BJ Collins
PROTECTED SPECIES SURVEYORS

BNG Cover Report V4

Proposed Replacement Artificial Pitch
Leafy Lane Playing Fields
Corsham
Wiltshire

A report to:

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Report Title:	BNG Metric Cover Report V4 - Proposed Replacement Artificial Pitch

Survey Site/Job:	Leafy Lane Playing Fields, Corsham, Wiltshire. SN13 0JY
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Architect/Agent:	Surfacing Standards Ltd
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Final Version V4	27/02/2026	B J Collins MSc MCIEEM & P A Collins BSc (Hons)	B J Collins MSc MCIEEM

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RELIANCE - The report describes the conditions and ecological features on the site (and possibly its environs) at the time of survey and that this may (is likely to) change over time. Reliance upon the findings of this report should be determined in accordance with the Chartered Institute of Ecology and Environmental Management guidance on the longevity of ecological surveys, see Advice Note (April 2019) On the Lifespan of Ecological Reports and Surveys CIEEM.

CONTENTS

SUMMARY 4
1. INTRODUCTION 5
2. SITE DESCRIPTION 6
2.1 Location of the proposed artificial pitch 6
2.2 Habitat Descriptions - within the development footprint 6
2.2.1 Modified grassland (g4 (823, 106)). 6
2.2.2 Hardstanding - artificial unvegetated unsealed surface 7
3. SURVEY METHODOLOGY 8
3.1 Biodiversity Net Gain Condition Assessments 8
3.2 Surveyor Details 8
3.3 Limitations to Survey 8
4. SURVEY RESULTS 9
4.1 BNG Baseline 9
5. Condition Assessments 11
6. Proposed Habitats 13
7. BIODIVERSITY NET GAIN RESULTS 17
8. REFERENCES 18

SUMMARY

This report provides a commentary on the Statutory Biodiversity Net Gain Metric V4 that accompanies this report. It is designed to be read in conjunction with the statutory metric, and it is supplementary to the original extended preliminary ecological appraisal and phase II bat survey reports produced in support of the planning application.

The red line boundary of the site proposed for the artificial turf pitch comprises of a localised area of sports turf, the existing artificial MUGA and adjacent pathway, and a separate cricket wicket, associated with the Leafy Lane playing fields, where a replacement artificial turf pitch with replacement sports turf floodlighting is proposed.

The main habitat to be affected by the development proposal is an existing artificial turf pitch (and cricket wicket) which will be replaced along with an area of managed and heavily disturbed modified grassland immediately adjacent, the grassland required for the new larger artificial pitch area and for BNG compensatory planting. There will be no significant biodiversity impact from the loss of habitats on site.

Net gain will be delivered by planting unused areas of the playing field with shrub planting of moderate condition, and three individual urban trees.

Note that this compensatory planting also provides a biodiversity benefit for the Bath & Bradford on Avon Bats Special Area of Conservation (SAC), that bounds the southern side of the proposal. This is as the shrub planting will result in a light attenuation zone between the pitch and the Boxfields Road, as described in best practice[1], further mitigating light spillage described in the Phase II Bat Survey Report

Biodiversity Net Gain

The result of the Statutory Biodiversity Net Gain Metric calculation is that the area of existing artificial sports pitch and modified grassland areas being removed, combined, to make way for the artificial pitch, associated hardstanding and compensatory planting totals 0.90 hectares. The loss of these areas results in -1.41 habitat units in the baseline survey area.

This landscape enhancement will only deliver **1.29 Biodiversity Habitat Units and a -3.18% Net Biodiversity Loss** (according to the metric calculation).

There is therefore a **deficit of 0.18 habitat units** and the compensatory planting does not deliver a 10% net gain as a result.

Because of this, the metric contains a trading rule error.

The supplementary 0.18 habitat units will be provided by the Environment Bank, and their documentation should be referred to for evidence that the trading rule error has been addressed.

See the BNG metric calculation tool submitted alongside this report:

Leafy_Lane_Statutory_Metric_V4_27.02.26

n.b. This version 4 report and metric have been altered in response to planning officer's comments. The ecologist has added reference to the existing concrete pathway that runs from the pavilion to the current sports pitch. The ecologist has also added up to date BNG Habitat Maps.

[1] The Institute of Lighting Professionals. (2023). Bats and artificial lighting in the UK. Guidance note (Page 29)

1. INTRODUCTION

This report has been prepared by B J Collins Protected Species Surveyors Limited for Surfacing Standards Limited. It provides the commentary supporting the Leafy_Lane_Statutory_Metric_V4_27.02.26, prepared for submission alongside this report. The development plan involves the installation of a new, artificial turf surface over part of the existing artificial turf pitch and part of the surrounding amenity grassland associated with natural pitches, there is also a small cricket wicket and a section of existing concrete pathway which will be lost to the proposal.

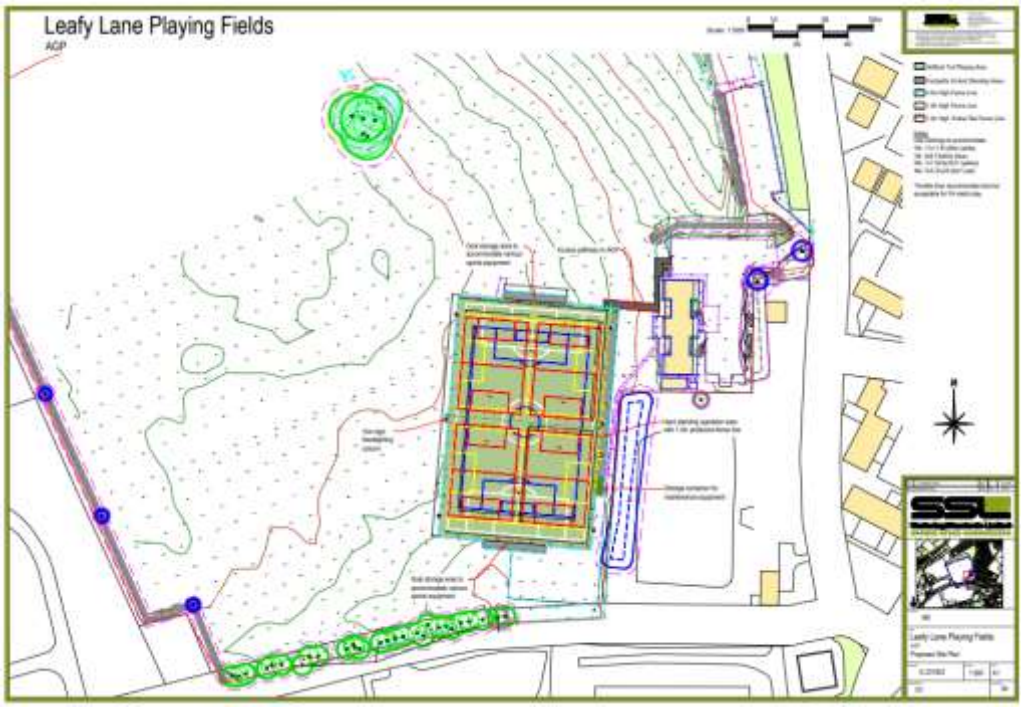

Figure 1: The proposed new artificial pitch above and existing situation below, at Leafy Lane Playing Fields

2. SITE DESCRIPTION

2.1 Location of the proposed artificial pitch

The area for the proposed artificial pitch sits within an extensive area of modified grassland used for football pitches. This includes an existing floodlit artificial pitch in the south-east corner of the playing field which will be replaced with a new full-size artificial pitch.

The boundary of the wider area of playing fields includes for deciduous woodland and mature tree lines to the distant north and north-east boundaries of the overall area. The west boundary comprises of a managed hedgerow and the south boundary comprises of a treeline associated with Boxfields Road.

The proposed pitch area is immediately surrounded to the north and west by extensive areas of amenity grassland, to the south by the existing artificial pitch and beyond that Boxfields Road and to the east by the pavilion building and south of that the boundary of a covered reservoir, with mature overgrown shrub boundary.

2.2 Habitat Descriptions - within the development footprint

2.2.1 Modified grassland (g4 (823, 106)).

This is an area of heavily used amenity grassland supporting multiple football pitches. The modified grassland includes a typical flora, with a domination of Perennial rye-grass (*Lolium perenne*) and occasional Annual meadow-grass (*Poa annua*), with Daisy (*Bellis perennis*), greater plantain (*Plantago major*), dandelion (*Taraxacum officinale* agg.) and mouse-ear (*Cerastium fontanum*).

Photograph 1: The intensively managed modified grassland habitat affected by the proposal

2.2.2 Hardstanding - artificial unvegetated unsealed surface

There is an existing artificial football pitch located in the south-east corner of the playing field. This is surrounded by a steel mesh fence and floodlit by six lighting columns.

This is an artificial turf surface, and therefore an unsealed free draining material.

Photograph 2 -the existing artificial football pitch from the south

Figure 2 – Ecological Walkover Assessment – Note the existing concrete pathway is not included as it was not part of the scheme at the time of walkover survey.

3. SURVEY METHODOLOGY

3.1 Biodiversity Net Gain Condition Assessments

The UK Habitat Classification identifies, describes and maps habitats on site. Each habitat is then subject to a condition assessment to inform the Statutory Biodiversity Net Gain calculation, which use a series of criteria representing key physical characteristics of each habitat type to assess whether the habitats are in favourable condition.

Each of the habitats were assessed using the relevant statutory condition assessment sheet. The results from the sheet are extracted and included within the relevant paragraph in the results section.

With regards to the statutory condition assessment sheet used, modified grassland was assessed utilising condition sheet 5a and 20a.

Habitats were assessed as either poor, moderate or good condition.

3.2 Surveyor Details

The survey was undertaken by Mr BJ Collins MSc MCIEEM, Bat Licence: 2015-13152-CLS-CLS and Registered Consultant RC110 and B32RC002. FISC Level 3. An ecologist with over 25 years of experience.

The survey was undertaken on the 22nd of April 2025.

3.3 Limitations to Survey

The surveyor did not encounter any significant constraints upon the survey effort.

4. SURVEY RESULTS

4.1 BNG Baseline

The BNG baseline habitats comprise of the following elements. The table is assimilated from the contents of the biodiversity net gain metric:

Baseline habitat	Area (hectares)	Condition	Strategic significance	Total habitat units	Area retained	Area lost	Units lost	Proposed habitat
Modified grassland	0.562509286	Poor	Area/compensation not in local strategy/ no local strategy	1.13	0	0.56	1.13	This is the area of existing Modified Grassland to be lost to the new artificial grass pitch
Artificial unvegetated, unsealed surface	0.00192617	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.00	0	0.00	0.00	This is the northern half of the existing cricket which will become modified grassland
Artificial unvegetated, unsealed surface	0.005376337	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.00	0	0.01	0.00	This is the southern half of the existing cricket wicket which will be incorporated into the new artificial grass pitch
Artificial unvegetated, unsealed surface	0.084046599	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.00	0	0.08	0.00	This is the north half of the existing MUGA which will be incorporated into the new artificial grass pitch
Modified grassland	0.003283837	Poor	Area/compensation not in local strategy/ no local strategy	0.01	0.0018	0.00	0.01	This is an area of modified grassland which will be retained around the boundary of the new artificial grass pitch, a buffer zone
Artificial unvegetated, unsealed surface	0.007257986	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.00		0.01	0.00	This is the area of the existing MUGA which will be converted back into grass
Artificial unvegetated, unsealed surface	0.079389033	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.00		0.08	0.00	This is the area of the existing MUGA which will be set aside for the BNG compensation planting of mixed native shrub
Modified grassland	0.101959707	Poor	Area/compensation not in local strategy/ no local strategy	0.20	0	0.10	0.20	This is the area of existing modified grassland which will be lost to the BNG compensation planting
Developed land; sealed surface	0.005093414	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.00		0.01	0.00	This is the existing MUGA path which will become modified grassland
TOTALS	**0.85**			**1.34**	**0**	**0.85**	**1.34**	

Table 1 - key features extracted from the statutory biodiversity net gain metric

Figure 3 – The BNG Baseline Habitat Map showing the existing habitats On-Site.

5. CONDITION ASSESSMENTS

The following condition assessment was completed for areas of modified grassland using condition assessment sheet 5a:

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
On-site or off-site, site name and location	On-site habitats - Leafy Lane Playing Fields	**Survey date and Surveyor name**	B J Collins MSc MCIEEM 22 April 2025
Limitations (if applicable)	None	**Survey reference (if relating to a wider survey)**	NA
Grid reference	Various around ST 8429 6948	**Habitat parcel reference**	NA
Habitat Description			
This condition assessment sheet covers four individual parcels of modified grassland which all comprise a similar make up. The habitat area directly affected by the development comprise of an intensively managed sports pitch, subject to annual fertiliser and herbicide resulting in a lush but species poor sward.			
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.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m^2 (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	N	None of the areas of grassland supported between 6 to 8 vascular plants
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	All areas are regularly and uniformly mown
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). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	This applies to all areas, the areas affected by development are not ones which foster scrub development
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	As is evident, there is extensive physical damage depending on the stage of the football season

E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Yes	This is because areas of bare ground are common across football pitches, but no bare ground is sufficiently large to be categorised as 10% of the habitat
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	NA	NA
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Yes	NA
Essential criterion achieved (Yes or No)			No
Number of criteria passed			3
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)	POOR	

Table 2 - statutory condition assessment sheet 5a

6. PROPOSED HABITATS

The Proposed Habitats were mapped using the design provided by the Architects, Surfacing Standards, as shown in Figure 4 below.

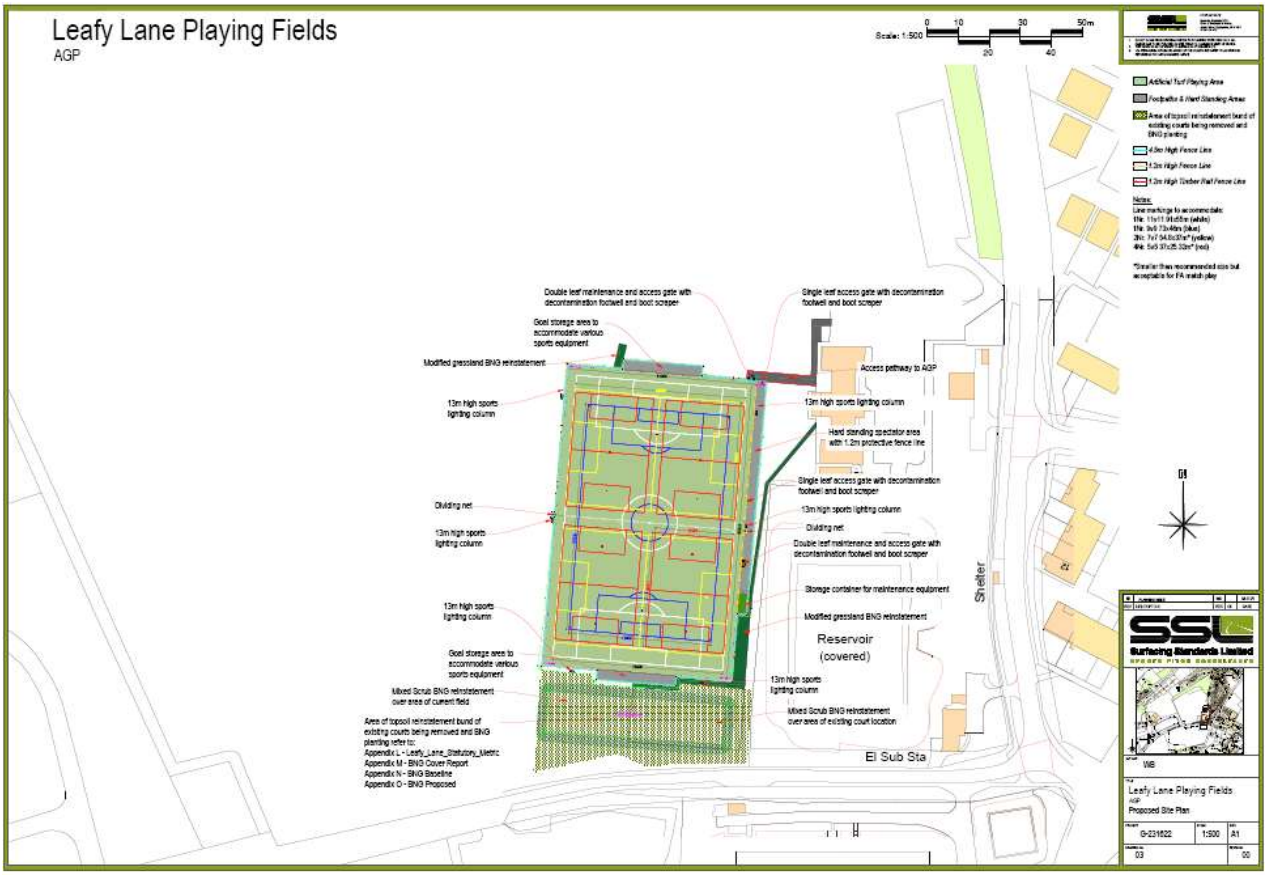

Figure 4: The development proposal for the artificial sports pitch at Leafy Lane playing fields, as provided by Surfacing Standards.

The following table details the areas and habitat units from the "A-2 on-site habitat creation" tab of the statutory metric.

Proposed habitat	Area (hectares)	Condition	Strategic significance	Final T-to-T (years)	Distinctiveness	Habitat units delivered	Description
Artificial unvegetated, unsealed surface	0.562509286	N/A - Other	Area/compensation not in local strategy/ no local strategy	0	V.Low	0.00	This is the area of new AGP over existing grassland
Modified grassland	0.00192617	Poor	Area/compensation not in local strategy/ no local strategy	1	Low	0.00	This is the new modified grassland area over the top of the existing artificial cricket wicket (half)
Artificial unvegetated, unsealed surface	0.005376337	N/A - Other	Area/compensation not in local strategy/ no local strategy	0	V.Low	0.00	This is the extent of the second half of the cricket wicket which will be lost to the new AGP
Artificial unvegetated, unsealed surface	0.084046599	N/A - Other	Area/compensation not in local strategy/ no local strategy	0	V.Low	0.00	This is the area of new AGP over the old artificial surfaced MUGA
Modified grassland	0.003283837	Poor	Area/compensation not in local strategy/ no local strategy	1	Low	0.01	This is a buffer zone of modified grassland retained between the new pitch and the proposed compensatory planting
Modified grassland	0.007257986	Poor	Area/compensation not in local strategy/ no local strategy	1	Low	0.01	This is a buffer zone of modified grassland retained between the new pitch and the proposed compensatory planting
Mixed scrub	0.079389033	Moderate	Area/compensation not in local strategy/ no local strategy	5	Medium	0.53	This is the mixed scrub compensatory planting over the top of existing modified grassland
Mixed scrub	0.101959707	Moderate	Area/compensation not in local strategy/ no local strategy	5	Medium	0.68	This is the mixed scrub compensatory planting over the top of existing modified grassland
Modified grassland	0.005093414	Moderate	Area/compensation not in local strategy/ no local strategy	4	Low	0.02	This is the modified grassland replacing the old footpath
Urban tree	0.0122	Moderate	Area/compensation not in local strategy/ no local strategy	27	V.Low	0.04	This is three trees which will be planted in the shrub area as BNG compensation
Totals	**0.86**					**1.29**	

Table 3 - the key elements from the biodiversity metric showing the post development status

The proposed condition assessment for the modified grassland above is as per that included within chapter 5. The condition assessment for the proposed shrub planting is included below.

6.1.1.1 A-2 On-Site Habitat Creation

The species proposed to achieve this are all native and typical of the type of habitat found in this region of the UK, to include Hazel (*Corylus avellana*), Holly *(Ilex aquifolium*), Guelder rose (*Viburnum opulus*), Dogwood (*Cornus sanguineous*), field maple (Acer campestre), Wild cherry (*Prunus avium)* and Crab apple (*Malus sylvestris*). These have been chosen to provide flowering across the season as well as shrubs that are spineless, and therefore do not damage children playing within the shrubberies

The trees should be planted in accordance with British Standards BS8545 : 2014, BS 3936 Nursery Stock (Parts 1-10), BS 4428 : 1989, BS 4043 : 1989 and BS 5837 : 2012.

Plant material and operations shall conform to BS8545 : 2014, BS 3936 Nursery Stock (Parts 1-10), BS 4428 : 1989, BS 4043 : 1989 and BS 5837 : 2012.

The planting season shall be from the 1st of October to the 31st of March. Container grown stock may be planted outside this season if accompanied by daily watering, or as necessary to ensure healthy establishment. Planting shall not be carried out during periods of frost, drought, cold drying winds or when the soil is waterlogged or frozen.

All planting that is within the root protection area of existing trees/shrubs to be retained, shall be undertaken by hand and positions altered should tree roots be encountered, in order to avoid damage to the root system.

Note that in order to deliver the condition of “moderate”, it is essential to maintain a band of approximately 1 m wide unmanaged grassland, between the shrub planting and the mown amenity grassland.

DEFRA Minimum Targeted Condition: Moderate

Condition Sheet: SCRUB Habitat Type

	Condition Assessment Criteria	Criterion passed (Yes or No)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range).[1] - At least 80% of scrub is native, - There are at least three native woody species[2], - No single species comprises more than 75% of the cover (except hazel *Corylus avellana*, common juniper *Juniperus communis*, sea buckthorn *Hippophae rhamnoides* (only in its restricted native range), or box *Buxus sempervirens*, which can be up to 100% cover).	YES
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran[3]) shrubs are all present.	NO
C	There is an absence of invasive non-native plant species[4] (as listed on Schedule 9 of WCA[5]) and species indicative of suboptimal condition[6] make up less than 5% of ground cover.	YES
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	YES
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	NO

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

Figure 5 - showing the statutory condition assessment for the "moderate" habitat categorisation of the proposed shrub planting. Note the recommendations to achieve condition criteria D

As is described in detail within the associated phase II bat survey report for the Leafy Lane Playing Fields, the proposed new artificial pitch has been moved away from the boundary of the Bath & Bradford on Avon Bats Special Area of Conservation (SAC), to remove light spillage onto the tree canopy.

The introduction of mixed shrub planting as part of the biodiversity net gain compensation further adds to the biodiversity gains for bats from the proposal. The phase II bat survey report postulates that a small number of bats, compared to the unaffected northern boundary of the playing fields, use the tree canopy on Boxfields Road as part of commuting routes to the swarming and hibernation sites associated with Box Mine SSSI.

The installation of a band of developing native shrub with smaller tree species will add a further level of light attenuation zoning.

Note that this lighting attenuation zone will also include for three small urban trees, all three will be Scots Pine (*Pinus sylvestris*) to provide lighting attenuation across the winter months.

Figure 5: The proposed BNG Habitat Map for the artificial sports pitch.

7. BIODIVERSITY NET GAIN RESULTS

The result of the Statutory Biodiversity Net Gain Metric calculation is that the area of existing artificial sports pitch and modified grassland areas being removed, combined, to make way for the artificial pitch, associated hardstanding and compensatory planting totals 0.85 hectares. The loss of these areas results in -1.34 habitat units from the Ecological baseline.

The proposed landscape enhancement will only deliver **1.29 Biodiversity Habitat Units and a -3.18% Net Biodiversity Loss** (according to the metric calculation).

There is therefore a **deficit of 0.18 habitat units** to achieve the required 10% Biodiversity Net Gain and the compensatory planting does not deliver this total. Because of this, the metric contains a trading rule error.

The supplementary 0.18 habitat units will be provided by the Environment Bank, and their documentation should be referred to for evidence that the trading rule error has been addressed.

Leafy_Lane_Statutory_Metric_V4_27.02.2026

On-site baseline	*Habitat units*	1.34	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	1.29	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site net change (units & percentage)	*Habitat units*	-0.04	-3.18%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-0.04
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-3.18%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	1.34	1.47	0.18
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

Input errors/rule breaks present in metric ▲

Figure 6: The Headline Results taken from the Leafy_Lane_Statutory_Metric_V4_27.02.26.

8. REFERENCES

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). *The UK Habitat Classification User Manual Version 1.1* at http://www.ukhab.org/

Surfacing Standards (Bugg M, 2025) Leafy Lane Playing Fields, Creation of an AWP-project code G-231622, 13-06-25.

Panks S (2024) Leafy_Lane_Statutory_Metric_V4_27.02.26, Biodiversity Net Gain Calculation Tool