mustard <i>Brassica nigra</i>, white dead-nettle <i>Lamium album</i>, hemlock, field thistle, ground ivy, hedge bindweed, wild parsnip, white campion, greater burdock <i>Arctium lappa</i>, wild marjoram, yarrow <i>Achillea millefolium</i>, common knapweed, common hogweed, creeping cinquefoil <i>Potentilla reptans</i>, greater knapweed <i>Centaurea scabiosa</i>, wild basil, wild carrot, cocksfoot, false oat, comfrey and common fleabane all present.</p> <p><u>Tall Ruderal/Secondary Code 16: Tall Forbs:</u></p> <p>Several belts and patches of tall ruderal/tall forbs were present across the site, notably in proximity to areas of dense scrub along the sites northern and southern boundaries. The belts and patches of tall ruderal/tall forbs did not appear to be subject to any form of management and appeared to be extending into adjacent areas of semi-improved neutral grassland. Species present included stinging nettle, mugwort, comfrey, red dead-nettle, black horehound, common hogweed, hemlock, greater burdock, field thistle, green alkanet <i>Pentaglottis sempervirens</i>, white dead-nettle, common mallow <i>Malva sylvatica</i>, spear thistle, great willowherb, rosebay willowherb, black mustard, nipplewort and hedge bindweed. The tall ruderal on site typically formed part of an ecologically valuable ecotone, often abutting hedgerow or woodland, dense scrub and semi-improved neutral grassland. Several small, scattered patches of tall ruderal were also present along the sites eastern boundary, with hemp agrimony <i>Eupatorium cannabinum</i>, purple loosestrife and great willowherb all present, further demonstrating the wetness of the site in some areas.</p>
<p>Key Species Considerations</p>	<p>The habitats on site have the potential to support a range of protected and/or notable species. Protected and/or notable species considered to be key considerations on site are detailed below:</p> <p><u>Amphibians:</u> while the site is absent of any suitable aquatic breeding habitat for amphibian species, the site does provide suitable terrestrial habitat for a range of amphibian species. As such, amphibians are a notable consideration in relation to the proposed works on site and measures to minimise impacts upon amphibians during the construction and operational phases of the proposed development should be outlined in a CEcMP.</p> <p><u>Badgers:</u> while no evidence of badgers <i>Meles meles</i> was identified on site during the Ecological Walkover Survey visit, the site does provide suitable sett building, foraging and commuting habitat for badgers. Therefore, a targeted badger survey should be undertaken to determine the status of badgers on site. As such, badgers are a notable consideration in relation to the proposed works on site. Middlemarch completed a Badger Survey (Report RT-MME-150545-02) on site in 2019, with no evidence of badger identified. Despite this, the results of this survey are no longer</p>

valid due to the time that has elapsed since it was undertaken, therefore an updated survey should be completed to determine the current status of badgers on site.

Bats: the copse of semi-natural broadleaved woodland in proximity to the sites south-western boundary and the belt of semi-improved broadleaved woodland lining the sites north-eastern boundary both contain trees that have the potential to support roosting bats. Furthermore, the wider site provides highly suitable foraging and commuting habitat for a range of bat species. As such, bats are a notable consideration in relation to the proposed works on site. Middlemarch completed Dusk Emergence and Dawn Re-entry Bat Surveys of trees on site in 2019 and 2021 (Reports RT-MME-150545-01 and Report RT-MME-155397-02 respectively), with no bat roosts identified. Despite this, at least six species of bat were recorded foraging on site (including common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Nathusius' pipistrelle *Pipistrellus nathusii*, brown long-eared bat *Plecotus auritus*, noctule *Nyctalus noctula* and an unidentified *Myotis* sp.), indicating the site is of value to foraging and commuting bats. Furthermore, the results of Dusk Emergence and Dawn Re-entry Bat Surveys are no longer valid due to the time that has elapsed since their completion, therefore updated surveys should be completed to determine the status of roosting bats on site.

Birds: the site provides an abundance of suitable habitat for a range of breeding and wintering bird species, with several species listed as Species of Principal Importance in England and/or Birds of Conservation Concern/RSPB Red Listed Species recorded on site, including grey partridge *Perdix perdix*, linnet *Linaria cannabina*, house sparrow *Passer domesticus*, starling *Sturnus vulgaris*, swift *Apus apus* and dunnock *Prunella modularis*. Additional species recorded on site include blackcap *Sylvia atricapilla*, common whitethroat *Sylvia communis* (BoCC/RSPB Amber), song thrush *Turdus philomelos* (BoCC/RSPB Amber), wren *Troglodytes troglodytes* (BoCC/RSPB Amber), woodpigeon *Columba palumbus* (BoCC/RSPB Amber), swallow *Hirundo rustica*, robin *Erithacus rubecula*, long-tailed tit *Aegithalos caudatus*, blue tit *Cyanistes caeruleus*, great tit *Parus major*, and great spotted woodpecker *Dendrocopos major*. As such, birds are a notable consideration in relation to the proposed works on site.

Dormouse: the boundary habitats on site including hedgerow, dense scrub and semi-natural broadleaved woodland all provide suitable habitat for dormouse *Muscardinus avellanarius*. As such, if boundary habitats are to be impacted by the proposed development, dormouse are a notable consideration in relation to the proposed works on site. If only minimal impact is proposed on suitable boundary habitats on site, clearance under the supervision of a suitably experienced and qualified ecologist should be undertaken and measures to minimise impacts upon dormouse during the construction and operational phases of the proposed development should be outlined in a CEcMP. Current proposals indicate most areas of suitable dormouse habitat on site are to be retained, with the protection and enhancement of these areas being something that should be incorporated into site design.

Harvest Mouse: the habitats on site provide highly suitable habitat for harvest mouse *Micromys minutus*. Whilst no evidence of harvest mouse was noted during the Ecological Walkover Survey visit, the survey was not targeted towards identifying evidence of harvest mouse on site and as such the presence of harvest mouse cannot be ruled out. As such, harvest mouse are a notable consideration in relation to the proposed works on site and measures to minimise impacts upon harvest mouse during the construction and operational phases of the proposed development should be outlined in a CEcMP.

Hedgehog: the habitats on site provide suitable foraging, commuting, sheltering and hibernation habitat for hedgehog *Erinaceus europaeus*. Furthermore, the sites

connectivity to further suitable habitat in the wider landscape (notably to the north and east) provides further suitable habitat for hedgehog. As such, hedgehog are a notable consideration in relation to the proposed works on site and measures to minimise impacts upon hedgehog during the construction and operational phases of the proposed development should be outlined in a CEcMP.

Invertebrates – the range of habitats on site offer suitable habitat for a diverse assemblage of invertebrate species. During the Ecological Walkover Survey, a range of invertebrate species were recorded within each of the habitats on site. As such, invertebrates are a notable consideration in relation to the proposed works on site and measures to minimise impacts upon invertebrates during the construction and operational phases of the proposed development should be outlined in a CEcMP.

Reptiles: the habitats on site provide suitable habitat for common reptile species (including common lizard, grass snake and slow worm), with the site well connected to roadside verges and other areas of suitable habitat in the wider landscape (notably to the north). Therefore, a reptile survey should be undertaken to determine the status of reptiles on site. As such, reptiles are a notable consideration in relation to the proposed works on site. Middlemarch completed a Reptile Survey (Report RT-MME-150545-03) on site in 2019, with no evidence of reptiles recorded. Despite this, habitats on site have continued to improve for common reptile species, with the results of the previous survey no longer valid due to the time that has elapsed since it was undertaken. Therefore, an updated survey should be completed to determine the current status of reptiles on site.

The following species/species groups were not considered to be key considerations in relation to the site:

Botanical: The majority of habitats on site were semi-improved or had some level of human influence, thus limiting their botanical diversity or the presence of notable plant species. As such, plants are not a notable consideration on site.

Brown Hare: Although the site does provide suitable habitat for brown hare, the absence of further areas of suitable contiguous habitat to the site, the presence of residential, industrial and commercial development to the north and west, and the proximity of busy road networks adjacent to the sites southern and western boundaries, mean that presence of brown hare *Lepus europaeus* on site is considered unlikely. As such, brown hare are not a notable consideration on site.

Otter and Water Vole – No suitable aquatic habitats were present on site for either otter *Lutra lutra* or water vole *Arvicola amphibius*. As such, otter and water vole are not a key consideration on site.

Recommendations

The recommendations below are based on Middlemarch’s current understanding of the project. If works are changed in any way these recommendations will need to be amended if appropriate.

R1	<p>Species surveys – The ecological walkover identified that the site supports suitable habitat opportunities for a range of species of ecological importance. As such, further survey works should be carried out for the following species, in order to determine their status on site and the extent they are likely to be affected by any future development or land use change:</p> <ul style="list-style-type: none"> • Badgers (Presence/absence),
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	<ul style="list-style-type: none"> • Bats (Preliminary Roost Assessment, Bat Activity Survey), • Birds (Breeding and Wintering), • Reptiles (Presence/absence). <p>Surveys should be undertaken as pre-development updates and can be secured by planning condition as part of any future planning application approval.</p> <p>All surveys should be undertaken in line with best practice guidance and within the recommended seasonal timeframes.</p>
R2	<p>Site Design (Mitigation hierarchy) – The site should apply the principles of the mitigation hierarchy to site design so that important ecological features are avoided in the first instance. Further avoidance considerations may be required pending the results of any recommended species-survey works (See Recommendation R1). Where un-avoidable effects are identified, mitigation and or compensation measures will be required as a last resort to ensure compliance with UK wildlife legislation or planning policy.</p>
R3	<p>Biodiversity Net Gain Plan – Opportunities to create or enhance, habitats should be sought at an early stage of the design process, alongside avoiding, mitigating or compensating for those already present, to ensure that the requisite net gain can be achieved. Where this is not possible on site, offsite compensation solution may be required to meet the net gain objective. A Biodiversity Metric Assessment has been produced for the site, the results of which are detailed in report RT-MME-159730-05-RevA.</p>
R4	<p>Construction Ecological Management Plan (CEcMP) – A Construction Ecological Management Plan should be produced for the site setting out the safeguards and appropriate working practices that will be employed to minimise adverse effects on biodiversity and ensure compliance with UK Wildlife Legislation. The details of the CEcMP will be informed by the final site design and ongoing ecological survey works but should include as a minimum:</p> <ul style="list-style-type: none"> • Development standoffs and safeguards for all retained habitats; • Construction timetables to avoid sensitive periods such as nesting bird season; • Vegetation management measures to minimise the risk to protected or notable species; and, • Compliance with any specific mitigation measures that will be required to acquire a Development Licence for works affecting protected species. <p>The CEcMP should be submitted to the Local Planning Authority for Approval and implemented in full thereafter.</p>
R5	<p>Landscape and Ecology Management Plan (LEMP) – A Landscape and Ecology Management Plan should be produced setting out the detailed establishment and management of all on site compensation and enhancement measures. In accordance with Biodiversity Net Gain Best Practice Principles, and the principles of the Environment Act 2021, the LEMP should cover a period of 30 years from the date of commencement with provisions for long-term monitoring and contingency actions linked to the Biodiversity Net Gain objectives of the project.</p> <p>The LEMP should be submitted to the Local Planning Authority for approval (typically to discharge planning conditions) and should be implemented in full thereafter.</p>

Quality Assurance

Date	Version	Author	Checked & Approved By
08/08/2023	Final	Jamie Fletcher ACIEEM (Principal Ecological Consultant)	Tom Docker CEcol MCIEEM (Managing Director)
29/09/2023	Rev B	Amelia Collins BSc (Hons) (Ecological Consultant)	Paul Roebuck MSc MCIEEM (Regional Manager: South)

Photographs



Plate 1: H1 – Defunct Species-Poor Hedgerow



Plate 2: TN1 – Semi-Improved Neutral Grassland



Plate 3: TN10 – Bare Ground



Plate 4: TN5 – Dense Bramble Scrub



Plate 5: TN2 – Semi-Natural Broadleaved Woodland



Plate 6: TN3 – Semi-Natural Broadleaved Woodland

Appendix 1

The following tables include full habitat descriptions and summarise the condition assessment for habitats and hedgerows using Natural England (2023)¹.

Area Habitat			Condition Sheet Criteria Score																		
Polygon / Line Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Habitat Description	Condition Sheet Used	A	B	C	D	E	F	G	H	I	J	K	L	M	Total Score	Condition Assessment		
TN1	Semi-Improved Neutral Grassland	g3c5: <i>Arrhenatherum</i> Neutral Grassland	The site was dominated by semi-improved neutral grassland/ <i>Arrhenatherum</i> neutral grassland which did not appear to have been subject to any form of recent management or usage (e.g. hay/silage cut, livestock grazing, recreational use). The sward measured c0.5-1.5 m tall, with species present including cocksfoot <i>Dactylis glomerata</i> , false oat <i>Arrhenatherum elatius</i> , Yorkshire fog <i>Holcus lanatus</i> , annual meadow grass <i>Poa annua</i> , couch grass <i>Elymus repens</i> , tall fescue <i>Schedonorus arundinaceus</i> , comfrey <i>Symphytum officinale</i> , common vetch <i>Vicia sativa</i> , tufted vetch <i>Vicia cracca</i> , field thistle <i>Cirsium arvensis</i> , chicory <i>Cichorium intybus</i> , common fleabane <i>Pulicaria dysenterica</i> , wild marjoram <i>Origanum majorana</i> , wild basil <i>Clinopodium vulgare</i> , wild carrot <i>Daucus carota</i> , wild parsnip <i>Pastinaca sativa</i> , field horsetail <i>Equisetum arvense</i> , mugwort <i>Artemisia vulgaris</i> , common ragwort <i>Jacobaea vulgaris</i> , ground ivy <i>Glechoma hederacea</i> , teasel <i>Dipsacus fullonum</i> , stinging nettle <i>Urtica doica</i> , white clover <i>Trifolium repens</i> , red clover <i>Trifolium pratense</i> , common sorrel <i>Rumex acetosa</i> , hedge woundwort <i>Stachys sylvatica</i> , bristly ox-tongue <i>Helminthotheca echoides</i> , perennial ryegrass <i>Lolium perenne</i> , red fescue <i>Festuca rubra</i> , white campion <i>Silene latifolia</i> , ribwort plantain <i>Plantago lanceolata</i> , creeping buttercup <i>Ranunculus repens</i> , purple loosestrife <i>Lythrum salicaria</i> , common hogweed <i>Heracleum sphondylium</i> , soft rush <i>Juncus effusus</i> , hard rush <i>Juncus inflexus</i> , hop trefoil <i>Trifolium campestre</i> , curled dock <i>Rumex crispus</i> , deadly nightshade <i>Atropa belladonna</i> , autumn hawkbit <i>Leontodon hispidus</i> , dandelion <i>Taraxacum</i> sp., common knapweed <i>Centaurea nigra</i> , oxeye daisy <i>Leucanthemum vulgare</i> , cut-leaved cranesbill <i>Geranium dissectum</i> , spear thistle <i>Cirsium vulgare</i> , broad-leaved dock <i>Rumex obtusifolius</i> , ladies bedstraw <i>Galium verum</i> , red dead-nettle <i>Lamium purpureum</i> , creeping cinquefoil <i>Potentilla repens</i> , silverweed <i>Potentilla anserina</i> , nipplewort <i>Lapsana communis</i> , gypsywort <i>Lycopus europaeus</i> , great willowherb <i>Epilobium hirsutum</i> and rosebay willowherb <i>Chamaenerion angustifolium</i> . The grassland comprised a range of species indicative of alternative grassland types, including calcareous grassland (with indicator species including wild marjoram, wild basil and wild carrot present), with several species indicative of wet grassland also present (including hard rush, soft rush, purple loosestrife and gypsywort). The area of scattered rushes is represented by Secondary Code 14.	(6A) Grassland Medium, High and Very High Distinctiveness	P	P	P	P	P	P	F									5/6	Moderate (2)

Area Habitat			Condition Sheet Criteria Score																
Polygon / Line Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Habitat Description	Condition Sheet Used	A	B	C	D	E	F	G	H	I	J	K	L	M	Total Score	Condition Assessment
TN2	Semi-Natural Broadleaved Woodland	w1f: Lowland Mixed Deciduous Woodland	A belt of semi-natural broadleaved woodland/lowland mixed deciduous woodland occupied the sites north-eastern boundary, forming part of a larger parcel of semi-natural broadleaved woodland/lowland mixed deciduous woodland located off site to the east. The woodland did not appear to be subject to any form of management, with a canopy comprising ash, sycamore <i>Acer pseudoplatanus</i> , English elm <i>Ulmus procera</i> and white willow, an understorey comprising elm, hawthorn, bramble, buddleia, pedunculate oak saplings and young trees, hazel, blackthorn <i>Prunus spinosa</i> and damson <i>Prunus domestica</i> subsp. <i>insititia</i> . The ground flora largely corresponded to the semi-improved neutral grassland abutting the woodland to the west, with black horehound, mugwort, stinging nettle, field horsetail, black mustard <i>Brassica nigra</i> , white dead-nettle <i>Lamium album</i> , hemlock, field thistle, ground ivy, hedge bindweed, wild parsnip, white campion, greater burdock <i>Arctium lappa</i> , wild marjoram, yarrow <i>Achillea millefolium</i> , common knapweed, common hogweed, creeping cinquefoil <i>Potentilla reptans</i> , greater knapweed <i>Centaurea scabiosa</i> , wild basil, wild carrot, cocksfoot, false oat, comfrey and common fleabane all present.	(24A) Woodland	3	2	3	3	3	1	2	2	1	3	2	2	2	29/39	Moderate (2)
TN3	Semi-Natural Broadleaved Woodland	w1f7: Other Lowland Mixed Deciduous Woodland	A small copse of semi-natural broadleaved woodland measuring approximately 0.05 ha abutted the sites south-western boundary. The woodland canopy comprised a low number of 12-14 m tall ash and common alder trees, with an understorey comprising scattered elder and hawthorn and ground flora consisting of stinging nettle, ground ivy, hedge bindweed and cow parsley <i>Anthriscus sylvestris</i> . The woodland comprised a significant amount of standing and fallen deadwood, with evidence of previous water inundation also present in the form of wet, soft soil and areas of sparse vegetation. Several of the trees present included features suitable for roosting bats and nesting birds, with standing deadwood, woodpecker holes, cavities and lifted bark all present.	(24A) Woodland	2	1	3	2	3	2	2	1	1	2	2	3	1	25/39	Poor (1)
TN4	Dense Scrub	h3j: Willow Scrub	A belt of unmanaged, dense scrub dominated by goat willow <i>Salix caprea</i> , grey willow <i>Salix cinerea</i> , osier willow <i>Salix viminalis</i> and white willow <i>Salix alba</i> abutting the sites southern/south-eastern boundary. Additional species including bramble, elder and common alder <i>Alnus glutinosa</i> were also present, with tall ruderal also growing among the dense scrub including stinging nettle, comfrey, field thistle, mugwort, lords and ladies <i>Arum maculatum</i> , black horehound <i>Ballota nigra</i> , hedge bindweed <i>Calystegia sepium</i> , ground ivy, hemlock <i>Conium maculatum</i> , common hogweed and cleavers <i>Galium aparine</i> . The dense scrub abutted a belt of semi-natural broadleaved woodland located on a bank running parallel to Bath Road located off site to the south.	(20A) Scrub	P	P	P	P	P									5/5	Good (3)
TN5	Dense Scrub	h3d: Bramble Scrub	Several patches of dense bramble scrub abutted the sites northern, eastern and western boundaries, with the areas of scrub present being dense and impenetrable and expanding into adjacent areas of tall ruderal and semi-improved neutral grassland as a result of an absence of site management. The dense bramble scrub on site provided high value habitat for a																

Area Habitat				Condition Sheet Criteria Score															
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			range of species, with several bird and invertebrate species recording using the patches of dense bramble present. The dense bramble scrub formed part of an ecologically valuable ecotone in several parts of the site, with the dense bramble scrub located between either hedgerow or semi-natural broadleaved woodland edge and tall ruderal and semi-improved neutral grassland.																
TN6	Scattered Trees	Secondary Code 33: Line of Trees	A line of mature common alder trees all measuring c8-10 m tall and with a diameter at breast height of c1.2 m located in the south of the site within semi-improved neutral grassland. All trees appeared to have been planted at the same time, with the reason for their planting potentially being to create a screen between the site and the adjacent road network or to increase water uptake in the southern part of the site, with the grassland and parcel of semi-natural broadleaved woodland in proximity to the scattered trees/line of trees being notably wet. All trees were multi-stemmed and were in good health, with no notable features considered to be suitable for roosting bats or cavity nesting birds present.	(16A) Line of Trees	P	P	F	P	P									4/5	Moderate (3)
TN7	Scattered Trees	Secondary Code 32: Scattered Trees	A single mature Lombardy poplar <i>Populus nigra var. Italica</i> was present along the sites western boundary, located within semi-improved neutral grassland. The tree measured approximately 25 m tall, with a diameter at breast height >2.5 m. The tree appeared to be in good health.	(9A) individual Trees	F	P	P	P	P	P								5/6	Good (3)
TN8	Tall Ruderal	Secondary Code 16: Tall Forbs	Several belts and patches of tall ruderal/tall forbs were present across the site (forming part of the wider neutral grassland), notably in proximity to areas of dense scrub along the sites northern and southern boundaries. The belts and patches of tall ruderal/tall forbs did not appear to be subject to any form of management and appeared to be extending into adjacent areas of semi-improved neutral grassland. Species present included stinging nettle, mugwort, comfrey, red dead-nettle, black horehound, common hogweed, hemlock, greater burdock, field thistle, green alkanet <i>Pentaglottis sempervirens</i> , white dead-nettle, common mallow <i>Malva sylvestris</i> , spear thistle, great willowherb, rosebay willowherb, black mustard, nipplewort and hedge bindweed. The tall ruderal on site typically formed part of an ecologically valuable ecotone, often abutting hedgerow or woodland, dense scrub and semi-improved neutral grassland. Several small, scattered patches of tall ruderal were also present along the sites eastern boundary, with hemp agrimony <i>Eupatorium cannabinum</i> , purple loosestrife and great willowherb all present, further demonstrating the wetness of the site in some areas.	(22A) Urban	F	P	P											2/3	Moderate (2)
TN9	Scattered Scrub	Secondary Code 10: Scattered Scrub	Scattered bramble, elm, white willow, goat willow and buddleia scrub lined the sites south-eastern boundary, growing along and adjacent to a wooden post and rail boundary fence.																

Area Habitat				Condition Sheet Criteria Score																
Polygon / Line Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Habitat Description	Condition Sheet Used	A	B	C	D	E	F	G	H	I	J	K	L	M	Total Score	Condition Assessment	
TN10	Bare Ground	U1f: Sparsely Vegetated Urban Land	An aggregate surfaced patch of land abutted the site entrance gate along the sites north-western boundary. The area appeared to have been disused for a significant period of time, with colonisation by short perennial and ephemeral species, grasses and low growing scrub now a significant feature, covering c25% of the area. Species present included bristly ox-tongue, scentless mayweed, red dead-nettle, black horehound, bramble, buddleia, chicory, hop trefoil, soft rush, nipplewort, wild parsnip, red clover, wild carrot, cocksfoot and false oat.																	

Key:
P – Criteria passed
F – Criteria failed

Woodland Condition Assessment
3 (points) = Good
2 (points) = Moderate
1 (point) = Poor

Total Score: >32 = Good 26-32 = Moderate <26 = Poor

Hedgerows				Condition Sheet Criteria Score										
Ref.	Phase 1 Habitat Type	UK Hab Habitat Equivalent	Description	A1	A2	B1	B2	C1	C2	D1	D2	E1*	E2*	Condition Assessment
H1	Defunct Species-Poor Hedgerow	h2a6: Other Native Hedgerow	An unmanaged, species-poor hedgerow dominated by hawthorn <i>Crataegus monogyna</i> (representing >90% of the hedgerow composition) lined the sites northern/north-western boundary. The hedgerow measured approximately 4-6 m tall and approximately 4-8 m wide, with much of the hedgerow being >0.5 m from ground level and with gaps present along much of its length as a result of an absence of hedgerow management. Additional species including bramble <i>Rubus fruticosus</i> agg., buddleia <i>Buddleia davidii</i> , ash <i>Fraxinus excelsior</i> , elder <i>Sambucus nigra</i> , elm <i>Ulmus</i> sp., hazel <i>Corylus avellana</i> and pedunculate oak <i>Quercus robur</i> having colonised the hedgerow, with each species being present in variable degrees of abundance, with elm and bramble being most frequent and abundant. Much of the elm present within the hedgerow was either dead or in poor health, indicative of Dutch elm disease symptoms. The hedgerow abutted a belt of tall ruderal and scattered and dense scrub to the north and south, with the hedgerow planted along a bank sloping southwards and ranging in steepness from approximately 30° to 60°. Large amounts of waste and fly-tip were present along the base of the hedgerow.	P	P	F	F	P	F	P	F			Moderate (2)

Key:
*Applicable to hedgerows with trees only

