



Newlands Developments

Land West of Sheffield Road, Hoyland

BIODIVERSITY IMPACT ASSESSMENT

September 2020

FPCR Environment and Design Ltd

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1.0 INTRODUCTION

- 1.1 This report has been prepared by FPCR Environment and Design Ltd on behalf of Newlands Developments in support of a hybrid planning application for employment uses and associated works, including access, earthworks and landscaping, for located west of Sheffield Road in Hoyland, South Yorkshire (central grid ref: SK 3557 9951).
- 1.2 Details of both onsite and offsite habitat creation mitigation including target conditions and detailed management required to meet these aims is provided in the separate Biodiversity Enhancement & Management Plan (BEMP) (FPCR, Sept. 2020¹). The BEMP also includes plans of post development habitats (onsite) and boundaries of offsite land.

Site Description

- 1.3 The land was dominated by arable habitat of low ecological value with grazed pasture also forming a significant proportion of the habitats. The boundary hedges are native species dominant and considered a priority habitat although many are heavily trimmed with low structural and botanical diversity. Many of the arable field boundaries supported defunct hedgerows or scattered scrub cover. Bell Ground wood lies adjacent a part of the southern boundary and plantation woodland belt was adjacent the west. Tankersley Lane bisects the northern extent of the site.

Proposals

- 1.4 The proposals have been submitted in a hybrid planning application for development up to 103,086sqm of employment uses (use classes B1/B2 and B8) and associated works including access roads, drainage and landscaping, a) Outline seeking approval over means of access and scale across 2 development plots (plots 2&3) of up to 71,515sqm floorspace; and b) full application for the development of plot 1 (31,571 sqm floorspace for use B8), associated earthworks and creation of access points including new roundabout to link with Hoyland south.

Offsetting Context

- 1.5 The overall aim of the biodiversity offsetting initiative is to provide a mechanism by which development activities are designed to deliver biodiversity benefits in compensation for losses, which can be delivered with a measurable outcome.
- 1.6 Using the biodiversity offsetting approach means that a developer employs a standardised formula (metric) to calculate the number of biodiversity 'units' to be lost as a result of their development, based on the habitat(s) and hedgerow(s) affected, their condition and extent. The developer then provides an 'offset' (where necessary) to deliver an equivalent number of biodiversity units; these ideally should be within the development boundary (habitat enhancement/creation) or off-site (refer to Appendix A for calculator sheets).
- 1.7 Biodiversity offsetting is to compensate for adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been undertaken, in accordance with the mitigation hierarchy as required by National Planning Policy Framework

¹ FPCR Environment and Design Ltd (Sept. 2020) *Land West of Sheffield Road, Hoyland – Biodiversity Enhancement & Management Plan*. For Newlands Developments.

(NPPF, 2019 (as amended)). Any subsequent changes to planning proposals may affect the credit requirement of the site and a review of the changes would be required.

Legislative Context

- 1.8 The UK Government, as signatory to the Rio Convention on Biological Diversity, is committed to conserving and enhancing biodiversity. This commitment is further enforced in the Natural Environment and Rural Communities Act (NERC) 2006 and the Natural Environment White Paper (June 2011).
- 1.9 DEFRA's 25 Year Environment Plan (2018) seeks to embed a 'net environmental gain' principle for development to deliver environmental improvements locally and nationally. Current policy is that the planning system should provide biodiversity net gains where possible however this is moving towards a mandatory requirement.
- 1.10 NPPF (2019) in particular seeks to ensure that the planning system contributes to and enhances the natural and local environment, protect and enhance biodiversity and geodiversity by:
- 170. d) Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- 174. b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*
- 1.11 The Barnsley local plan supplementary planning document: Biodiversity and Geodiversity states
- The LPA will not support applications that would damage the ecological network and cause a net-loss in biodiversity in line with the NPPF.*
- 1.12 With specific reference to sites located within the Nature Improvement Area the above document states:
- Within the NIA (Nature Improvement Area) we require specific biodiversity enhancements with developments over and above the minimum mitigation/ compensation measures.....*
- Such quantifiable, significant benefits could include:*
- *New woodland;*
 - *New wetland;*
 - *Enhancing areas of poor environmental quality;*
 - *Improving public access, or*
 - *Improving the management of existing habitats;*

Report Context

- 1.13 Following provision of initial biodiversity offsetting calculations and consultation with the Biodiversity Officer this report will provide the following:
- Baseline information and assessment justification for habitats on-site
 - Justification for the metric calculation

- 1.14 The offsite mitigation will be secured under a S106 agreement with confirmation of landowner agreement based upon detail provided within the BEMP for offsite land.

2.0 METHODOLOGY

Habitat assessment

- 2.1 The habitat assessments were undertaken on 29th April and 6th May 2020 by a FISC level 4 botanical surveyor in accordance with the UK Habitat Classification as set out in the guidance (Natural England, 2019²); with further resurvey undertaken for the grassland areas in August 2020 by the same surveyor (updated botanical lists provided in Appendix B).

Existing Value

- 2.2 Defra has developed a metric based on evaluating each individual habitat's value. While the Defra metric is still under development and subject to future review, a 'beta test' Biodiversity Metric 2.0 (Natural England, 2019) is available for use. The calculator is in excel format and is used to measure the biodiversity value of habitats and hedgerows within an application site before and after development, therefore calculating the expected biodiversity net loss or gain.
- 2.3 The development site is mapped and divided into existing habitat criteria. Habitats are defined under UK Habitat Classification with further information providing habitat area, distinctiveness and condition, which are used to calculate the value of each habitat.
- 2.4 Linear habitats require different treatments, measuring lengths rather than areas. Therefore, in accordance with the guidance hedgerows are considered separately.

Compensation

- 2.5 In addition to quantifying the biodiversity value of habitats / hedgerows to be lost, to determine the offsetting requirement it is also necessary to measure the offsetting potential of mitigation measures. This allows for the potential quantity of off-site units required to be calculated. For this to take place a number of factors must be considered:
- the size of the mitigation areas;
 - the habitat distinctiveness band it is assigned currently, and the target band once improved; and
 - the condition of the habitat at the start of the offset project, and its condition at the end.
- 2.6 The potential compensation value is derived from the difference in quality between the habitat to be lost and that to be created. The area from which the same number of units can be achieved may allow for the area required for mitigation to be smaller than that which is being lost. For example, if a habitat of low distinctiveness and poor condition is improved to create a habitat of high distinctiveness in good condition, the area needed to offset can theoretically be less than that lost.

² Natural England, (2019) The biodiversity metric 2.0 – auditing and accounting for biodiversity Technical Supplement (Beta Edition) Available at: <http://publications.naturalengland.org.uk/publication/5850908674228224>

Risk Multipliers

- 2.7 Once the maximum potential value of the mitigation is calculated (the difference between the current value and the proposed value) a set of risk multipliers is used to quantify the difference between the area to be lost and the area to be created/enhanced.
- 2.8 The aim of a multiplier is to correct for a disparity or risk. There are three main types of risk that are associated with habitat creation:
- 2.9 Temporal risks: Many factors influence how long a habitat takes to go from the point of creation or restoration to the desired end point condition. Within the metric average time estimates have been used, accepting that there will be variation from this central estimation. Average estimates of the time to target condition were largely expert driven.
- 2.10 Delivery risks: The risks associated with the actual delivery of the offset due to the uncertainty in the effectiveness of restoration and/or habitat creation/management techniques.
- 2.11 Spatial risks: These reflect ecological risks deriving from the change in location of the habitat or resource. For example, it may be that recreating a type of habitat in a new location may reduce its biodiversity value.
- 2.12 The above risks are automatically factored into the calculations completed using the metric calculator however it should be noted that woodland and scrub creation for example have been targeted adjacent existing established woodland reducing the risk and uncertainty of creating good quality new habitat.

Strategic Significance

- 2.13 As recognised in the Barnsley Local Plan Supplementary Planning Document: Biodiversity and Geodiversity (adopted May 2019) the eastern half of the application site and the entirety of offsite Area B falls within the Dearne Valley Green Heart 'Nature Improvement Area' and these areas are recognised in the calculations as being 'within area formally identified in local strategy'.

Considerations

- 2.14 Natural ecological communities are susceptible to change; at times this change can be rapid as a result of internal and external environmental factors. The biodiversity offsetting calculations are based on ecological assessments of habitats carried out during 2020; as a result, changes which may affect the conclusions of this report may occur, if a prolonged period of time elapses prior to the commencement of the project.
- 2.15 The proposed site habitat biodiversity values have been calculated using habitat creation details shown on Figure 1 Post Development Habitat Plan provided with the BEMP.
- 2.16 The aim of biodiversity offsetting is to compensate for significant adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been taken, according to the mitigation hierarchy as required by NPPF. Any changes to planning proposals or decisions may affect the credit requirement of the site. Plots 2&3 are currently at outline stage. Specific details of the design of these areas are yet to be determined therefore some changes are likely to the framework and GI provision, meaning that the calculations will need to be reassessed. Thus, scores relating to these plots are indicative, and should be treated as such.

3.0 RESULTS

Biodiversity Units – Existing Value

Habitats

- 3.1 The existing Phase 1 Habitats are shown in Figure 1a and 1b.
- 3.2 The biodiversity units for each habitat on the site have been calculated and are presented in Table 1. Justifications for condition scores are detailed below with species lists provided in Appendix B (for grasslands revised since the initial ecological appraisal was completed).

Table 1: Biodiversity Units: Existing On-Site Habitats

Habitat	Area (ha)	Condition	Biodiversity Units
Urban – developed land: Sealed Surface	1.05	n/a	0.00 (compensation not required)
Urban: Amenity grassland	1.04	Poor	2.29
Cropland: Cereal crops	39.51	n/a	88.49
Grassland: Modified grassland	6.02	Poor	13.79
Grassland: Other neutral grassland	2.55	Moderate	22.74
Grassland: Other neutral grassland	2.7	Poor	11.88
Heathland and shrub: Mixed scrub	0.46	Poor	2.02
Heathland and shrub: Mixed scrub	0.06	Good	0.79
Woodland and forest – other woodland; broadleaved	0.07	Moderate	0.64
Woodland and forest – Lowland mixed deciduous woodland	0.18	Moderate	2.48
Lakes: Ditches	0.09	Poor	0.41
Total	53.73		145.54

Please note there may be minor discrepancies (rounding errors) between the columns and the totals, however, the numbers duplicate those presented within the matrix calculator.

Amenity grassland

- 3.3 Sports pitch and associated grassland strip in the north east and north of Tankersley Lane.
- Condition assessment - Moderate.
 - Dominated by creeping bent with total wildflower cover <30% excluding creeping buttercup and white clover.
 - Wildflower and sedges found at a low frequency
- 3.4 Grassland verges of Tankersley Lane.
- Condition assessment - Poor.
 - *Lolium* species >25% cover

- Wildflowers and sedges found at low frequency and < 30% cover excluding white clover

Modified grassland - Species poor semi-improved grassland

3.5 Two pasture compartments in the south (F1 and F2) and a mown grassland (F9) in the north.

- Condition assessment - poor
- All grasslands a poor match to the Priority Habitat description of lowland grasslands
- All characterised by limited species diversity with wildflowers, sedges and indicator species largely absent or occurring at low frequency
- F1 and F2 supported >25% cover of *Lolium* species
- F9 supported around 25% *Lolium* species and was short-mown and rolled with a homogenous sward and aside from undesirable herbs such as broadleaved dock only ribwort plantain was recorded (rarely).

Other neutral grasslands – Species-poor semi-improved grassland

3.6 Pasture compartments F6 and F7 and unmanaged compartment F10.

- Condition assessment – poor
- Dominated by bent grasses with a significant cover of Yorkshire fog
- 10% cover of wildflowers and these of limited diversity (mostly meadow buttercup that would likely avoid preferential grazing)

Other neutral grasslands

3.7 Pasture compartments F3, F8 and F8a (contiguous with F8 and supporting roughly 20% mature scrub) and uncut margins of amenity sports pitches.

- Condition assessment – Moderate
- Supporting 20-30% wildflower cover (excluding white clover, creeping buttercup and injurious weeds)
- Dominated by a few common grasses (bent grasses and perennial rye-grass)
- High proportion of physical damage (poaching from grazing animals) over 5% cover.

Mixed scrub

3.8 Mature scrub associated with SI grassland of F8a (contiguous with F8)

- Condition assessment - Poor
- Dominated by hawthorn (over 75%) with a few other common species present, including bramble and dog rose.
- A poor age range present – mostly mature specimens, particularly in the stand adjacent the M1 verge where heavy pony grazing has removed ecotone/graded margins and sapling/seedling growth

Mixed scrub

3.9 Compartment of mature scrub adjacent M1 verge and Tankersley Lane.

- Condition assessment - Moderate
- Supporting a limited diversity of common species (hawthorn, bramble, goat willow) but more mixed dominance.
- Age range missing seedling and sapling age classes but supporting young and mature specimens

Other woodland – broadleaved (medium distinctiveness)

3.10 Small compartment of plantation woodland associated with sports pitches.

- Condition assessment - Moderate
- Native species dominant (non-natives and invasive species less than 10% cover)
- Three different shrub and trees present within 10m radius
- Limited age range
- Planting lines visible
- No standing or fallen deadwood over 20cm

Lowland mixed deciduous woodland (high distinctiveness)

3.11 Semi-natural ash dominated woodland colonising spoil heap/disturbed ground and falling partially within the south site boundary.

- Condition assessment – Moderate
- Little evidence of seedlings and saplings recorded and ground flora supported stands of dense ruderal and bramble
- Woodland compartment unprotected from adjacent arable operations
- Some standing deadwood over 20cm was recorded but limited fallen deadwood noted

Ditches

3.12 Wet ditches D1, D2 and D3 supporting standing and slow flowing water for at least part of the year.

- Condition assessment - Poor.
- No emergent, submerged or floating aquatic vegetation supported
- All features supporting < 50cm of water; D1 and D2 dry in late spring
- Intensive land use directly adjacent D3 (short grazed bankside grassland)

Hedgerows

3.13 The biodiversity unit totals for each hedgerow type have been calculated and are presented in Table 2.

Table 2: Biodiversity Units: Existing On-Site Hedgerows

Habitat	Length (km)	Condition	Biodiversity Units
H1 Hedges: native hedgerow	0.09	2	0.414
H2 Hedges: native hedgerow – associated with bank or ditch	0.18	3	2.484
H3 Hedges: native hedgerow	0.31	3	2.046
H3a Hedges: species rich hedge	0.14	3	0.924
H4 Hedges: native hedgerow	0.13	3	0.858
H5 Hedges: native hedgerow	0.09	3	0.594
H6 Hedges: native hedgerow – associated with bank or ditch	0.09	3	1.188
H7 Hedges: native hedgerow	0.13	3	0.858
H8 Hedges: native hedgerow – associated with bank or ditch	0.05	2	0.44
H9 Hedges: native hedgerow	0.36	3	2.376
H10 Hedges: native hedgerow	0.15	3	0.99
H11 Hedges: native hedgerow	0.23	3	1.518
H11a Hedges: native hedgerow	0.03	3	0.198
H12 Hedges: native hedgerow	0.2	3	1.32
H13 Hedges: native hedgerow	0.13	1	0.286
H17 Hedges: native hedgerow	0.01	3	0.069
H18 Hedges: native hedgerow	0.02	3	0.138
H19 Hedges: native hedgerow	0.01	3	0.069
H20 Hedges: native hedgerow	0.17	3	1.122

H21 Hedges: native hedgerow	0.14	3	0.966
H22 Hedges: native hedgerow	0.2	3	1.362
H23 Hedges: hedgerow with trees	0.09	3	0.621
Total	2.95	-	20.84

Please note there may be minor discrepancies (rounding errors) between the columns and the totals, however, the numbers duplicate those presented within the matrix calculator.

- 3.14 The habitat condition of hedgerows to be impacted across the site varied somewhat and for those that fell below 'Good' condition assessment data is provided in Table 3 below.

Table 3: Hedgerow Assessment Data

Hedge No.	Assessment Notes	Condition/Score
1	- Browse line with vertical gap >0.5m over 100% of hedge and horizontal gappiness >10% (fails B1 & B2) - Disturbance/poaching from sheep for >20% of length (fails C1) - Damage due to human activities over >10% of length (fails D2)	Moderate/2
8	- Browse line with vertical gap >0.5m over 100% of hedge and horizontal gappiness >10% (fails B1 & B2) - Nettles dominated >20% of hedge length (fails C2)	Moderate/2
13	- Flailed hedge at or less than 1.5 high x 1.5m wide - Disturbance from cultivation within 1m of hedge on both sides (fails C1) - Nettles dominated >20% of hedge length (fails C2)	Poor/1

- 3.15 Hedgerows which met 'Good' condition but which failed on some criteria:

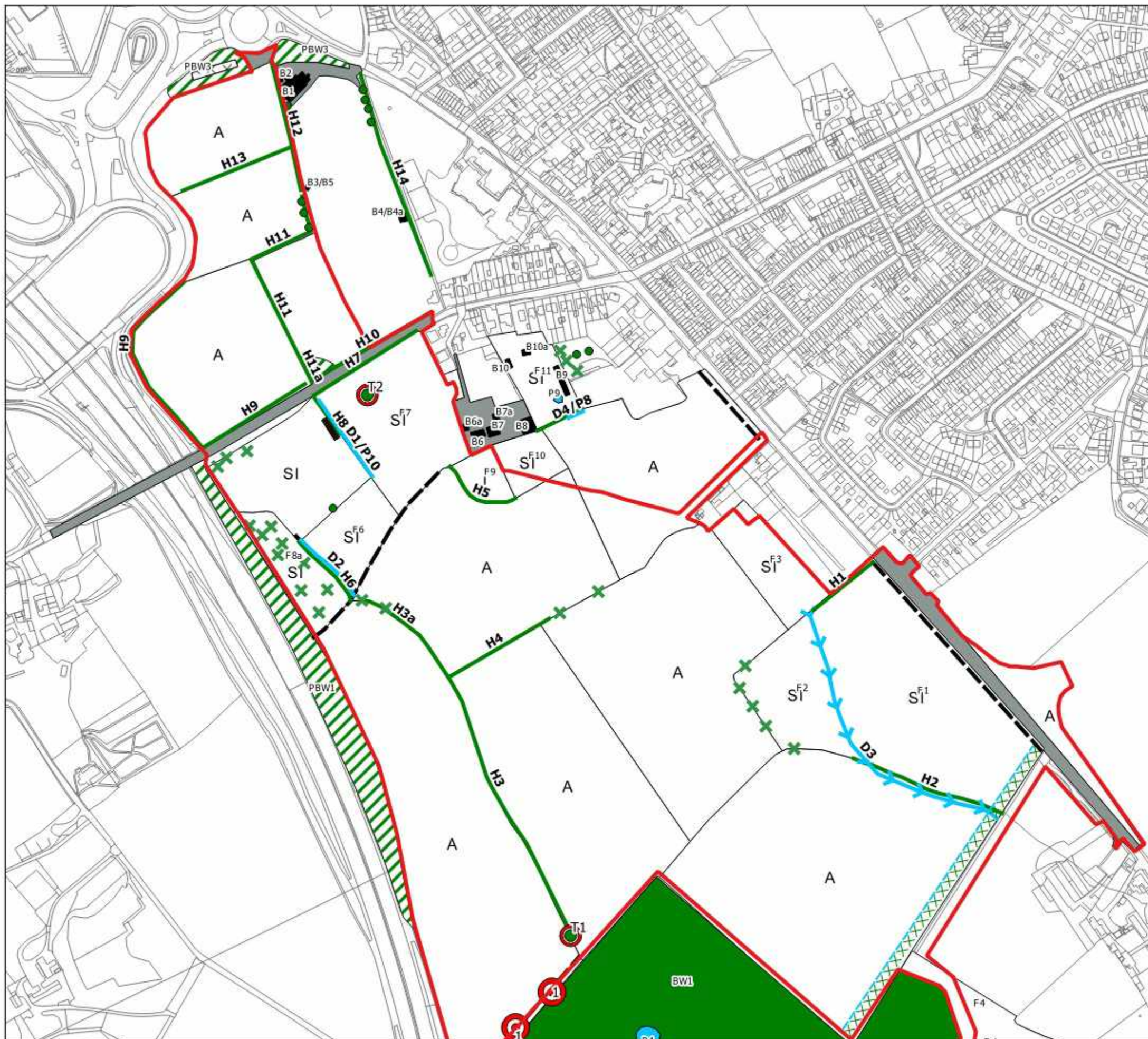
- H2 and H22 – failed B2 and C1 (horizontal gappiness >10% and ground disturbed by poaching or arable cultivation within 1m of canopy on both sides)
- H4 – failed C1 (ground disturbed by arable cultivation within 1m of canopy on both sides)
- H5 failed B2 (horizontal gappiness >10%)
- H20 and H21 failed A1 and C2 (flailed hedges less than or equal to 1.5m high with ground flora indicators including cleavers and nettles >20% cover)
- H22 – failed B2 and C1 (horizontal gappiness >10% and ground disturbed by arable cultivation within 1m of canopy on both sides)

Offsite Provision

- 3.16 Proposed onsite habitats (shown on Figure 1: Post Development Habitat Plan within the BEMP) will deliver 105.57 habitat units and 23.07 hedgerow units leaving a deficit of 39.97 units for habitats and a gain of 2.23 units for hedgerows.
- 3.17 Offsite mitigation was therefore deemed necessary and addresses this deficit through creation of 72.17 habitat units (56.95 additional units once the value of baseline habitat is subtracted) on two areas of offsite arable land and provides a gain of 16.97 habitat units (together with 2.23 hedgerow units provided onsite) for the scheme as a whole. Management detailed within the BEMP will ensure onsite and offsite proposals meet the required habitat conditions set out in the metric calculations (see Appendix A) to deliver a biodiversity net gain of 11.66% for habitats and 10.72% for hedgerows.

4.0 CONCLUSION

- 4.1 Biodiversity offsetting has been used to inform the habitat creation and enhancement proposals for the scheme and the presence of Dearne Valley Nature Improvement Area covering approximately half of the site has been factored into the calculations in accordance with the metric.
- 4.2 The results of the assessment demonstrate that the scheme will lead to the delivery of a total net gain in biodiversity for habitats and linear features in line with NPFF.
- 4.3 The onsite habitats are valued at 145.54 units for habitats and 20.84 units for hedgerows. Taking into account habitat retention and following onsite habitat creation the proposed development will provide 105.57 units for habitats and 23.07 units for hedgerows.
- 4.4 The inclusion and enhancement of offsite areas results in a delivery of 72.17 units.
- 4.5 The overall net gain in biodiversity is 16.97 units (11.66%) against the site base value.
- 4.6 The creation of new hedgerows results in a gain of 2.23 units, providing a net gain in biodiversity of 10.72%.
- 4.7 Details of how mitigation will be achieved, including onsite and offsite habitat creation and management are detailed in the separate BEMP.



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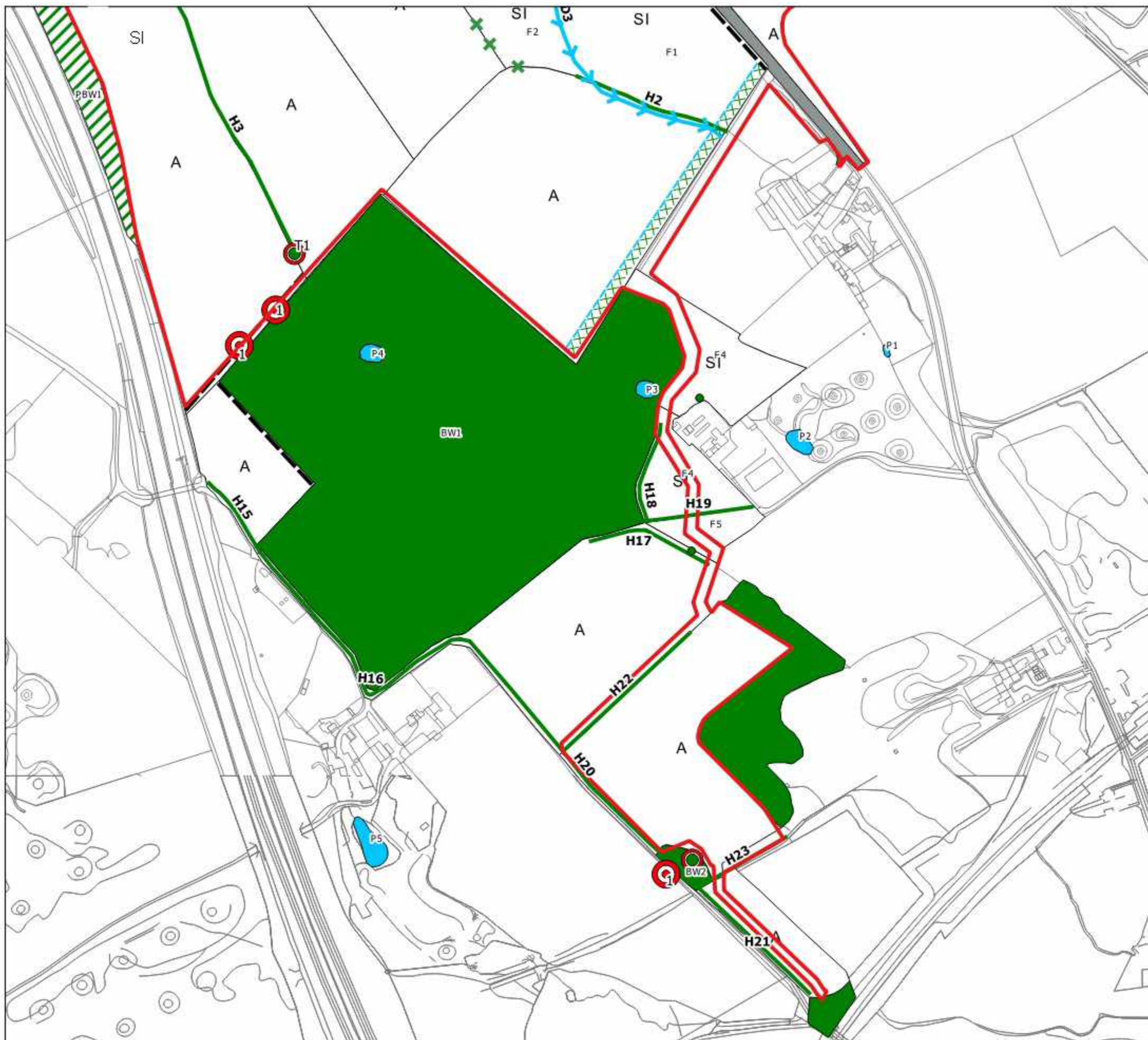
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Key

- ✕ Scrub - scattered
- Tree with bat potential
- Target note
- Broadleaved tree
- Wet Ditch
- Dry stone wall
- Stream
- Hedgerow
- Dry ditch
- xxx Scrub - scattered line
- ▨ Broadleaved woodland - plantation
- ▨ Broadleaved woodland - semi-natural
- Buildings
- Built Environment: Buildings/hardstanding
- ▨ Cultivated/disturbed land - arable
- ▨ Cultivated/disturbed land - ephemeral/short perennial
- ▨ Improved grassland
- ▨ Poor semi-improved grassland
- Pond

fpcr Newlands Developments
Land West of Sheffield Road,
Hoyland
PHASE 1 HABITAT PLAN (north)

Scale: 1:4500
Date: 18/9/2020
Figure 1a 9295



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Key

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- A Cultivated/disturbed land - arable
- SI Poor semi-improved grassland
- Pond


Newlands Developments
 project
 Land West of Sheffield Road,
 Hoyland
 created by
PHASE 1 HABITAT PLAN (south)



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Figure 1b

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Appendix A: Biodiversity Impact Assessment Calculator Sheets

Onsite Habitats - Baseline

	Habitats and areas			Habitat distinctiveness	Habitat condition	Ecological connectivity	Strategic significance	Suggested action to address habitat losses	Ecological baseline
Ref	Broad Habitat	Habitat type	Area (hectares)	Distinctiveness	Condition	Ecological connectivity	Strategic significance		Total habitat units
1	Woodland and forest	Woodland and forest - Other woodland; broadleaved	0.07	Medium	Moderate	Low	Within area formally identified in local strategy	Same broad habitat or a higher distinctiveness habitat required	0.64
2	Urban	Urban - Developed land; sealed surface	0.39	V.Low	N/A - Other	N/A	Location ecologically desirable but not in local strategy	Compensation Not Required	0.00
3	Urban	Urban - Amenity grassland	1.04	Low	Poor	Low	Location ecologically desirable but not in local strategy	Same distinctiveness or better habitat required	2.29
4	Cropland	Cropland - Cereal crops	23.82	Low	N/A - Agricultural	N/A	Location ecologically desirable but not in local strategy	Same distinctiveness or better habitat required	52.40
5	Grassland	Grassland - Modified grassland	0.6	Low	Poor	Low	Location ecologically desirable but not in local strategy	Same distinctiveness or better habitat required	1.32
6	Heathland and shrub	Heathland and shrub - Mixed scrub	0.46	Medium	Poor	Low	Location ecologically desirable but not in local strategy	Same broad habitat or a higher distinctiveness habitat required	2.02
7	Woodland and forest	Woodland and forest - Lowland mixed deciduous woodland	0.18	High	Moderate	Low	Within area formally identified in local strategy	Same habitat required	2.48
8	Lakes	Lakes - Ditches	0.02	Medium	Poor	Low	Location ecologically desirable but not in local strategy	Same broad habitat or a higher distinctiveness habitat required	0.09
9	Grassland	Grassland - Other neutral grassland	1.79	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	Same broad habitat or a higher distinctiveness habitat required	15.75
10	Heathland and shrub	Heathland and shrub - Mixed scrub	0.06	Medium	Good	Low	Location ecologically desirable but not in local strategy	Same broad habitat or a higher distinctiveness habitat required	0.79
11	Grassland	Grassland - Other neutral grassland	2.7	Medium	Poor	Low	Location ecologically desirable but not in local strategy	Same broad habitat or a higher distinctiveness habitat required	11.88
12	Urban	Urban - Developed land; sealed surface	0.66	V.Low	N/A - Other	N/A	Within area formally identified in local strategy	Compensation Not Required	0.00
13	Cropland	Cropland - Cereal crops	15.69	Low	N/A - Agricultural	Low	Within area formally identified in local strategy	Same distinctiveness or better habitat required	36.09
14	Grassland	Grassland - Modified grassland	5.42	Low	Poor	Low	Within area formally identified in local strategy	Same distinctiveness or better habitat required	12.47
15	Grassland	Grassland - Other neutral grassland	0.76	Medium	Moderate	Low	Within area formally identified in local strategy	Same broad habitat or a higher distinctiveness habitat required	6.99
16	Lakes	Lakes - Ditches	0.07	Medium	Poor	Low	Within area formally identified in local strategy	Same broad habitat or a higher distinctiveness habitat required	0.32

Onsite Hedgerows - Baseline

UK Habitats - existing habitats				Habitat distinctiveness		Habitat condition		Ecological connectivity			Strategic significance				Ecological baseline	Retention category biodiversity value						Assessor comments
Baselin e ref	Hedge number	Hedgerow type	length KM	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	Suggested action to address habitat losses	Total hedgerow units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	
1		Native Hedgerow	0.09	Low	2	Moderate	2	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.414			0	0	0.09	0.414	H1
2		Native Hedgerow - Associated with bank or ditch	0.18	Medium	4	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Like for like or better	2.484			0	0	0.18	2.484	H2
3		Native Hedgerow	0.31	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	2.046			0	0	0.31	2.046	H3
4		Native Hedgerow	0.14	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.924			0	0	0.14	0.924	H3a
5		Native Hedgerow	0.13	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.858			0	0	0.13	0.858	H4
6		Native Hedgerow	0.09	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.594			0	0	0.09	0.594	H5
7		Native Hedgerow - Associated with bank or ditch	0.09	Medium	4	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Like for like or better	1.188			0	0	0.09	1.188	H6
8		Native Hedgerow	0.13	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.858			0	0	0.13	0.858	H7
9		Native Hedgerow - Associated with bank or ditch	0.05	Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Like for like or better	0.44			0	0	0.05	0.44	H8
10		Native Hedgerow	0.36	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	2.376			0	0	0.36	2.376	H9
11		Native Hedgerow	0.15	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.99			0	0	0.15	0.99	H10
12		Native Hedgerow	0.23	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	1.518		0.04	0.264	0	0.19	1.254	H11
13		Native Hedgerow	0.03	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.198			0	0	0.03	0.198	H11a
14		Native Hedgerow	0.2	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	1.32		0.2	1.32	0	0	0	H12
15		Native Hedgerow	0.13	Low	2	Poor	1	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.286			0	0	0.13	0.286	H13
16		Native Hedgerow	0.01	Low	2	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.069			0	0	0.01	0.069	H17
17		Native Hedgerow	0.02	Low	2	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.138			0	0	0.02	0.138	H18
18		Native Hedgerow	0.01	Low	2	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.069			0	0	0.01	0.069	H19
19		Native Hedgerow	0.17	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	1.122		0.17	1.122	0	0	0	H20
20		Native Hedgerow	0.14	Low	2	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.966		0.14	0.966	0	0	0	H21
21		Native Hedgerow	0.06	Low	2	Good	3	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.396		0.06	0.396	0	0	0	H22
22		Native Hedgerow	0.14	Low	2	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.966		0.14	0.966	0	0	0	H22
23		Native Hedgerow with trees	0.09	Low	2	Good	3	Low	Unconnected habitat	1	Within area formally identified in local strategy	High strategic significance	1.15	Same distinctiveness band or better	0.621		0.08	0.552	0	0.01	0.069	H23

Onsite Habitats – Creation

Post development/ post intervention habitats								Habitat units delivered
Proposed habitat	Area (hectares)	Distinctiveness	Condition	Ecological Ecological connectivity	Strategic significance Strategic significance	Temporal Time to target condition/years	Difficulty Difficulty of creation category	
Urban - Amenity grassland	0.78	Low	Poor	Low	Location ecologically desirable but not in local strategy	1	Low	1.66
Urban - Developed land; sealed surface	16.96	V.Low	N/A - Other	N/A	Location ecologically desirable but not in local strategy	0	Low	0.00
Urban - Introduced shrub	0.02	Low	Poor	Low	Location ecologically desirable but not in local strategy	1	Low	0.04
Urban - Developed land; sealed surface	4.91	V.Low	N/A - Other	N/A	Location ecologically desirable but not in local strategy	0	Low	0.00
Urban - Amenity grassland	0.55	Low	Poor	Low	Location ecologically desirable but not in local strategy	1	Low	1.17
Lakes - Ponds (Non- Priority Habitat)	0.67	High	Moderate	Medium	Within area formally identified in local strategy	3	Low	9.14
Heathland and shrub - Mixed scrub	1.73	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	3	Low	13.68
Grassland - Other neutral grassland	1.19	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	10	Low	7.33
Woodland and forest - Other woodland; broadleaved	2.97	Medium	Good	Low	Location ecologically desirable but not in local strategy	32+	Medium	8.40
Grassland - Modified grassland	0.33	Low	Poor	Low	Location ecologically desirable but not in local strategy	1	Low	0.70
Cropland - Cereal crops	1.14	Low	N/A - Agricultural	Low	Within area formally identified in local strategy	1	Low	2.53
Heathland and shrub - Mixed scrub	1.57	Medium	Good	Low	Location ecologically desirable but not in local strategy	7	Low	16.15
Urban - Amenity grassland	0.93	Low	Poor	Low	Within area formally identified in local strategy	1	Low	2.06
Urban - Developed land; sealed surface	3.48	V.Low	N/A - Other	N/A	Within area formally identified in local strategy	0	Low	0.00
Grassland - Modified grassland	0.26	Low	Poor	Low	Within area formally identified in local strategy	1	Low	0.58
Urban - Introduced shrub	0.02	Low	Poor	Low	Within area formally identified in local strategy	1	Low	0.04
Urban - Developed land; sealed surface	9.03	V.Low	N/A - Other	N/A	Within area formally identified in local strategy	0	Low	0.00
Urban - Amenity grassland	1	Low	Poor	Low	Within area formally identified in local strategy	1	Low	2.22
Heathland and shrub - Mixed scrub	0.98	Medium	Moderate	Low	Within area formally identified in local strategy	3	Low	8.10
Heathland and shrub - Mixed scrub	0.98	Medium	Good	Low	Within area formally identified in local strategy	7	Low	10.54
Grassland - Other neutral grassland	1.94	Medium	Moderate	Low	Within area formally identified in local strategy	10	Low	12.50
Woodland and forest - Other woodland; broadleaved	2.11	Medium	Good	Low	Within area formally identified in local strategy	32+	Medium	6.24

Onsite Hedgerows – Creation

		Proposed habitats				Spatial quality		Temporal multiplier	Hedge units delivered
Baseline ref	New hedge number	Habitat type	Length km	Habitat distinctiveness	Habitat condition	Ecological connectivity	Strategic significance	Time to target condition/years	
1		Native Species Rich Hedgerow	0.45	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	2.22
2		Native Species Rich Hedgerow	0.1	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	0.49
3		Native Species Rich Hedgerow	0.34	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	1.68
4		Native Species Rich Hedgerow	0.08	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	0.39
5		Native Species Rich Hedgerow	0.06	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	0.30
6		Native Species Rich Hedgerow	0.33	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	1.63
7		Native Species Rich Hedgerow	0.08	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	0.39
8		Native Species Rich Hedgerow	0.31	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	1.53
9		Native Species Rich Hedgerow	0.07	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	0.35
10		Native Species Rich Hedgerow	0.04	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	0.20
11		Native Species Rich Hedgerow	0.06	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	0.30
12		Native Species Rich Hedgerow	0.14	Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	0.69
13		Native Species Rich Hedgerow	0.14	Medium	Moderate	Low	Within area formally identified in local strategy	5	0.72

14		Native Species Rich Hedgerow	0.1	Medium	Moderate	Low	Within area formally identified in local strategy	5	0.52
15		Native Species Rich Hedgerow	0.25	Medium	Moderate	Low	Within area formally identified in local strategy	5	1.29
16		Native Species Rich Hedgerow	0.14	Medium	Moderate	Low	Within area formally identified in local strategy	5	0.72
17		Native Species Rich Hedgerow	0.08	Medium	Moderate	Low	Within area formally identified in local strategy	5	0.41
18		Native Species Rich Hedgerow	0.06	Medium	Moderate	Low	Within area formally identified in local strategy	5	0.31
19		Native Species Rich Hedgerow	0.2	Medium	Moderate	Low	Within area formally identified in local strategy	5	1.03
20		Hedge Ornamental Non Native	0.03	V.Low	Poor	Low	Location ecologically desirable but not in local strategy	1	0.00
21		Hedge Ornamental Non Native	0.02	V.Low	Poor	Low	Location ecologically desirable but not in local strategy	1	0.00
22		Hedge Ornamental Non Native	0.01	V.Low	Poor	Low	Location ecologically desirable but not in local strategy	1	0.00
23		Native Species Rich Hedgerow	0.25	Medium	Moderate	Low	Within area formally identified in local strategy	5	1.29
24		Native Species Rich Hedgerow	0.2	Medium	Moderate	Low	Within area formally identified in local strategy	5	1.03

Offsite Habitats - Baseline

	Habitats and areas			Habitat distinctiveness	Habitat condition	Ecological connectivity	Strategic significance	Suggested action to address habitat losses	Ecological baseline
Baseline ref	Broad habitat	Habitat type	Area (hectares)	Distinctiveness	Condition	Ecological connectivity	Strategic significance		Total habitat units
1	Cropland	Cropland - Cereal crops	1.17	Low	N/A - Agricultural	N/A	Location ecologically desirable but not in local strategy	Same distinctiveness or better habitat required	2.57
2	Cropland	Cropland - Cereal crops	5.5	Low	N/A - Agricultural	N/A	Within area formally identified in local strategy	Same distinctiveness or better habitat required	12.65
3									
4									
5									
6									
Total site area ha			6.67					Total Site baseline	15.22

Offsite Habitats - Creation

Post development/ post intervention habitats									
Proposed habitat	Area ha	Distinctiveness	Condition	Ecological	Strategic significance	Temporal	Difficulty	Spatial risk multiplier	Habitat units delivered
				Ecological connectivity	Strategic significance	Time to target condition/years	Difficulty of creation category	Spatial risk category	
Heathland and shrub - Mixed scrub	1.17	Medium	Good	Low	Location ecologically desirable but not in local strategy	7	Low	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss	12.04
Lakes - Ponds (Non- Priority Habitat)	0.15	High	Good	Low	Within area formally identified in local strategy	5	Low	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss	2.60
Heathland and shrub - Mixed scrub	5.35	Medium	Good	Low	Within area formally identified in local strategy	7	Low	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss	57.53
Totals	6.67								72.17

Appendix B: Botanical Species Lists (Key: D – dominant, A – abundant, F – frequent, O – occasional, R – rare, L – local, P – present)

Common Name	Scientific Name	F1	F2	F3	F4	F5	F6	F7	F8	F8a	F9	F10	F11	F12	F13	F13a (unmown margins of amenity pitches)	Tankersley Lane (grass verge)
Bent grasses	Agrostis sp.	O	F	O	F	R	D	D	O	O	D	D	A	D	D	D	-
a cat's-ear	Hypochaeris sp.	-	-	-	-	-	-	-	-	-	-	-	-	P	O	-	-
a sow-thistle	Sonchus sp.	-	-	-	-	-	-	-	-	-	-	-	-	P	P	-	-
Annual Meadow-grass	Poa annua	O	R	O	-	R	-	P	F	O	-	R	-	R	-	-	-
Autumnal Hawkbit	Scorzoneroides autumnalis	-	-	F	-	-	O	R	O	-	-	-	-	-	-	R	R
Broad-leaved Dock	Rumex obtusifolius	-	-	R	R	O	R	R	O	R	R	O	R	P	-	R	-
Cat's-ear	Hypochaeris radicata	-	-	-	-	-	-	-	-	-	-	-	R	-	-	R	-
Chickweed	Stellaria media agg.	R	-	-	-	-	-	-	R	R	-	-	-	-	-	-	-
Cock's-foot	Dactylis glomerata	-	-	P	F	F	-	P	-	-	-	R	P	-	-	-	F
Common Bent	Agrostis capillaris	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common Bird's-foot- trefoil	Lotus corniculatus	-	-	O	-	-	R	-	-	-	-	-	-	P	P	R	-
Common Centaury	Centaureum erythraea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-
Common Couch	Elytrigia repens	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-
Common Knapweed	Centaurea nigra	-	-	R	-	-	-	-	-	-	-	-	-	-	R	R	-
Common Mouse-ear	Cerastium fontanum	R	R	-	R	R	P	-	R	O	-	-	-	O	-	-	O
Common Nettle	Urtica dioica	R	O	-	-	R	-	P	-	-	-	-	R	-	-	-	-
Common Ragwort	Senecio jacobaea	-	-	R	-	-	R	R	-	O	-	-	-	R	O	R	-

Common Name	Scientific Name	F1	F2	F3	F4	F5	F6	F7	F8	F8a	F9	F10	F11	F12	F13	F13a (unmown margins of amenity pitches)	Tankersley Lane (grass verge)
Common Sorrel	<i>Rumex acetosa</i>	-	-	R	-	-	F	-	R	R	-	R	R	R	F	O	-
Common Vetch	<i>Vicia sativa</i>	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-
Cow Parsley	<i>Anthriscus sylvestris</i>	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-
Creeping Buttercup	<i>Ranunculus repens</i>	R	R	F	-	O	R	O	F	F	-	A	F	-	R	R	-
Creeping Cinquefoil	<i>Potentilla reptans</i>	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-
Creeping Thistle	<i>Cirsium arvense</i>	-	-	-	-	R	-	P	-	-	-	-	F/LD	-	-	-	-
Crested Dog's-tail	<i>Cynosurus cristatus</i>	P	R	-	R	-	-	-	-	R	-	-	-	-	-	-	-
Cuckoo-flower	<i>Cardamine pratensis</i>	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-
Curled Dock	<i>Rumex crispus</i>	-	-	-	-	R	-	-	-	R	-	-	-	-	P	R	-
Cut-leaved Crane's-bill	<i>Geranium dissectum</i>	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-
Daisy	<i>Bellis perennis</i>	-	-	R	-	-	-	-	R	R	-	-	-	P	-	-	O
Dandelion	<i>Taraxacum officinale</i> agg.	-	-	R	R	F	-	P	R	-	F	R	-	O	F	-	O
a St. John's-wort	<i>Hypericum</i> sp.	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-
False Oat-grass	<i>Arrhenatherum elatius</i>	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-
Field Wood-rush	<i>Luzula campestris</i>	-	-	-	-	-	-	-	-	-	-	-	-	P	P/LF	-	-
Great Willowherb	<i>Epilobium hirsutum</i>	-	-	-	-	-	R	P	-	-	-	-	-	-	-	-	-
Greater Plantain	<i>Plantago major</i>	-	-	R	-	P	R	-	R	F	-	-	-	O	-	-	R
Hard Rush	<i>Juncus inflexus</i>	-	-	-	R	-	-	-	-	-	-	R	-	-	-	-	-

Common Name	Scientific Name	F1	F2	F3	F4	F5	F6	F7	F8	F8a	F9	F10	F11	F12	F13	F13a (unmown margins of amenity pitches)	Tankersley Lane (grass verge)
Hogweed	Heracleum sphondylium	-	-	-	R	R	-	-	-	-	-	-	-	-	-	-	-
Hop Trefoil	Trifolium campestre	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-
Knotgrass [agg.]	Polygonum aviculare agg.	-	-	-	-	-	-	R	F	O	-	-	-	-	-	-	-
Lesser Stitchwort	Stellaria graminea	-	R	-	-	-	-	P	-	-	-	R	-	P	-	O	-
Meadow Buttercup	Ranunculus acris	-	-	F	R	-	F	-	F	F	-	R	-	-	-	O	-
Meadow Foxtail	Alopecurus pratensis	-	R	R	D	R	-	-	-	-	-	-	-	-	-	-	-
Meadow Vetchling	Lathyrus pratensis	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-
Perennial Rye-grass	Lolium perenne	D	D	D	O	F	F	R	D	F	D	R	O	D	-	-	D
Red Bartsia	Odontites vernus	-	-	R	-	-	R	-	-	-	-	-	-	-	-	-	-
Red Clover	Trifolium pratense	-	-	R	-	O	-	-	R	R	-	-	-	-	-	-	R
Red Fescue	Festuca rubra agg.	-	-	-	-	-	-	P	-	-	-	-	-	-	F	R	F
Ribwort Plantain	Plantago lanceolata	-	-	F	-	-	P	P	F	R	R	R	-	P	O	-	O
Rough Meadow-grass	Poa trivialis	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-
Selfheal	Prunella vulgaris	-	-	-	-	-	-	-	-	-	-	-	-	R	R	-	-
Slender Speedwell	Veronica filiformis	-	-	-	-	-	-	-	-	-	-	-	-	O	-	-	-
Smooth Hawk's-beard	Crepis capillaris	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-
Smooth Meadow-grass	Poa pratensis sens.lat.	-	-	-	-	-	-	-	-	-	-	R	O	-	-	-	-
Soft Rush	Juncus effusus	-	-	-	-	-	-	P	-	-	-	R	-	-	-	R	-
Spear Thistle	Cirsium vulgare	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-

Common Name	Scientific Name	F1	F2	F3	F4	F5	F6	F7	F8	F8a	F9	F10	F11	F12	F13	F13a (unmown margins of amenity pitches)	Tankersley Lane (grass verge)
Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>	-	-	-	R	-	-	-	-	-	-	-	-	-	LF	-	-
Thyme-leaved Speedwell	<i>Veronica serpyllifolia</i>	-	-	-	-	-	-	-	-	R	-	-	-	O	-	-	-
Timothy	<i>Phleum pratense</i> sens.lat.	-	-	F	-	-	R	-	-	-	-	R	R	-	-	-	-
Tufted Hair-grass	<i>Deschampsia caespitosa</i>	-	-	-	-	-	R	P	R	-	O	P	-	-	-	R	-
Tufted Vetch	<i>Vicia cracca</i>	-	-	-	-	R	-	-	-	R	-	-	-	-	-	-	-
White Clover	<i>Trifolium repens</i>	F	F	O	-	F	-	-	O	F	O	R	-	F	F	R	F
White Dead-nettle	<i>Lamium album</i>	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-
Yarrow	<i>Achillea millefolium</i>	-	-	-	-	-	-	-	-	-	-	R	-	R	R	R	R
Yorkshire-fog	<i>Holcus lanatus</i>	O	F	R	F	R	F	LD	-	O	O	D	-	R	F	D	-

Common Name	Scientific Name	H1	H2	H3	3a	H4	H5	H6	H7	H8	H9	H10	H11	11a	H12	H13	H14	H15	H16	H17	H18	H19	H20	H21	H22	H23
a lime	<i>Tilia sp.</i>	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	P	-	-	-	-	-	-	-
a willow	<i>Salix sp.</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-
Alder	<i>Alnus glutinosa</i>	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-	-	-
Apple	<i>Malus domestica</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-
Ash	<i>Fraxinus excelsior</i>	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	P	P	P	-	-	-	-	P

Common Name	Scientific Name	H1	H2	H3	3a	H4	H5	H6	H7	H8	H9	H10	H11	11a	H12	H13	H14	H15	H16	H17	H18	H19	H20	H21	H22	H23
Beech	<i>Fagus sylvatica</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-
Blackthorn	<i>Prunus spinosa</i>	-	P	-	-	-	-	P	-	-	-	P	P	-	-	-	-	-	-	-	-	-	-	-	-	-
Bramble	<i>Rubus fruticosus</i> agg.	P	-	P	P	P	P	P	P	-	P	P	P	P	P	P	-	-	P	P	P	P	-	-	-	P
Dog Rose	<i>Rosa canina</i> agg.	-	P	P	-	-	-	-	-	-	P	-	P	-	P	P	-	-	P	-	-	-	-	-	-	-
Downy Birch	<i>Betula pubescens</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-
Elder	<i>Sambucus nigra</i>	-	-	P	-	-	-	P	P	P	P	P	P	-	P	P	-	-	P	-	-	-	-	-	-	P
Enchanter's-nightshade	<i>Circaea lutetiana</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-
Field Maple	<i>Acer campestre</i>	-	-	-	-	-	-	-	-	-	-	-	P	P	-	-	-	-	-	-	P	P	-	-	-	P
Field Rose	<i>Rosa arvensis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P	-	-	-	-	-	-
Gooseberry	<i>Ribes uva-crispa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-
Hawthorn	<i>Crataegus monogyna</i>	P	P	P	P	P	P	P	P	P	-	P	P	P	P	P	-	-	P	P	P	P	-	-	-	-
Hazel	<i>Corylus avellana</i>	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-	-	-
Holly	<i>Ilex aquifolium</i>	-	-	-	-	-	-	-	P	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse-chestnut	<i>Aesculus hippocastanum</i>	-	-	-	-	-	-	-	P	-	-	-	P	-	-	-	-	-	P	-	-	P	-	-	-	-
Pedunculate Oak	<i>Quercus robur</i>	-	-	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-
Raspberry	<i>Rubus idaeus</i>	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Currant	<i>Ribes rubrum</i>	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sessile Oak	<i>Quercus petraea</i>	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-	-	P
Silver Birch	<i>Betula pendula</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P
Sweet Chestnut	<i>Castanea sativa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-

Common Name	Scientific Name	H1	H2	H3	3a	H4	H5	H6	H7	H8	H9	H10	H11	11a	H12	H13	H14	H15	H16	H17	H18	H19	H20	H21	H22	H23
Norway Maple	Acer Platanoides	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-
Sycamore	Acer pseudoplatanus	P	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	P
Wild Cherry	Prunus avium	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-	-	-
Wild Plum	Prunus domestica	-	-	-	-	-	-	-	-	-	-	P	P	-	-	-	-	-	-	-	-	P	-	-	-	-
Wych Elm	Ulmus glabra	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	P	-	P	-	-	-	-	-