

Halewood LUF- Halewood Leisure Centre

Habitat Management and Monitoring Plan

Knowsley Council

Reference	Site	Client	Date
P.2048.24	Halewood LUF- Halewood Leisure Centre	Knowsley Council	12 May 2026

Field work	Document author	Technical review	Quality & approval
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2	70117919_WSP_LUD_HLC_DR_LA_006 Rev P02, Proposed Soft Landscape Strategy
3	P.2048.24 Target Condition Sheets
4	Baseline Condition Assessment Sheets

Executive Summary

This Habitat Management and Monitoring Plan (HMMP) has been prepared by Ascerta on behalf of **Knowsley Council** for the **redevelopment of Halewood Leisure Centre**. The plan has been prepared to satisfy condition 11 of the planning application **25/00182/KMBC1** and to ensure the long-term management and enhancement of biodiversity **on-site** in accordance with the Environment Act 2021, DEFRA Biodiversity Metric 4.0, and Knowsley Council (Metropolitan Borough of Knowsley).

The HMMP outlines the management, monitoring, and maintenance of newly created, retained habitats and retained on-site habitats for a period of 30-years (2027-2057). Its primary objective is to ensure all habitats reach and maintain target ecological conditions, thereby delivering a measurable Biodiversity Net Gain in line with statutory requirements. The HMMP ensures that the development of **Halewood Leisure Centre**, delivers measurable, lasting biodiversity improvements in compliance with national policy and local planning conditions. Through detailed management prescriptions, monitoring, and adaptive management strategy, the plan secures the long-term ecological value of the site while contributing to local green infrastructure and wildlife conservation.

- **Site Overview:** The site comprises predominantly modified grassland, areas of hardstanding (sealed and artificial surfaces), and scattered individual urban trees. The baseline is largely of low ecological value, with urban land uses dominating and limited structural diversity.
- **Habitat Outcomes Post Development:** Post-development, the site will retain areas of modified grassland and urban land, alongside the creation of new habitats including mixed scrub, introduced shrub planting, ponds (non-priority), and additional urban tree planting. Notably, an area of existing modified grassland will be enhanced to other neutral grassland (ONG), increasing habitat condition and ecological value. These measures collectively contribute to improved habitat diversity and support the delivery of on-site biodiversity net gain.
- **Monitoring and Maintenance:** Annual monitoring by a qualified ecologist between May and August for 30 years. Formal audits at years 1, 2, 5, 10, 20, and 30 with biodiversity reconciliation at each stage. Adaptive management procedures to address underperformance or environmental changes.
- **Long-Term Management:** Regular maintenance of vegetation, replacement of failed planting, control of invasive species, and preservation of habitat structure and diversity. Establishment and maintenance schedules detailed for all habitat types to ensure target conditions are met.
- **Responsibility:** Implementation and monitoring will be managed by **Knowsley Council**, in consultation with the Local Planning Authority (LPA) **Knowsley Council**.

1. Introduction

This HMMP has been commissioned by **Knowsley Council** to form part of the consent to discharge condition 11 for **25/00182/KMBC1**.

The OS grid reference is SJ 45275 85177 and the what3words reference is crowns.tiredness.rally. see **Figure 1.1** below.



Figure 1.1: Extent of the site

1.1 Aims and Objectives

This HMMP provides an overview of how habitats will be managed. It also sets out monitoring proposals for habitats and certain species present on site. It should also be noted that the landscape architect/contractor will also advise on specific management of landscaped areas, whilst adhering to the ecological management activities contained herein.

It may be appropriate for this document to be updated over the period; however, the overall extents and types of created habitats, and their ecological value, are unlikely to change. Proposals for monitoring may also identify issues requiring remedial measures and alteration to the management prescriptions detailed in this document.

1.2 Site Safeguarding

Knowsley Council, as the owner and operator of the proposed development, will be responsible for the implementation of this HMMP. The stated management and monitoring will be undertaken for 30 years. The implementation of the HMMP will be secured by way of planning condition and will therefore be binding upon a future operator or occupier of the proposed development, should **Knowsley Council transfer** its interest in the site or ceases to operate the proposed development during that 30-year period (see **Table 1.1** below). They will also undertake safeguarding measures such as reinstatement of habitats or prevention installations such as fire, acute pollution control or other major damage, and the control and removal of all dumped materials.

1.3 Project Background

The application (reference: **25/00182/KMBC1**)

Table 1.1 below summarises key project and organisational details for this HMMP.

Table 1.1: Key project and organisational details for this HMMP

Site overview	Description
Project type	Redevelopment
Development Name and Address	Knowsley Council
BNG Project Name and Address	P.2048.24 Halewood LUF- Halewood Leisure Centre
Author Organisation	Ascerta
Landowner	Knowsley Council
Land Manager	Knowsley Council
Responsible person/organisation for creating or enhancing the habitat	Knowsley Council
Period covered by this management plan	From commencement of habitat implementation to 30 years following the completion of initial capital works. The plan covers a preliminary period of between 2026 (Year 0) to 2057 (Year 30).
Planning authority	Knowsley Council
Planning reference	25/00182/KMBC1
BNG register reference (if applicable)	Not Applicable
Central OS Grid Reference	SJ 45275 85177
Metric revision/title	P.2048.24G Halewood Leisure Centre The_Statutory_Biodiversity_Metric_Calculation_Tool
Are any Irreplaceable Habitats present onsite	Yes: ☐ No: ☒

2. Habitat Baseline Conditions, Creation and Management

2.1 Current Land Use Summary

The site is currently in use as a leisure centre, comprising built infrastructure, areas of hardstanding, and associated amenity landscaping. Habitats on site are dominated by modified grassland of low ecological value, with additional areas of sealed surfaces and scattered individual urban trees. The site is managed as a functional recreational facility, with limited habitat diversity and predominantly urban characteristics.

A Preliminary Ecological Appraisal was undertaken in August 2023 (WSP report 70112144, Preliminary Ecological Appraisal, September 2023).

The site was visited by Liz Kenyon BSc (Hons) on 3 September 2025 to update baseline conditions and assess the potential for protected species to use the site. This assessment builds upon previous survey work including a badger survey undertaken on 29 August 2024, which identified no evidence of badger activity within the site (Ascerta, 2024), and environmental DNA (eDNA) testing for great crested newt undertaken on 16 April 2025, which returned a negative result confirming absence of great crested newt within the on-site pond (Ascerta, 2025a).

The updated ecological appraisal in September 2025 confirmed that habitats within the site remain consistent with those recorded in 2023, with trees assessed as having negligible suitability for roosting bats and no evidence of roosting identified (Ascerta, 2025b). Overall, the site is considered to support low ecological value with no significant protected species constraints.

2.2 Baseline Habitats On-site

The *Baseline Assessment*, drawing P.2048.24.E01D (Appendix 1) has been used to identify the habitat area types within the development site. The phase 1 habitat categories have translated into UKHab habitat classification (*UK Habitat Classification User Manual*) using the UKHab/Phase 1 translation tool within *The Statutory Biodiversity Metric Calculation Tool* and following the methods set out in *The Statutory Biodiversity Metric : auditing and accounting for biodiversity value* (User guide) and the *Statutory Biodiversity Metric: Auditing and accounting for biodiversity value: technical supplement* and biodiversity scores have been calculated and assessed, as displayed in Table 2.1 below.

Table 2.1: Baseline Habitat Areas Biodiversity Calculation for on-site habitats

Existing area habitats				Distinctiveness		Condition	
Broad habitat	Habitat type	Irreplaceable habitat	Area (hectares)				
				Distinctiveness	Score	Condition	Score
Grassland	Modified grassland	No	3.71	Low	2	Moderate	2
Urban	Developed land; sealed surface	No	1.0687	V. low	0	N/A - Other	0
Urban	Developed land; sealed surface	No	0.5386	V. low	0	N/A - Other	0
Urban	Artificial unvegetated, unsealed surface	No	0.9317	V. low	0	N/A - Other	0
Individual trees	Urban tree	No	0.1344	Medium	4	Poor	1
Individual trees	Urban tree	No	0.1466	Medium	4	Poor	1
Individual trees	Urban tree	No	0.0366	Medium	4	Moderate	2
Individual trees	Urban tree	No	0.0163	Medium	4	Moderate	2

Collectively the baseline habitats areas detailed within **Table 2.1** above are equal to **16.62** Biodiversity Units.

2.3 Post-development Area Biodiversity Value of the Proposed Development Site

Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02, Proposed Soft Landscape Strategy (Appendix 2) has been used to identify the new habitat area types within the proposed development site. Habitat areas, distinctiveness and condition scores have been calculated and assessed and are displayed in Table 2.2-2.5 below.

Table 2.2: Post Development Habitat Areas Retained Biodiversity Calculation for On-site Habitats

Existing area habitats retained				Distinctiveness		Condition	
Broad habitat	Habitat type	Irreplaceable habitat	Area (hectares)				
				Distinctiveness	Score	Condition	Score
Grassland	Modified grassland	No	2.0207	Low	2	Moderate	2
Urban	Developed land; sealed surface	No	0.5386	V. low	0	N/A - Other	0
Urban	Artificial unvegetated, unsealed surface	No	0.841	V. low	0	N/A - Other	0
Individual trees	Urban tree	No	0.0611	Medium	4	Poor	1
Individual trees	Urban tree	No	0.0326	Medium	4	Poor	1
Individual trees	Urban tree	No	0.0366	Medium	4	Moderate	2
Individual trees	Urban tree	No	0.0041	Medium	4	Moderate	2

Through the habitat area retention detailed within **Table 2.2** above and drawing 70117919_WSP_HLC_GRP_DR_LA_006 Rev P02, Proposed Soft Landscape Strategy (Appendix 2) the proposal retains **8.85** Biodiversity Units.

Table 2.3: Post Development Habitat Areas Biodiversity Calculation for On-site Habitats

Broad habitat	Created habitat	Area (hectares)	Distinctiveness		Condition	
			Distinctiveness	Score	Condition	Score
Heathland and scrub	Mixed scrub	0.3969	Medium	4	Moderate	2
Urban	Introduced shrub	0.0948	Low	2	N/A	1
Individual trees	Urban tree	0.4927	Medium	4	Moderate	2
Urban	Rain garden	0.0609	Low	2	Poor	1
Urban	Artificial unvegetated, unsealed surface	0.269	V. low	0	N/A-Other	0
Grassland	Other neutral grassland	0.0343	Medium	4	Moderate	2
Lakes	Ponds (non-priority habitat)	0.065	Medium	4	Moderate	2
Urban	Developed land; sealed surface	0.95	V. low	0	N/A - Other	0

Collectively through the habitat area creation detailed within **Table 2.3** above and drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02, Proposed Soft Landscape Strategy (Appendix 2), the proposals deliver **5.53** Biodiversity Units.

Table 2.4: Post Development Habitat Area Enhancement Calculation for On-site Habitats

Broad habitat	Enhanced habitat	Area (hectares)	Distinctiveness		Condition	
			Distinctiveness	Score	Condition	Score
Grassland	Modified grassland > Neutral grasslands	0.98	Low> Medium	2>4	Moderate	2

Through habitat enhancement detailed within **Table 2.4** above and drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02, Proposed Soft Landscape Strategy (Appendix 2) the proposal delivers **4.24** Biodiversity Units.

Table 2.5: Post Development Habitat Areas Biodiversity Calculation for On-site Linear Features

New hedge number	Habitat type	Length (km)	Distinctiveness		Condition	
			Distinctiveness	Score	Condition	Score
	Native hedgerow	0.59	Low	2	Moderate	2

A total of 0.59km is proposed to be created within the proposed development, resulting in **2.17 BU**, however no hedgerow units were recorded within the baseline assessment, thus there is no mandatory requirement for a percentage change in hedgerow units.

2.4 Impacts to Biodiversity: Statement

Based on the recommended habitat creation and enhancement measures at the site and land under ownership of the client (Knowsley Council), the combined unit net change in biodiversity value is **+1.89 (+11.42%)** in habitat area units, demonstrating that the site/s can achieve a 10% net gain in biodiversity units in line with the NPPF and Knowsley Metropolitan Borough Council (2016) Knowsley Local Plan Core Strategy (CS) (Adopted January 2016). Knowsley Council.

3. Site Baseline, Environmental Information and Associated Impacts Checklist

Consideration has been given to the sites Baseline and Environmental Information listed below within **Table 3.1**. Including appropriate contextual information for the management prescriptions provided later in this document, informing the proposals and project design.

Table 3.1: Site Baseline and Environmental Information

Baseline and Environmental Information	Relevant information	Check box	Document Reference or Reason if not included
Statutory / Non-statutory Designated Sites	Three internationally designated sites are located within 10km of the site, including the Mersey Estuary SPA/Ramsar (approximately 4.7km southeast) and Liverpool Bay SPA (approximately 9.8km northwest). Eight non-statutory designated sites are located within 2km, the closest being Halewood Triangle LWS approximately 0.3km northwest. Given the scale and nature of the proposals, and the lack of ecological connectivity, no impacts to designated sites are anticipated.		WSP (2023). Preliminary Ecological Appraisal, Halewood LUF, Project No. 70112144.
Protected and Notable Species	Baseline surveys and assessment identified limited potential for protected species. - Trees and buildings were assessed as having negligible to low suitability for roosting bats, with no evidence of roosting identified - No badger activity, setts, or field signs were recorded - Habitats offer limited suitability for amphibians and reptiles, with no evidence of presence recorded - Habitats including trees and scrub provide nesting opportunities for birds Overall, the site is considered to support low ecological value with no significant protected species constraints identified.	X	Ascerta (2025). Preliminary Ecological Addendum Letter Report, Halewood Leisure Centre, Ref: P.2048.24. WSP (2023). Preliminary Ecological Appraisal, Halewood LUF, Project No. 70112144.
Invasive Non-Native Species (INNS)	No invasive non-native species were recorded during the site surveys. Should any INNS be identified during works, appropriate management and control measures will be implemented.		WSP (2023). Preliminary Ecological Appraisal, Halewood LUF, Project No. 70112144.
Biological Records Plan - Sites and Species	Desk study records identified protected and notable species within the wider area; however, no records were identified that would influence the delivery of the proposals or the HMMP.		WSP (2023). Preliminary Ecological Appraisal, Halewood LUF, Project No. 70112144.
Baseline Habitats Survey	Baseline conditions are informed by: - Preliminary Ecological Appraisal undertaken August 2023 - Updated walkover survey undertaken September 2025 The site comprises a leisure centre with associated hardstanding, amenity grassland, and scattered trees, with habitats remaining consistent between surveys.	X	Ascerta (2025). Preliminary Ecological Addendum Letter Report, Halewood Leisure Centre, Ref: P.2048.24. WSP (2023). Preliminary Ecological Appraisal, Halewood LUF, Project No. 70112144.
Public Access	The site is currently in active use as a leisure centre with associated recreational facilities. Public access does not constrain or influence the delivery of the proposals or HMMP.		Public access will not significantly influence future delivery of the Landscape and the delivery of this HMMP.
Climate	The proposals comprise urban redevelopment and landscape enhancement within an existing developed site. Climate is not considered to significantly influence the delivery of the landscape proposals or HMMP.		Climate has not significantly influenced the proposals.
Geology and Topography	The geology and topography of the site have not influenced the delivery of the landscape plan or HMMP. The underlying geology and site topography will not prevent the establishment of the landscape typologies and habitats designed within the scheme.		Geology and topography have not significantly influenced the proposals.

Agricultural Land Status	Not applicable. The site is currently in use as a leisure centre and does not comprise agricultural land.		Agricultural land status is not relevant to the implementation of the HMMP.
Soil and Substrates	The soils within the site are typical of urban amenity grassland associated with the existing leisure centre. Proposed planting and grassland treatments will be appropriate to site conditions.	X	Soil conditions will not constrain the delivery of the HMMP.
Contaminated Land	No evidence of significant contamination has been identified within the site based on available information.	X	Contamination is not considered to constrain the implementation of the HMMP.
Hydrology and Drainage	The site has been determined to be at a limited risk of flooding from surface water.		
Landscape Character and Designations	The site is located within an urban area of Halewood and comprises an existing leisure centre and associated recreational land. The surrounding landscape is characterised by built development, urban green space, and recreational infrastructure. The proposals are not considered to significantly affect the wider landscape character.	X	
Historic Land Use	The site has historically been in use as a leisure centre and recreational facility.		The historical land use of the site has therefore not influenced the delivery of the landscape plan or HMMP.
Historic Environment and Earth Heritage	No known archaeological features present within the site would affect the implementation of the HMMP.		None known that would influence the proposals

4. Management Operation Necessary to Achieving Aims and Objectives

4.1 Habitat Management and Monitoring

All habitats shall be managed and monitored to ensure successful establishment and achievement of target condition (see P.2048.24 Target Condition Sheets, at Appendix 3). Monitoring shall be undertaken at agreed intervals and any necessary remedial management implemented where targets are not being met.

4.2 Overview

This section describes the management and monitoring measures required to ensure that all newly created habitats successfully establish, deliver the intended ecological functions, and achieve their target BNG outcomes in line with the Environment Act 2021 and the DEFRA (2023) Biodiversity Metric 4.0. Management and monitoring activities will ensure that habitat condition targets are met, maintained, and reported to the Local Planning Authority over the 30-year monitoring period or as otherwise specified within the approved BNG framework.

4.3 Purpose

The purpose of this section is to outline the approach for monitoring and maintaining created habitats so that they meet the target condition and biodiversity unit values defined within the BNG metric calculations (Ascerta Report P.2048.24G Biodiversity Impact Assessment, December 2025) and the approved management plan.

4.4 Monitoring Frequency and Timing

Annual monitoring (refer to section 7) shall be undertaken for all created, retained and enhanced habitats on-site including individual trees, neutral grasslands, ponds and native hedgerows for the first 30 years post-development, unless otherwise agreed. Monitoring visits shall occur between May and August, when plant identification and habitat assessment are most reliable.

All monitoring shall be carried out by a suitably qualified ecologist or botanist, with demonstrable competence in habitat classification and species identification in accordance with UKHab (2023) and CIEEM (2021) Guidelines for Ecological Report Writing.

Monitoring will follow the principles set out in BS 8683:2021 - Process for Biodiversity Net Gain aligned with the Environment Act 2021 and BS 42020:2022 - Biodiversity Code of Practice for Planning and Development.

4.5 Assessment Criteria and Remedial Action

The established vegetation shall be measured against the approved habitat creation plans (Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02 Proposed Soft Landscape Strategy, including species composition, planting densities, and target condition criteria (P.2048.24 Target Condition Sheets, Appendix 3) identified within DEFRA (2023) Biodiversity Metric 4.0 Technical Supplement.

Where failed planting or poor establishment is identified within the site location boundary, replacement planting shall be undertaken using equivalent native species of local origin, in consultation with the appointed ecologist and the landscape architect.

If vegetation becomes dominated by one or a limited number of species, adaptive management measures, such as selective thinning, overseeding, or targeted replanting shall be implemented to restore the intended species diversity and ascribed habitat condition, as such, to proactively achieve and maintain habitat target condition within the allocated timeframe (see Section 5).

All remedial works will be documented and reviewed during subsequent monitoring cycles to confirm success and ongoing progress towards the BNG targets.

4.6 Control of Invasive and Undesirable Species

Each monitoring visit shall include an inspection for colonising flora, with particular attention to non-native invasive species (INNS). The assessment shall include, but not be limited to, species listed under: Schedule 9 of the Wildlife and Countryside Act 1981 (as amended); The Invasive Alien Species (Enforcement and Permitting) Order 2019; and Relevant provisions of the Environment Act 2021.

Where such species are identified, control or removal shall be implemented in accordance with recognised best-practice guidance, including the Environment Agency (2010) - Managing Invasive Non-native Plants; and CIRIA C773 (2018) - Invasive Species Management for Infrastructure Managers.

All works shall be supervised by a competent ecologist (ECoW) to ensure legal compliance and prevent the further spread or ecological degradation of retained and created habitats on-site and the respective target condition.

4.7 Reporting and Review

Annual monitoring reports on remedial action and habitat condition shall be prepared at and submitted to the LPA and/or Natural England, where required and agreed, to demonstrate progress, any short fall towards trajectory habitat target conditions and the statutory biodiversity unit delivery.

Reports will detail:

- The results of the habitat condition assessments using Statutory BNG Metric 4.0 criteria (see P.2048.24 Target Condition Sheets, appendix 3)
- Details of any remedial, management, or enhancement actions undertaken
- Any changes to habitat extent or quality
- Suitable sources, such as dated photographic evidence and habitat survey data (DAFOR augmented Species lists and QGIS mapping for example)

Where results indicate a shortfall in condition and/or trajectory to target condition, the management regime shall be reviewed and updated in consultation between the responsible and governing bodies.

4.8 Long-Term Management and Adaptive Approach

The management prescriptions outlined within **Section 5** are designed to be adaptive, allowing modification in response to monitoring outcomes, such as change in climatic conditions, not considered or change in abiotic conditions, on-site and local ecological trends observed.

Any significant amendments to the management approach shall be documented within subsequent monitoring reports and agreed with the relevant body before implementation.

The overarching objective is to ensure that all habitats achieve and maintain their ascribed target condition (see P.2048.24 Target Condition Sheets, appendix 3) and contribute long-term net gains in biodiversity value.

Table 4.1: Management summary

Consideration	Description
Habitats to be Retained, Created on-site.	Modified grassland (retained and enhanced to other neutral grassland); urban habitats including developed land (sealed/unsealed surfaces); retained and planted urban trees; and newly created habitats including mixed scrub, introduced shrub and ponds (non-priority habitat). Please refer to Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02 Proposed Soft Landscape Strategy, Appendix 2
Timescale and Applicable Actions	Habitat creation works are estimated to commence in 2026, following completion of the construction of the associated development (estimated 2026). This is defined as Year 0 of the 30-Year Management. Year 1 will start following completion of habitat implementation and soft landscaping (estimated 2027). Approximate start and end dates of HMMP are 2027 (Year 1) to 2057 (Year 30), this is however subject to change.
Monitoring	Habitat monitoring to be undertaken annually in Years 1>30 (see Section 5) (following completion of the habitat capital works in Year 0 and establishment). This is considered proportionate for the soft landscaping and the habitats created and maintained within the proposed development. Additional monitoring surveys may be undertaken as required in response to earlier monitoring and any required remedial measures.
Funding	Landowner - Knowsley Council
Legal Agreement	Management will be secured via the relevant condition.

5. Details of the Monitoring Needed to Measure the Effectiveness of Management

5.1 Proposed Individual Tree Planting

Table 5.1: Habitat Management Prescription - Proposed and Retained On-site Trees

Proposed habitat type	Urban trees
Proposed species	Acer campestre, Betula pendula, Carpinus betulus, Liquidambar styraciflua, Pinus nigra, Prunus avium plena, Pyrus calleryana 'Chanticleer', Quercus robur, Sorbus aria, Sorbus aucuparia, Tilia cordata, Ulmus 'New Horizon'.
Points Proposed / Retained	Please refer to Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02 Proposed Soft Landscape Strategy, Appendix 2
Target condition	Moderate
Considered Habitat Failure Risk (HFR)	Low likelihood

Management objective

To ensure new tree planting and retention is managed to provide good health over the long-term, to retain and enhance its habitat value. To ensure that the health and growth of the trees does not decrease over time due to weed growth around stem, and damage due to vandalism, rubbing of ties, or weather conditions. The ecological management strategy will aim to enhance canopy coverage, limit pruning, reduce disease proliferation, and retain created ecological niches (deadwood and cavities) where possible (for example, when not a risk to public health and safety).

Tree Descriptions

Table 5.2: Recorded trees, typical canopy form, growth rate, native status and management conditions

Tree / cultivar	Canopy form	Typical spread (m)	Litter	Growth rate	Native status	Condition targets / expected	Condition achieved
Field maple	Rounded, compact crown	6-10	Moderate leaf litter	Moderate	UK native	A, B, D, F	Moderate
Birch	Light, open canopy	5-8	Light leaf litter	Fast	Uk native	A, B, D, F	Moderate
Hornbeam	Dense, rounded crown	6-10	Moderate leaf litter	Moderate	UK native	A, B, D, F	Moderate
Sweet gum	Pyramidal to rounded crown	6-10	Moderate leaf litter	Moderate	Non-native	B, D, F	Moderate
Austrian pine	Broad, spreading crown	6-10	Needle litter (acidic)	Moderate	Non-native	B, D, F	Moderate
Double gean	Rounded crown	5-8	Moderate leaf litter	Moderate	Non-native	B, D, F	Moderate
Flowering pear 'Chanticleer'	Narrow, upright crown	3-5	Light leaf litter	Moderate	Non-native	B, D, F	Moderate
English oak	Broad, spreading crown	10-15	Heavy leaf litter	Slow	UK native	A, B, D, F	Moderate
Whitebeam	Rounded crown	6-10	Moderate leaf litter	Moderate	UK native	A, B, D, F	Moderate
Rowan	Light, open crown	4-8	Light leaf litter	Moderate	UK native	A, B, D, F	Moderate
Small-leaved lime	Broad, domed crown	8-15	Moderate leaf litter	Moderate	UK native	A, B, D, F	Moderate
Elm 'New Horizon'	Upright to spreading crown	8-12	Moderate leaf litter	Moderate	Non-native cultivar	B, D, F	Moderate

When managed in accordance with the prescriptions below, trees within the site have the potential to achieve moderate condition.

Tree Retention: Construction Phase

All landscape works shall be carried out in full accordance with BS 4428: Code of Practice for General Landscape Operations and BS 3936:1992: All works shall be undertaken during the appropriate planting season (November - March) and only under suitable weather and ground conditions. The appointed contractor shall verify the location of all existing services and utilities and shall obtain any necessary instructions or approvals before proceeding.

During the construction phase, all retained trees (see Drawing P.2048.24.E01D Baseline Habitats, Appendix 1) will be managed and protected through the implementation of appropriate mitigation measures to avoid direct and indirect impacts, including root damage, soil compaction and accidental encroachment. Measures for tree retention during the construction works will comply with the methods set out within the Arboricultural Impact Assessment for the proposed development.

- Retained trees shall be clearly identified on all construction drawings and marked on-site prior to the commencement of works.
- Protective heras fencing shall be installed around retained trees and Root Protection Areas (RPAs) in accordance with BS5837 and shall remain in place for the duration of construction works.
- No storage of materials, plant, machinery, fuels or spoil shall take place within proximity to retained tree areas or RPAs.
- Ground levels within proximity to existing trees will not be altered and soil compaction shall be avoided at all times.
- Construction personnel shall be briefed on the location of retained trees.
- Any works required in proximity to retained trees shall be undertaken under arboricultural and/or Ecological Clerk of Works (ECoW) supervision, as appropriate.
- Accidental damage to retained trees shall be reported immediately and remedial measures implemented following specialist advice.
- Protective measures shall only be removed following completion of construction works and with the approval of the project arboriculturist/ECoW.

Tree Planting: Establishment Phase Prior to the End of Construction

- Tree pits are to be excavated to accommodate the full root ball of each specimen with an additional minimum 50mm all round for backfill.
- Pit bases to be loosened to spade depth and are to include slightly raised centre to reduce the risk of waterlogging and prevent sump formation; in addition, pit sides are to be scarified to prevent root circling.
- Excavated materials are to be mixed with 2 kg of well-rotted manure to use, prior to backfilling.
- Trees are to be positioned centrally with roots fully spread and best aspect facing forward.
- Each tree is to be supported by a single vertical stake installed on the windward side, driven a minimum of 300 mm into the base of the pit.
- Trees to be secured to the stake using a flexible tie, fixed within 25mm of the top of the stake, allowing for movement but preventing abrasion.
- Spacer blocks or cushions to be used where necessary to prevent contact between the tree and stake.
- Fixings to be galvanised nails to BS 1202-1.
- Pits to be backfilled and firmed carefully.
- Growth tubes to be installed around each tree.
- Trees to be watered to field capacity immediately after planting.
- Mulch is to be applied to a depth of 75mm around each tree.
- Where mulching does not provide adequate weed suppression, additional weed control (e.g. periodic herbicide application) may be undertaken at intervals agreed with the Land Manager.

Establishment Phase (Years 1–2)

- Continue to water newly planted trees to field capacity and ensure good establishment
- Limit pruning, to allow 75% canopy coverage of the expected age and height of each individual tree (avoid heavy crown reduction)
- Retain 20% of the proposed vegetation below the tree canopy areas, if this becomes limited, re-seed/replant these areas with suitable species.
- Annually replace dead or dying stock with like-for-like species, check stakes and tree ties and adjust/replace if necessary
- Hand weed around a 0.6m diameter of the base of each tree to ensure weed free and top up mulch every two years
- Remove excessive leaf litter to reduce disease proliferation within the immediate area
- Augment habitat structure to progressively raise the canopies of new trees to provide clearance for residents, pedestrians and vehicles
- Management should ensure planting and/or substantial leaf litter does not encroach into/onto adjacent habitats and/or property
- The condition assessment of tree health will be monitored each year using three primary indicator thresholds detailed within **Table 5.3** and **Table 5.4**, including tree mortality, crown damage and disease/pest prevalence. Remedial action will be undertaken with the presence of a high-risk pest or disease detailed within **Table 5.4**. Remedial action will be addressed through targeted removal of infected material, improved biosecurity measures, stress reduction measures, replanting with a more resilient diverse range of species within effected plots and supported by ongoing monitoring.

Established Management (Years 3+)

- Annually replace dead or dying stock with like-for-like species and check stakes and tree ties and adjust/replace if necessary
- Hand weed around a 0.6m diameter of the base of each tree to ensure weed free and top up mulch every two years
- Limit pruning, to allow 75% canopy coverage of the expected age and height of each individual tree (avoid heavy crown reduction)
- Retain vegetation below 20% of the tree canopy area; if this becomes limited, re-seed
- Remove excessive leaf litter to reduce disease proliferation within the immediate area

- Augment habitat structure to progressively raise the canopies of new trees to provide clearance for residents, pedestrians and vehicles
- Management should ensure planting and/or substantial leaf litter does not encroach into/onto adjacent habitats and/or property

Monitoring and Adaptive Management

- **Years 4-10:** twice per year (spring and late summer)
- **Maturity:** annually and following extreme weather events
- **Record at each visit:** survival, crown density, leaf condition, pests/diseases, leader/stem form, root flare exposure, stake/tie condition, soil moisture, mulch, irrigation volumes and soil damage/compaction.

Protective Measures

Cutting of vegetation, particularly those features that provide important roosting and commuting habitats (including trees and tree lines), will be undertaken outside of the bird breeding season (1 March to 31 August, inclusive). Should the above timing constraints conflict with any phased/timetabled works, it is recommended that works commence only after a suitably qualified ecologist has undertaken nesting bird checks 48 hours prior to works commencing to ensure no nesting birds are present. If nesting birds are found to be present during checks, then a suitable species-specific buffer zone will be allocated, and clearance of that area would be delayed until young have fledged.

Maintenance should also involve the removal of branches or epicormic growth around the trunk of the tree where it is restricting access, growing over footpaths or obstructing lighting, and the inspection and reporting of any incidence of pests and diseases which could cause trees or tree limbs to fail.

Table 5.3: Condition classification per woodland group

Pest / diseases present	0 to 11% mortality	>11% and <25% mortality	≥25% mortality
No crown dieback or pest/disease present	Favourable	Intermediate	Unfavourable
Crown dieback and/or low risk pest/disease present	Intermediate	Intermediate	Unfavourable
Any presence of high-risk pest/disease	Unfavourable	Unfavourable	Unfavourable

Table 5.4: UK Tree pest and diseases including tree health risk

Disease / Pest	Risk Level	General Host / Infected
Acute/Chronic Oak Decline	High	• Sessile and pedunculate oak
Ash Dieback	High	• Ash
Asian Longhorn beetle	High	• Maple (Acer) • Horse chestnut • Birch • Willow • Poplar • Elm
Bronze Birch borer	High	• Birch
Canker	Low	• Any
<i>Cryphonectria parasitica</i>	High	• Castanea sativa
Horse Chestnut Bleeding Canker	High	• Aesculus hippocastanum
Horse Chestnut leaf miner	Low	• Aesculus hippocastanum
<i>Ips amitinus</i>	High	• Norway spruce
<i>Ips duplicatus</i>	High	• Norway spruce
<i>Ips typographus</i>	High	• Norway spruce
Oak Processionary Moth	Low	• Sessile and pedunculate oak
Phytophthora lateralis	High	• Lawson cypress
<i>Phytophthora kernoviae</i>	High	• Beech • Rhododendron • Rose

<i>Phytophthora ramorum</i>	High	• Larch • Beech • Sweet chestnut • Oak (Quercus spp.) • Rhododendron (primary reservoir) • Rose
<i>Phytophthora austrocedrae</i>	High	• Juniper
<i>Phytophthora</i> spp.	High	• Larch • Beech • Oak (Quercus spp.) • Sweet chestnut • Alder (Alnus spp.) • Juniper • Lawson cypress • Birch, • maple, • horse chestnut (some species) • Rhododendron (primary reservoir)
Pine Lappet Moth	High	• Pinus spp.
Red Band Needle Blight	High	• Pinus spp.
Sawyer Beetle	Low	• Pinus spp.
<i>Tomicus piniperda</i>	Low	• Pinus spp.
Weevils	High	• Pinus spp.

5.2 Proposed Rain Garden

Table 5.5: Habitat Management Prescription – proposed rain garden

Proposed habitat type	(Urban – Rain garden (UKHab ref: u1e5))
Proposed species	Achillea millefolium, Caltha palustris, Carex nigra, Filipendula ulmaria, Geum rivale, Iris pseudacorus, Juncus effusus, Knautia arvensis, Lythrum salicaria, Mentha aquatica, Salvia pratensis.
Areas proposed	Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02 Proposed Soft Landscape Strategy, Appendix 2
Target condition	Moderate
Considered HFR	Low likelihood

Management objective

To establish and maintain a functional rain garden that provides surface water attenuation, improves water quality, and delivers biodiversity benefits through the development of a diverse wetland planting community. Management will aim to ensure successful plant establishment, maintain appropriate hydrological conditions, and prevent dominance by invasive or undesirable species.

Establishment and Management

Construction / Planting Phase (Year 0)

- Rain garden to be formed in accordance with approved drainage and landscape drawings
- Planting to be undertaken using specified species mix (2–5L pots at approx. 2 plants per m²)
- Soil profile to be suitable for drainage and seasonal water retention
- Water immediately following planting

Establishment Phase (Years 1–2)

- Water during prolonged dry periods to ensure establishment
- Control weeds to prevent competition (manual removal preferred)

- Replace any failed planting on a like-for-like basis
- Monitor for sediment build-up and remove if affecting function

Ongoing Management (Years 3–30)

- Annual inspection of vegetation condition and coverage
- Remove excessive sediment, litter, or debris to maintain drainage function
- Manage vegetation to maintain species diversity and prevent dominance
- Replace failed or declining species as required
- Ensure inlets and outlets remain clear and functional

5.3 Proposed Mixed Scrub

Table 5.6: Habitat Management Prescription – Proposed Mixed Scrub

Proposed Habitat Type	Mixed Scrub (Uk Hab ref: h3h)
Proposed Species	Acer campestre, Betula pubescens, Cornus sanguinea, Corylus avellana, Crataegus monogyna, Euonymus europaeus, Rosa canina, Sambucus nigra, Sorbus aucuparia, Viburnum lantana, Viburnum opulus.
Areas Proposed and Retained	Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02 Proposed Soft Landscape Strategy, Appendix 2
Retained / Target Condition	Moderate
Considered HFR	Low Likelihood

Management objective

To ensure new scrub is managed to provide good health over the long term and to retain and enhance its habitat value. To ensure that the health and growth of the scrub does not decrease over time.

Establishment Phase (Years 1–2)

- >80% of the scrub will be woody native species including, species will be implemented and managed as below to reduce any one species dominating and exceeding 5m in height to meet criteria A and in time meet criteria B.
- The management regime will work on a rotational basis to allow the succession of age classes across the pre-existing and created areas of scrub; this will ensure more structural diversity, and allow grasslands to develop within glades along the scrub's edges, creating refuge and food source for a wider variety of species meeting criteria D and E.
- To meet criterion C, relevant good practice and management will be adopted to eradicate non-native invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Specialist advice will be sought.
- To meet criterion D and E, upon planting newly selected native species; south facing areas of the existing scrub and created will be selectively thinned, manually or mechanically with chainsaw / brush cutter.
- Stumps will be retained or cut to ground level, removing arisings to avoid nutrient enrichment.
- Encourage herbaceous growth by allowing natural regeneration or sowing a wildflower/grass mix suited to local soils.
- Add deadwood piles proportionally to selectively thinned areas from any felled/pruned trees or rotationally managed areas of scrub within the site.

Table 5.7: Established management (years 3+) and monitoring and adaptive management

Management activity	Timing / frequency	Method / details	Responsibility	Monitoring / success criteria	Notes
Pruning and sucker removal	Annually, October-January	Prune branches to augment height. Undertake works outside the bird nesting season. Leave deadwood in-situ.	Landscape Contractor / Estate Manager	Annual inspection to confirm height control, no unmanaged regrowth, and healthy structure.	Avoid disturbance to nesting birds or protected species.
Weed control	Monthly during first 2 growing seasons; then as required	Hand-weed around each plant to maintain a 0.5m weed-free radius. Avoid herbicides where possible.	Maintenance Contractor	Annual checks to confirm ≤10% weed cover within planting areas.	Prevents competition for moisture, light, and nutrients.
Shelter guards, ties, and stakes	Monthly (Apr-Oct) during	Inspect and refix or replace damaged,	Landscape Contractor	Annual record of inspections; <5% of	Ensure plants are protected from

	establishment and after severe weather	missing, or vandalised guards, ties, and stakes. Remove when plants become self-supporting (typically after 3 years).		plants with missing/damaged guards.	browsing and wind damage.
Replacement planting	Winter (Nov-Feb)	Replace all dead, dying, or failed plants with matching native species, same specification and density.	Landscape Contractor	Mortality <10% after first 5 years. All gaps replanted by end of following winter.	Maintain 100% species mix and design intent.
Fertiliser (Pro Flora tablets)	Year 2 only	Apply as per manufacturer's specifications: • 40–60cm: 3 tablets (45g) • 60–80cm: 4 tablets (60g) • 80–100cm: 5 tablets (75g) • Transplants (30–120cm): 2 tablets (30g)	Landscape Contractor	Spot checks during Year 2 maintenance; ensure even application and correct dosage.	Place tablets in soil at planting base; avoid root damage.
General monitoring	Twice annually for first 5 years; annually thereafter	Visual inspections for plant health, evidence of pests/disease, and general establishment success.	Ecological Clerk of Works (ECOW) / Landowner	Establishment success ≥90% after 5 years.	Findings to inform adaptive management as part of BNG monitoring.

Protective Measures

Any clearance of vegetation to accommodate the proposals will be undertaken with appropriate consideration for potential use of the site by birds and bats. Cutting of vegetation, particularly those features that provide important roosting and commuting habitats will be undertaken outside of the bird breeding season (1 March to 31 August, inclusive). Should the above timing constraints conflict with any phased/timetabled works, it is recommended that works commence only after a suitably qualified ecologist has undertaken nesting bird checks 48 hours prior to works commencing to ensure no nesting birds are present. If nesting birds are found to be present during checks, then a suitable species-specific buffer zone will be allocated, and clearance of that area would be delayed until young have fledged.

Maintenance should also involve the removal of branches or epicormic growth around the trunk of the tree where it is restricting access, growing over footpaths or obstructing lighting to be cut back, and the inspection and reporting of any incidence of pests and diseases which could cause trees or limbs to fail.

5.4 Proposed and retained Modified Grasslands/Other Neutral Grasslands

Table 5.8 Habitat Management Prescription – Modified Grasslands/Other Neutral Grassland

Proposed habitat types	Other neutral grassland (UKHab ref g4/g3c)
Proposed seed mix	Wildflower meadow mix (Emorsgate EM3 or equivalent, 4g/m ²) and amenity grassland mix (Emorsgate EG22 or equivalent, 25g/m ²).
Areas proposed	Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02 Proposed Soft Landscape Strategy, Appendix 2
Target condition	Moderate
Considered HF Risk	Low likelihood

Management Objective

To establish and maintain **species-rich neutral grassland** that supports floristic diversity and provides habitat for pollinators, invertebrates and other wildlife, while improving the overall ecological value of the site in accordance with UKHab grassland condition criteria.

Grassland Establishment

Enhancement of the grassland areas will be achieved through the implementation of an **appropriate native wildflower and grass seed mix suitable for neutral soils**, alongside a management regime designed to improve species diversity and sward structure over time.

Seed mixes will be selected to reflect locally appropriate neutral grassland communities and support the achievement of the target habitat condition identified within the UKHab condition assessment.

Neutral Grassland Seed Mix

Enhancement of the grassland areas will be achieved through the implementation of an appropriate native wildflower and grass seed mix suitable for neutral soils. The seed mix will be selected to reflect locally appropriate neutral grassland communities and support long-term habitat condition targets.

All works shall be undertaken during the appropriate planting season (November -March) and only under suitable weather and ground conditions. The appointed contractor shall verify the location of all existing services and utilities and shall obtain any necessary instructions or approvals before proceeding.

Neutral Grassland Creation: Construction Phase

All works shall be undertaken during the appropriate planting season (November – March) and only under suitable weather and ground conditions. The appointed contractor shall verify the location of all existing services and utilities and shall obtain any necessary instructions or approvals before proceeding.

Soil Preparation and Establishment

- Existing soils shall be retained and prepared to create suitable conditions for neutral grassland establishment.
- Compacted soils shall be lightly cultivated or harrowed prior to seeding to promote seed establishment and root penetration.
- A suitable neutral grassland seed mix (e.g. Emorsgate EM3 or equivalent) shall be applied across the proposed grassland areas.
- Seeding shall be undertaken evenly using broadcast or drill methods at appropriate sowing rates.
- Where necessary, soils may be lightly rolled following seeding to ensure good seed-to-soil contact.
- Topsoil nutrient enrichment shall be avoided to encourage establishment of species-rich grassland communities.
- Machinery used during establishment shall avoid excessive soil compaction and disturbance.
- Ground levels and drainage shall be maintained to prevent prolonged waterlogging while allowing natural seasonal moisture variation.

Establishment Phase (Years 1–2)

- Prepare the soil surface by lightly cultivating or harrowing to create a suitable seedbed and reduce excessive fertility where required.
- Sow the selected neutral grassland seed mix during the appropriate season (typically March–October) in suitable weather conditions.
- Undertake 3–4 light establishment cuts (to approximately 50–70mm) when the sward reaches around 70–100mm to prevent weed dominance and reduce nutrient build-up.
- Remove all arisings following cutting to maintain low soil nutrient levels and encourage species-rich grassland development.
- Monitor establishment success and undertake supplementary seeding where necessary to maintain adequate vegetation cover.

Established Management (Years 3+)

- Implement one main annual hay cut (July–September) once the grassland has set seed. Arisings should be left in situ briefly to allow seed drop before being removed from site.
- Where vigorous regrowth occurs, undertake an optional autumn cut (October–November) to maintain appropriate sward structure.
- Every 2–3 years lightly scarify or rake approximately 30–40% of the surface to create germination niches and prevent sward closure.
- Overseed with appropriate locally sourced wildflower species if floristic diversity declines.
- Manage invasive species through manual removal or other appropriate control measures where required.
- Manage scrub encroachment to maintain open grassland structure.
- Avoid mowing when soils are wet to prevent compaction and surface damage.
- Repair any damaged grassland areas through supplementary seeding where required.

Monitoring and Adaptive Management

- Conduct annual floristic monitoring (May–August) following UKHab grassland condition criteria (as applicable to habitat type).
- Aim to achieve a diverse sward with a good representation of wildflower species by Year 5. Apply adaptive management measures (e.g. reseeding, selective cutting, scarifying) if species richness or sward structure declines.
- Manage the occurrence of invasive species (see Section 4.6).
- Appropriate mowing regimes shall be undertaken to maintain a healthy grassland sward and prevent excessive dominance of coarse grasses.

Protective Measures

Any clearance of vegetation to accommodate the proposals will be undertaken with appropriate consideration for potential use of the site by birds and bats. Cutting of vegetation will be undertaken outside of the bird breeding season (1 March to 31 August, inclusive). Should the above timing constraints conflict with any phased/timetabled works, it is recommended that works commence only after a suitably qualified ecologist has undertaken nesting bird checks 48 hours prior to works commencing to ensure no nesting birds are present. If nesting birds are found to be present during checks, then a suitable species-specific buffer zone will be allocated, and clearance of that area would be delayed until young have fledged.

5.5 Proposed Native Hedgerows

Table 5.9: Habitat Management Prescription – proposed native hedgerow

Proposed habitat type	Native hedgerow with trees (Uk Hab ref: h2a6)
Proposed species	Acer campestre, Cornus sanguinea, Corylus avellana, Crataegus monogyna, Malus sylvestris, Prunus avium, Viburnum opulus.
Areas proposed	Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02 Proposed Soft Landscape Strategy, Appendix 2
Target condition	Moderate
Considered HFR	Low likelihood

Management objective

To establish and maintain a species-rich native hedgerow that reflects local character, provides structural diversity, and supports wildlife. Management will ensure successful establishment, promote dense growth, and maintain the long-term health and ecological function of the hedgerow.

Establishment Phase (Years 1–2)

Table 5.10: Establishment Phase (Years 1–2)

Management / monitoring activity	Timing / frequency	Method / description	Success criteria	Adaptive management actions
Weed control	Monthly (March–September)	Hand-weed 0.5m radius around each plant to remove competitive vegetation. Avoid herbicide unless invasive species present.	Planting areas remain >95% weed-free during growing season.	Repeat hand-weeding; reapply mulch to suppress regrowth.
Watering	As required (April–September)	Water during prolonged dry periods to support establishment; apply water directly to base.	No signs of drought stress (wilting, dieback).	Increase watering frequency during dry spells.
Shelter guard and Stake check	Quarterly	Inspect guards, stakes, and ties for damage, displacement, or vandalism. Replace or refit as needed.	All guards upright, secure, and undamaged.	Replace or refit damaged or missing guards promptly.
Pruning (formative)	Annually (Jan–Feb)	Light pruning encourages dense growth and strong basal structure.	Even, bushy growth form; no gaps developing.	Adjust pruning height or method as needed to promote density.
Plant replacement	Annually (autumn)	Replace failed or poor-performing plants with same native species mix.	Minimum 90% plant survival by end of Year 2.	Replant during next planting season and water to aid establishment.

Monitoring and reporting	Biannually (spring and autumn)	Ecologists visually inspect condition, record survival rates, and assess management effectiveness.	Annual report confirms >90% survival and healthy growth.	Review and adapt management measures based on findings.
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Table 5.11: Established Management (Years 3+), Monitoring and Adaptive Management

Management task	Timing / frequency	Details / method	Objective
Pruning	Annually in January-February	Lightly prune hedgerows once per year during dormancy. Maintain a neat, dense structure and an overall height of approximately 2.5 m. Undertake infill planting where gaps appear to maintain continuity.	Encourage healthy, dense growth and a continuous wildlife corridor while maintaining structure and aesthetic value.
Weed Control	Monthly (March-September) during establishment years (Years 1-3).	Remove weeds by hand around hedgerow bases to maintain a weed-free zone (500 mm radius). Avoid herbicide use unless necessary for persistent invasive species.	Reduce competition for moisture and nutrients; support establishment of native hedgerow species.
Shelter Guard Maintenance	Quarterly checks in Year 1, then biannually.	Inspect shelter guards, ties, and stakes when watering or during routine visits. Replace or refit any that are damaged, vandalised, or missing. Remove once plants are established and self-supporting (typically after 3-5 years).	Ensure young plants are protected from browsing and physical damage, promoting successful establishment.
Mulch Maintenance	Top-up at Year 2, then as required.	Apply medium-grade bark mulch to a settled depth of 75 mm around base of plants, maintaining a clear area around stems. Reapply or top up as mulch decomposes.	Suppress weed growth, retain soil moisture, and improve soil structure.
Watering (if required)	During dry periods of (April-September), particularly in first two years.	Water thoroughly at base of plants during prolonged dry spells. Avoid overwatering.	Promote strong root development and reduce establishment failure during drought conditions.
Monitoring and Replacement Planting	Annually (autumn)	Assess overall condition and establishment success. Replace any failed or poor-performing plants with the same native species.	Maintain full, continuous hedgerow cover and long-term ecological function.

Protective Measures

Any clearance of vegetation to accommodate the proposals will be undertaken with appropriate consideration for potential use of the site by birds and bats. Cutting of vegetation will be undertaken outside of the bird breeding season (1 March to 31 August, inclusive). Should the above timing constraints conflict with any phased/timetabled works, it is recommended that works commence only after a suitably qualified ecologist has undertaken nesting bird checks 48 hours prior to works commencing to ensure no nesting birds are present. If nesting birds are found to be present during checks, then a suitable species-specific buffer zone will be allocated, and clearance of that area would be delayed until young have fledged.

5.6 Proposed Introduced Shrub

Table 5.12: Habitat Management Prescription – Introduced Shrubs

Proposed habitat type	Introduced shrub (UKHab ref:u1h)
Proposed species	Acer campestre, Alchemilla mollis, Allium sphaerocephalon, Astrantia major, Carex comans, Centaurea nigra, Galium odoratum, Geranium pratense, Hebe 'Amy', Hedera helix,

	Hyacinthoides non-scripta, Ilex crenata, Pinus mugo 'Mops', Primula vulgaris, Rudbeckia fulgida 'Goldsturm', Salvia nemorosa 'Balkan Clary', Sarcococca, Stipa capillata 'Lace Veil', Viburnum davidii.
Areas proposed	Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02 Proposed Soft Landscape Strategy, Appendix 2
Target condition	Not Applicable
Considered HFR	Low likelihood

The introduced shrubs planted throughout the site will aim to offer a diversity of vegetation structure displaying variation. The habitat will support a range of plant species beneficial to wildlife, including flowering species providing nectar at different times of the year.

- Invasive non-native plant species will be controlled to ensure they cover less than 5% of any surface area.
- Remedial measures will address abundance and density gaps in shrub planting specific to those listed within Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02 Proposed Soft Landscape Strategy, Appendix 2

Protective Measures

Any clearance of vegetation to accommodate the proposals will be undertaken with appropriate consideration for potential use of the site by birds. Cutting of bank side vegetation will be undertaken outside of the bird breeding season (1 March to 31 August, inclusive). Should the above timing constraints conflict with any phased/timetabled works, it is recommended that works commence only after a suitably qualified ecologist has undertaken nesting bird checks 48 hours prior to works commencing to ensure no nesting birds are present. If nesting birds are found to be present during checks, then a suitable species-specific buffer zone will be allocated, and clearance of that area would be delayed until young have fledged.

5.7 Proposed Ponds

Table 5.13: Habitat Management Prescription – Ponds (non-priority habitat)

Proposed habitat type	Ponds (non-priority habitat)
Proposed Feature/s	Pond edge and pond boundary planting associated with the proposed water features, including marginal and wetland species mixes. Species include Carex elata 'Aurea', Cephalotaxus occidentalis, Cornus sericea, Echinacea purpurea, Erica carnea, Iris versicolor, Itea virginica, Lobelia cardinalis, Mertensia virginica, Monarda fistulosa, Panicum virgatum, Phlox subulata, Sambucus canadensis and Schizachyrium scoparium, alongside wetland meadow and pond edge grass mixes including Emorsgate EP1 Pond Edge Planting Mix or equivalent approved.
Areas proposed	Drawing 70117919_WSP_LUD_HLC_DR_LA_006 Rev P02 Proposed Soft Landscape Strategy, Appendix 2
Target condition	Moderate
Considered HFR	Low likelihood

The proposed ponds and associated marginal planting on-site will provide a diversity of vegetation structure, with no single vegetation type dominating more than 80% of the habitat area. The habitat will support a range of plant species beneficial to wildlife, including flowering species providing nectar at different times of the year. Invasive non-native plant species will be controlled to ensure they cover less than 5% of any surface area.

Table 5.14 Establishment Phase (Years 1–2)

Management Action	Frequency	Purpose / Outcome
Vegetation inspection	Quarterly	Confirm establishment success and varied vegetation structure
Watering (if required)	During dry periods	Support plant establishment and prevent stress
Weed control (hand removal)	Monthly (growing season)	Reduce competition and prevent dominance
Invasive species checks	Quarterly	Ensure invasive species remain below 5% cover
Replacement planting	As required	Maintain plant diversity of local provenance
Structural diversity review	Annually	Confirm no single vegetation type exceeds 80%

Table 5.15 Management Phase (Years 3–5>)

Management Action	Frequency	Purpose / Outcome
Habitat condition assessment	Annually	Confirm habitat remains in target condition
Selective vegetation management	As required	Maintain varied vegetation structure
Invasive species monitoring	Biannually	Prevent increase above 5% cover
Flowering species review	Annually	Ensure year-round nectar sources
Remedial planting	As required	Address gaps in floral diversity

Table 5.16 Management Phase (Years 5>)

Management Action	Frequency	Purpose / Outcome
Habitat condition monitoring	Every 3–5 years	Confirm long-term compliance
Vegetation management	As required	Prevent dominance of any one vegetation type
Invasive species survey	Annually	Maintain invasive species below threshold
Targeted control measures	As required	Manage any emerging invasive species
Adaptive management review	Following monitoring	Update actions based on results

6. Annual Maintenance Schedule

The annual schedule summarises the maintenance operations required for the first five years and should be reviewed on an annual basis to allow for any changes that may be required as the site develops and matures.

6.1 Individual Tree

Activity	J	F	M	A	M	J	J	A	S	O	N	D
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Inspect health & structure											X	
Watering				X	X	X	X	X	X	X		
Formative pruning	X											
Check stakes & ties	X									X		
Weed control				X		X		X				
Replace failed stock											X	
Top-up mulch (Years 2 & 4)										X		

6.2 Rain Garden

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Vegetation inspection				X					X			
Invasive species control				X		X		X				
Replace failed planting										X		
Litter and debris removal				X					X			
Sediment removal (if required)							x					
Inlet/outlet inspection and clearance				X					X			
Watering (establishment only)				X	X	X	X					

6.3 Mixed Scrub

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Prune / thin scrub	X									X	X	X
Weed control by hand				X		X		X				
Check guards & stakes	X									X		

Remove guards (Years 3–5)										X		
Replacement planting											X	

6.4 Modified Grasslands/Other Neutral Grassland

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Main hay cut							X	X	X			
Secondary cuts (if required)								(X)	X	X		
Remove arisings							X	X	X	X		
DAFOR monitoring						X	X	X				

6.5 Ponds (non-priority habitat)

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Vegetation inspection			X							X		
Weed control				X		X		X				
Invasive species monitoring			X							X		
Replacement planting											X	

6.6 Proposed Native Hedgerows

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Prune hedgerow	X	X										
Weed control				X		X		X				
Check guards & stakes	X									X		
Remove guards (Years 3– 5)										X		
Top-up mulch										X		

(Years 2 & 4)												
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7. Long-Term Management Schedule (Years 6–30)

The ongoing management plan is a guideline for the maturing phase of the site and should be reviewed every 5 years as a minimum, to take account of site-based ecological changes.

7.1 Individual Tree

Year of Operation	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Monitor tree health and structural condition	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Replace dead or dying trees / gap-up	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

7.2 Rain Garden

Year of Operation	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Annual vegetation monitoring (UKHab)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

condition criteria)																									
Invasive species control (twice per year, April–August)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Litter and debris removal (twice per year, April and September)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Inlet/outlet inspection and clearance (twice per year, April and September)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Sediment removal (as required)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Replace failed planting	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

[illegible]

7.3 Mixed Scrub

[illegible]

7.4 Modified Grassland/Other Neutral Grasslands

[illegible]

seed set (July–Sept)																									
Control pernicious weeds	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Monitor grassland succession	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

7.5 Ponds (non-priority habitat)

Year of
Operation

6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Inspect vegetation and hydraulic function	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Weed and invasive species control	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Replacement planting as required	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

7.6 Introduced Shrubs

Year
Operation

6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Annual pruning and shaping	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Weed control and mulch maintenance	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Replacement planting as required	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

7.7 Proposed Native Hedgerows

Year of Operation 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Annual pruning to maintain approx. 2.5m height	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Weed control and infill planting	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

as required																							
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8. Details of Persons Responsible for the Implementation and Monitoring

This HMMP has been prepared by Ascerta on behalf of **Knowsley Council**. It sets out the key management measures required for habitats to be created and retained as part of the redevelopment works at Halewood Leisure Centre.

This HMMP provides details of the measures required to ensure that the site is appropriately managed in the long term for the benefit of biodiversity and wildlife. Subject to the implementation of the measures set out within this document, the proposed habitat creation and enhancement will contribute towards achieving biodiversity net gain in accordance with the recommendations set out within the Biodiversity Impact Assessment for the site.

Implementation and long-term management of the habitats will be undertaken by **Knowsley Council**, in consultation with the Local Planning Authority where required.

9. Mechanisms of Adaptive Management to Account for Necessary Changes in Work Schedule to Achieve the Required Targets

Following completion of the proposed works, a programme of habitat monitoring will be undertaken. This will focus on the establishment and ongoing management of the habitats created and retained within the site. Habitat creation will be undertaken during the first appropriate planting season following completion of construction works.

Management and monitoring of the habitats will continue for a period of 30 years in accordance with the measures set out within this Habitat Management and Maintenance Plan. The management plan will be subject to periodic review to ensure it remains effective, and where monitoring identifies that habitat targets are not being met, appropriate adaptive management measures will be implemented.

These measures will be undertaken by the responsible landowner, **Knowsley Council**, or their appointed management contractor.

10. Expected Unit Progress Shown at Years 1 >30 for each Habitat

In accordance with this HMMP, the proposed mixed scrub, native hedgerows, modified grassland/other neutral grassland, introduced shrub, ponds and rain gardens are expected to reach target condition by Year 5. Urban trees are expected to reach target condition by Year 27 (refer to Table 10.1 below).

Table 10.1: Standard time to target condition/years

Year Habitat	1	2	3	4	5	27	30
Urban Trees						X	
Mixed Scrub					X		
Modified grassland/Other neutral grassland					X		
Rain Garden					X		
Introduced shrub					X		
Native hedgerow					X		
Ponds (non- priority habitat)					X		

11. Reporting on Year 1, 2, 5, 10, 20 and 30 with Biodiversity Reconciliation Calculations at each stage

An official audit should be carried out on the habitats in accordance with section 7 and against the Target Conditions detailed within section 5 and appendix 4, at year 1, 2, 5, 10, 20 and 30. Ecological monitoring, maintenance and reporting on-site shall occur annually for 30 years by the persons appointed responsible by **Knowsley Council**.

12. Conclusion

This Habitat Management and Maintenance Plan (HMMP) sets out the measures required to ensure that habitats created and retained within the development site are successfully established and maintained in accordance with the recommendations of the Biodiversity Impact Assessment and the Biodiversity Net Gain strategy for the site.

Ecological monitoring, maintenance and reporting will be undertaken throughout the 30-year management period to ensure habitats establish and develop towards their target conditions. Monitoring will review habitat establishment, vegetation structure, species composition and overall ecological performance to ensure that the objectives of the Biodiversity Impact Assessment are achieved. Where monitoring identifies that habitats are not progressing towards their target condition, appropriate adaptive management measures will be implemented.

Formal ecological audits will be undertaken at Years 1, 2, 5, 10, 20 and 30. These audits will review habitat condition and management effectiveness and will include biodiversity reconciliation calculations to confirm that the biodiversity net gain targets identified within the Biodiversity Impact Assessment continue to be achieved.

Monitoring and reporting will be undertaken by a suitably qualified ecologist on behalf of **Knowsley Council**, or their appointed management contractor.

- **Habitat Outcomes:** The development will deliver the retention, creation and enhancement of a range of habitats across the site including neutral grassland, modified grassland, scrub habitats, individual trees, and SuDS features designed to support biodiversity. These habitats will collectively deliver a measurable biodiversity net gain in accordance with the Biodiversity Impact Assessment for the site.
- **Monitoring and Maintenance:** Ecological monitoring will be undertaken annually during the main growing season (typically May–August) for the duration of the 30-year management period. Monitoring will review habitat condition, vegetation composition and management effectiveness, with adaptive management measures implemented where required.
- **Long-Term Management:** The long-term management of habitats will include regular vegetation management, maintenance of grassland structure, scrub and tree management where required, control of invasive or undesirable species, and remedial actions where habitat establishment or condition targets are not being achieved.
- **Responsibility:** Implementation of this HMMP and ongoing monitoring of the habitats will be undertaken on behalf of **Knowsley Council**, in consultation with the Local Planning Authority where required.

13. References

- Ascerta (2025) P.2048.24F Biodiversity Impact Assessment, Halewood Leisure Centre, December 2025.
- Ascerta (2025a) Preliminary Ecological Addendum Letter Report, Halewood Leisure Centre, Ref: P.2048.24.
- Ascerta (2025b) Great Crested Newt eDNA Survey Letter Report, Halewood Leisure Centre, Ref: P.2048.24.
- Ascerta (2024) Badger Survey Letter Report, Halewood Leisure Centre, Ref: P.2048.24A.
- British Standards Institution (2021) BS 8683:2021 – Process for Biodiversity Net Gain: Specification. London: BSI.
- British Standards Institution (2022) BS 42020:2022 – Biodiversity – Code of Practice for Planning and Development. London: BSI.
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- CIEEM (2021) Guidelines for Ecological Report Writing, 2nd edn. Winchester: Chartered Institute of Ecology and Environmental Management.
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- Department for Environment, Food and Rural Affairs (DEFRA) (2024) Statutory Biodiversity Metric: User Guide (Version 4.0). Natural England, February 2024.
- Environment Agency (2010) Managing Invasive Non-Native Plants. Bristol: Environment Agency.
- HM Government (2024) National Planning Policy Framework (NPPF). London: Ministry of Housing, Communities and Local Government.
- Knowsley Metropolitan Borough Council (2016) Knowsley Local Plan Core Strategy (CS) (Adopted January 2016). Knowsley Council.
- QGIS Development Team (2024) QGIS Geographic Information System, Version 3.38. Open Source Geospatial Foundation.
- The Invasive Alien Species (Enforcement and Permitting) Order 2019 (UK). London: The Stationery Office.
- UK Habitat Classification Working Group (2023) UK Habitat Classification.
- UK Habitat Classification (2023) Habitat Definitions V2.01.
- UKHab Ltd (2023) UK Habitat Classification – Field Survey Guidance: Version 2.0.
- Wildlife and Countryside Act 1981 (as amended) (UK). London: The Stationery Office.



Survey Area

Baseline Habitats

Baseline Trees

Existing Large (L)/(VL) Urban Tree

Existing Medium Urban Tree

Existing Small Urban Tree

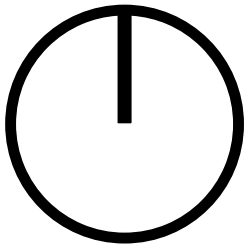
Baseline Habitats

u1 Developed land; sealed surface

u1b5 Buildings

821 Artificial sports pitches

g4 Modified grassland



DO NOT SCALE.
ALL COORDINATES RELATED TO LOCAL GRID.
LOCATED TO NG BY BEST FIT TO DETAIL.
EXTRACTED FROM OS DIGITAL DATA.

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CLIENT:
Knowsley Council

PROJECT:
Halewood Leisure Centre.

DRAWING TITLE:
Baseline Habitats Plan

SCALE: 1:2500@A3	DRAWN BY: JS	DRAWING No: P.2048.25.E01
DATE: 22/10/2025	CHKD BY: LH	REV: - D

Note.

- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER SCHEME DRAWINGS AND DOCUMENTS.
LOCATION PLAN
70119719_WSP_LUD_HLC_DR_LA_0002
EXISTING SITE PLAN
70119719_WSP_LUD_HLC_DR_LA_0003
PROPOSED SITE PLAN
70119719_WSP_LUD_HLC_DR_LA_0004
HARD LANDSCAPE PLAN
70119719_WSP_LUD_HLC_DR_LA_0005
PROVIDED LEVELS SHALL BE VERIFIED AND CONFIRMED WITH DESIGNER PRIOR TO ANY WORKS COMMENCING.
ALL DIMENSIONS ARE METERS UNLESS STATED OTHERWISE.
- FOR LIGHTING PROPOSALS REFER TO LIGHTING IMPACT ASSESSMENT
HAL-WSP-XX-XX-RP-Y-0002
- FOR ARBORICULTURAL TREE ROOT PROTECTION PLAN REFER TO DRAWING
70119719-ARB-TRPP-HLC-1.0
- FOR TRANSPORT DESIGN REFER TO DRAWINGS
UK0029106.9719-SK02
UK0029106.9719-VT04
UK0029106.9719-VT05
UK0029106.9719-VT06
UK0029106.9719-VT07

ALL LAYOUTS ARE SUBJECT TO ADDITIONAL SURVEY WORKS AND DESIGN INCLUDING:

- GROUND INVESTIGATION
- DRAINAGE DESIGN
- MATERIAL MANAGEMENT PLAN

Planting Schedule			
Planting Types	Scientific Name	Common Name	Specification & Density
Individual Trees - Total No. 121	Acer campestre Betula pendula Carpinus betulus Fagus sylvatica Liquidambar styraciflua Pinus sylvestris Prunus avium Pyrus calleryana 'Chanticleer' Quercus robur Sorbus aucuparia Tilia cordata Ulmus 'New Horizon'	Field maple Birch Hornbeam Beech Sweet Gum Scots Pine Douglas Cedar Flowering Pear 'Chanticleer' English oak Rowan Small-leaved Lime Elm 'New Horizon'	Range from 18-20cmg to 20-25cmg Trees are to be planted as per location on the plan.
Native Scrub Mix - 3968m2 Hedgerow seed mix base with Scrub species to be scattered and/or clustered to support open, mosaic habitat for biodiversity with seed mix beneath. Trees to be planted as Whips with some at 6-8cmg	Acer campestre Betula pubescens Cornus sanguinea Corylus avellana Crataegus monogyna Eunymus europaeus Rosa canina Sambucus nigra Sorbus aucuparia Viburnum lantana Viburnum opulus	Field Maple Downy Birch Dogwood Hazel Hawthorn Spindle Dog Rose Elder Rowan Wayfaring tree Guelder rose	1+1 Transplants - Seed Raised, Branched, 3 Brakes, 60-80cmH planted at 3 per m2
Native Hedgerow - 590 Lm Hedgerow and to provide dominant species up to 70%	Acer campestre Cornus sanguinea Crataegus monogyna Ilex aquifolium Achillea millefolium Caltha palustris Carex riga Filipendula ulmaria Geum rivale Iris pseudacorus Juncus effusus Knautia arvensis Lythrum salicaria Mertensia aquatica Primula vulgaris	Field maple Common dogwood Hawthorn Holly Yarrow Marsh Marigold Common sedge Meadow sweet Water avens Yellow flag iris Soft rush Field scabious Purple loosestrife Water mint Primrose	4mg per m2
Recessed Planter Planting - 609m2 Indicative list of planting 2 to 6L Pots	Acer campestre Cornus sanguinea Crataegus monogyna Ilex aquifolium Achillea millefolium Caltha palustris Carex riga Filipendula ulmaria Geum rivale Iris pseudacorus Juncus effusus Knautia arvensis Lythrum salicaria Mertensia aquatica Primula vulgaris	Field maple Common dogwood Hawthorn Holly Yarrow Marsh Marigold Common sedge Meadow sweet Water avens Yellow flag iris Soft rush Field scabious Purple loosestrife Water mint Primrose	2 to 6L Pots 2 per m2
Ornamental Planting - 849m2 Indicative list of features planting entrance areas and plazas	Alchemilla mollis Allium sphaerocephalon 'drumstick' Astrantia major 'moulin rouge' Carex comans 'frosted curls' Centaurus nigra Galium odoratum Geranium pratense Hebe alba Hedera helix Hyacinthoides non-scripta Ilex cornuta Pinus mugo 'mops' Primula vulgaris Rudbeckia hirta 'goldsturm' Salvia nemorosa 'balkan clary' Sarcocolla coccinea Stipa capitata 'lace veil' Viburnum davidii	Lady's mantle Round-headed leek 'drumstick' Great masterwort 'moulin rouge' Sedge 'Frosted curls' Common knapweed Sweet woodruff Meadow cranesbill Strawberry geranium 'amy' Common ivy English bluebell Japanese holly Dwarf mountain pine 'mops' Primrose Black-eyed susan 'goldsturm' Balkan clary Sweet Box Feather grass 'lace veil' David Viburnum	2 to 6L Pots 2 per m2
Pond Boundary Planting - 203m2	Carex bucharvensis Cornus alba 'Kesselringi' Enchiridion purpurea Erica carnea Iris 'Jane Phillips' Lobelia cardinalis Monarda 'Cambridge Scarlet' Myosotis scorpioides Panicum virgatum Phlox paniculata 'David' Sambucus nigra Black lace	Leatherleaf Sedge Dogwood 'Kesselringi' Purple cornflower Heath Iris 'Jane Phillips' Cardinal flower Bergamot Water Forget-me-not Switchgrass Perennial phlox Elder Black lace	2- 6L Pots 2 per m2 To be planted in swatches within wetland meadow seed mix
Grass Seed Mixes			
Wildflower Meadow Mix - 9817m2 (20% wildflower 80% grasses)	EM3 Special General Purpose Meadow Mixture, Emorsgate Seeds - https://ukseed.co.uk/product/mixtures/complete-mixtures/special-general-purpose-meadow-mixture/ or equivalent and approved		4mg per m2
Amenity Lawn Grass - 20,207m2 (100% grasses)	EG22 Strong Lawn Grass Mixture, Emorsgate Seeds - https://ukseed.co.uk/product/mixtures/grass-only-mixtures/strong-lawn-grass-mixture/ or equivalent and approved		26mg per m2
Pond Edge Planting Mix - 343m2 (100% grasses)	EP1 Pond Edge Mixture, Emorsgate Seeds - https://ukseed.co.uk/product/mixtures/complete-mixtures/meadow-mixtures-for-specific-conditions/meadow-mixture-for-pond-edge/ or equivalent and approved		4mg per m2

DO NOT SCALE

EAID LING RE:AINED :

- Application Site Boundary
- HLC
- AGP
- Artificial Grass Pitch
- Gas Governor Station
- Trees
- Trees to be relocated

PROPOSED SOFT LANDSCAPE:

- Trees to be REMOVED
- Native Scrub Mix - For Specification refer to Planting Schedule
- Ornamental Planting - For Specification refer to Planting Schedule
- Pond Boundary Planting - For Specification refer to Planting Schedule
- Recessed Planter Planting - For Specification refer to Planting Schedule
- Native Hedgerow - For Specification refer to Planting Schedule
- Amenity Lawn Grass - For Specification refer to Planting Schedule
- Pond Edge Planting - For Specification refer to Planting Schedule
- Wildflower Meadow - For Specification refer to Planting Schedule
- Water Feature - Pond
- Tree Protection Fencing to BS5837:2012

P02	01/04/26	ZY	Shared Path and SuDs Updated	MF	RW
P01	10/02/25	ZY	First Issue	ER	RW
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS

S2 - FOR INFORMATION

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CLIENT: KMBC

ARCHITECT: WSP

PROJECT: Halewood LUF

FILE: Halewood Leisure Centre
Proposed Soft Landscape Strategy

SCALE 1:500	CHECKED: MF	APPROVED: RW
PROJECT NO: 70119719	DESIGNED: JYMF	DRAWN: JY
DATE: April 26		

DRAWING NO: 70119719_WSP_LUD_HLC_DR_LA_0006

REV: P02

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Condition sheet: HEDGEROW Habitat Types				
Habitat Type				
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch				
Habitat Description				
ukhab – UK Habitat Classification				
On-site or off-site, site name and location		Survey date and Surveyor name		
Limitations (if applicable)		Survey reference (if relating to a wider survey)		
Grid reference		Habitat parcel reference		
Condition Assessment Details				
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria. This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook. Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.				
Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types				
A1.	Height	>1.5 m average along length	N	
The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).				
A2.	Width	>1.5 m average along length	N	
The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).				
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	Y	
This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).				
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Y	
This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).				

C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length; · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	Y	
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	Y	
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA ³) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' ⁶ contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	Y	
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Y	

Additional group - applicable to hedgerows with trees only

E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient ⁸), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.		
E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.		

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees

Category	Category Requirements	Metric Score
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2
Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		2

Condition categories for hedgerows with trees

Category	Category Requirements	Metric score
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2
Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		

Suggested enhancement interventions to improve condition score

--

Condition Sheet: POND Habitat Type			
Habitat Type			
Lakes - Ponds (priority habitat) Lakes - Ponds (non-priority habitat) Lakes - Temporary lakes ponds and pools (H3170) [Use this condition sheet for Temporary ponds and pools, use Lake condition sheet for Temporary lakes] Lakes - Ornamental lake or pond [Use this condition sheet for Ornamental ponds, use Lake condition sheet for Ornamental lakes]			
Habitat Description			
ukhab – UK Habitat Classification			
On-site or off-site, site name and location		Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - applicable to all ponds (woodland ¹ and non-woodland):			
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	Y	
B	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	Y	
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	Y	
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	N	
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams ² , pumps or pipework.	N	
F	There is an absence of listed non-native plant and animal species ³ .	Y	
G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	N	
Additional Criteria - must be assessed for all non-woodland ponds:			

H	Emergent, submerged or floating plants (excluding duckweed) ⁴ cover at least 50% of the pond area which is less than 3 m deep.	Y	
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.	Y	
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved ✕/✓	
Results for woodland ponds which require assessment of 7 core criteria			
Passes 7 criteria	Good (3)		
Passes 5 or 6 criteria	Moderate (2)		
Passes 4 or fewer criteria	Poor (1)		
Results for non-woodland ponds which require assessment of 9 criteria			
Passes 9 criteria	Good (3)		
Passes 6 to 8 criteria	Moderate (2)	X	
Passes 5 or fewer criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			
Footnote 1 - A woodland pond will be surrounded on all sides by woodland habitat. Footnote 2 – This excludes natural dams such as those created by Eurasian beaver <i>Castor fiber</i>. Footnote 3 - Any species included on the Water Framework Directive (WFD) UKTAG GB High Impact Species List should be absent: WFD UKTAG (2021) <i>Classification of aquatic alien species according to their level of impact</i> [online]. Available from:			

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
On-site or off-site, site name and location	On-Site	Survey date and Surveyor name	Jack Kay 7/10/25
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	Modified grassland
Habitat Description Areas of modified grassland forming part of a mosaic with ruderal/ephemeral vegetation and scattered bramble scrub on previously disturbed ground. The sward is species-poor and dominated by common grasses and ruderal species typical of urban or disturbed environments, with patches of bare ground present.			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m ² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	N	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	N	
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y	
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Y	
Essential criterion achieved (Yes or No)			N
Number of criteria passed			3
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved ×/√	

Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)		
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	Y	
Suggested enhancement interventions to improve condition score			
Footnotes			
Footnote 1 – Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> . Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover. Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement. Footnote 4 – Wildlife and Countryside Act 1981 (as amended).			

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)			
UK Habitat Classification (UKHab) Habitat Types			
Grassland - Lowland calcareous grassland Grassland - Lowland dry acid grassland Grassland - Lowland meadows Grassland - Other lowland acid grassland Grassland - Other neutral grassland Grassland - Tall herb communities (H6430) [Not to be confused with the Tall forbs secondary code – see UKHab guidance for details.] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland			
On-site or off-site, site name and location		Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
Habitat Description			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). ¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Y	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Y	
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	

E	Combined cover of species indicative of suboptimal condition³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	N	
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	N	
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		N	
Number of criteria passed		4	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√	
Acid grassland types (Result out of 5 criteria)			
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)		
Passes 2 or fewer criteria	Poor (1)		
Non-acid grassland types (Result out of 6 criteria)			
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)		
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	X	
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
Footnote 1 - Professional judgement should be used alongside the UKHab description. Footnote 2 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover. Footnote 3 - Species indicative of suboptimal condition for this habitat type include: creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> . There may be additional relevant species local to the region and or site. Footnote 4 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement. Footnote 5 – Wildlife and Countryside Act 1981 (as amended).			

Condition Sheet: INDIVIDUAL TREES Habitat Type			
Habitat Types			
Individual trees – Urban trees Individual trees – Rural trees Complete a condition sheet for each tree or block of trees. <i>Please see the separate Line of trees condition sheet for a line of <u>rural</u> trees. You should only use the Line of trees condition assessment and record that habitat type in <u>rural</u> locations.</i>			
Habitat Description			
Individual trees (description applied to the urban or rural environment): Young trees over 7.5 cm in diameter at breast height whose canopies are not touching. Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only): Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.			
On-site or off-site, site name and location		Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	Y	
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	
C	The tree is mature (or more than 50% within the block are mature) ¹ .	N	
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	
Number of criteria passed		4	
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved x/✓	
Passes 5 or 6 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	X	
Passes 2 or fewer criteria	Poor (1)		
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			
Suggested enhancement interventions to improve condition score ²			

Condition Sheet: URBAN Habitat Type			
Habitat Types			
Sparsely vegetated land - Ruderal/Ephemeral Sparsely vegetated land - Tall forbs Urban - Allotments Urban - Biodiverse green roof Urban - Bioswale Urban - Cemeteries and churchyards Urban - Facade-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 drainage system (SuDS) Urban - Vacant or derelict land Urban - Bare ground			
Habitat Description			
Ruderal/ Ephemeral			
See the Statutory Biodiversity Metric User Guide for green roofs and UK Habitat Classification (UKHab) for other habitats:			UKHab – UK Habitat Classification
On-site or off-site, site name and location		Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - must be assessed for all urban habitat types :			
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	Y	
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	N	
C	Invasive non-native plant species (listed on Schedule 9 of WCA ¹) and others which are to the detriment of native wildlife (using professional judgement) ² cover less than 5% of the total vegetated area ³ . Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	
Additional Criterion - must be assessed for Open mosaic habitat on previously developed land only:			
D	The parcel shows spatial variation and forms a mosaic of bare substrate PLUS: - At least four early successional communities (a) to (i); Communities: (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland, (i) pools.		
Additional Criteria - must be assessed for Bioswale and SuDS habitat types only:			
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife ⁴ .	Y	
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.	Y	
Additional Criterion - must be assessed for Intensive green roofs only:			

F	The roof has a minimum of 50% native and non-native wildflowers. 70% of the roof area is soil and vegetation (including water features).		
Additional Criterion - must be assessed for Biodiverse green roofs only:			
G	The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. Note – to achieve Good condition some additional habitat, such as sand piles, stones, logs etc. are present.		
Essential criteria relevant for habitat type achieved (Yes or No)			
Number of criteria passed			
Condition Assessment Result		Condition Assessment Score	Score Achieved x/√
Results for habitats requiring assessment of 3 core criteria only (all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs):			
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C.		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 criterion C.		Moderate (2)	X
• Passes 0 or 1 of 3 core criteria.		Poor (1)	
Results for Green roofs and Open mosaic habitat on previously developed land (requiring assessment of 4 criteria only - core criteria plus additional criterion specified for habitat type):			
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C; AND • Passes additional criterion relevant to specific habitat type (D, F or G).		Good (3)	
• Passes 2 or 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for Good condition within criterion C.		Moderate (2)	
• Passes 0 or 1 of 4 criteria.		Poor (1)	
Results for Bioswale or SuDS (requiring assessment of 5 criteria - core criteria plus additional criteria specified for habitat type):			
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C; AND • Passes all additional criteria relevant to specific habitat type (Group E)		Good (3)	
• Passes 3 or 4 of 5 criteria; OR • Passes 5 of 5 criteria but does not meet the requirements for Good condition within criterion C.		Moderate (2)	
• Passes 2 or fewer of 5 criteria.		Poor (1)	
Suggested enhancement interventions to improve condition score			
Footnotes			

Condition Sheet: SCRUB Habitat Type			
Habitat Types			
Heathland and shrub - Blackthorn scrub Heathland and shrub - Gorse scrub Heathland and shrub - Hawthorn scrub Heathland and shrub - Hazel scrub Heathland and shrub - Mixed scrub Heathland and shrub - Dunes with sea buckthorn (H2160) Heathland and shrub - Willow scrub			
Habitat Description			
For Dunes with sea buckthorn see:	Dunes with sea-buckthorn (Dunes with Hippophae rhamnoides) - Special Areas of Conservation (jncc.gov.uk)		
For other scrub types see:	ukhab – UK Habitat Classification		
On-site or off-site, site name and location		Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). ¹ - At least 80% of scrub is native, - There are at least three native woody species ² , - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> (only in its restricted native range), or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	Y	
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	N	
C	There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.	Y	
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Y	
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Y	
Number of criteria passed			
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved x/√	

Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	X	
Passes 2 or fewer criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
On-site or off-site, site name and location	Halewood LUF	Survey date and Surveyor name	Liz Kenyon 29.08.24
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
Habitat Description			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	Y	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)².	N	
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y	
G	There is an absence of invasive non-native plant species³ (as listed on Schedule 9 of WCA⁴).	Y	
Essential criterion achieved (Yes or No)			
Number of criteria passed			

Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved x/√	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	Y	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)		
Suggested enhancement interventions to improve condition score			
Footnotes			
Footnote 1 – Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> . Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover. Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement. Footnote 4 – Wildlife and Countryside Act 1981 (as amended).			

[illegible]

Passes 3 or 4 criteria	Moderate (2)		Y			Y							
Passes 2 or fewer criteria	Poor (1)	Y		Y									
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.													
Suggested enhancement interventions to improve condition score ²													

[illegible]

Passes 3 or 4 criteria	Moderate (2)		Y			Y							
Passes 2 or fewer criteria	Poor (1)	Y		Y									
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.													
Suggested enhancement interventions to improve condition score ²													

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