

Baseline Biodiversity Net Gain Assessment

Site Address:

Hillcrest, Black Lane, Winnothdale, Staffordshire ST10 4HB

Client:

Mr Michael Maryon

Assessment Date:

30/04/2026

Project:

This report is prepared to inform a planning application with Staffordshire Moorlands District Council. The proposal is described as:
'The demolition of the building, and the construction of a new build, within the same/similar footprint'

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.

Version Control			
Status	Issue	Name	Date
Draft	0.1	Jaden Allcock BSc (Hons) MSc, Graduate Ecologist	04/05/2026
Review	0.2	Georgia Knight BSc (Hons), Consultant Ecologist	11/05/2026
Draft	0.3	Jaden Allcock BSc (Hons) MSc, Graduate Ecologist	11/05/2026
Review	0.4	Georgia Knight BSc (Hons), Consultant Ecologist	13/05/2026
Final	1.0	Jaden Allcock BSc (Hons) MSc, Graduate Ecologist	

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Site Location and Context

A baseline habitat map is provided in **Appendix 1**, a proposed development plan in **Appendix 2**, headline BNG results in **Appendix 3**, and condition assessments in **Appendix 4**.

The site is centred at National Grid Reference SK 02258 40735 and has an area of approximately 0.17ha. The site is characterised by one building, two scattered trees, modified grassland, bramble scrub, sparsely vegetated land, artificial unvegetated, unsealed surface and non-native and ornamental hedgerow. The wider landscape comprises agricultural fields and pockets of woodland.

This report should be read in conjunction with the following documents:

- ❖ Statutory BNG Metric - Hillcrest, Black Lane, ST10 4HB – V1 (Arbtech Consulting Ltd., 2026)
- ❖ Proposed Plan (HEAL Planning, 2026)
- ❖ Preliminary Ecological Appraisal (PEA) - Hillcrest, Black Lane, ST10 4HB – V1 (Arbtech Consulting Ltd., 2026)
- ❖ Tree Survey Report - Hillcrest, Black Lane, ST10 4HB – V1 (Arbtech Consulting Ltd., 2026)

Executive Summary

- ❖ The site generates 0.78 area-based habitat units and 0.08 linear-based habitat units in its baseline. Note the habitat types are calculated separately and must independently achieve net gain; any excess of one cannot be used to offset any deficits of the other. To achieve a minimum +10% uplift for both, a minimum of 0.86 area-based habitat units and 0.088 linear-based habitat units are required.
- ❖ Trading rules are foreseen to be a constraint: the removal of modified grassland and sparsely vegetated land (ruderal/ephemeral) must be made up for on a like-for-like or like-for-better basis. In other words, unless sufficient amounts of modified grassland and sparsely vegetated land (ruderal/ephemeral) are proposed, the site will generate a trading error for the loss of these habitat types.
- ❖ There is good scope on site to achieve the required net gain.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	30 th April 2026
	The baseline biodiversity value of the site is derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2026). As evident in the screenshots of satellite imagery obtained from GoogleEarth dated 26 th May 2017 and 23 rd April 2021, the site does not appear to have undergone any degradation. The habitats on site, and therefore biodiversity value of the site, is not considered to have undergone degradation since 30th January 2020.	
	Historical imagery < 26 May 2017 > > 	
	Historical imagery < 23 Apr 2021 > > 	
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)	64 - Potteries and Churnet Valley
Strategic Significance	Staffordshire & Stoke Local Nature Recovery Strategy – Pre-consultation Draft The site lies with the non-strategic areas identified on an interactive map available on the website “ netgainstaffs ”. Therefore, the habitats on site are deemed low strategic significance.
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
Modified Grassland	0.10045	There are three parcels of modified grassland on site. All parcels appear to be managed with a predominantly short sward height of ~7cm and are all assessed as poor condition, failing essential criteria A.	<i>Poor: passes 6 of 7 criteria excluding essential criterion A.</i> Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance
Sparsely vegetated land	0.02423	To the southeast of B1, there is a parcel of sparsely vegetated land which is used as a driveway on site. The land consists of ruderal vegetation, and is ~60% unvegetated, gravel surface.	<i>Poor: passes 1 of 3 criteria.</i> Assessed using the 'Sparsely vegetated land – Ruderal/Ephemeral' habitat type condition sheet.	Low Strategic Significance
Developed land; sealed surface	0.02381	There is one building on site, which is used as an out-building.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Artificial unvegetated, unsealed surface	0.00961	Along the northwest boundary there is a gravel area of artificial unvegetated, unsealed surface which appears to be used for planting, and associated with the greenhouse.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Developed land; sealed surface	0.00362	There is a concrete area of hardstanding to the front of B1.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Developed land; sealed surface	0.00163	There is a greenhouse located along the northeast boundary of site.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Bramble scrub	0.01581	To the northwest of site, there is an area of bramble scrub which is connected to the hedgerow on site.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory	Low Strategic Significance

			Biodiversity Condition Assessment Supplement.	
Rural tree	Moderate: 0.0041	2 trees are present on site, comprising 1 small and 1 large size. The survey identified common oak (Quercus robur) and horse chestnut (Aesculus hippocastanum). The large common oak is assessed as being in good condition and the small horse chestnut assessed as being in moderate condition.	Moderate: passes 4 of 6 criteria. 1no. small	Low Strategic Significance
	Good: 0.0366		Good: passes 5 of 6 criteria. 1no. large	Low Strategic Significance

Baseline Biodiversity Value: On-Site

Linear-Based Habitats (B-1)

Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Non-native and ornamental hedgerow	0.04924	H1 is located along the southwest boundary, dominant of cherry laurel. The hedgerow is connected to adjacent fields and appears to be managed.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Non-native and ornamental hedgerow	0.02662	H2 is located along the southeast boundary, the dominant species is cherry laurel, with holly found frequently within the hedgerow. Again, the hedgerow is connected to adjacent fields and appears to be managed.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance

Change of Biodiversity Value

	Habitat Type	Biodiversity Units Generated
	Modified Grassland	0.20
	Sparsely vegetated land	0.05
	Developed land; sealed surface	0
	Artificial unvegetated, unsealed surface	0
	Bramble Scrub	0.06
	1no. Rural Trees (Good Condition)	0.44
	1no. Rural Trees (Moderate Condition)	0.03
	Total	0.78
Linear-Based	Non-native and ornamental hedgerow	0.08
	Total	0.08

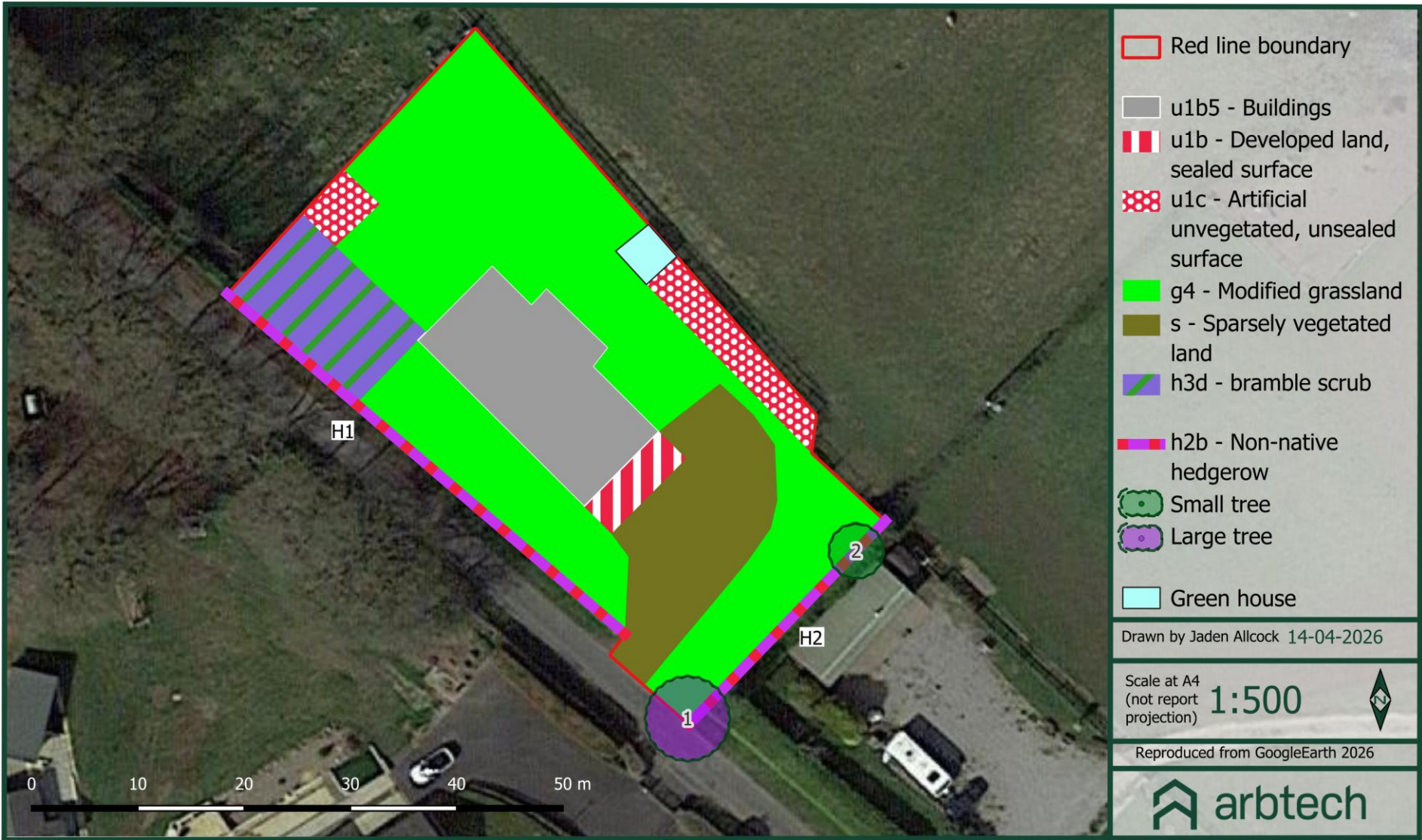
Results, Discussion, and Next Steps

BNG Informative	
Results and Next Steps	The site generates 0.78 area-based habitat units and 0.08 linear-based habitat units in its baseline. Note the habitat types are calculated separately and must independently achieve net gain; any excess of one cannot be used to offset any deficits of the other. To achieve a minimum +10% uplift for both, a minimum of 0.86 area-based habitat units and 0.08 linear-based habitat units are required. A post-development BNG assessment must be undertaken to discern the net change of biodiversity value as a result of the proposed development.
General recommendations	Trading rules are foreseen to be a constraint: the removal of modified grassland and sparsely vegetated land (ruderal/ephemeral) must be made up for on a like-for-like or like-for-better basis. In other words, unless sufficient amounts of habitats of the same value, or higher distinctiveness, the site will generate a trading error for the loss of these habitat types. There is good scope on site to achieve the required net gain. Recommendations to reach a 10% uplift on AND/OR off-site include: - Planting individual trees within the site. The below recommendations will achieve a condition score of “moderate”. - Any trees planted on site will be located outside of vegetated gardens, as instructed by the BNG user guide (Natural England, 2024). It should be noted that any trees planted within mixed scrub habitat should not exceed 5m in height. - Tree species planted will be of native origin, or at the very least, appropriate with the local landscape. Any non-native species planted must comprise <30% off all trees planted on site. - Trees planted on site will require protection from damage caused by human activity, including poor management and vandalism. - Trees should be planted in areas with enough space for the canopy growth to reach a minimum of 75% of its expected area, relative to the age, height and species of the tree, allowing the canopy to oversail at least 20% of the ground vegetation beneath. Additionally, these trees will not be subject to regular pruning. - Species considered suitable for planting include English oak, hazel, rowan, hawthorn, blackthorn, birch, willow, spindle, elm, wild cherry, ash. - Planting a section of native hedgerow within the site. The below recommendations will achieve a condition score of “good”.

	○ Hedgerows provide highly valuable habitat for wildlife, and act as a great source of refugia, nesting and roosting, foraging, hunting and commuting opportunities for birds, mammals, invertebrates, reptiles and amphibians. ○ Native hedgerows must contain over 80% of canopy cover from native or archaeophyte woody species. Archaeophyte species are those that have been recorded as naturalised in the wild before 1500CE. Although integral to many hedgerows, climbing species such as Honeysuckle and Bramble are not included in the definition of woody species. ○ Native hedgerow must have an average width of at least 1.5m along its length, a base of the leafy canopy that commences 0.5m or less from the ground, and horizontal gaps must make up less than 10% of the length of the hedgerow. At least 90% of the hedgerow must be free from damage caused by human activities. ○ A strip of undisturbed ground containing perennial herbaceous vegetation, measuring >1m in width, must be present for at least 90% of the length of the hedgerow, on at least one side. Plant species indicative of nutrient enrichment must comprise <20% of the ground vegetation beneath, and the hedgerow and ground flora must present an absence of non-native invasive species, as listed on Schedule 9 of the Wildlife and Countryside Act (1981). ○ To achieve a species-rich native hedgerow 5 or more (or 4 or more in Northern and Eastern England, Upland Wales and Scotland) native or archaeophyte woody species must be present within a 30m section. ○ Species composition often contains a mix of shrub and tree species. Recommended species include hawthorn, hazel, blackthorn, field maple, elm, ash, English oak, dog rose, wild cherry, spindle. ● The creation of mixed scrub within the site. The below recommendations will achieve a condition score of “good”. ○ Scrub is considered a highly valuable habitat type for wildlife, with many species depending on it for survival. Mixed scrub provides resource opportunities for birds, mammals, invertebrates, reptiles and amphibians. ○ Management of this habitat parcel will be required to ensure the target condition is achieved. As such, access to the habitat parcel must be achieved from the road or similar, without encroaching on any private gardens, for external management to take place. ○ Mixed scrub should not exceed 5m in height and should have a dense composition, comprising a continuous cover of 75% or more, and must contain a range of age-classes, including seedlings, saplings, young shrubs and mature shrubs. Any trees located within this habitat parcel must not exceed 5m in height. ○ Mixed scrub should contain a mixture of at least three species and should not be dominated by a single species, providing well-developed sheltered edges, with clearings, glades or rides. Any non-native shrub species must make up less than 20% of the scrub. ○ Mixed scrub must present a well-developed edge with a mosaic of scattered scrub, tall grassland and forbs between the scrub and adjacent habitat.
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	○ Planting of invasive species listed in Schedule 9 of the Wildlife and Countryside Act (1981) is discouraged, such as Rhododendron and Gaultheria, as these plants often dominate and outcompete other shrub species, making it difficult for this habitat type to be maintained. Any invasive species present must make up <5% of ground cover. ○ Shrub species to consider include blackthorn, hazel, sea-buckthorn, bramble, hawthorn, willow, alder and birch. ● Creation of modified grassland within the site. The below recommendations will achieve a condition score of “good”. ○ Modified grassland will contain 6-8 vascular plant species per m², including at least 2 forbs. ○ Management will be required to prevent non-target dominant plant species taking over the habitat parcel, as well as to ensure a varied sward height is maintained and bare ground is reseeded. ○ The grassland will have a varied sward height, with at least 20% measuring <7cm and at least 20% measuring >7cm. This provides resource opportunities for wildlife. ○ Bare ground must comprise between 1-10% of the total area of grassland, including localised areas such as rabbit warrens, areas which exceed this will be reseeded. Cover of bracken and scrub must each comprise <20% of the total area of grassland. Evidence of physical damage to the grassland must not exceed 5% of its total area, including damage from machinery use or storage, erosion from high levels of access or damaging management activities. ○ Management of this habitat parcel will be required to ensure the target condition is achieved. As such, access to the habitat parcel must be achieved from the road or similar, without encroaching on any private gardens, for external management to take place. ○ Modified grassland must not contain any invasive non-native species, as listed on Schedule 9 of the Wildlife and Countryside Act (1981). ○ Species to consider for planting include Yorkshire fog, creeping bent, red fescue, perennial ryegrass, cocksfoot, meadow buttercup, creeping buttercup, white campion, red campion, dandelion, chickweed, ox-eye daisy, willowherb, white clover, red clover, ragwort, ribwort plantain, broadleaved dock, smooth hawksbeard, herb robert, cleavers, germander speedwell, cow parsley, birdsfoot trefoil etc.
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Appendix 1: Baseline Habitat Plan



Appendix 2: Proposed Development Plan

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Rev.	Description	Date
HEAL PLANNING APPEALS Hooper Enterprise Associates Ltd St Mary's Place, Shrewsbury, Shropshire. SY1 1DZ. Project: Garage Hillcrest Black Lane, Winthorpe Title: Illustrative Site Plan Date: March 2026 Drawing No: HP-HBL-02 Scale: 1:500 Copyright © 2026 Heal Planning Appeals		

Appendix 3: Headline BNG Results

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-0.78		
	Hedgerow units	-0.08		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-100.00%	Total net gain achieved is less than target set ▲	
	Hedgerow units	-100.00%	Total net gain achieved is less than target set ▲	
	Watercourse units	0.00%		
Trading rules satisfied?		No - Check Trading Summaries ▲		
Area created must match area lost for both onsite and offsite ▲				
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	0.78	0.86	0.86
Hedgerow units	10.00%	0.08	0.08	0.08
Watercourse units	10.00%	0.00	0.00	0.00
				No additional watercourse units required to meet target ✓

Appendix 4: Baseline Habitat Condition Assessment Sheet

Modified grassland condition assessment.

	Criteria Description	Criteria Passed?
A	There are 6-8 vascular plant species per m2 present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	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.	Y
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.	Y
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens). For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.	Y
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Y
		Total 6/7
	Condition Poor due to failing one or more essential criteria.	

Sparsely vegetated land condition assessment.

	Criteria Description	Criteria Passed?
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) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area.	Y
BONUS	There is a complete absence of invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement). Note - this criterion is essential for achieving good condition.	Y
		Total 1/3
	Condition Poor due to passing 1 of 3 criteria and all essential criteria.	

Scattered trees (Group 1) condition assessment.

	Criteria Description	Criteria Passed?
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).	Y
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
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Scattered trees (Group 2) condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	N
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).	Y
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
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	