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Biodiversity Net Gain Assessment

Site Address:

Sussex Topiary, Naldretts Lane, Rudgwick, Horsham, West Sussex RH12 3BU

Client:

Maria Bloxham

Assessment Date:

25th June 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*

Project:

This report is prepared to inform a planning application with the Horsham District Council. The proposal is described as:
Change of use to 4 pitch gypsy site including hard standing and playrooms.

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

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Version Control			
Status	**Issue**	**Name**	**Date**
Draft	0.1	Kelly Clarke (Cert. H.E), Consultant Ecologist	25/06/2025
Reviewed	0.2	Kelly Clarke (Cert. H.E), Consultant Ecologist	04/07/2025
Final	1.0	Kelly Clarke (Cert. H.E), Consultant Ecologist	04/07/2025

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 TQ 08627 32049 and has an area of approximately 0.35ha. The site comprises of modified grassland, gravel and a building. The site is bordered by a line of trees to the north and eastern boundary; amenity grassland borders the southern boundary, and Sussex Topiary campsite to the west. A small collection of residential dwellings and their accompanying vegetated gardens lies 175m northwest of the site. The surrounding area is predominantly rural, characterised by a collection of agricultural fields, mature hedgerows, watercourses, small parcels of woodland and scattered agricultural buildings. Notably, there are several habitats of elevated ecological value nearby, including the Cheohurst Copse Woods, situated approximately 227m southwest of the site boundary which is identified as priority habitat deciduous woodland. Smithwood Copse Woods lies approximately 655m southeast of the site boundary and is a large patch of deciduous and ancient woodland. The site is located on slightly acidic but base-rich loamy and clayey soils with impeded drainage. The bedrock geology is Weald Clay Formation, which is primarily Mudstone.

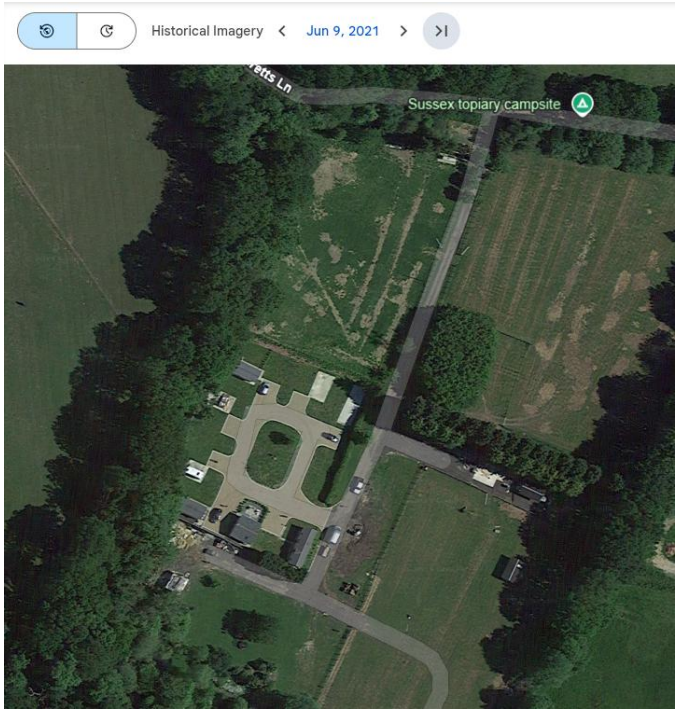
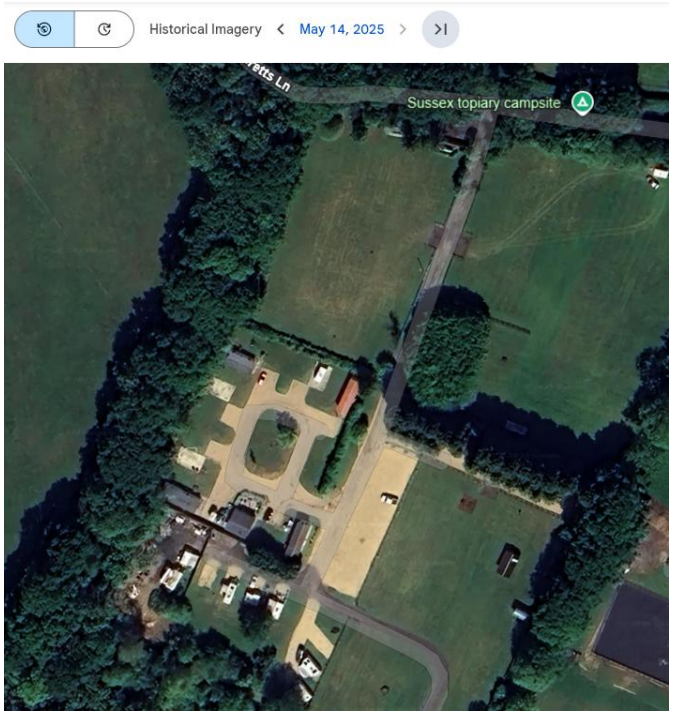
This report should be read in conjunction with the following documents:

- Biodiversity Metric Calculation Tool - Sussex Topriary, RH12 3BU
- PEA-PRA - Sussex Topiary RH12 3BU
- Sussex Topiary Nursery – 1904SU.4 – Location & Block Plan

Executive Summary

- The proposal generates a net gain of area-based habitat units (+10%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024) as a minimum biodiversity net gain of +10% was achieved.
- All trading conditions have been satisfied.
- 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.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	25th May 2025
	The baseline biodiversity value of the site is based on conditions observed during the Preliminary Ecological Appraisal conducted by Arbtech Consulting Ltd, 2025. Satellite imagery from Google Earth, dated 9th June 2021 and 14th May 2025, shows evidence of habitat degradation in the western portion of the site, resulting from the installation of a gravel parking area. However, it is understood that this development was approved under a previous planning scheme. Consequently, the baseline biodiversity value is assessed based on the site's current condition at the time of the appraisal and is not applied retrospectively.  
Irreplaceable Habitat Statement	No irreplaceable habitats as listed under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024) are currently present nor were present before 30th January 2020.	

<table>
<tr><td>Metric Version & Publication Date</td><td colspan="3">Statutory Biodiversity Metric Calculation Tool first published 29th November 2023, with last updates to metric tools and user guides on 23rd July 2024.</td></tr>
<tr><td>BNG Target Uplift</td><td colspan="3">+10%</td></tr>
<tr><td>National Character Area (NCA)</td><td colspan="3">121 - Low Weald</td></tr>
<tr><td rowspan="3">Strategic Significance</td><td colspan="3">West Sussex County Council, the responsible authority for drafting the Local Nature Recovery Strategy (LNRS) for Horsham District Council, has yet to adopt a comprehensive LNRS. As such the following documents were used to determine strategic significance:
Horsham District Planning Framework
Horsham District Nature Recovery Network</td></tr>
<tr><td>Habitat</td><td>Baseline / Post-Development</td><td>Justification</td></tr>
<tr><td>N/A</td><td>N/A</td><td>N/A</td></tr>
<tr><td colspan="4">Limitations</td></tr>
<tr><td colspan="4">There were no specific limitations to the assessment.</td></tr>
</table>

Baseline

Baseline Biodiversity Value: On-Site				
Area-Based Habitats (A-1)				
Habitat	**Area (ha)**	**Description**	**Condition Assessment**	**Strategic Significance**
Urban: Developed land, sealed surface	0.003ha	There is a timber stable building on site.	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
Urban: Artificial unvegetated, unsealed surface	0.118ha	Several areas of artificial unvegetated, unsealed surface are present across the site. These include the access track and the western section of the site, which are predominantly gravel and serve as parking areas for campsite guests. A small gravel track is also located in the southern part of the site, providing access for caravans entering the camping field. Additionally, a designated children's play area is situated within the grassland, featuring a swing set and slide, and is primarily covered with bark.	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
Grassland: Modified grassland	0.339ha	The majority of the site comprises frequently mown modified grassland, which is currently in use as a campsite. Historically, the grassland is known to have been regularly grazed by horses. The sward was approximately 5cm in height across the entire habitat parcel, and species composition was low, with 3 species per square metre observed. Species comprise **dominant** Perennial ryegrass *Lolium perenne*, Rough meadow grass *Poa trivialis*, **abundant** Yorkshire fog *Holcus lanatus* and Creeping buttercup *Ranunculus repens*. **Frequent** Common dandelion *Taraxacum officinale*, **occasional** Self-heal *Prunella vulgaris*, White clover *Trifolium repens*, Broadleaf plantain *Plantago major* and **rare** Dock *Rumex agg*.	**Poor**: passes 5 of 7 criteria, excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	**Low** Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).

Post-Development

Post-Development Biodiversity Value: On-Site					
Area-Based Habitats					
	Habitat	**Area (ha)**	**Description**	**Condition Assessment**	**Strategic Significance**
Retained (A-1)	**Urban:** Artificial unvegetated, unsealed surface	0.105ha	The main access track to the site is to be retained in full.	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
Created (A-2)	**Urban:** Developed land, sealed surface	0.048ha	Creation of caravan pitches and playrooms.	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
	Urban: Artificial unvegetated, unsealed surface	0.093	Creation of access and parking areas.	Habitat condition pre-determined as '***N/A***' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low** Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
	Grassland: Modified grassland	0.036	Creation of amenity grassland within the centre of the site.	**Poor**: passes 5 of 7 criteria, excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	**Low** Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
	Grassland: Modified grassland	0.177	Creation of modified grassland around the edges of the site and caravan pitches.	**Moderate**: passes 5 of 7 criteria, excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type	**Low** Strategic Significance Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).

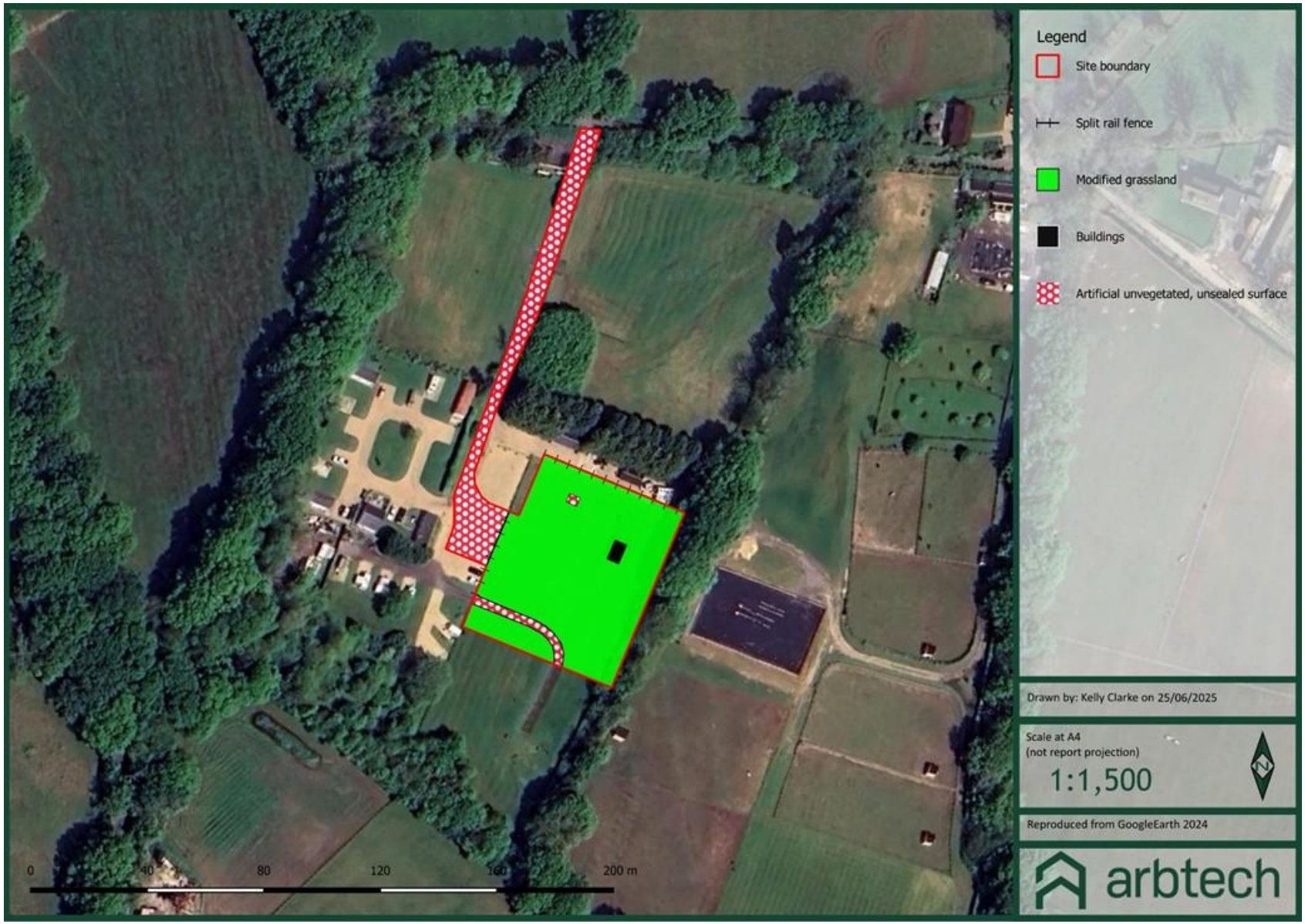
Change of Biodiversity Value

Biodiversity Units				
		Area-Based	**Linear-Based**	**Watercourse-Based**
On-Site	Baseline	• Developed land; sealed surface (no value) • Artificial unvegetated, unsealed surface (no value) • Modified grassland in poor condition (0.68 units)	N/A	N/A
	Post-Development	• Developed land; sealed surface (no value) • Artificial unvegetated (no value) • Individual trees of moderate condition (0.06 units) • Modified grassland in poor condition (0.07 units) • Modified grassland in moderate condition (0.61 units)		
	Unit Net Change	**+0.07**		
Overall Net Change		**+10%**		

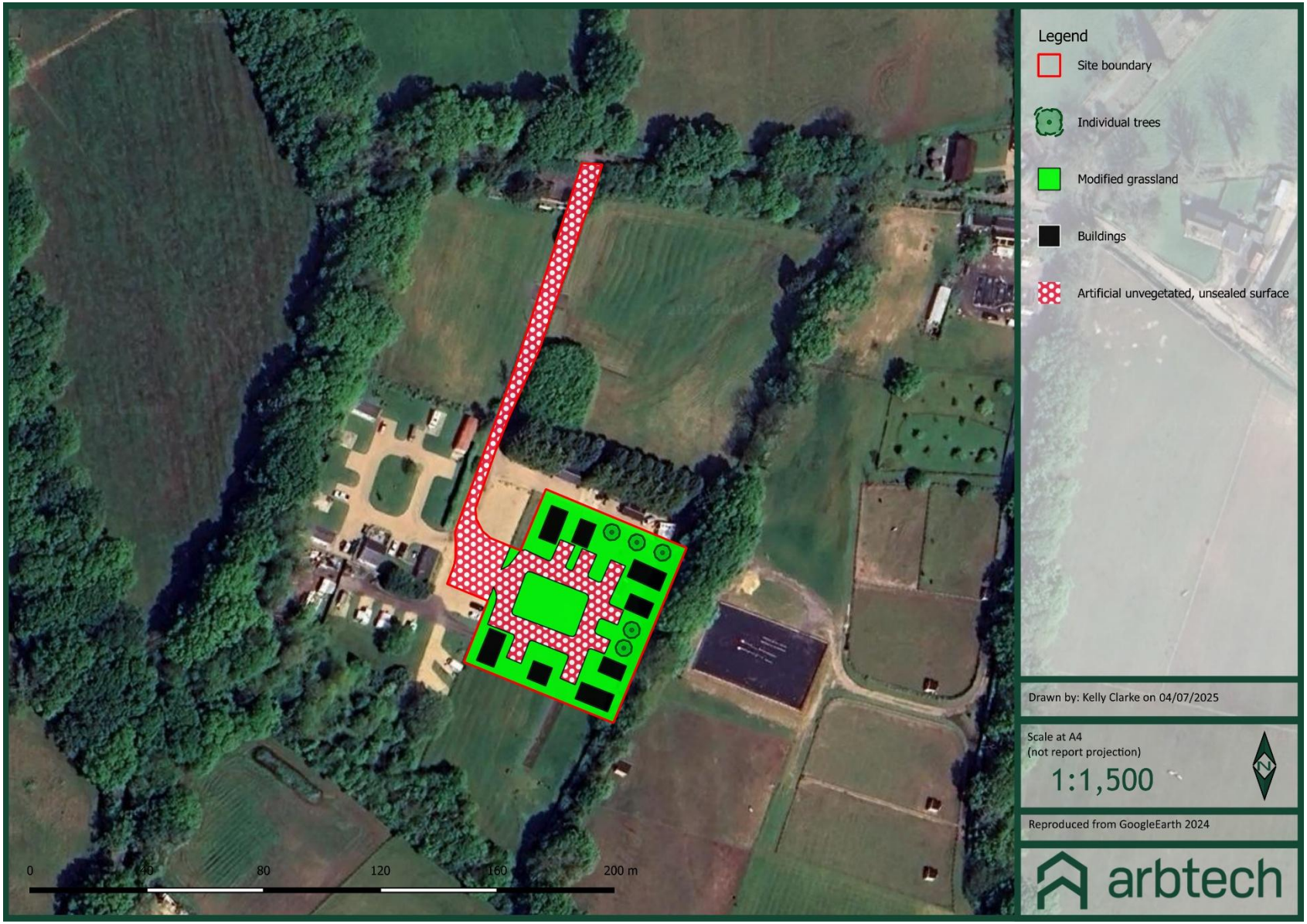
Results, Discussion, and Next Steps

BNG Informative	
Results and Next Steps	The current landscaping proposal generates a net gain of area-based habitat units (+10%). As such, the proposed development is compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024; Horsham District Planning Framework) as a minimum biodiversity net gain of +10% was achieved for both area-based habitat units. All trading conditions have been satisfied. 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 Minimisation	Retaining the modified grassland on site is considered unfeasible during the construction phase of the development.
Mitigation	To address the loss of the modified grassland in poor condition, it is proposed to create 0.177ha of modified grassland in good condition. Additionally, it is proposed to plant 5 native trees to create the required units to achieve a net gain on site.
Offset	N/A: Net gain achieved within the red line boundary.

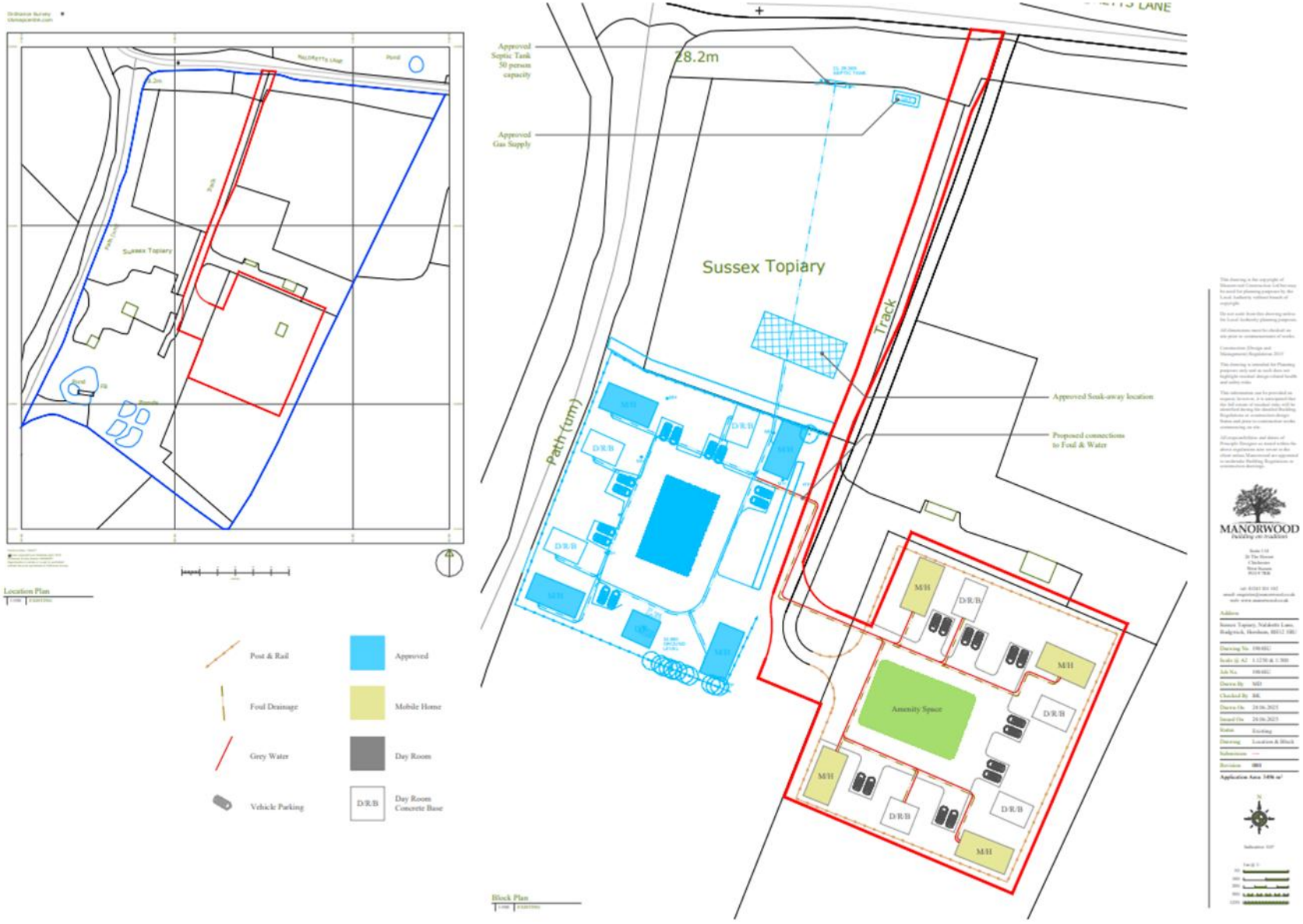
Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan

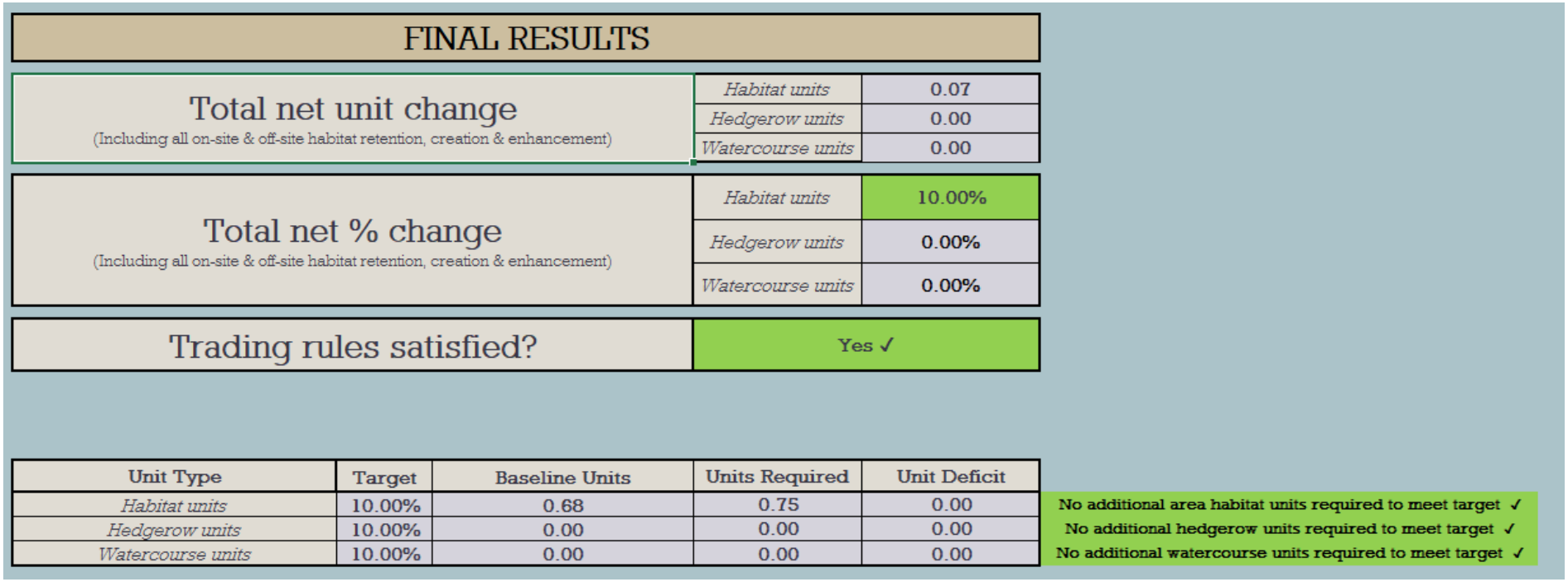


Appendix 3: Proposed Development Plan



Appendix 4: Headline BNG Results

The Defra Statutory Biodiversity Metric is provided as a separate excel spreadsheet.



FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.07
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	10.00%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	0.68	0.75	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.00	0.00	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Modified Grassland Condition Assessment

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.**	No	3 species per square metre
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.	No	Sward height uniform
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present).	Yes	Less than 20%
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.	Yes	Less than 5% physical damage
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	Less than 10%
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Yes	Less than 20%
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	No invasive species
		Essential criterion achieved (Yes or No)	No
		Number of criteria passed	5

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)	✓

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Modified Grassland Condition Assessment (Poor)

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.**	No	3 species per square metre
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.	No	Sward height uniform
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present).	Yes	Less than 20%
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.	Yes	Less than 5% physical damage
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	Less than 10%
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Yes	Less than 20%
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	No invasive species
		Essential criterion achieved (Yes or No)	No
		Number of criteria passed	5

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)	✓

Modified Grassland Condition Assessment (Moderate)

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.**	Yes	At least 6 species

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.	No	Sward height expected to be uniform
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present).	Yes	Less than 20%
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.	No	More than 5%
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	Less than 10%
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Yes	Less than 20%
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	No invasive species
		Essential criterion achieved (Yes or No)	No
		Number of criteria passed	5

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)	

Individual Trees Condition Assessment

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).	Yes	All 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).	Yes	Automatic pass
C	The tree is mature (or more than 50% within the block are mature)[1].	Yes	Trees are mature
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.	No	Some impact on tree health anticipated

E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No	No ecological niches
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	More than 20%
	Number of criteria passed	4	

Condition Assessment Result (out of 6 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**
Passes 5 or 6 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	✓
Passes 2 or fewer criteria	Poor (1)	