

PROPOSED CAMPING PITCHES AT LAND NORTH- WEST OF THE CHESTNUTS, GLENSIDE SOUTH, PINCHBECK



BIODIVERSITY NET GAIN REPORT

FINAL

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Report ref: P2025-24 R2 Draft

Date: 02/07/2025

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DOCUMENT HISTORY				
Project reference: 2025-24 R2		Document title: Biodiversity Net Gain Report		
Revision	Status	Originated	Reviewed	Date
Rev. 1	Draft	Polly Godfrey	Naomi Parker	02/07/2025
Rev. 2	Final	Polly Godfrey	Philip Parker	10/07/2025

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1.0 EXECUTIVE SUMMARY

- 1.1 Biodiversity net gain is the name given to a process of biodiversity offsetting whereby any habitat loss caused by a new development is mitigated to ensure that there is an overall increase in biodiversity post-development. As part of the initial development plans, developers are increasingly required to demonstrate that biodiversity net gain can be achieved. To establish the best way to protect the habitats on site, a metric is used. To achieve biodiversity net gain, developers must show evidence that a development will increase the biodiversity value of a site. This statistic is presented in the value of a biodiversity net gain metric called 'biodiversity units'. The 10% net gain requirement in England became compulsory from the 12/02/2024 for larger developments and from the 02/04/2024 for small sites.
- 1.2 To accompany the planning application for the construction of camping pitches and managers buildings at land north-west of the Chestnuts, Glenside South, Pinchbeck, a Biodiversity Net Gain (BNG) report has been prepared. The field survey was undertaken at the site by principal ecologist Philip Parker and project ecologist Polly Godfrey of Philip Parker Associates Ltd on the 11/03/2025. An update survey was undertaken on the 06/06/2025 by project ecologist Polly Godfrey during the optimum time period for flora to ensure the habitat was still the same.
- 1.3 The statutory biodiversity net gain metric was used to calculate the baseline and proposed habitats.
- 1.4 Table 1 below shows the change of all unit categories on site.

Table 1 **Summary table of net unit change**

Category	Baseline units	Proposed Units	Change in units
Habitat	3.80	4.60	+21.04%
Hedgerow	0.23	0.43	+88.09%
Watercourse	0.0	0.0	N/A

2.0 INTRODUCTION

- 2.1 Peter Humphrey Associates are preparing a planning application for the for the construction of camping pitches and managers buildings on land north-west of the Chestnuts, Glenside South, Pinchbeck. The Biodiversity Net Gain Assessment will accompany the application to the local planning authority, South Holland District Council.
- 2.2 The following report includes the findings of the surveys and has been prepared following guidance in the Biodiversity Net Gain Report and Audit Templates prepared by the Institute of Ecology and Environmental Management (CIEEM) (2021).
- 2.3 The BNG assessment will estimate the anticipated net gain provided by the development with the information available at the time of this report's production. The biodiversity net gain calculations can only provide an assumption for the future biodiversity change on and off site.

3.0 METHODOLOGY

HABITAT BASELINE

- 3.1 The field survey was conducted on the 11/03/2025 by principal ecologist Philip Parker and project ecologist Polly to assess the baseline habitats and habitat conditions on site. An update survey was undertaken by project ecologist Polly Godfrey on the 06/06/2025 to undertake a survey of the grassland in the optimum time period.
- 3.2 The habitats present within the red line boundary were recorded on site using the UK Habitat Classification. All habitats and their area of coverage were subsequently mapped using QGIS mapping software.
- 3.3 Calculations were undertaken using the Statutory Biodiversity Metric Calculation Tool. The habitat plan formulated with QGIS software was used to calculate the habitat baseline and to measure each component area.

HABITAT SCORE

- 3.4 The following habitat scores and areas are used to calculate the units provided by each habitat area.
- **Distinctiveness**
The distinctiveness is already assigned by the metric to each habitat and was calculated using national records of occurrence and rarity of each habitat.
 - **Condition assessment**
Whilst on site, a condition assessment was undertaken on the habitats present to determine their quality. The condition sheets list indicators which need to be met before a habitat can reach the threshold for each habitat condition.
 - **Strategic significance**
The strategic significance of the site is determined by the site's connectivity and significance and gives additional value to habitats which are in preferred locations. The strategic significance uses local biodiversity plans and designations to identify priority habitats.
- 3.5 **Limitations**
Habitat areas (pre-development) have been measured using QGIS mapping which uses aerial positioning. The positioning is not always completely accurate but any differences in area will be small and will not significantly impact on the overall score.

4.0 BASELINE CONDITIONS

- 4.1 The habitats listed below were recorded within the application site and as such, have been included within the on site baseline assessment. See Drawing D1 for extent and location of habitat. For condition assessment results, see Appendix B.
- 4.2 This report follows the BNG guidance for sites where on site habitat degradation (degradation occurred over winter 2024/2025) has occurred, this is as follows;

'Within Schedule 14 of the Environment Act, measures have been included to take note of any habitat degradation or deliberate destruction undertaken on a site since 30th January 2020, and to take the earlier habitat state as the baseline for the purposes of biodiversity net gain'.

ON SITE HABITAT

Modified grassland (G1, G2, G3)

- 4.3 The grassland was largely located within the centre of the site, with an additional two small sections (G2, G3) present off the access track. Within Grassland G1, some clearance had occurred around the pond as part of previous works. As a good portion of the grassland remained present the condition assessment was completed on the remaining area. Grassland G2 and G3 had been removed to make the site accessible for vehicles, therefore the condition assessment could not been undertaken. On this basis, a worst-case scenario of good condition has been awarded.



Figure 1 – Modified grassland viewed from the west of the site



Figure 2 – Modified grassland viewed from the north of the site.

- 4.4 **Condition score:** The modified grassland G1 was in a **poor** condition, whilst grassland sections G2 and G3 were awarded **good** condition.
- 4.5 **Strategic significance:** The modified grassland was deemed **not to occur in a local strategy area but does occur in an ecologically significant location** due to the potential to support foraging amphibians if using the local waterbodies for breeding.

Mixed scrub (S1 and S2)

- 4.6 Two areas of mixed scrub were present on site. They contained a range of native species with ivy *Helix hedera* colonising most of the plants present.



Figure 3 – Mixed scrub present within the south-western corner of the site.

- 4.7 **Condition score:** The mixed scrub was in **moderate** condition.
- 4.8 **Strategic significance:** The mixed scrub did not occur in a **local strategy area but was deemed to be in an ecological significant location** due to it possibly supporting a range of nesting birds and could act as hibernation areas for amphibians if they are present within the area.

Ponds (non-priority) (P1)

- 4.9 One large pond was present centrally in the site. This had been dredged recently due to the overgrowth of vegetation. The pond had been stocked with fish.



Figure 4 – Large pond located centrally on site.

- 4.10 **Condition score:** The pond was in **poor** condition.
- 4.11 **Strategic significance:** The pond did not occur in a **local strategy but was deemed in ecologically desirable location** due to its potential in supporting protected amphibians (albeit the presence of fish can in instances dissuade amphibians from occurring).

Individual trees - Rural (T1)

- 4.12 One large apple *Malus sp* tree was present on site, located just south of the pond.



Figure 5 – Large apple tree present south of the pond

- 4.13 **Condition score:** The individual tree was in **good** condition.
- 4.14 **Strategic significance:** The individual tree did not occur in a **local strategy and was not in an ecologically desirable location** due to the unlikeness to support protected species.

Individual trees- Rural (T2 to T7)

- 4.15 A number of trees were present on site. Two small (T4, T5), three medium (T2, T3, T6) and one large (T7).



Figure 6 – T4, T5 and T6 clustered together

- 4.16 **Condition score:** The individual trees were in **moderate** condition.
- 4.17 **Strategic significance:** The individual trees did not occur in a **local strategy** and were not in **ecologically desirable location** due to the unlikeness to support protected species.

Native hedgerow (H1)

- 4.18 A small section of native hedgerow was present along the western boundary of the site.
- 4.19 **Condition score:** The hedgerow was in **moderate** condition.
- 4.20 **Strategic significance:** The hedgerow occurred in a **local strategy** as it is a biodiversity action plan habitat for Lincolnshire.

BASELINE HABITATS ON SITE

- 4.21 Table 2 below shows the baseline habitats.

Table 2 The baseline habitat units on site

Habitat type	Description	Area (ha)	Distinctiveness	Habitat units	Area to be lost/enhanced or retained
On site					
Grassland	Modified grassland	0.56	Low	1.47	0.26ha retained

Habitat type	Description	Area (ha)	Distinctiveness	Habitat units	Area to be lost/enhanced or retained
Lakes	Pond (non-priority)	0.16	Medium	0.7	All retained
Heathland and scrub	Mixed scrub	0.099	Medium	0.43	0.0814ha
Individual trees	Rural trees	0.13	Medium	1.18	All retained
Total		0.82ha (excluding individual trees)		3.80 units	

Table 3 The baseline hedgerow units on site

Hedgerow type	Description	Length(km)	Distinctiveness	Hedgerow units	Length to be lost/enhanced or retained
On site					
Hedgerow	Native hedgerow	0.057	Low	0.26	All retained
Total		0.057km		0.26 units	

5.0 PROPOSED BIODIVERSITY NET GAIN

- 5.1 The habitats and areas noted in Section 5 below are based on the current development plan provided by Peter Humphrey Associates. See Drawing D2 for proposed locations of habitat.

ON SITE

HABITAT CREATION

Artificially unvegetated, unsealed surface (U1)

- 5.2 A new access track will be created and will comprise of gravel.
- 5.3 **Condition assessment: N/A**
- 5.4 **Strategic significance:** The proposed artificially unvegetated, unsealed surface will not be in a local strategy or in an ecologically desirable location.
- 5.5 **Temporal modifier:** The artificially unvegetated, unsealed surface will be created within 1 year of the development commencing therefore it will score a 0 in the metric

Developed land, sealed surface (U2)

- 5.6 The new buildings will be constructed on concrete bases.
- 5.7 **Condition assessment: N/A**
- 5.8 **Strategic significance:** The proposed developed land, sealed surface will not be in a local strategy or in an ecologically desirable location.
- 5.9 **Temporal modifier:** The developed land, sealed surface will be created within 1 year of the development commencing therefore it will score a 0 in the metric

Other neutral grassland (G4)

- 5.10 An area of other neutral grassland will be created around the pond and centrally on the site. This will be located around the camping pitches to provide an aesthetically pleasing landscape and benefit local wildlife.

5.11 **Condition assessment: Moderate**

The proposed neutral grassland to be sown is to achieve a moderate habitat condition by meeting the following criteria;

- Planted with a suitable seed mix to achieve the appearance and composition to match the neutral grassland habitat type (UKHAB definition)
- Any bare patches will be reseeded
- Mowing will reduce the chance of bracken growing
- Mowing will reduce the occurrence of non-native species appearing in grassland.

5.12 **Strategic significance:** The proposed neutral grassland does **not occur in a local strategy area but was deemed to be in an ecological significant location** due to potential for amphibians and other species present on site to use the grassland to forage.

5.13 **Temporal modifier:** The neutral grassland will be sown within 1 year of the development commencing therefore it will score a 0 in the temporal modifier column.

Individual trees (T8 to T37)

5.14 Thirty small trees will be planted in the new and existing grassland on site.

5.15 **Condition assessment: Moderate**

The proposed individual trees are to be planted to achieve a moderate habitat condition by meeting the following criteria;

- Native species – following a planting scheme recommended by Philip Parker Associates Ltd
- Canopy continuous (individual trees automatically pass this criteria)
- Little or no evidence of an adverse impact caused by anthropogenic activities (vandalism or herbicide use). There is no current pruning regime so trees will reach over 75% of their expected canopy for age and height. This will be achieved by only pruning where necessary such as tree/limbs dangerous for people's safety.
- The trees will oversail more than 20% vegetation beneath the canopy

5.16 **Strategic significance:** The proposed tree planting will **not be in a local strategy or in a location which is ecologically desirable** due to the trees being isolated from similar habitat with limited direct connectivity to off site habitat.

5.17 **Temporal modifier:** The new trees will be planted within 1 year of the development occurring therefore they will score a 0 in the metric.

Mixed scrub (S3)

5.18 A small area of mixed scrub will be planted within the proposed grassland to create diversity of habitats on site of which would benefit a range of wildlife.

5.19 **Condition assessment: Moderate**

The proposed mixed scrub to be created is to achieve a moderate habitat condition by meeting the following criteria;

- Planted with a suitable range of native species to achieve the appearance and composition to match the mixed scrub (UKHAB definition)
- Regeneration will allow a range of ages to occur
- The scrub will be within the other neutral grassland so will have a well developed edge.

5.20 **Strategic significance:** The proposed mixed scrub does **not occur in a local strategy area but was deemed to be in an ecological significant location** due to potential for amphibians and other species present on site to use the habitat to forage/nest in.

5.21 **Temporal modifier:** The mixed scrub will be sown within 1 year of the development commencing therefore it will score a 0 in the temporal modifier column.

Species-rich native hedgerow (H2)

5.22 A species-rich native hedgerow will be planted centrally on site to separate the managers quarters from the camping plots.

5.23 **Condition assessment: Moderate**

The proposed hedgerow to be created is to achieve a moderate habitat condition by meeting the following criteria;

- The hedgerow will be double planted to achieve a depth greater than 1.5m
- The management will include regular trimmings to ensure that the hedgerow thickens at its canopy and base.
- A suitable stand-off will be allowed from works to prevent damage to the hedgerow
- Any invasive species that are noted will be removed.

5.24 **Strategic significance:** The proposed hedgerow will be **in a local strategy** as it's a biodiversity action plan habitat for Lincolnshire.

5.25 **Temporal modifier:** The hedgerow will be planted within 1 year of the development commencing, therefore it will score a 0 in the metric.

Table 4 Proposed areas of on site habitat creation

Broad habitat category	Proposed habitat	Area (ha)	Distinctiveness	Units gained
On site				
Grassland	Other neutral grassland	0.16	Medium	1.18
Individual trees	Rural trees	0.122	Medium	0.37
Heathland and scrub	Mixed scrub	0.03	Medium	0.22
Urban	Artificially unvegetated, unsealed surface	0.1116	Very low	0.0
Urban	Developed land, sealed surface	0.0166	Very low	0.0
Total		0.32ha (excluding individual trees)		1.77 units

Table 5 Net habitat area and unit change

Habitat Baseline	Area (ha)	Units	Proposed	Area (ha)	Units
On site					
Modified grassland	0.56	1.47	Retained	0.26	0.57
Pond (non-priority)	0.16	0.7	Retained	0.16	0.7
Mixed scrub	0.099	0.43	Retained Created	0.814 0.03	0.36 0.22
Rural trees	0.13	1.18	Retained Created	0.13 0.122	1.18 0.37
			Other neutral grassland	0.16	1.18
			Artificially unvegetated unsealed surface	0.1116	0.0
			Developed land, sealed surface	0.0166	0.0
Total	On site 0.82ha	On site 3.80 Units	Total	On site 0.32ha	On site 4.60 Units

Table 6 The proposed hedgerow creation on site

Hedgerow type	Description	Length (km)	Distinctiveness	Hedgerow units
Hedgerow	Species-rich native hedgerow	0.03	Medium	0.23
Total		0.03km		0.23 units

Table 7 Net habitat hedgerow and unit change

Hedgerow Baseline	Length (km)	Units	Proposed	Length (km)	Units
On site					
Native hedgerow	0.057	0.26	Retained	0.057	0.26
			Species-rich native hedgerow	0.03	0.23
Total	On site 0.057km	On site 0.26 units		On site 0.087km	On site 0.49units

6.0 PROPOSED HABITAT DESIGN

6.1 This section includes mitigation and enhancement works which can occur on site but cannot be included within the metric and therefore it does not gain any credit within the Biodiversity Net Gain Metric.

6.2 Bat boxes

The following will be installed as enhancement;

- Nine bat boxes will be mounted on trees within the woodland outside of the red line boundary. The boxes should be positioned as high as possible, away from the influence of lighting.

6.3 Bird boxes

The following will be installed as enhancements;

- Six bird boxes to be installed on suitable trees within the woodland, outside of the red line boundary
- Barn owl *Tyto alba* box to be erected onto a pole
- The bird boxes should face an eastern or northern orientation.

7.0 CONCLUSION

- 7.1 The table below shows the baseline units, the proposed habitat creation units, and the percentage change of units;

Table 8 Summary table of net unit change

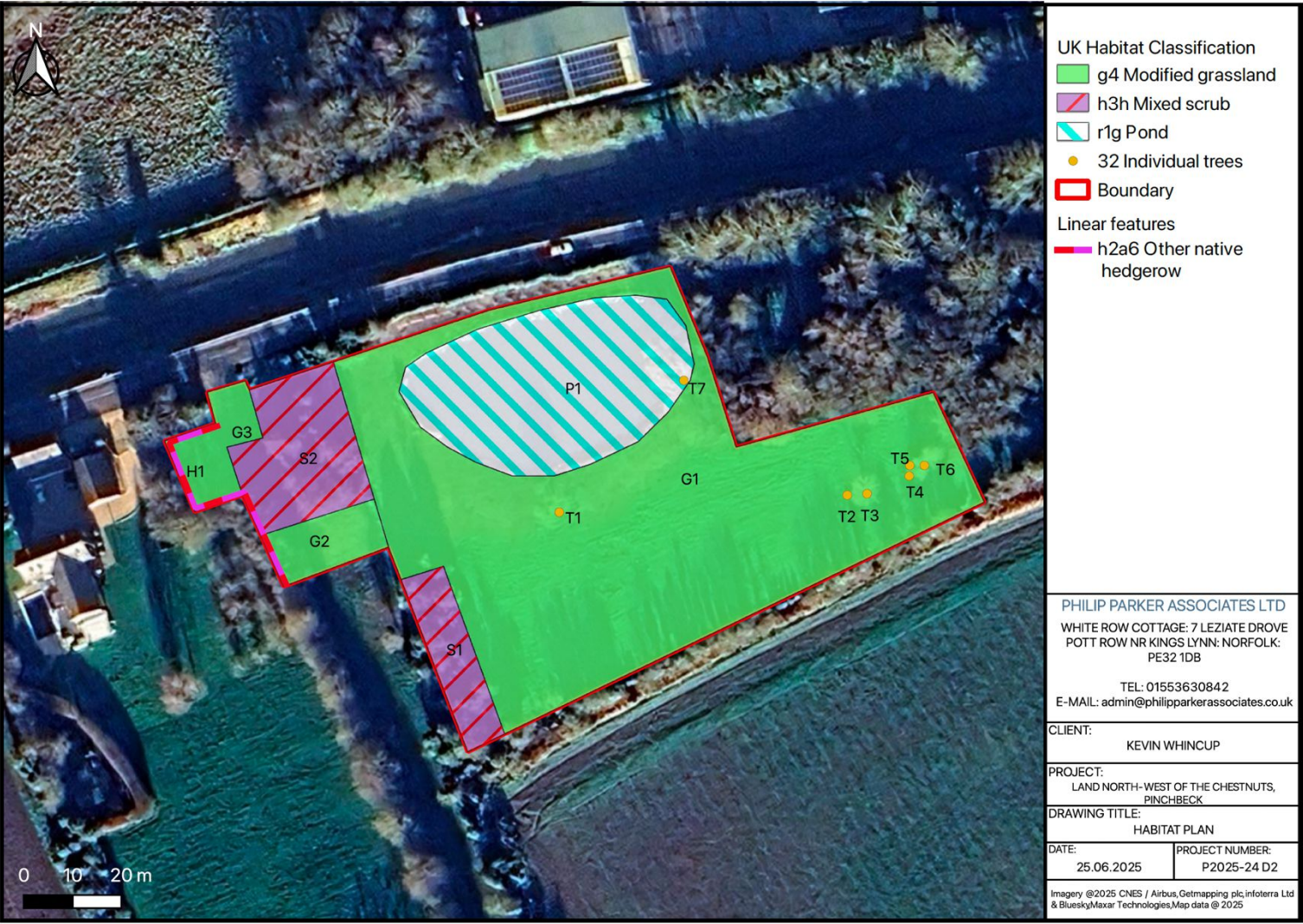
Category	Baseline units	Proposed Units	Change in units
Habitat on site	3.80	4.60	+21.04%
Hedgerow	0.23	0.43	+88.09%
Watercourse	0.0	0.0	N/A

- 7.2 The habitat creation on site produces a positive change in habitat units on site.
- 7.3 The hedgerow planting created a positive net change in hedgerow units on site
- 7.4 There are no qualifying ditches or rivers within 5m or 10m of the site respectively.
- 7.5 The habitat type, condition and size as set out in this report must be achieved to reach 10% on the site. This will be secured with a habitat management and monitoring report, plus subsequent monitoring visits by ecologists.
- 7.6 This report is based on the site visit undertaken on the 06/06/2025. This report presents a true reflection of habitats present and wildlife usage on the site at the time of the survey and remains valid for a period of 12 months from the date of this report.

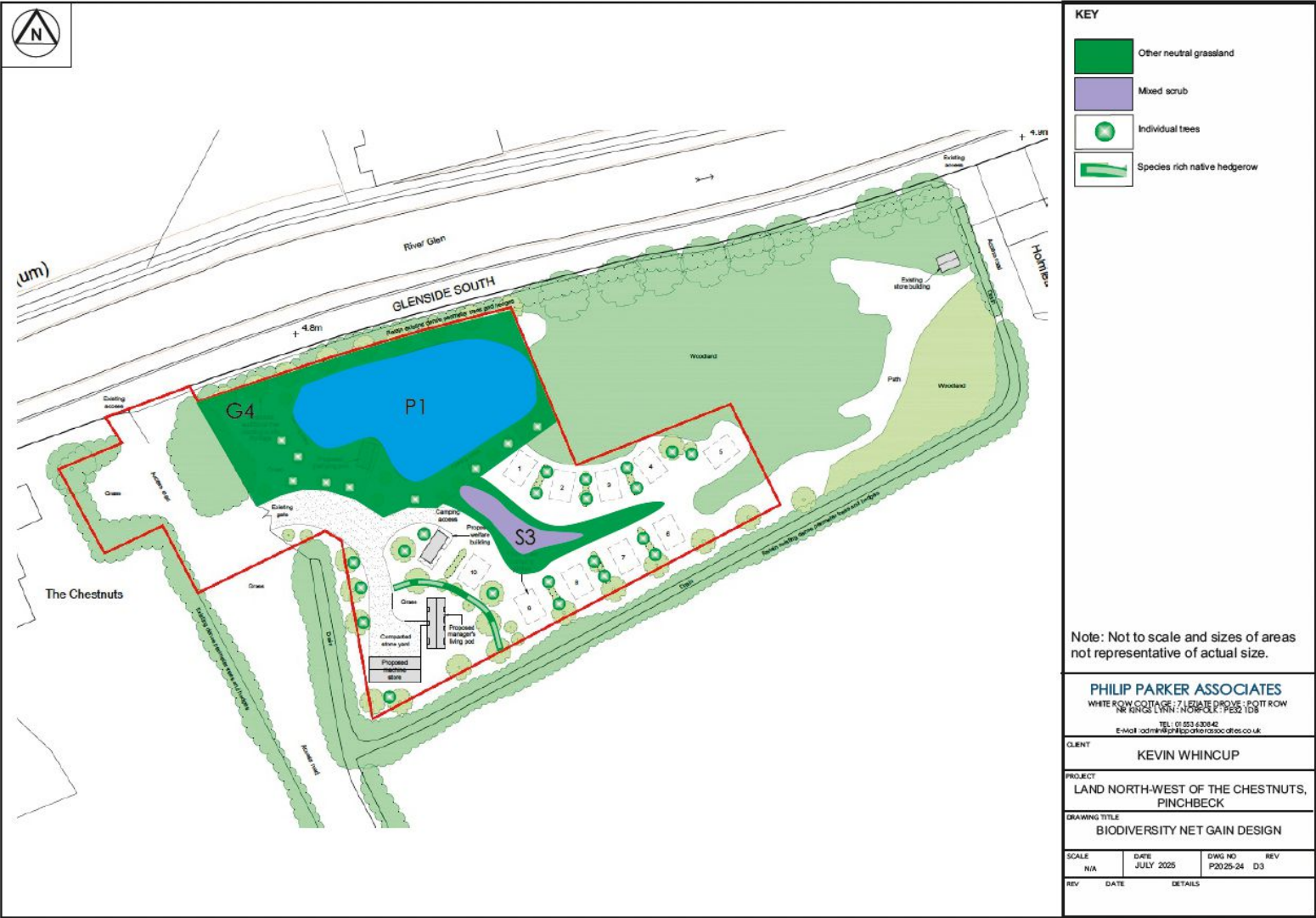
8.0 REFERENCES

- **Butcher,B., Carey, P., Edmonds, R., Norton, L., Treweek, J., 2020.** *UK habitat classification – Habitat Definitions V1.1*
- **CIEEM (2018).** Guidelines for ecological impact assessment in the UK and Ireland – Terrestrial, freshwater, coastal and marine.
- **CIEEM (2021).** Biodiversity Net Gain Report and Audit Templates Chartered Institute of Ecology and Environmental Management, Winchester, UK.
- **Gurnell, A., Shuker, L., (2022).** The MORPH survey: Technical reference manual 2022.
- **Natural England, (2023).** The Biodiversity Statutory Metric – Calculation tool
- **Natural England, (2023b).** The Biodiversity Statutory Metric – Users guide

DRAWING D2 BASELINE HABITAT PLAN



DRAWING D3 BIODIVERSITY NET GAIN DESIGN



APPENDIX A CALCULATIONS – HEADLINE RESULTS

Land north-west of the Chestnuts, Glenside South

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Headline Results

Scroll down for final results ↴

On-site baseline	Habitat units	4.23	
	Hedgerow units	0.23	
	Watercourse units	0.00	
On-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	4.95	
	Hedgerow units	0.43	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	0.72	16.99%
	Hedgerow units	0.20	88.09%
	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.72	
	Hedgerow units	0.20	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS

Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.72
	Hedgerow units	0.20
	Watercourse units	0.00
Total net % change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	16.99%
	Hedgerow units	88.09%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	4.23	4.66	0.00
Hedgerow units	10.00%	0.23	0.25	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional area habitat units required to meet target ✓

No additional hedgerow units required to meet target ✓

No additional watercourse units required to meet target ✓

APPENDIX B CONDITION ASSESSMENTS

Modified grassland. G2 and G3 do not have a condition assessment as good condition has been presumed due to the habitat having not been surveyed.

Condition assessment for modified grassland

Criteria for modified grassland		Criteria achieved (Y/N)
		G1
1	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.	N
2	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
3	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
4	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
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Y
6	Cover of bracken less than 20%.	Y
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y

Table 7 Condition assessment result

Score criteria	Score
Passes 6 or 7 of 7 criteria including passing essential criterion 1	Good
Passes 4 or 5 of 7 criteria including passing essential criterion 1	Moderate
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion 1	Poor

Mixed scrub

Condition assessment for mixed scrub

Criteria for mixed scrub		Criteria achieved (Y/N)
		S1, S2
1	Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species	Y

	comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be up to 100% cover)	
2	There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs.	N
3	There is an absence of invasive non-native species (as listed on schedule 9 of WCA, 1981) and species indicative of sub-optimal conditions make up less than 5% ground cover	Y
4	The scrub has a well-developed edge with scattered scrub and tall grasses or herbs present between the scrub and adjacent habitat.	N
5	There are clearings, glades or rides present within the scrub, providing sheltered edges	N

Table 16 Condition assessment results

Score criteria	Score
Passes 5 of 5 criteria	Good
Passes 3 or 4 of 5 criteria	Moderate
Passes 0, 1, 2 of 5 criteria	Poor

Native Hedgerow

Condition assessment of hedgerow

Criteria for hedgerow				Criteria achieved (Y/N)
				H1
A1	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).	Y
A2	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (e.g. blackthorn suckers) are only included in the width estimate when they >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice⁴).	Y

Criteria for hedgerow				Criteria achieved (Y/N)
				H1
B1	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	This is the vertical gappiness of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	N
B2	Gap - hedge canopy continuity	Gaps make up <10% of total length and No canopy gaps >5 m	This is the horizontal gappiness of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall gappiness, but are not subject to the >5 m criterion (as this is the typical size of a gate).	Y
C1	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow, and - is present on one side of the hedge (at least)	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be present for at least 90% of the hedgerow length, greater than 1m in width and must be present along at least one side of the hedge. This criterion recognises the value of the hedge base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	N
C2	Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	The indicator species used are nettles (<i>Urtica</i> spp.), cleavers (<i>Galium aparine</i>) and docks (<i>Rumex</i> spp.). Their presence, either singly or together, should not exceed the 20% cover threshold.	N
D1	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and	Neophytes are plants that have naturalised in the UK since AD 1500. For information on neophytes see the JNCC website and for information on invasive non-native species see the GB Non-Native Secretariat website.	Y

Criteria for hedgerow				Criteria achieved (Y/N)
				H1
		neophyte species		
D2	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).	Y

Condition assessment result

Score criteria	Score
"No more than 2 failures in total; AND No more than 1 in any functional group."	Good
"No more than 4 failures in total; AND Does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & C2 = Moderate condition)."	Moderate
"Fails a total of more than 4 attributes; OR Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition)."	Poor

Individual tree

Condition assessment for individual trees

Criteria for individual trees		Criteria achieved (Y/N)	
		T1	T2 to T7
A	The tree is a native species (or at least 70% within the block are native species).	Y	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	Y
C	The tree is mature (or more than 50% within the block are mature).	Y	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y	N

Criteria for individual trees		Criteria achieved (Y/N)	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Y

Table 10 Condition assessment results

Score criteria	Score
Passes 5 or 6 criteria	Good
Passes 3 or 4 of 6 criteria	Moderate
Passes 0, 1 or 2 of 6 criteria	Poor

Condition assessment for pond

Criteria for pond		Criteria achieved (Y/N)
1	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	Y
2	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	N
3	Less than 10% of the water surface is covered with duckweed Lemna spp. or filamentous algae.	Y
4	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	N
5	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams, pumps or pipework.	N
6	There is an absence of listed non-native plant and animal species ³ .	Y
7	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	N
Additional Criteria – Must be assessed for all non-woodland ponds		
8	Emergent, submerged or floating plants (excluding duckweed) ⁴ cover at least 50% of the pond area which is less than 3 m deep.	N
9	The pond surface is no more than 50% shaded by adjacent trees and scrub.	Y

Condition assessment results (non-woodland ponds)

Score criteria	Score
Passes 9 criteria	Good
Passes 6 to 8 criteria	Moderate
Passes 5 or fewer criteria	Poor

APPENDIX C SPECIES LIST FOR EACH HABITAT GROUP

Modified grassland

The grass species included Yorkshire fog *Holcus lanatus*, perennial rye *Lolium perenne*, annual meadow grass *Poa annua* and cock's-foot *Dactylis glomerata*. Dominant herb species included broad leaved dock *Rumex obtusifolius*, spear thistle *Cirsium vulgare*, cleavers *Galium aparine*, groundsel *Senecio vulgaris*, petty spurge *Euphorbia peplus*, hogweed *Heracleum sphondylium*, creeping buttercup *Ranunculus repens*, nettle *Urtica dioica*, white clover *Trifolium repens* and daisy *Bellis perennis*.

Individual trees

Established trees on site include apple *Malus sp*, ash *Fraxinus excelsior*, hawthorn *Crataegus monogyna*, holly *Ilex aquifolium*.

Mixed scrub

The scrub consisted of hawthorn, bramble *Rubus fruticosus*, elder *sambucus nigra*, ash, dog rose *Rosa canina* with ivy present.

Native hedgerow

The species present included hawthorn, wild privet *Ligustrum vulgare* and holly

APPENDIX D SURVEYOR/COMPANY EXPERIENCE AND QUALIFICATIONS

We, Philip Parker Associates, are ecological consultants suitably qualified with fifty years of combined experience in this sector. We have been undertaking habitat assessments under the new UK habitat classification since it was released in September 2022 (now using version 2) and have been completing and submitting biodiversity net gain assessments successfully since the release of the metric version 3.1 in April 2022.

In, particular Polly Godfrey has a BSc in Ecology and Conservation and has been working at Philip Parker Associates for three years. During this time she has undertaken and submitted a number of Preliminary Ecological Appraisals and Biodiversity Net Gain assessments (under metrics 3.1, 4 and statutory). Polly is also certified to undertake MORPH river condition assessments.

All surveyors have a university degree at BSc level or above in a relevant field of this sector. Our surveyors regularly train with a FISC level 4 Botanist Julia Masson, and any plants which cannot be identified are passed over to ensure that they are identified correctly.

Our surveyors have attended a number of conferences and virtual symposiums (many organised by CIEEM) to ensure that our knowledge of biodiversity net gain remains up to date.

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