

26 November 2024

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National Validation Requirements for Biodiversity Net Gain.

Project

Harvey's Barn. Day's Lane, Donington, Lincolnshire. PE11 4XT(OS ref: TF 21584 36638)

Planning Authority and Reference

South Holland District Council. Reference number tbc.

Biodiversity Net Gain Condition

The proposal relates to a commercial development on 0.5344 ha of land and will involve construction of a new building with an approximate footprint of 750m². This is a minor development which doesn't meet criteria for exemption and is therefore subject to the biodiversity net gain condition.

Pre-Development Value

The relative baseline value for the Application Site was estimated using Defra's Statutory Metric to be 1.65 Habitat Units. There were no linear habitats within the site. The completed metric is supplied and a baseline habitat map is appended to this statement.

Date for Baseline

The baseline was evaluated on 26 November 2024 and considered to be an accurate assessment for that date. Land use and habitats within the site are unlikely to significantly change within the next six months. The baseline will therefore be considered valid for the date of application assuming that it is submitted before 26 May 2025

Habitat Degradation

There is no indication that any activities have taken place, since January 2020, that were intended to degrade or otherwise deliberately reduce the value of habitats present within the Application Site.

Irreplaceable Habitats

There are no habitats present within the site that are described and identified within the Biodiversity Gain Requirements (Irreplaceable Habitats) Regulations 2024.

Statutory Biodiversity Metric

A copy of the Statutory Biodiversity Metric has been provided with this statement - Harvey's Barn, Statutory Metric v2, Nov 2024.xlsx

The development is predicted to deliver an onsite gain of 10.18%. The modelled landscape satisfies metric trading rules and the metric tool shows no error messages.

Habitat Plans

A baseline habitat map, a post-development habitat map and baseline habitat condition assessment sheets are appended below.



Legend

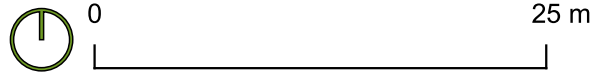
- Red Line Boundary
- Buildings
 - Existing
- Habitats Baseline
 - Artificial unvegetated, unsealed surface
 - Developed land; sealed surface
 - Introduced shrub
 - Modified grassland
 - Other neutral grassland
 - Tall forbs
- Trees
 - Indicative

Notes
Baseline cover types and condition were replicated and assessed from aerial images, site photographs and a topographic survey.

Project
Harvey's Barn. Day's Lane, Donington. PE11 4XT
Drawing title
Baseline Habitat Map
Client
Andrew Nicholl-Smith
Drawing Ref
HW1123.1.2
Date
26 November 2024



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Legend

Red Line Boundary

Buildings

Proposed

Habitats Proposed

Developed land; sealed surface

Introduced shrub

Modified grassland

Other neutral grassland

Tall forbs

Trees

Indicative

Notes

The spatial distrivbution of proposed cover types was digitised with reference to Oglesby and Limb Ltd. (2024) Proposed Commercial Building Harvey's Barn, Site Block Plan Dwg. A1643-02 Rev. PA1

There is flexibility regarding the placement of the proposed new tree.

Project

Harvey's Barn. Day's Lane, Donington. PE11 4XT

Drawing title

Proposed Habitat Map

Client

Andrew Nicholl-Smith

Drawing Ref

HW1123.1.2

Date

26 November 2024



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25 m

Habitat Condition Assessments

Cover

Survey Cover Sheet			
Survey Date/s	N/A see notes	Site Name or Location	Harvey's Barn
Weather Conditions	N/A	Project or Development Name	as above
Surveyor Name	Desk Study produced by Dr Leslie Cousins MCIEEM Hushwing Ltd.	On-site or Offsite	On Site
Survey Reference	HW1123.1.2	Reason For Assessment	Planning application
Notes			
Baseline conditions have been determined from a desk based study drawing upon information gleaned from aerial images, an historic topographic survey and recent site photographs. The client supplied information relating to stem diameters and species of trees. The precautionary principle has been applied where considered necessary to provide an accurate account of the habitats and condition of habitats present within the baseline.			

Sheet 5: Grassland of Low Distinctiveness

Sheet 5: Grassland of Low Distinctiveness			
Condition Assessment Proforma for use with Defra's Statutory Biodiversity Metric			
UKHab Habitat Type(s)			
Grassland - Modified grassland			
Site name/location	Harvey's Barn	Onsite/offsite	Onsite
Central grid reference of habitat		Unique polygon reference	P4

Limitations (if applicable)	The extent of grassland vs hard standing was mapped from aerial images and a topographic survey issued in March 2015 (i.e., c. 10 years old)	Survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
g4 - modified grassland, Secondary: 108 frequently mown, . A parcel of modified grassland (lawn) at the site's frontage. It has been assumed that it is relatively species rich and that is not poached and has a uniform and short mown sward height. There are seven ornamental trees within the sward (six small and one medium)			



Photo: Google Earth Image looking south



Photo: Google Earth Image looking west

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
A	There are 6-8 vascular plant species per m² present, including at least 2 forbs (this 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	Precautionary principle

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	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs 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.	Y	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Y	
F	Cover of bracken less than 20%.	Y	
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	
Essential criterion 1 achieved (Y/N)			Y
Number of criteria passed			^
Condition Assessment Result		Condition Assessment Score	Score Achieved x/✓
Passes 6 or 7 criteria including passing essential criterion A		Good (3)	Good
Passes 4 or 5 criteria including passing essential criterion A		Moderate (2)	
Passes 4 – 6 criteria (excluding criterion A)		Poor (1)	
Suggested enhancement interventions to improve condition score			
This is retained habitat. The small size restricts scope for meaningful enhancement.			
Notes			
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).			

Add or delete tables as required

Sheet 6A: Grassland of Medium to Very High Distinctiveness

Sheet 6A: Grassland of Medium to Very High Distinctiveness			
Condition Assessment Proforma for use with Defra's Statutory Biodiversity Metric			
UKHab Habitat Type(s)			
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) [Note Tall herb habitat that does not meet the Annex 1 definition should be recorded as 'Other neutral grassland'] [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			
Site name/location	Harvey's Barn	Onsite/offsite	Onsite
Central grid reference of habitat		Unique polygon reference	P2, P3
Limitations (if applicable)		Survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
UKHab Primary: g3c Other Neutral Grassland, Secondary: 10 scattered scrub, 103 mown Aerial and site images show a tall sward subject to infrequent mowing. It is assumed that species count is low			



Photo: Cut grassland looking east, 19 August 2024



Photo: Cut grassland looking west, 19 August 2024

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
A	The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	N	This is poor grassland that due to management regime doesn't fit the description of modified grassland
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.	N	Uniform height due to annual mow
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ¹	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 sub-optimal condition ² 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 species ³ (as listed on Schedule 9 of WCA ⁴) are present, this criterion is automatically failed.	Y	
Additional criterion – must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	N	Assumed species poor
Essential criterion 1 achieved (Y/N)			N
Number of criteria passed			3
Condition Assessment Result		Condition Assessment Score	Score Achieved ×/✓
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)	
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.		Poor (1)	Poor
Suggested enhancement interventions to improve condition score			
Re-enforce richness with native species and manage as wildflower meadow to attain ONG of good condition.			
Notes			
Footnote 1 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover.			
Footnote 2 - Species indicative of sub-optimal 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 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, by applying professional judgement.

Footnote 4 – Wildlife and Countryside Act 1981 (as amended).

Sheet 22A: Urban

Sheet 22A: Urban			
Condition Assessment Proforma for use with Defra's Statutory Biodiversity Metric			
UKHab Habitat Type(s)			
Where a parcel contains areas of higher distinctiveness habitats within it, then the area of higher distinctiveness habitat must be separated and recorded and assessed as such. 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			
Site name/location	Harvey's Barn	Onsite/offsite	On Site
Central grid reference of habitat		Unique polygon reference	P7
Limitations (if applicable)		Survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
Primary: u1, Secondary: 16 Tall forbs, Small area of unmanaged habitat adjacent neighbouring fields. Common nettle is dominant.			



Photo: Google Earth Image nettle bank with mugwort, dock and bindweed present

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
CORE CRITERIA - applicable to 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.	N	
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 Open mosaic on previously developed land only:			

D1	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.		
D2	The parcel contains pools of water such as permanent and ephemeral waterbodies.		
ADDITIONAL CRITERION – 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 .		
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.		
ADDITIONAL CRITERION – must be assessed for Intensive green roof 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 roof 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? (Y/N)			Y
Number of criteria passed			1
Condition Assessment Result		Condition Assessment Score	Score Achieved ×/✓
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)	
• Passes 0 or 1 of 3 criteria.		Poor (1)	Poor
Results for Green roofs (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;		Good (3)	

AND • Passes additional criterion relevant to specific habitat type (F or G).			
• 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 Open mosaic habitat on previously developed land, 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 D or 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			
Notes			
Footnote 1 – Wildlife and Countryside Act 1981 (as amended). Footnote 2 – Sources of information about detrimental non-native species can be found on the GB Non-native Species Secretariat (GBNNSS) website: Home » NNSS (nonnativespecies.org) and Natural England Access to Evidence page should also be checked for up-to-date information: Horizon-scanning for invasive non-native plants in Great Britain - NECR053 (naturalengland.org.uk) For criterion C – For green roof habitat types only – buddleia <i>Buddleja davidii</i> should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in subsequent years. 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 – Use professional judgement. Sources of information about non-native species that are not detrimental to native wildlife can be found on the GBNNSS website:			

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Add or delete tables as required

Sheet 9B: Individual Trees (multiple)

Sheet 9B: Individual Trees
Condition Assessment Proforma for use with Defra's Statutory Metric
UKHab Habitat Type(s)
Individual trees – Urban trees Individual trees – Rural trees Complete a condition assessment for each block of trees Please see separate Line of Trees condition sheet for a line of Rural trees
Habitat Description
Individual trees UKHab Primary: g4 modified grassland, Secondary: 32 scattered trees Mixed tree planting comprising a selection of nine specimens within the lawn at the site's frontage. T1, Norway Spruce DBH 26.5cm T2, walnut DBH 29cm T3, walnut, double stem DBH 35cm T4, ash DBH 53cm T5, ash DBH 24cm T6, Purple Norway Maple DBH 28cm T7, silver birch, forked stem DBH 54cm



Photo: Google Earth image of trees T7 to T2

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 must overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

Site name/location	Harvey's Barn			Onsite or Off-site Survey reference (if relating to a wider survey)					On Site					
Limitations (if applicable)	Condition based on desk study without site visit.								Trees T1 to T7					
Tree number or Ref				T1	T2	T3	T4	T5	T6	T7				
Condition Assessment Criteria				Criterion Passed (Y or N)										Notes

A	The tree is a native species(or more than 70% within the block are native species).	N	Y	Y	Y	Y	N	Y				Confirmed on site by client	
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	Y	Y	Y	Y	Y	Y					
C	The tree is mature (or more than 50% within the block are mature)	N	N	N	N	N	N	N				All young trees.	
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	Y	Y	Y	Y	Y	Y					
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	N	N	N	N	N				Trees have not been inspected	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y	Y	Y	Y	Y	Y				Aerial and topo	
Number of criteria passed		3	4	4	4	4	3	4					
Condition Assessment Result		Condition Assessment Score		Score Achieved x/✓									
Passes 5 or 6 of 6 criteria		Good (3)											
Passes 3 or 4 of 6 criteria		Moderate (2)		Y	Y	Y	Y	Y	Y	Y			
Passes 0, 1 or 2 of 6 criteria		Poor (1)											
Suggested enhancement interventions to improve condition score													
Baseline assumptions are considered safe as all trees are to be protected during construction and retained for the future.													
Notes													
Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)													

Add or delete tables as required