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19th April 2022

STANDLAKE BUSINESS PARK / BIODIVERSITY BASELINE, CONSTRAINTS & OPPORTUNITIES

Nicholsons Lockhart Garratt was commissioned on behalf of Aequitas Estates Ltd to undertake a baseline biodiversity assessment at land within Standlake Business Park (hereafter referred to as 'the Site'). The purpose of the assessment was to calculate the existing habitat value, as well as potential constraints and opportunities associated with developing the Site.

The Site is located at grid reference SP 38329 04418 within the wider site of Standlake Business Park. At the time of assessment, the Site comprised tall ruderal, ephemeral, mixed scrub, scattered trees and a dry ditch. The Site was bordered to the north, east and west by industrial buildings and areas of hardstanding associated with Standlake Business Park. Agricultural land bordered the Site to the south. The wider landscape comprised mostly agricultural land with Standlake and Oxlease lakes located approximately 0.6km north-east of the Site.

Methodology

A Preliminary Ecological Appraisal (PEA) was undertaken by Rachel Jackson on 14th March to ascertain the general ecological value of the Site. The PEA was undertaken in accordance with standard Phase 1 habitat methodology (JNCC, 2010[1]). The Phase 1 methodology involves the classification of habitat types based on vegetation present. The Site was classified into areas of similar botanical community types, with a representative species list provided for each habitat type identified.

[1] Joint Nature Conservation Committee (2010). Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit.

Following a survey and habitat mapping, the areas of habitats within a site are inputted into the Metric using the UK Habitat Classification[2] (UKHab). Each habitat has a predetermined distinctiveness score, which is inputted once the habitat is selected. The distinctiveness score reflects how rare that habitat is across England and whether the habitat is considered a Priority Habitat in accordance with S.41 of the Natural Environment and Rural Communities Act, 2006[3]. Distinctiveness scores range from 'Low' to 'Very High'.

Once the classification and distinctiveness of the habitat has been determined, the condition of the habitat was assessed. These condition assessments are defined within the technical supplement to the Metric and provide a set of criteria against which differing habitats are assessed. Depending on how many of the criteria the habitat passes, the condition can then be classified on a scale ranging from 'Poor' to 'Good' with a corresponding score of 1-3.

The final part of the Metric baseline calculation is the strategic significance of a site within the wider landscape. The Metric will add additional value to habitats within a preferred location for biodiversity i.e. within an area formally identified within local strategy. This may include Biodiversity Action Plans, Nature Recovery Areas and green infrastructure strategies.

Habitats outside of these areas are assigned a low strategic significance, which is not penalised, but adds no further value to the habitat score.

Once all of this information is provided, the Metric will calculate a total baseline biodiversity value for a site taking into account all of the aforementioned features ("the Baseline Calculation").

Results

Habitat Classification

The PEA confirmed the following habitats to be present within the Site:

- Ephemeral
- Dense Scrub
- Hardstanding
- Scattered Trees
- Tall Ruderal
- Waterbodies (Dry Ditch)

In order to input these habits into the Metric they need to be converted to UKHab classification and a summary of the UKhab equivalent habitat is presented at **Table 1**. These habitats have been classified following guidance within the UKHab field key and the UKHab Category Definitions document. A plan setting out the habitats is presented at **Appendix 1**.

[2] https://ecountability.co.uk/ukhabworkinggroup-ukhab/

[3] https://jncc.gov.uk/our-work/uk-bap-priority-habitats/

Table 1: Summary of UKHab habitats within the Site

Phase 1 Habitat Classification	UKHab Classification
Ephemeral	Urban – sparsely vegetated land
Dense scrub	Heathland and shrub – mixed scrub
Hardstanding	Urban – developed land, sealed surface
Scattered Trees	Urban – urban trees
Tall ruderal	Urban – sparsely vegetated land
Waterbodies – Dry ditch	Rivers - ditches

Condition Assessment

Using the condition sheets as set out within the Metric, the conditions of the habitats within the Site were assessed. **Table 2** sets out a summary of the conditions, the full condition assessments are presented at **Appendix 2**.

It should be noted that urban habitats such as hardstanding are pre-assigned a condition score within the Metric and are not subject to a condition assessment.

Table 2: Summary of habitat condition assessments for the Baseline Calculation

Phase 1 Habitat	UKHab habitat	Condition sheet used	Condition	Score
Ephemeral	Urban – sparsely vegetated land	Urban – Non-priority habitat	Moderate	2
Dense scrub	Heathland and shrub – mixed scrub	Scrub	Poor	1
Hardstanding	Urban – developed land, sealed surface (u1b)	N/a	N/a Urban	1
Scattered trees	Urban – urban tree	Urban – urban tree	Good	3
Tall ruderal	Urban – sparsely vegetated land	Urban – Non-priority habitat	Moderate	2
Waterbodies – dry ditch	Rivers – ditches	Ditch	Poor	1

Strategic Significance

For the purposes of the Metric Calculation, the habitats within the Site have been classified as having a low Strategic Significance as the Site is in an 'Area not in local strategy/ no local strategy'. This assessment is based on the absence of nearby Sites of Special Scientific Interest, Local Wildlife Sites and Habitats of Principal Importance.

Baseline Metric Calculation

The results of the Metric Calculation are set out in **Appendix 3**. The Baseline Calculation for the Site confirms as follows:

- Ephemeral – 1.817ha = 7.27 habitat units
- Dense scrub – 0.207ha = 0.83 habitat units
- Hardstanding – 0.166ha = 0 habitat units

- Scattered trees – 0.0651ha = 0.78 habitat units
- Tall ruderal – 0.869ha = 3.48 habitat units
- Dry ditch – 0.09km = 0.17 habitat units
- **Total baseline biodiversity for the Site = 12.52 habitat units**

Constraints & Opportunities

Following the PEA, the Site was assessed for its constraints and opportunities associated with the potential development of the Site. Full details of this assessment are provided within the Constraints and Opportunities Plan (ref: 21-2502) in **Appendix 4**.

The majority of the Site comprised ephemeral habitat on disturbed ground. This habitat provided limited opportunities for species groups such as pollinators and birds and had little biodiversity value overall. This habitat can be improved by seeding of species-rich wildflower and grassland habitats and creating ecotones between the scrub/tall ruderal habitats and areas of bare ground.

More sensitive ecological features included the scattered trees bordering the south-west boundary of the Site, the dense scrub in the south-east corner of the Site and the tall ruderal habitats on the soil bounds in the south-west and southern areas of the Site. These habitats would provide foraging, commuting and sheltering opportunities for birds, bats and small mammals as well as foraging/shelter for reptiles, amphibians and invertebrates. These features also provide connectivity around the Site and the surrounding habitats. These habitats would need to be replaced with similar habitats of the same or higher value if they were to be removed.

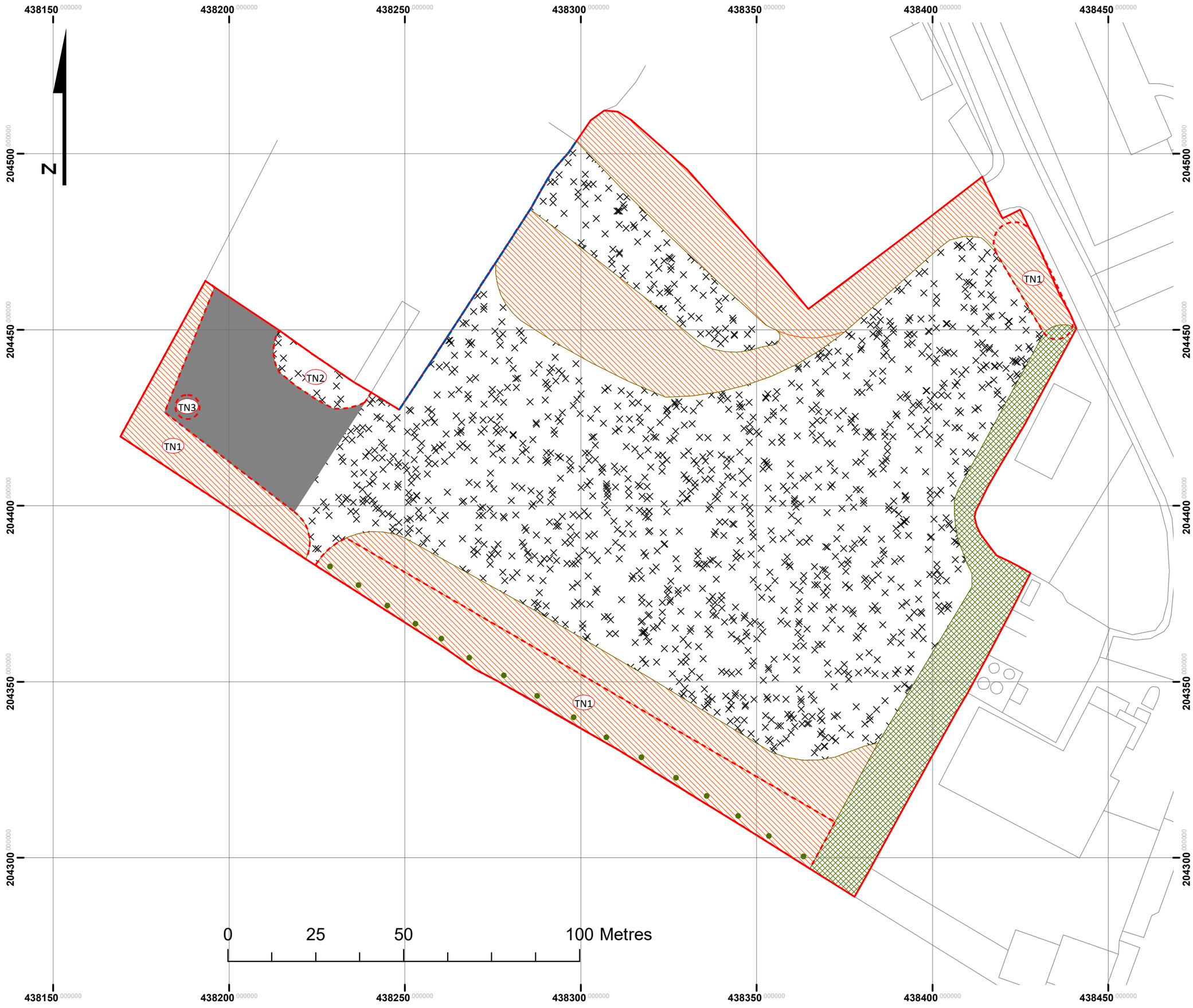
Opportunities to improve biodiversity within these habitats include establishing a wider tree buffer through native tree planting, creating ecotones with areas of scrub and grassland and removing of undesirable and invasive species such as Japanese knotweed *Fallopia japonica*.

Yours sincerely,

Rachel Jackson BSc (Hons)
Assistant Ecological Consultant

Appendices:

Appendix 1: 21-2441 PEA Map
Appendix 2: 21-2480 Baseline Condition Assessment
Appendix 3: 21-2479 BNG Metric Calculation
Appendix 4: 21-2502 Constraints & Opportunities Plan



Legend:

- Site Boundary
- Scattered Tree
- Dense Scrub = 0.207ha
- Ephemeral/Short Perennial = 1.817ha
- Hardstanding = 0.166ha
- Tall Ruderal = 0.869ha
- Dry Ditch = 91.445m

TN Target Notes:

TN1 - Soil bund with ruderal
TN2 - Soil bund with ephemeral
TN3 - Japanese Knotweed

REVISIONS:		
DATE:	VERSION:	INITIALS:

NICHOLSONS LOCKHART GARRATT
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TITLE: Preliminary Ecological Appraisal

PROJECT/SITE: Standlake Business Park

CLIENT: Aequitas Estates (Midlands No2) Ltd

MAP REF: 4564/03/21-2441

VERSION: v1

DATE: 05/04/22 SCALE: 1:1,000 @A3

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CONDITION ASSESSMENT PROFORMA FOR USE WITH BIODIVERSITY METRIC 3.0 - AREA BASED HABITATS

Date	08/04/2022	Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Weather conditions			
Surveyor name(s)	Rachel Jackson	Unique polygon reference(s)	
Project / development name	Standlake Business Park	Metric 3.0 habitat type	Tall ruderal
Site name or location		Condition assessment required? (y/n)	Y
Onsite or offsite?		Condition sheet used	Urban - Rederal/Ephemeral
Reason for assessment (if not baseline condition survey)			
Limitations (if applicable)			

Habitat description

Areas of ruderal were present mostly in association with boundary features and soil bunds, particularly along the northern and southern boundaries of the Site. Species recorded included teasel *Dipsacus fullonum* , euphorbia *Euphorbia sp* ., broadleaf dock *Rumex obtusifolius* , mullein *Verbascum thapsus* , creeping thistle *Cirsium arvense* , buddleia (immature) *Buddleja davidii* , bramble *Rubus fruticosus agg.* , field speedwell *Veronica persica* , mugwort *Artemisia vulgaris* , bristly oxtongue *Helminthotheca echioides* , scentless mayweed *Tripleurospermum inodorum* , cleavers *Galium aparine* , creeping cinquefoil *Potentilla reptans* , ribwort plantain *Plantago lanceolata* , ground ivy *Glechoma hederacea* , common bent *Agrostis capillaris* , field poppy *Papaver rhoeas* , cow parsley *Anthriscus sylvestris* , common dandelion *Taraxacum officinale agg* ., hogweed *Heracleum sphondylium* , common sedge *Carex nigra* , ragwort *Jacobaea vulgaris* , and dove's-foot cranesbill *Geranium molle* . A small patch of Japanese knoweed *Fallopia japonica* was recorded in the south-west corner of the Site.

Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.
For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.

Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	**TOTAL**
Result	F	P	P	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 passes
Photo ref														
Target note ref														

Are any criteria non-negotiable? (Y/N) If Yes are they passed?		Condition (Good/Moderate/Poor):	Moderate
Suggested enhancement interventions to improve condition score			

Condition Sheet: URBAN - NON PRIORITY Habitat Type	
UKHab Habitat Type	
Sparsely vegetated land - Ruderal/ephemeral **Urban - Allotments** **Urban - Bioswale** **Urban - Brown roof** **Urban - Cemeteries and churchyards** [Use Urban condition sheet as default. Where there are areas of grassland, woodland or scrub above the minimum mappable area, record and assess these as the relevant habitat type] **Urban - Extensive green roof** **Urban - Façade-bound green wall** **Urban - Ground based green wall** **Urban - Intensive green roof** **Urban - Open mosaic habitats on previously developed land** **Urban - Rain garden** **Urban - Sustainable urban drainage feature** [in the contect of the Biodiversity Metric, this habitat type refers to open SUDS with vegetation and/or open water] **Urban - Vacant / derelict land / bare ground**	
Habitat Description	
See UKHab	
Condition Assessment Criteria	
CORE CRITERIA - applicable to **all urban habitat types:**	
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife).
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).
ADDITIONAL CRITERION - only applicable to **Open mosaic on previously developed land** habitat type:	
4a	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.
ADDITIONAL CRITERION - only applicable to **Bioswale and SUDS** habitat types:	
4b	The water table is at or near the surface throughout the year. This could be open water or saturation of soil at the surface.

Condition Assessment Result	Condition Assessment Score
If 3 criteria assessed:	
• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3	Good (3)
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)
• Passes 0 or 1 of 3 core criteria	Poor (1)
If 4 criteria assessed:	
• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3; AND • Passes additional criterion 4a or 4b	Good (3)
• Passes 2 of 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)
• Passes 0 or 1 of 4 criteria	Poor (1)
Notes	

CONDITION ASSESSMENT PROFORMA FOR USE WITH BIODIVERSITY METRIC 3.0 - AREA BASED HABITATS

Date	08/04/2022	Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Weather conditions			
Surveyor name(s)	Rachel Jackson	Unique polygon reference(s)	
Project / development name	Standlake Business Park	Metric 3.0 habitat type	Mixed Scrub
Site name or location		Condition assessment required? (y/n)	Y
Onsite or offsite?		Condition sheet used	Scrub
Reason for assessment (if not baseline condition survey)			
Limitations (if applicable)			

Habitat description

An area of scrub was recorded along the eastern boundary of the Site. Species recorded included bramble *Rubus fruticosus agg.* , elder *Sambucus nigra* , buddleia *Buddleja davidii* , goat willow *Salix caprea* , ash (immature) *Fraxinus excelsior* , hogweed *Heracleum sphondylium* , cow parsley *Anthriscus sylvestris* , teasel *Dipsacus fullonum* , mullein *Verbascum thapsus* , common nettle *Urtica dioica* , mugwort *Artemisia vulgaris* , greater burdock *Arctium lappa* , cock's-foot *Dactylis glomerata* , common bent *Agrostis capillaris* , Yorkshire fog *Holcus lanatus* , and false oatgrass *Arrhenatherum elatius* .

Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.
For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.

Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	**TOTAL**
Result	P	F	F	P	F	NA	NA	NA	NA	NA	NA	NA	NA	2 passes
Photo ref														
Target note ref														

Are any criteria non-negotiable? (Y/N) If Yes are they passed?		Condition (Good/Moderate/Poor):	Poor
Suggested enhancement interventions to improve condition score			

Condition Sheet: SCRUB Habitat Type		
UKHab Habitat Type		
Heathland and shrub - Blackthorn scrub **Heathland and shrub - Bramble scrub** **Heathland and shrub - Gorse scrub** **Heathland and shrub - Hawthorn scrub** **Heathland and shrub - Hazel scrub** **Heathland and shrub - Mixed scrub** **Heathland and shrub - Sea buckthorn scrub (Annex 1)**		
Habitat Description		
See UKHab		
For sea buckthorn scrub use Habitats Directive Annex 1 definition		
Condition Assessment Criteria		
1	Habitat is representative of UKHab description (where in its natural range). 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 up to 100% cover).	
2	There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs.	
3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and undesirable species[1] make up less than 5% of ground cover.	
4	The scrub has a well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitat(s).	
5	There are clearings, glades or rides present within the scrub, providing sheltered edges.	
Condition Assessment Result		**Condition Assessment Score**
Passes 5 of 5 criteria		Good (3)
Passes 3 or 4 of 5 criteria		Moderate (2)
Passes 0, 1 or 2 of 5 criteria		Poor (1)
Notes		
Footnote 1 - Species considered undesirable for this habitat type include: creeping thistle *Cirsium arvense* , common nettle *Urtica dioica* , cherry laurel *Prunus laurocerasus* , snowberry *Symphoricarpos* spp., buddleia *Buddleja* spp., cotoneaster *Cotoneaster* spp., Spanish bluebell *Hyacinthoides hispanica* (or hybrids).		

CONDITION ASSESSMENT PROFORMA FOR USE WITH BIODIVERSITY METRIC 3.0 - AREA BASED HABITATS

Date	08/04/2022	Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Weather conditions			
Surveyor name(s)	Rachel Jackson	Unique polygon reference(s)	
Project / development name	Standlake Business Park	Metric 3.0 habitat type	Ephemeral
Site name or location		Condition assessment required? (y/n)	Y
Onsite or offsite?		Condition sheet used	Urban - Ephemeral
Reason for assessment (if not baseline condition survey)			
Limitations (if applicable)			

Habitat description

The majority of the Site comprised ephemeral over heavily disturbed ground. Several small pools had formed, creating damp conditions for much of this habitat. Species recorded included common vetch *Vicia sativa* , ragwort *Jacobaea vulgaris* , scentless mayweed *Tripleurospermum inodorum* , sow thistle *Sonchus sp* ., broadleaf dock *Rumex obtusifolius* , teasel *Dipsacus fullonum* , common sedge *Carex nigra* , common dandelion *Taraxacum officinale agg* ., ribwort plantain *Plantago lanceolata* , creeping cinquefoil *Potentilla reptans* , bird's-foot trefoil *Lotus corniculatus* , red deadnettle *Lamium purpureum* , dove's-foot cranesbill *Geranium molle* , cow parsley *Anthriscus sylvestris* , white clover *Trifolium repens* , field speedwell *Veronica persica* , bindweed *Convolvulus arvensis* , cock's-foot *Dactylis glomerata* , foxglove *Digitalis purpurea* , coltsfoot *Tussilago farfara* , and cudweed *Filago vulgaris* .

Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.
For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.

Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	**TOTAL**
Result	F	P	P	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 passes
Photo ref														
Target note ref														

Are any criteria non-negotiable? (Y/N) If Yes are they passed?		Condition (Good/Moderate/Poor):	Moderate
Suggested enhancement interventions to improve condition score			

Condition Sheet: URBAN - NON PRIORITY Habitat Type	
UKHab Habitat Type	
Sparsely vegetated land - Ruderal/ephemeral **Urban - Allotments** **Urban - Bioswale** **Urban - Brown roof** **Urban - Cemeteries and churchyards** [Use Urban condition sheet as default. Where there are areas of grassland, woodland or scrub above the minimum mappable area, record and assess these as the relevant habitat type] **Urban - Extensive green roof** **Urban - Façade-bound green wall** **Urban - Ground based green wall** **Urban - Intensive green roof** **Urban - Open mosaic habitats on previously developed land** **Urban - Rain garden** **Urban - Sustainable urban drainage feature** [in the contect of the Biodiversity Metric, this habitat type refers to open SUDS with vegetation and/or open water] **Urban - Vacant / derelict land / bare ground**	
Habitat Description	
See UKHab	
Condition Assessment Criteria	
CORE CRITERIA - applicable to **all urban habitat types:**	
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife).
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).
ADDITIONAL CRITERION - only applicable to **Open mosaic on previously developed land** habitat type:	
4a	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.
ADDITIONAL CRITERION - only applicable to **Bioswale and SUDS** habitat types:	
4b	The water table is at or near the surface throughout the year. This could be open water or saturation of soil at the surface.

Condition Assessment Result	Condition Assessment Score
If 3 criteria assessed:	
• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3	Good (3)
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)
• Passes 0 or 1 of 3 core criteria	Poor (1)
If 4 criteria assessed:	
• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3; AND • Passes additional criterion 4a or 4b	Good (3)
• Passes 2 of 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)
• Passes 0 or 1 of 4 criteria	Poor (1)
Notes	

CONDITION ASSESSMENT PROFORMA FOR USE WITH BIODIVERSITY METRIC 3.0 - AREA BASED HABITATS

Date	08/04/2022	Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Weather conditions			
Surveyor name(s)	Rachel Jackson	Unique polygon reference(s)	
Project / development name	Standlake Business Park	Metric 3.0 habitat type	Scattered Tree (line of trees)
Site name or location		Condition assessment required? (y/n)	Y
Onsite or offsite?		Condition sheet used	Urban Tree
Reason for assessment (if not baseline condition survey)			
Limitations (if applicable)			

Habitat description

A line of cypress *Cupressus sp.* trees was recorded along the south-west boundary of the Site. All specimens were mature and measuring approximately 7-8m in height, with occasional dead stands present.

Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.
For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.

Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	**TOTAL**
Result	F	P	P	P	P	P	NA	NA	NA	NA	NA	NA	NA	5 passes
Photo ref														
Target note ref														

Are any criteria non-negotiable? (Y/N) If Yes are they passed?		Condition (Good/Moderate/Poor):	Good
Suggested enhancement interventions to improve condition score			

Condition Sheet: URBAN TREES (INCLUDING STREET TREES) Habitat Type	
UKHab Habitat Type(s)	
Urban - Urban tree	
Habitat Description	
Covers the following topographical formations most commonly found in urban areas[1]: **Individual Trees:** Young trees over 75mm in diameter measured at 1.5m from ground level and individual semi-mature and mature trees of significant stature and size that dominant their surroundings whose canopies are not touching but that are in close proximity to other trees. **Perimeter Blocks:** Groups or stands of trees within and around boundaries of land, former field boundary trees incorporated into developments, individual trees in gardens whose canopies overlap continuously **Linear Blocks:** Lines of trees along streets, highways, railways and canals whose canopies may or may not overlap continuously.	
Condition Assessment Criteria	
1	More than 70% of trees are native species.
2	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.
3	More than 50% of trees are mature[2] or veteran[3].
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.
5	Management regime has encouraged micro habitat sites for birds, mammals and insects e.g. presence of deadwood, cavities or loose bark etc.
6	Trees are immediately adjacent to other vegetation, and tree canopies are oversailing vegetation beneath.

FC	Condition Assessment Score
Passes 5 or 6 of 6 criteria	Good (3)
Passes 3 or 4 of 6 criteria	Moderate (2)
Passes 0, 1 or 2 of 6 criteria	Poor (1)
Notes	

Footnote 1 - This covers all trees in artificial urban habitats such as private gardens, private land, institutional land and land used for transport functions; roads, streets, canals, rail, footpaths etc. Trees in urban areas can under the right conditions provide a large range of habitat opportunities, supporting lichens, invertebrates and birds. Tree planting in urban areas has for over two hundred years also introduced non-native species into towns and cities. In the context of biodiversity native species are the preferred option. However, non-native tree species can contribute positively to biodiversity richness particularly in relation to providing a seasonal food source for nectar feeders and other invertebrates as well as supporting vertebrates that feed on species that are hosted by non-native trees. Examples are early and late flowering species of *Prunus* and aphids on varieties of *Acer* providing food for species higher up the food chain. The species of trees (native or non-native) together with the intensity and type of management they are subject to will determine the biodiversity value of the trees in question. Trees in urban areas provide opportunistic sites for biodiversity to colonise and re-colonise, increasing connectivity and contributing to biodiversity critical mass between already established patches or sites. This is especially so where transport corridors are populated with mixed native species

Footnote 2 - A mature tree in this context is one that is at least 2/3 expected fully mature height for the species.

Footnote 3 - All ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but it has decay features, such as branch death and hollowing. These features contribute to its biodiversity, cultural and heritage value. Veteran trees can be classified if they have four out of the five following features:

1. Rot sites associated with wounds which are decaying >400cm2;
2. Holes and water pockets in the trunk and mature crown >5 cm diameter;
3. Dead branches or stems >15 cm diameter;
4. Any hollowing in the trunk or major limbs;
5. Fruit bodies of fungi known to cause wood decay.

CONDITION ASSESSMENT PROFORMA FOR USE WITH BIODIVERSITY METRIC 3.0 - AREA BASED HABITATS

Date	08/04/2022	Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Weather conditions			
Surveyor name(s)	Rachel Jackson	Unique polygon reference(s)	
Project / development name	Standlake Business Park	Metric 3.0 habitat type	Dry ditch
Site name or location		Condition assessment required? (y/n)	Y
Onsite or offsite?		Condition sheet used	Rivers
Reason for assessment (if not baseline condition survey)			
Limitations (if applicable)			

Habitat description

A dry ditch was recorded bordering the north-east boundary of the Site. The ditch measured approximately 90m in length, 1m in width and 1m in height. Vegetation present within and around the ditch was dominated by species found within the ephemeral and tall ruderal habitats.

Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.
For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.

Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	**TOTAL**
Result	F	F	P	P	F	F	P	P	NA	NA	NA	NA	NA	4 passes
Photo ref														
Target note ref														

Are any criteria non-negotiable? (Y/N) If Yes are they passed?		Condition (Good/Moderate/Poor):	Poor
Suggested enhancement interventions to improve condition score			

Condition Sheet: DITCH Habitat Type	
UKHab Habitat Type(s)	
Rivers and streams - Ditches	
Habitat Description	
Artificially created, linear water-conveyancing features that are less than 5 m wide and likely to retain water for more than 4 months of the year. Their hydraulic function is primarily for land drainage, and although partially or fully connected to a river system, they would not have been present without human intervention' *[Note: some heavily engineered ditches may actually be part of the river system (usually part of the headwater system). If there is uncertainty, consult historic maps, LIDAR data and riverine specialists]*	
Condition Assessment Criteria	
1	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.
2	A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating or submerged plants in a 20 m ditch length.
3	There is less than 10% cover of filamentous algae and/or duckweed (these are signs of eutrophication).
4	A fringe of marginal vegetation is present along more than 75% of the ditch.
5	Physical damage evident along less than 5% of the ditch, such as excessive poaching, damage from machinery use or storage, or any other damaging management activities.
6	Sufficient water levels are maintained; as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.
7	Less than 10% of the ditch is heavily shaded.
8	There is an absence of non-native plant and animal species[1].

Condition Assessment Result	Condition Assessment Score
Passes 8 of 8 criteria	Good (3)
Passes 6 or 7 of 8 criteria	Moderate (2)
Passes 0, 1, 2, 3, 4 or 5 of 8 criteria	Poor (1)

Notes

Footnote 1 - Any species included on the Water Framework Directive UKTAG GB High Impact Species List should be absent.

• Frequently occurring non-native plant species include water fern *Azolla spp.,* Australian swamp stonecrop *Crassula helmsii* , parrot's feather *Myriophyllum aquaticum* , floating pennywort *Hydrocotyle ranunculoides,* Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum* (on the bank).
• Frequently occurring non-native animals include signal crayfish *Pacifastacus leniusculus* , zebra mussels *Dreissena polymorpha* , killer shrimp *Dikerogammarus villosus* , demon shrimp *Dikerogammarus haemobaphes,* carp *Cyprinus carpio* .

Standlake Business Park

A-1 Site Habitat Baseline

Condense / Show Columns | Condense / Show Rows

Main Menu | Instructions

	Habitats and areas			Distinctiveness	Condition	Strategic significance	Suggested action to address habitat losses	Ecological baseline
Ref	Broad habitat	Habitat type	Area (hectares)	Distinctiveness	Condition	Strategic significance		Total habitat units
1	Sparsely vegetated land	Ruderal/Ephemeral	0.869	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required	3.48
2	Sparsely vegetated land	Ruderal/Ephemeral	1.817	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required	7.27
3	Urban	Developed land; sealed surface	0.166	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00
4	Heathland and shrub	Mixed scrub	0.207	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required	0.83
5	Urban	Urban Tree	0.0651	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required	0.78
			3.06					12.35

Retention category biodiversity value						Bespoke compensation agreed for unacceptable losses	Comments	
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area lost	Units lost		Assessor comments	Reviewer comments
		0.00	0.00	0.87	3.48		Tall ruderal	
		0.00	0.00	1.82	7.27		Ephemeral	
		0.00	0.00	0.17	0.00		Hardstanding	
		0.00	0.00	0.21	0.83		Mixed scrub dominated by bramble	
		0.00	0.00	0.07	0.78		Scattered Tree	
0.00	0.00	0.00	0.00	3.12	12.35			

Dry Ditch

This habitat was in poor condition and dry at the time of assessment. The ditch was heavily encroached by ephemeral vegetation with no water plants recorded. This habitat was potentially polluted due to the close proximity to the wider industrial estate and rubble was present within the ditch itself.

Opportunities: Creating a naturalised buffer with marginal vegetation and riparian species to enhance the biodiversity and opportunities for a range of species.

Constraints: Removal of this habitat would result in a minor loss of biodiversity within the Site.

Hardstanding/Ephemeral/Poor Ruderal & Scrub

This area would provide limited refugia and foraging opportunities for reptiles, amphibians and small mammals. Invasive species such as Japanese knotweed *Fallopia japonica* (Schedule 9 species) recorded within this area.

Opportunities: This area would have very little to no biodiversity value. Biodiversity net gain would be easy to achieve in this area and could provide links to more suitable habitat (e.g. tree line)

Constraints: Removal of these habitats would result in a minor loss of biodiversity within the Site.

Tall Ruderal (Moderate Condition)

Provides refugia and foraging opportunities for reptiles and amphibians. Allows for minimal connectivity around the Site and to the surrounding area.

Opportunities: enhancing the habitat through clearing of scrub species such as bramble *Rubus fruticosus agg.* and seeding with wildflower meadow mix to increase the biodiversity value of this habitat and encourage more insect species. Regular management would be required to ensure no species become dominant.

Constraints: This habitat has a diverse flowering mix making the existing habitat suitable for many species including pollinators. Removal would have a moderate impact on biodiversity within the Site. Net Gain would require replacement of this habitat of the same value or higher.

Scattered/Line of Trees

This habitat provides forging, sheltering and commuting opportunities for multiple species including birds, bats and small mammals. This habitat combined with the understory of tall ruderal and the adjacent bund would provide connectivity opportunities around the Site and surrounding area.

Opportunities: Infilling and extending this habitat with native species would increase the quality of this habitat and the biodiversity value of the Site. Improving the buffer along the Site boundary would encourage more bat species and nesting birds.

Constraints: Removal or decreasing the habitat area would have a moderate impact on local biodiversity. Net Gain would require replacement of this habitat of the same value or higher.

0 50 100 200 Metres

438100 438150 438200 438250 438300 438350 438400 438450 438500 438550

204600 204550 204500 204450 204400 204350 204300 204250 204200

Legend:

- Site Boundary
- Red Zone = Habitat of higher ecological value; Suitable habitat for multiple sensitive species recorded; Potential wildlife corridor.
- Amber Zone = Habitat of moderate ecological value; Suitable habitat for a few sensitive species; Limited connectivity opportunities
- Green Zone = Low ecological value; Occasional sensitive species may be present.
- Scattered Tree
- Dry Ditch
- Dense Scrub
- Ephemeral/Short Perennial
- Hardstanding
- Tall Ruderal

REVISIONS:

DATE:	VERSION:	INITIALS:

NICHOLSONS LOCKHART GARRATT

Leading solutions for the natural environment

TITLE: Constraints and Opportunities

PROJECT/SITE: Standlake Business Park

CLIENT: Aequitas Estates (Midlands No2) Ltd

MAP REF: 4564/03/21-2502

VERSION: v1

DATE: 12/04/22

SCALE: 1:1,500 @A3

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