

Biodiversity Net Gain Assessment

Site Address:

David Lloyd, Reading, Berkshire, RG6 1PT

Client:

David Lloyd Leisure Limited

Assessment Date:

11th March 2026

Project:

This report is prepared to inform a planning application with the Wokingham Borough Council. The proposal is described as:
'David Lloyd Club extension and spa garden'.

BNG assessment methodology and legislation can be found in the Arbtech Supplement: **BNG Methodology and Legislation – 2025.**

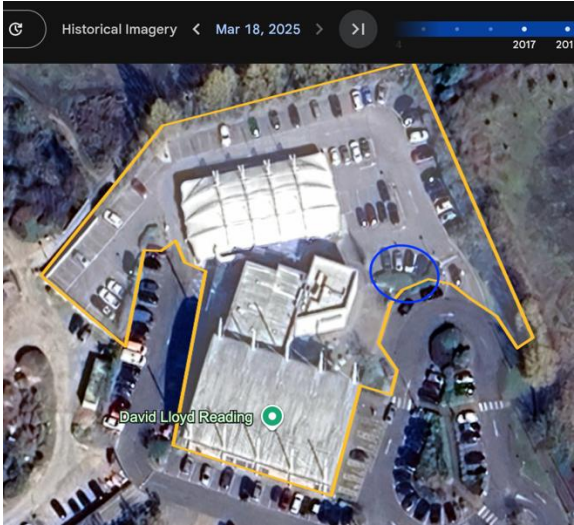
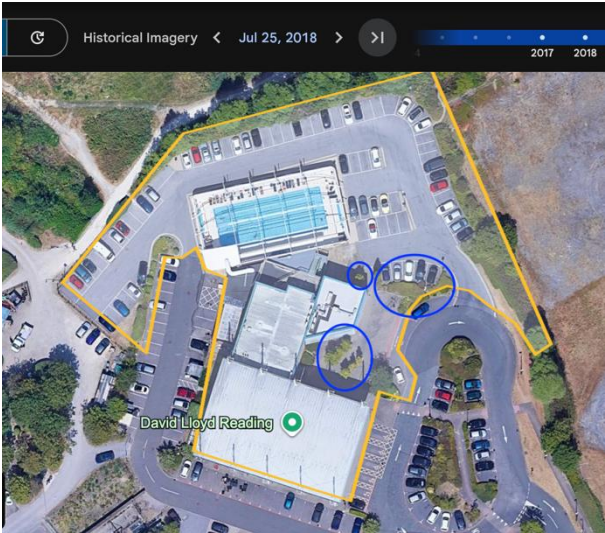
The results and recommendations contained within this report are valid for 18 months. An updated site visit and BNG assessment may be required if the report is to be used any longer than 18 months after completion.

Site Location and Context			
A baseline habitat map is provided in Appendix 1 , a post development habitat map in Appendix 2 , a proposed development plan in Appendix 3 , headline BNG results in Appendix 4 , and condition assessments in Appendix 5 .			
The survey site is centred on National Grid Reference SU 74377 74237 and has an area of approximately 1.169ha. The site comprises developed land; sealed surface, modified grassland, introduced shrubs and scattered trees. There are scattered trees within the site and extending into the local landscape. It is situated within Thames Valley Business Park and is surrounded by commercial buildings to the east, south and west and Thames Valley Park Nature Reserve to the north. Additionally, water bodies can be found nearby, such as Caversham Lakes (lake) located ~490m to the north and the River Thames also located 280m north of the site. The wider landscape is comprised of a rail line to the south, the town of Reading to the south and west, the village of Caversham to the north and the town of Woodley to the east. This report should be read in conjunction with the following documents: ❖ Statutory BNG Metric – David Lloyd, RG6 1PT – v2 (Arbtech Consulting Ltd., 2026) ❖ Proposed Plan - David Lloyd, RG6 1PT (Hadfield Cawkwell Davidson, 2024) ❖ Preliminary Ecological Appraisal (PEA) - David Lloyd, RG6 1PT – v3 (Arbtech Consulting Ltd., 2026)			
Executive Summary			
The baseline habitat value of the site is 0.39 area-based habitat units with the proposed development resulting in a -62.18% area-based net loss with unmet trading rules. The proposed development is therefore anticipated to subceed the minimum target of 10% biodiversity net gain for area-based habitats and thus is not compliant with legislation (Environment Act 2021). Summaries of baseline habitats and value, development proposals and overall BNG result plus any recommendations can be seen below:			
		Area units	Linear Units
			Watercourse

% Change	-62.18%	N/A	N/A
Units required for a 10% net gain	0.29	N/A	N/A

A net gain cannot be achieved on site. Therefore units will need to be purchased off site.

Introduction

BNG Informative		
	Date reflected by BNG calculations	11 th March 2026
Habitat Degradation Statement	The baseline biodiversity value of the site is derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2025) and Google Earth’s historical aerial imagery. As evident in the screenshots of satellite imagery obtained from GoogleEarth dated 25th July 2018 and 18th March 2025, 7 small trees and a parcel of introduced shrub seem to have been removed between 2018 and the day the PEA was carried out (see blue circles below). The habitats on site, and therefore biodiversity value of the site, are considered to have undergone degradation since 30th January 2020. Based on the current site use and management, we can assume that the baseline condition of the removed habitats to be the same as the condition recorded during the PEA. Therefore the lost trees are assumed to be of moderate condition.	
		
Irreplaceable Habitat Statement	No irreplaceable habitats as listed under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024) are currently present nor were present before 30 th January 2020.	

Metric Version & Publication Date	Statutory Biodiversity Metric Calculation Tool first published 29 th November 2023 with last updates to metric tools and user guides on 23 rd July 2024.	
BNG Target Uplift	+10%	
National Character Area (NCA)	115 - Thames Valley	
Strategic Significance	The strategic significance of habitats within the baseline assessment has been determined in accordance with the BNG Metric User Guide (Updated, July 2025)¹ and the published Local Nature Recovery Strategy for Berkshire². According to the LNRS interactive map³, the application site falls within an area subject to no designation.	 Figure 3: The application site's location within the LNRS interactive map. The site is the blue square in the middle of the photo.

¹ https://assets.publishing.service.gov.uk/media/689c5ee17b2e384441636196/The_Statutory_Biodiversity_Metric_-_User_Guide_-_July_2025.pdf

² <https://rbwmtogether.rbwm.gov.uk/berkshire-local-nature-recovery-strategy>

³ https://mol.rbwm.gov.uk/mol/lhrs_berks/

	In line with the BNG Metric User Guide, as the LNRS has been published for the site, all baseline strategic significance values for habitat parcels on site (within the identified area of potential measure) are set to ‘low’ (BNG User Guide p27, 2025). Any potential increase in strategic significance would only apply to post-development habitat creation or enhancement (where possible) if it were proposed in a mapped location and aligned with an LNRS potential measure. At the baseline stage, the published guidance is clear that all existing habitats are to be scored as Low strategic significance, regardless of ecological value or local conservation interest. When the BNG post-development assessment is undertaken, the following should be considered in regard to post-development strategic significance of habitats according to Table 7 of the BNG Metric User Guide (p. 27/28), as summarised below: • High strategic significance = Applied only if the parcel is mapped in the Local Habitat Map for a potential LNRS measure and <i>the proposed intervention is consistent with that mapped measure</i>. • Medium strategic significance = Cannot be applied where an LNRS is published. • Low strategic significance = Applied when the above conditions are not met. This includes cases where the intervention occurs in a mapped area but does not align with the specific potential measure proposed by the LNRS.
Limitations	
There were no specific limitations to the assessment.	

Baseline

Baseline Biodiversity Value: On-Site				
Area-Based Habitats (A-1)				
Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Developed land; sealed surface – hardstanding	0.32471 ha	Located throughout the site, are areas of developed land; sealed surface. The hard standing is comprised of tarmac and is of negligible habitat value for protected species. This also includes hardstanding connected to the main road for access. Preliminary Ecological Appraisal (PEA) - David Lloyd, RG6 1PT – v3 (Arbtech Consulting Ltd., 2026)	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Developed land; sealed surface	0.21142 ha	There is one existing building on site- the leisure centre (B1). The building was assessed for its habitat value for roosting bats and nesting birds in their relevant sections below. For more information please see Preliminary Ecological Appraisal (PEA) - David Lloyd, RG6 1PT – v3 (Arbtech Consulting Ltd., 2026).	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Modified Grassland	0.0078 ha	Around the boundary of the site are areas of modified grassland which is subject to management, resulting in a sward of approximately 3cm in length. Species composition is comprised of cocks foot (D), creeping cinquefoil (A), ragwort (A), birds-foot trefoil (A), thistle (F), small-flowered cranesbill (O), goats-hue (O), hogweed (O), oxeye daisy (R), self-heal (R), plantain (R), primrose (R), knapweed (R), dandelion (R) and germander speedwell (R). Additionally, to the west of the site, there is a small area of scattered bramble scrub, which accounts for approximately 5% of the grassland.	Poor: passes 5 of 7 criteria excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance

Introduced shrub	0.03874 ha	The vegetation is comprised of buddleia (D), teasel (O), goats-rue (O), white birch saplings (O), dogwood (R), snowberry (R) and goat willow saplings (R). The small area of shrubs could provide opportunities for vertebrates and invertebrates to live, eat and breed.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Urban Tree	Moderate: 0.0366 ha	Located within the site are two scattered trees, comprised of alder and poplar. Both trees are small in size, semi-mature in age and represent a fair structural condition. Additionally, 7 trees have been removed (as observed from historical aerial imagery), based on the current use and management of the site these have been assumed to be of the same condition as the ones recorded in the PEA for this site: Preliminary Ecological Appraisal (PEA) - David Lloyd, RG6 1PT – v3 (Arbtech Consulting Ltd., 2026).	Moderate: passes 3 or 4 of 6 criteria. All trees assessed using 'Individual Trees' habitat type condition sheet	Low Strategic Significance

Post-Development

Post-Development Biodiversity Value: On-Site

Area-Based Habitats

	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Retained (A-1)	Developed land; sealed surface – hardstanding	0.05115 ha	Retained hardstanding connected to the main road for access.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Created (A-2)	Developed land; sealed surface – buildings	0.20175 ha	Existing building to be retained and proposed extension.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Developed land; sealed surface – hardstanding	0.27421 ha	Hardstanding surrounding the main building – replacement pool to be built with a terrace. Creation of new parking spaces.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance

	Artificial unvegetated; unsealed surface	0.01369	Two parcels of artificial grass and resin bound gravel to be installed in the new SPA area	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Modified grassland	0.0372 ha	New modified grassland to be planted around the new development and in the car park.	Moderate: <i>passes 5 of 7 criteria including essential criterion A.</i> Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance
Enhanced (A-3)	Modified grassland	0.00497 ha	Retained modified grassland to be enhanced to moderate condition, located on the northwestern and southeastern boundaries of the site.	Moderate: <i>passes 5 of 7 criteria including essential criterion A.</i> Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance

Change of Biodiversity Value

		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	- Developed land; sealed surface both buildings and hardstanding: 0 (no value) - Modified grassland: 0.02 - Introduced shrub: 0.08 - Urban tree: 0.29 Overall: 0.39	N/A	N/A
	Post-Development	- Proposed developed land; sealed surface, both hardstanding and buildings: 0 (no value) - Proposed artificial unvegetated; unsealed surface: 0 (no value) - Proposed modified grassland: 0.13 - Enhanced modified grassland: 0.02 Overall: 0.12	N/A	N/A
	Net Change	-0.24 (-62.18%)	N/A	N/A

Results, Discussion, and Next Steps

BNG Informative	
Results	The current landscaping proposal generates a net loss of area-based habitat units (-62.18%) with unmet trading rules. The proposal fails principal Rules 1 and 2 of BNG and is not compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024; Wokingham Borough Council Local Plan Update (2023-2040) (proposed submission plan)). In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 0.42 will need to be achieved. At present, there is a unit deficit of 0.29 units. Of these units, 0.29 need to be of individual trees to satisfy the trading rules.
Recommendations and Next Steps	In order to achieve the required net gain in biodiversity as a result of the proposed development, the provision of additional or alternative landscaping should be explored and the proposed plans amended accordingly to achieve a net gain on site. The provisioning of additional landscaping should first be considered within the site boundary. There is limited scope on site and this provision may not be possible to achieve on site or adjacent with the current arrangement (within the redline boundary or offsite on other owned land) considering the size of the proposed development area and the limited amount of soft landscaping within the parcel. At present, most of the site is to be converted into buildings, hardstanding and sports facilities with limited space remaining for the provisioning of any other habitat on site. Based on the proposed plans, it is unlikely that net gain will be achieved by ways of habitat creation/enhancement without significant changes to the proposals on site or require unfeasible commitments off-site. As such, a financial contribution to off-site ecological enhancements (i.e. purchasing biodiversity units) within an approved scheme is required to make up the +10% net gain for area-based habitat units. The proposed habitat compensation must be of an appropriate distinctiveness to meet the trading rules of BNG.

	A summary as to what off-site units will be required is detailed in the table below.				
		Distinctiveness	Broad Habitat Group	Habitat	Units Required
	Area-Based	Medium	Individual trees	Urban Tree	0.29
		Total0.29			
Pre-Commencement	A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years to ensure that biodiversity net gain is delivered.				
BNG Mitigation Hierarchy					
Avoidance	N/A				
Minimisation	Minimising the area of modified grassland lost.				
Mitigation	Planting of modified grassland around the development of moderate condition.				
Offset	Units will need to be purchased off-site to offset the loss of baseline habitats.				

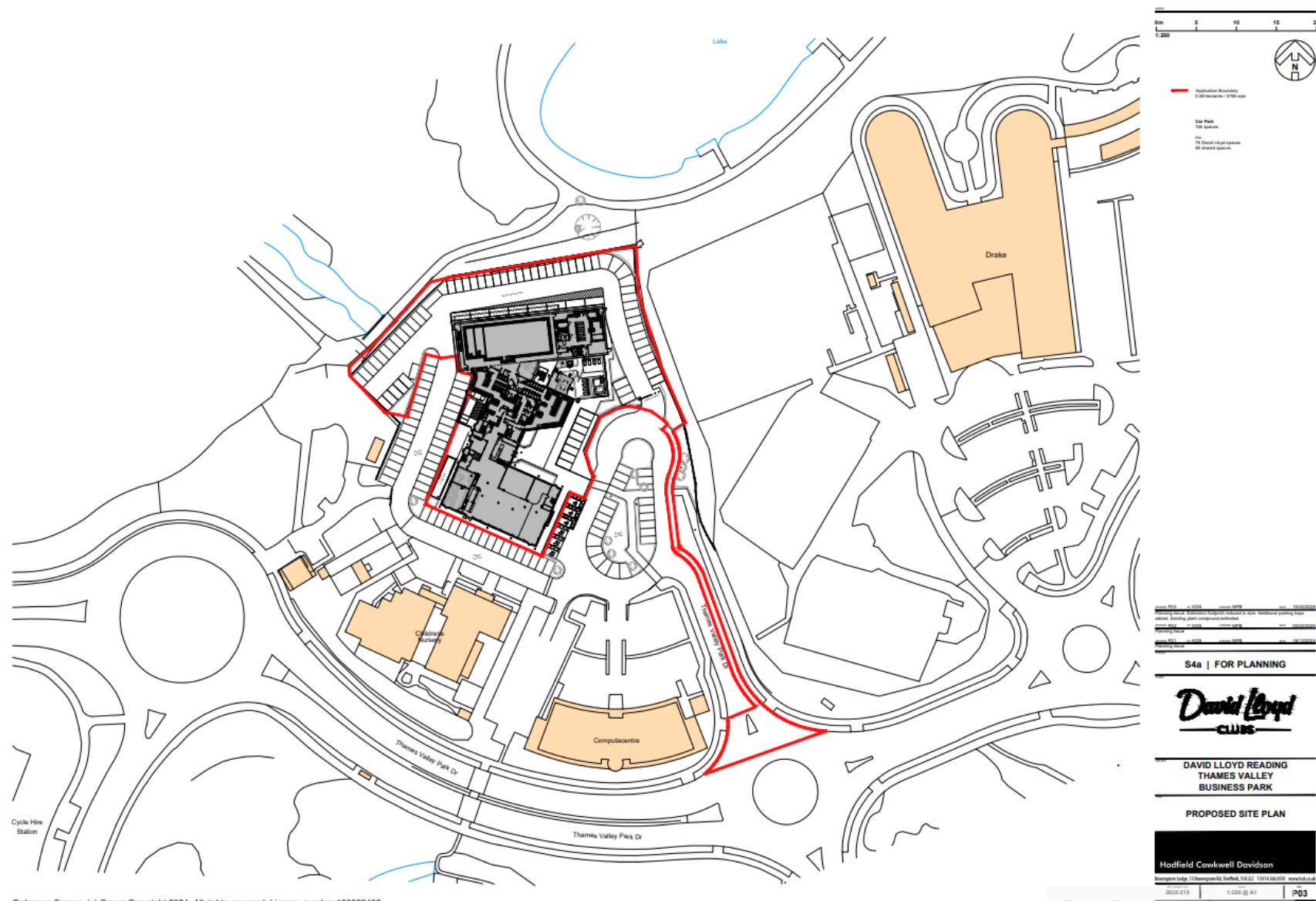
Appendix 1: Baseline Habitat Plan



Appendix 2 : Post-Development Habitat Plan



Appendix 3: Proposed Development Plan



Appendix 4: Headline BNG Results

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-0.24	Total net gain achieved is less than target set ▲	
	Hedgerow units	0.00		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-62.18%		
	Hedgerow units	0.00%		
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	0.39	0.42	0.28
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional hedgerow units required to meet target ✓
No additional watercourse units required to meet target ✓

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Modified Grassland; assessed using 'Grasslands Low Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria:		Condition passed (Yes or No)	Notes/Justification
A	There must be 6-8 vascular plant species per m ² , including at least 2 forbs. Note – this criterion is essential for achieving moderate condition.	N	Less than 6 species per m ²
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	areas of modified grassland which are subject to management, resulting in a sward of approximately 3cm in length
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	to the west of the site, there is a small area of scattered bramble scrub, which accounts for approximately 5% of the grassland.
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	Physical damage present in less than 5% of total grassland area, caused by high level of access
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Y	Bare ground covers between 1% and 10 % of the area.
F	Cover of bracken less than 20%.	Y	Bracken coverage is less than 20% coverage.
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	Absence of invasive species.
Essential criterion achieved (Y/N)			N
Number of criteria passed			5
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
Passes 6 or 7 of 7 criteria including passing essential criterion A		Good (3)	
Passes 4 or 5 of 7 criteria including passing essential criterion A		Moderate (2)	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion A		Poor (1)	✓

Urban Trees; assessed using 'Individual Trees' habitat type condition sheet:

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
A	The tree is a native species (or more than 70% within the block are native species).	Y	>70% of the trees are native species
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	All trees are individual trees and thus automatically pass this criterion.
C	The tree is mature (or more than 50% within the block are mature).	N	< 50% of the trees on site are mature.
D	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	Little to no evidence of adverse anthropogenic impacts; all trees have retained >75% of their expected canopy.
E	Natural Ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	None observed.
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	More than 20% of the tree canopy area has vegetation underneath.
Number of criteria passed			4
Condition Assessment Result	Condition Assessment Score	Score Achieved ✓	
Passes 5 or 6 of 6 criteria	Good (3)		
Passes 3 or 4 of 6 criteria	Moderate (2)	✓	
Passes 0, 1 or 2 of 6 criteria	Poor (1)		

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Created Modified Grassland; assessed using 'Grasslands Low Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria:		Condition passed (Yes or No)	Notes/Justification
A	There must be 6-8 vascular plant species per m ² , including at least 2 forbs. Note – this criterion is essential for achieving moderate condition.	Y	More than 6 species per m ² will be planted
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	This will be newly planted and therefore will not have a varied sward.
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	Some scrub can be planted to account for less than 20% of the total grassland area.
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	This will be newly planted grassland around a development with potential physical damage being evident in >5% of the grassland area
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Y	Bare ground covers between 1% and 10 % of the area.
F	Cover of bracken less than 20%.	Y	Ensure that when planting no bracken is planted
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	Ensure no invasive species are planted.
Essential criterion achieved (Y/N)			Y
Number of criteria passed			5
Condition Assessment Result	Condition Assessment Score	Score Achieved ✓	
Passes 6 or 7 of 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 of 7 criteria including passing essential criterion A	Moderate (2)	✓	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion A	Poor (1)		

Retained Modified Grassland; assessed using 'Grasslands Low Distinctiveness' habitat type condition sheet: **enhanced**

Condition Assessment Criteria:		Condition passed (Yes or No)	Notes/Justification
A	There must be 6-8 vascular plant species per m ² , including at least 2 forbs. Note – this criterion is essential for achieving moderate condition.	Y	More than 6 species per m ² will be planted to ensure these parcels are enhanced to moderate condition.
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	This will be newly planted and therefore will not have a varied sward.
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	Some scrub can be planted to account for less than 20% of the total grassland area.
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	Potential physical damage being evident in >5% of the grassland area
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Y	Bare ground covers between 1% and 10 % of the area.
F	Cover of bracken less than 20%.	Y	Ensure that when planting no bracken is planted
G	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	Ensure no invasive species are planted.
Essential criterion achieved (Y/N)			Y
Number of criteria passed			5
Condition Assessment Result	Condition Assessment Score	Score Achieved ✓	
Passes 6 or 7 of 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 of 7 criteria including passing essential criterion A	Moderate (2)	✓	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion A	Poor (1)		

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Version control			
Status	Issue	Name	Date
Draft	0.1	Georgina Rennie BSc (Hons), MSc – Consultant Ecologist	09/09/2025
Proof	0.2	Mel Reid BSc (Hons), MRes, AMRSB, Principal Ecologist	12/09/2025
Final	1.0	Georgina Rennie BSc (Hons), MSc – Consultant Ecologist	15/09/2025
Amended	1.1	Georgina Rennie BSc (Hons), MSc – Consultant Ecologist	19/02/2026
Proof	1.2	Mel Reid BSc (Hons), MRes, AMRSB – Principal Consultant	20/02/2026
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