

9<sup>th</sup> November 2020

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- (1) **BARNSLEY METROPOLITAN BOROUGH COUNCIL**
- (2) **WENTWORTH TRUSTEE COMPANY LIMITED**
- (3) **RIPPLE TRUSTEE COMPANY LIMITED**
- (4) **THE WENTWORTH CHARITY**
- (5) **HOYLAND DEVELOPMENTS LTD**
- (6) **EQUITES NEWLANDS (HOYLAND) LIMITED**

Agreement pursuant to section 106 of the Town and Country Planning Act 1990

Relating to land to the west of Sheffield Road, Hoyland, Barnsley

THIS AGREEMENT is made the

9<sup>th</sup> November

2020

**BETWEEN**

- (1) **BARNSELEY METROPOLITAN BOROUGH COUNCIL** of the Town Hall, Church Street, Barnsley, S70 2TA (the "Council")
- (2) **WENTWORTH TRUSTEE COMPANY LIMITED** (Co. Regn. No. 03736061) whose registered office is at Hitchcock House Hilltop Park Devizes Road Salisbury SP3 4UF acting as land trustee of the English Will Trust (the "First Owner")
- (3) **RIPPLE TRUSTEE COMPANY LIMITED** (Co. Regn. No. 12317094) whose registered office is at Hitchcock House Hilltop Park Devizes Road Salisbury SP3 4UF being a trust corporation and acting as trustee of the English Will Trust (the "Trustee")
- (4) **THE WENTWORTH CHARITY** (a registered charity registered under reference 1078792) of The Estate Office Wentworth, Rotherham S62 7TD acting by The Official Custodian For Charities and its trustees Mr David Hunton, Sir Philip-Naylor-Leyland, Mrs Cynthia Shaw, Mr Robert W. Dagleish, Miss Susan J. Clayton. Mr Anthony Barber-Lomax, Mrs Rosalind A. Stevenson and Mr William Crawford (the "Second Owner")
- (5) **HOYLAND DEVELOPMENTS LTD** (Co. Regn. No. 09899754) whose registered office is at 2 Duchy Road, Harrogate, HG1 2EP and 2 Park Lane, Leeds, LS3 1ES (the "Option Holder")
- (6) **EQUITES NEWLANDS (HOYLAND) LIMITED** (Co. Regn. No. 12536008) whose registered office is at Lumonics House Valley Drive Swift Valley Industrial Estate Rugby Warwickshire CV21 1TQ (the "Developer")

**BACKGROUND**

- (A) By virtue of the Act the Council is the local planning authority for the purposes of this Agreement for the area in which the Site is situated and is the local planning authority by whom the planning obligations hereby created are enforceable.
- (B) The First Owner is the registered proprietor of that part of the Site shown shaded green on Plan 1 registered with absolute title at the Land Registry under title numbers SYK524738, SYK524757, SYK524871, SYK524784 and SYK620966

- (C) The Second Owner is the registered proprietor of that part of the Site shown shaded turquoise on Plan 1 registered with absolute title at the Land Registry under title number SYK533775
- (D) The Option Holder has an interest in the First Owner's Land registered under title numbers SYK524738, SYK52757 SYK620966 and SYK524871 pursuant to an option agreement dated 24 March 2016
- (E) The First Owner is the registered proprietor of the Biodiversity Offsetting Land registered under title numbers SYK52449 and SYK524738
- (F) The Planning Application has been submitted to the Council for determination.
- (G) The Council would not grant the Planning Permission for the Development unless the covenants contained herein were entered in to by the Owners.
- (H) The Owners and the Option Holder have agreed to enter in to this Agreement to create planning obligations in respect of each of their interests in the Site and the Biodiversity Offsetting Land in favour of the Council pursuant to section 106 of the Act and to be bound by and observe and perform the covenants, agreements, conditions and stipulations contained in this Agreement.
- (I) The Developer is the proposed purchaser of the Owners' interest in the Site under a contract made between the First Owner, the Second Owner, the Option Holder, the Developer and other parties and will assume the obligations contained in this Agreement on the part of the Owners in respect of the Site following completion of the transfer of the Owner's interest in the Site to it pursuant to the said contract.
- (J) At its meeting on the 20 October 2020 the Planning Committee of the Council resolved to approve the Development applied for in the Planning Application subject to the parties hereto entering into the obligations herein provided for.

## **1. DEFINITIONS**

- 1.1. In this Agreement the following words and phrases have the meanings shown opposite in addition to the definitions given in the description of the parties and the Background:

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| the Act                                      | means the Town and Country Planning Act 1990 (as amended)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Biodiversity Offsetting Land                 | means the land edged red on the plans titled FPCR 01 9295 and FPCR 02 9295 attached hereto                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Biodiversity Enhancement and Management Plan | means the plan titled as such and contained in the Fifth Schedule together with any amendments to the same following the application of paragraphs 2.1 and 2.2 of the Second Schedule hereto                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Biodiversity Offsetting Land Survey          | means a survey of the Biodiversity Offsetting Land to establish its baseline condition including field boundary vegetation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Commencement of Development                  | means carrying out of material operation as defined in section 56(4) of the Act save that for the purposes of this Agreement the term is not to include operations in connection with site clearance, demolition, archaeological investigation, for the purposes of assessing contamination, remedial action in respect of any contamination, or of assessing the need for any diversion and laying of services and the erection of means of enclosure for the purposes of site security and / or the display of advertisements and the works referred to in the Enabling Works Construction Method Statement submitted in conjunction with the Planning Application and the expression "Commence" and "Commencement" is to be construed accordingly |
| Development                                  | means the development of the Site pursuant to the Planning Permission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| English Will Trust             | means the will dated 3 July 1970 (with the two codicils thereto) governing immovable property in Great Britain of the late Right Honourable Olive Dorothea Countess Fitzwilliam who died on 14 December 1975 which will and codicils were proved in the Principal Registry of the Family Division of the High Court of Justice on 26 February 1976 by Robert Edward MacWatt, Allan Berkeley Valentine Hughes and Messrs Hoare Trustees being the executors named in the said will |
| Forge Capital Contribution     | means the sum of £800,000 (Eight Hundred Thousand) to be expended on part (a) of the Forge Contribution Purposes                                                                                                                                                                                                                                                                                                                                                                  |
| Forge Contribution Purposes    | means: <ul style="list-style-type: none"> <li>(a) in respect of the Forge Capital Contribution the carrying out of the Parkside Permanent Works; and</li> <li>(b) in respect of the Forge Maintenance Contribution the maintenance of the playing fields;</li> <li>(c) in respect of the Forge Seeding Contribution the seeding of the playing fields</li> </ul>                                                                                                                  |
| Forge Maintenance Contribution | means the sum of £15,000.00 (Fifteen Thousand Pounds) to be expended on part (b) of the Forge Contribution Purposes                                                                                                                                                                                                                                                                                                                                                               |
| Forge Seeding Contribution     | means the sum of £50,000.00 (Fifty Thousand Pounds) to be expended on the Forge Contribution Purposes                                                                                                                                                                                                                                                                                                                                                                             |
| Occupation and Occupied        | means occupation for the purposes permitted by the Planning Permission but not including occupation by personnel engaged in construction, fitting out or decoration or                                                                                                                                                                                                                                                                                                            |

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | occupation for marketing or display or occupation in relation to security operations                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Owners                        | means together the First Owner and the Second Owner collectively                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Qualified Agronomist          | means an Agronomist holding a BA degree Registered with RIPTA and having a minimum of 10 years post qualification experience                                                                                                                                                                                                                                                                                                                                                                                       |
| Parkside Permanent Works      | means the works shown on the Parkside Permanent Works Plan and described in Part 2 of the Fourth Schedule and any additional works required to be undertaken in accordance with the planning permission to be granted for the Parkside Permanent Works and to comply with the recommendations of the report of the Qualified Agronomist                                                                                                                                                                            |
| Parkside Permanent Works Plan | means the plan titled "Land for Sports Facilities Phase 1 and Phase 2 works" numbered SP002 P3 attached hereto                                                                                                                                                                                                                                                                                                                                                                                                     |
| Plan 1                        | means the plan attached to this Agreement at the First Schedule and marked Plan 1                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Planning Application          | means the hybrid planning application for a 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 Masterplan Area (Local Plan references HS68, HS65, HS61, HS58, HS6, SL5) carrying reference number 2020/0647                                                                                                                                                             |
| Planning Permission               | means the planning permission to be issued pursuant to the Planning Application                                                                                                                                                                                                        |
| Site                              | means the land edged red on Plan 1                                                                                                                                                                                                                                                     |
| RIPTA                             | means the Register of Independent Professional Turfgrass Agronomists                                                                                                                                                                                                                   |
| Temporary Sports Facilities Works | means the works shown on the Temporary Works Facilities Plan and described in Part 1 of the Fourth Schedule which for the avoidance of doubt shall include the retention of the cricket pitch and the retention of the archery facility until a replacement is provided                |
| Temporary Sports Facilities Plan  | means the plan titled "Temporary Sports Facilities" numbered SK006 P9 attached hereto                                                                                                                                                                                                  |
| Unchallenged Planning Permission  | means a permission which is not subject to judicial review proceedings or any other form of legal challenge as evidenced by the expiry of a period of 8 weeks from the date of issue of the planning permission without any proceedings having been issued and notified to the Council |
| Working Days                      | means any day other than a Saturday and a Sunday and Bank or Public holiday.                                                                                                                                                                                                           |

## 2. CONSTRUCTION

- 2.1. Where in this Agreement reference is made to any clause, paragraph or schedule or recital such reference (unless the context otherwise requires) is a reference to a clause, paragraph or schedule or recital in this Agreement.

- 2.2. Words importing the singular meaning where the context so admits include the plural meaning and vice versa.
- 2.3. Words of the masculine gender include the feminine and neuter genders and words denoting actual persons include companies, corporations and firms and all such words shall be construed interchangeable in that manner.
- 2.4. Wherever there is more than one person named as a party and where more than one party undertakes an obligation all their obligations can be enforced against all of them jointly and severally unless there is an express provision otherwise.
- 2.5. Any reference to an Act of Parliament shall include any modification, extension or re-enactment of that Act for the time being in force and shall include all instruments, orders, plans regulations, permissions and directions for the time being made, issued or given under that Act or deriving validity from it.
- 2.6. References to any party to this Agreement shall include the successors in title to that party and to any person deriving title through or under that party and in the case of the Council the successors to its statutory functions.
- 2.7. The headings and contents list are for reference only and shall not affect construction.

### **3. ENGLISH WILL TRUST**

The Trustee, as trustee of the English Will Trust directs the First Owner as registered proprietor of that part of the Site shown shaded green on Plan 1 registered with absolute title at the Land Registry under title numbers SYK524738, SYK524757, SYK524871, SYK524784 and SYK620966, and the Biodiversity Offsetting Land registered under title numbers SYK52449 and SYK524738 to enter into this Agreement on behalf of the English Will Trust.

### **4. STATUTORY PROVISIONS**

- 4.1. This Agreement is a planning obligation made in pursuant of section 106 of the Act and to the extent that the covenants in this Agreement are not made under section 106 of the Act they are made under section 111 of the Local Government Act 1972 and Section 1 of the Localism Act 2011.
- 4.2. Subject to clause 4.3 the covenants, restrictions and requirements imposed upon the Owners under this Agreement create planning obligations pursuant to Section 106 of the Act and are enforceable by the Council as local planning authority against the Owners.

- 4.3. The obligations contained in paragraph 1 of the Second Schedule bind the Owners' interest in the Site and the obligations in paragraph 2 of the Second Schedule bind the First Owner's interest in the Biodiversity Offsetting Land.

## **5. CONDITIONALITY**

This Agreement is conditional on:

- (i) the grant of the Planning Permission; and
- (ii) the Commencement of Development pursuant to the Planning Permission

save for the provision of this clause and clauses 3, 11, and 13, and clauses 15-17 (inclusive), which shall come into effect immediately upon completion of this Agreement.

## **6. THE OWNERS COVENANTS WITH THE COUNCIL**

- 6.1. The Owners and the Developer hereby covenant with the Council subject to clause 5. above to observe and perform the restrictions and obligations which apply to the Owners' interest in the Site and are contained in paragraph 1 of the Second Schedule to this Agreement.
- 6.2. The First Owner hereby covenants with the Council subject to clause 5. above to observe and perform the restrictions and obligations which apply to the Biodiversity Offsetting Land and are contained in paragraph 2 of the Second Schedule to this Agreement.

## **7. THE COUNCIL'S COVENANTS WITH THE OWNERS**

The Council hereby covenants with the Owners:

- 7.1. to issue the Planning Permission (in general accordance with the Draft Planning Permission) expeditiously following the completion of this Agreement; and
- 7.2. to observe and perform any obligations on its part contained in the Third Schedule to this Agreement.

## **8. AGREEMENTS AND DECLARATIONS**

The parties agree and declare

- 8.1. No provisions of this Agreement shall be enforceable under the Contracts (Rights of Third Parties) Act 1999.
- 8.2. This Agreement shall be registrable as a local land charge by the Council.

- 8.3. Where the agreement, approval, consent or expression of satisfaction is required by the Owners from the Council under the terms of this Agreement, such agreement, approval or consent or expression of satisfaction shall not be unreasonably withheld or delayed and any such agreement, consent, approval or expression of satisfaction shall be given on behalf of the Council by the Head of Planning and Building Control or his nominee.
- 8.4. Following the performance and satisfaction of all of the obligations contained in this Agreement the Council shall forthwith effect the cancellation of all entries made in the Register of Local Land Charges in respect of this Agreement.
- 8.5. Insofar as any clause or clauses of this Agreement are found (for whatever reason) to be invalid illegal or unenforceable then such invalidity illegality or unenforceability shall not affect the validity or enforceability of the remaining provisions of this Agreement.
- 8.6. This Agreement shall cease to have effect (insofar only as it has not already been complied with) if the Planning Permission shall be quashed, revoked or otherwise withdrawn or (without the consent of the Owners) it is modified by any statutory procedure (other than a modification under section 73 or 96A of the Act) or expires prior to the Commencement of Development.
- 8.7. If pursuant to clause 8.6 this Agreement shall terminate and cease to have effect the Council shall upon request remove any entry relating to this Agreement from the Register of Local Land Charges.
- 8.8. No person shall be liable for any breach of any of the planning obligations or other provisions of this Agreement after it shall have parted with its interest in the Site or the Biodiversity Offsetting Land or the part of the Site or the Biodiversity Offsetting Land in respect of which such breach occurs but without prejudice to liability for any subsisting breach arising prior to parting with such interest and the retention of a right of way or easement of the Site or the Biodiversity Offsetting Land shall not constitute an interest for the purposes of this clause.
- 8.9. This Agreement shall not be enforceable against:
- 8.9.1. anyone whose only interest in the Site or the Biodiversity Offsetting Land or any part of the Site or the Biodiversity Offsetting Land is in the nature

- of the benefit of an easement or covenant or as the owner of the sub soil of any highway within the Site or the Biodiversity Offsetting Land;
- 8.9.2. any person whose only interest in the Site or the Biodiversity Offsetting Land or any part of the Site or the Biodiversity Offsite Land is an estate or interest in any subterranean stratum of mineral or other matter;
- 8.9.3. any statutory undertaker acquiring any part of the Site or the Biodiversity Offsetting Land, any owner of any electricity sub-station and/or gas governor site and/or pumping station to other supply installation nor those deriving title from them.
- 8.10. Any mortgagee or chargee for the time being shall not be liable for any breach of the obligations in this Agreement unless committed or continuing at a time when the mortgagee or chargee is in possession of all or any part of the Site or the Biodiversity Offsetting Land.
- 8.11. Subject to clause 8.13 nothing in this Agreement shall prohibit or limit the right to develop any part of the Site in accordance with a planning permission (other than the Planning Permission) granted (whether or not on appeal) after the date of this Agreement nor shall any payment be due to the Council pursuant to this Agreement as a result of any development carried out pursuant to such later planning permission.
- 8.12. Nothing contained or implied in this Agreement shall prejudice or affect the rights discretions powers duties and obligations of the Council under all statutes by-laws statutory instruments orders and regulations in the exercise of its functions as a local authority.
- 8.13. In the event that:
- 8.13.1. the Council shall at any time hereafter grant a planning permission pursuant to an application made under section 73 or 73A of the Act (or any re-enactment thereof) in respect of the conditions in the Planning Permission; and
- 8.13.2. the Council and the Owners shall agree such in writing by exchange of correspondence

references in this Agreement to the Planning Application and the Planning Permission shall be deemed to include any such subsequent planning applications and planning permissions granted as aforesaid and this Agreement shall henceforth take effect and be read and construed accordingly.

**9. WAIVER**

No waiver (whether expressed or implied) by the Council or the Owners of any breach or default in performing or observing any of the covenants terms or conditions of this Agreement shall constitute a continuing waiver and no such waiver shall prevent the Council or the Owners from enforcing any of the relevant terms or conditions or for acting upon any subsequent breach or default.

**10. CHANGE IN OWNERSHIP**

The Owners agree with the Council to give the Council immediate written notice of any change in ownership of any of their interests in the Site or the Biodiversity Offsite Land occurring before all the obligations under this Agreement have been discharged such notice to give details of the transferee's full name and registered office (if a company or usual address if not) together with the area of the Biodiversity Offsite Land or the Site or unit of occupation purchased by reference to a plan.

**11. COUNCIL COSTS**

The Developer agrees to pay the Council on execution of this Agreement the Council's reasonable costs and disbursements of an incidental to the preparation and execution of this Agreement in the sum of £1,000 (one thousand pounds) the receipt of which is hereby acknowledged.

**12. DISPUTE RESOLUTION**

12.1. In the event of any dispute or difference arising between any of the parties to this Agreement in respect of any matter contained in this Agreement such dispute or difference shall be referred to an independent and suitable person holding appropriate professional qualifications to be appointed (in the absence of an agreement) by or on behalf of the president for the time being of the professional body chiefly relevant in England with such matters as may be in dispute and such person shall act as an expert whose decision shall be final and binding on the parties in the absence of manifest error and any costs shall be payable by the parties to the dispute in such proportion as the expert shall determine and failing such determination shall be borne by the parties in equal shares.

12.2. In the absence of agreement as to the appointment or suitability of the person to be appointed pursuant to Clause 12.1 or as to the appropriateness of the professional body then such question may be referred by either part to the president for the time being of the Law Society for him to appoint a solicitor to determine the dispute such

solicitor acting as an expert and his decision shall be final and binding on all parties in the absence of manifest error and his costs shall be payable by the parties to the dispute in such proportion as he shall determine and failing such determination shall be borne by the parties in equal shares.

- 12.3. Any expert howsoever appointed shall be subject to the express requirement that a decision was reached and communicated to the relevant parties within the minimum practicable timescale allowing for the nature and complexity of the dispute and in any event not more than twenty-eight working days after the conclusion of any hearing that takes place or twenty-eight working days after he has received any file or written representation.
- 12.4. The expert shall be required to give notice to each of the said parties requiring them to submit to him within ten working days of notification of his appointment written submissions and supporting material and the other party will be entitled to make a counter written submission within a further ten working days.

### **13. LIMITATION OF LIABILITY**

- 13.1. The obligations of the First Owner pursuant to this Agreement shall be limited to the assets of the English Will Trust from time to time.
- 13.2. The obligations of the Second Owner pursuant to this Agreement shall be limited to the assets of the Wentworth Charity from time to time.

### **14. NOTICE**

- 14.1. Any notice required to be given under this agreement shall be in writing and shall be delivered personally, or sent by pre-paid first class post or recorded delivery or by commercial courier, to any person required to receive the notice at its address as set out below:
  - 14.1.1. Council: C/O Head of Planning and Building Control, at Barnsley Metropolitan Borough Council, Westgate Plaza One, PO Box 600, Barnsley, S70 9EZ,
  - 14.1.2. First Owner: Fitzwilliam (Wentworth) Estate, Estate Office, Wentworth, Rotherham S62 7TD for the attention of Philip Nelson,
  - 14.1.3. Second Owner: Fitzwilliam (Wentworth) Estate, Estate Office, Wentworth, Rotherham S62 7TD for the attention of Anthony Barber-Lomax

or as otherwise specified by the relevant person by notice in writing to each other person.

14.2. Any notice shall be deemed to have been duly received:

- 14.2.1. if delivered personally, when left at the address and for the contact referred to in this clause;
- 14.2.2. if sent by prepaid first-class post or special delivery, at 9.00am on the second working day after posting; or
- 14.2.3. if delivered by commercial courier, on the date and at the time that the courier's delivery receipt is signed

## **15. JURISDICTION**

This Agreement is governed by and interpreted in accordance with the law of England and the parties submit to the jurisdiction of the courts of England.

## **16. DELIVERY**

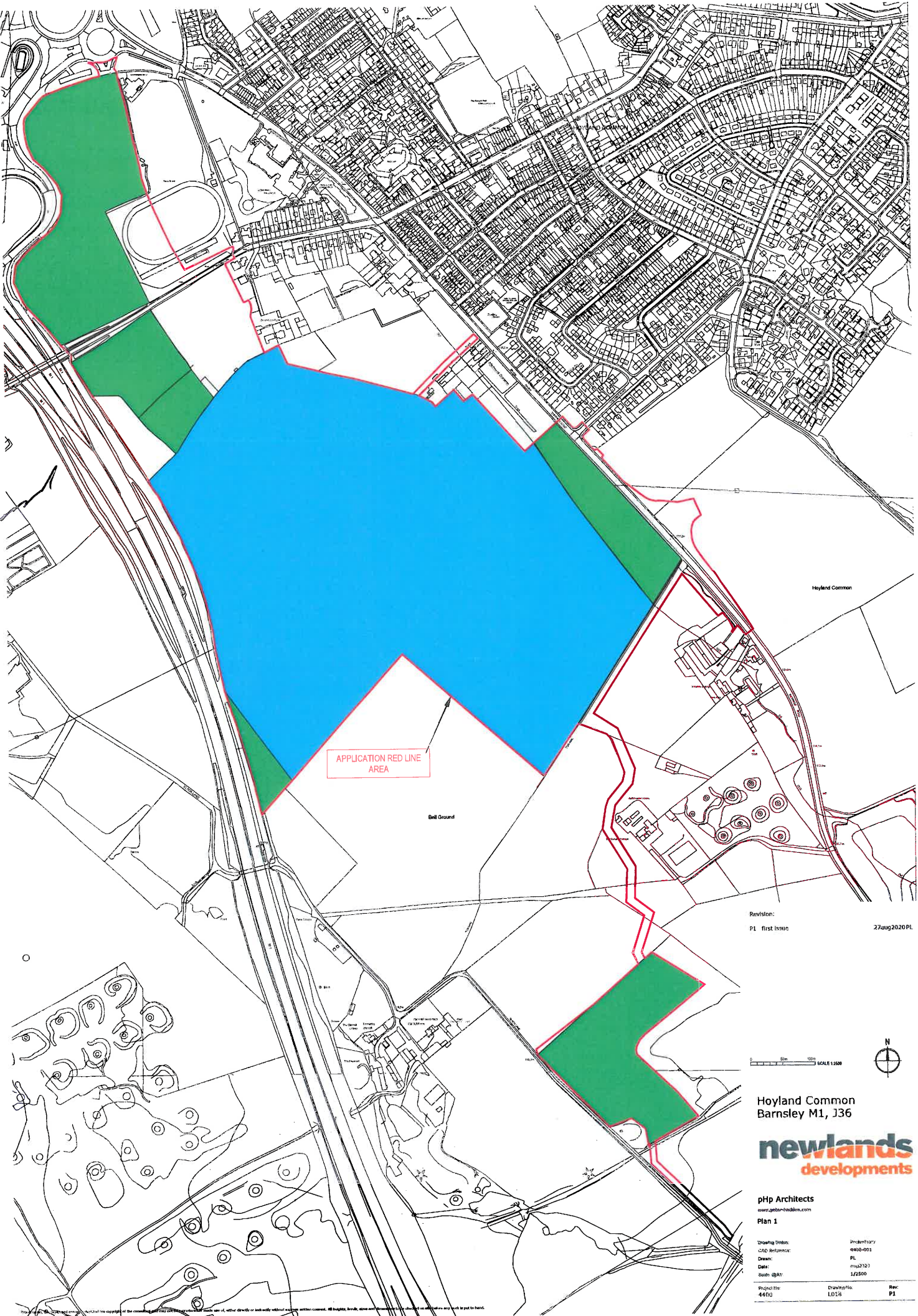
The provision of this Agreement (other than this clause which shall be of immediate effect) shall be no effect until this Agreement has been dated.

## **17. EXECUTION OF COUNTERPARTS**

This Agreement may be executed in separate counterparts and such counterparts when executed and delivered shall be an original.

This document is executed as a deed and is delivered on the date stated at the beginning of this deed.

**FIRST SCHEDULE**  
**Plans**



APPLICATION RED LINE AREA

Bell Ground

Hoyland Common

Revision:  
P1 first issue 27 Aug 2020 PL

0 50m 100m SCALE 1:2500



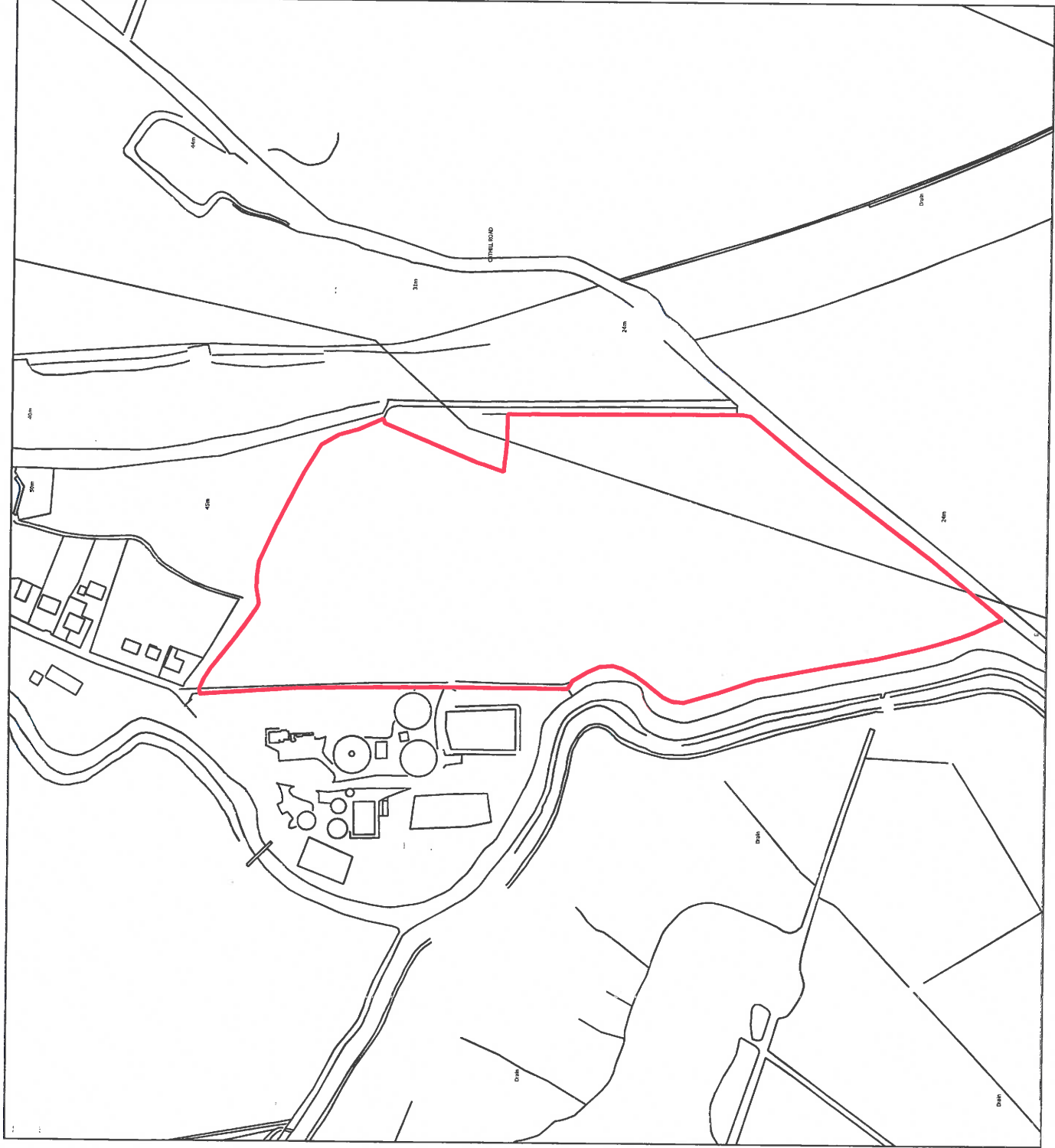
Hoyland Common  
Barnsley M1, J36

**newlands**  
developments

pHp Architects  
www.gabrielnewlands.com  
Plan 1

|                |            |               |          |
|----------------|------------|---------------|----------|
| Drawing Date:  | 04/08/2020 | Project No:   | 4400-001 |
| CAD Reference: | PL         | Drawn:        | PL       |
| Date:          | 04/08/2020 | Scale:        | 1/2500   |
| Scale:         | 1/2500     | Project File: | 4400     |
|                |            | Drawn/PLs:    | L018     |
|                |            | Rev:          | P1       |

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*[Handwritten signature]*

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**Key**



Newlands Developments  
Land West of Sheffield Road,  
Hoyland  
Area B site boundary plan

Scale 1:2500  
Drawing / Revision  
Date 5/11/20  
No 9295

FPCR Environment and Design Ltd, Lockington Hall, Lockington, Derby, DE74 2RH ■ t: 01509 672 772 ■ f: 01509 674 565 ■ e: mail@fpcr.co.uk ■ w: www.fpcr.co.uk  
masterplanning ■ environmental assessment ■ landscape design ■ urban design ■ ecology ■ architecture ■ arboriculture

K:\920019295\ECO\QGIS 2.14\Plans\Phase 1 - 00m\9295-E-02 Phase 1 Habitat Plan.qgs

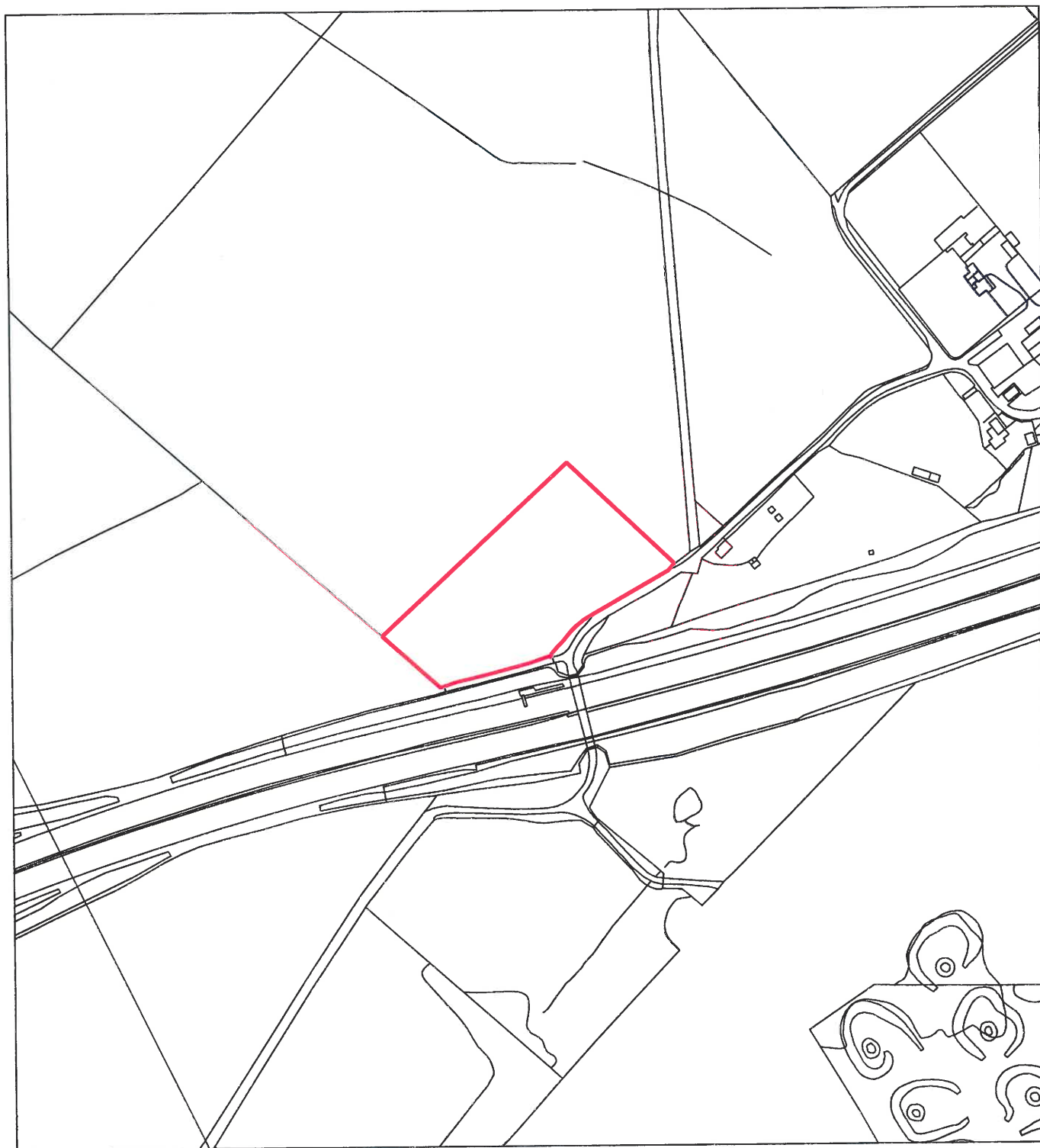
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# Key

Site Boundary

*[Handwritten signature]*



Newlands Developments  
Land West of Sheffield Road,  
Hoyland

Area A site boundary plan

Scale: 1:2500  
Date: 11/9/2020  
FPCR 02 9295



## Notes;

To enable the archery club to have a continuous use it is proposed to undertake the works as indicated in two phases.

### Phase 1 will comprise;

- Undertake site clearance to form new entrance off Sheffield Road;
- Provide a temporary surfaced access way and car park area;
- Undertake earthworks and re-modelling to create plateaus for new archery zone area and sports pitches.
- Subject to the timing of the land exchange the archery area is proposed to be part turfed (to the archery runs) and part grass seeded to the remainder.
- The provision of new archery zone will be located on the lower plateau.
- Provide container storage.

### Phase 2 will comprise;

- Finalise clearance and earthworks re-modelling to create required level plateau for sports pitches
- playing areas to be left with a topsoil surface ready to receive seeding/turf as part of BMBC phase of works;
- Form new permanent entrance off Sheffield Road together with underground electricity and surface and foul water supplies to serve the future community building;

2.4m high Paladin (weldmesh) Fencing  
Dark Green RAL.6005, to boundary

existing public right of way  
maintained

Phase 2.  
finalise levels and  
topsoil surface pitches

Phase 1.  
earthworks plateauing

Phase 2.  
form permanent access, electricity, foul  
and surface drainage supplies, capped off  
as necessary for future connection

Phase 1.  
existing drains to remain

Plot redline  
area 4.38ha

Phase 1.  
temporary surfaced  
access and parking area

Phase 1.  
provide container storage and  
temporary portakabin type  
changing/toilets

Phase 1.  
perimeter fencing

Phase 1.  
turf/seeding of archery zone  
(pink dotted line area 0.988ha)

indicative overhead  
electricity cable zone

Revisions:  
P1 First issue  
P2 Boundary fence type varied  
P3 updated as required

12aug2020 PL  
18aug2020 PL  
18aug2020 PL

SCALE 1:1000



Hoyland Common  
Barnsley M1, J36

**newlands**  
developments

pHp Architects

www.peter-haddon.com

Land for Sports Facilities

Proposed Phase 1 and Phase 2 works

Drawing Status: Preliminary  
CAD Reference: 4400-001  
Drawn: PL  
Date: feb2020  
Scale @A1: 1/1000

Project No: 4400  
Drawing No: SP002  
Rev: P3



## SECOND SCHEDULE

1. The Owners covenant with the Council in respect of the Site only as follows:

### SPORTS FACILITY RELOCATION

- 1.1 Prior to the Occupation of the Development and unless otherwise agreed with the Council:
  - 1.1.1 to carry out the Temporary Sports Facilities Works; and
  - 1.1.2 not to Occupy the Development until the requirements of paragraph 1.1.1 is complied with.
- 1.2 To use reasonable endeavours to obtain planning permission for the Parkside Permanent Works as expeditiously as possible following the date of this agreement including obtaining a written report from a Qualified Agronomist which assesses the detail of the Parkside Permanent Works and makes recommendations in relation to the works and how they are carried out.
- 1.3 If an Unchallenged Planning Permission for the Parkside Permanent Works exists by 17:00 hours on 30 May 2021 then unless otherwise agreed with the Council:
  - 1.3.1 to carry out the Parkside Permanent Works in accordance with the planning permission to be granted for the Parkside Permanent Works, the Permanent Works Plan, the description in Part 2 of the Fourth Schedule and the Qualified Agronomist Report recommendations and to ensure such works are overseen by the Qualified Agronomist;
  - 1.3.2 to pay the Forge Maintenance Contribution and the Forge Seeding Contribution to the Council within 28 Working Days of completion of the Parkside Permanent Works; and
  - 1.3.3 not to Occupy the Development until the requirements of these paragraphs 1.3.1 and 1.3.2 are complied with.
- 1.4 If an Unchallenged Planning Permission for the Parkside Permanent Works does not exist by 17:00 hours on 30 May 2021 then unless otherwise agreed with the Council to pay the Forge Capital Contribution, the Forge Seeding Contribution and the Forge Maintenance Contribution to the Council within 28 Working Days of 30 May 2021.

1.5 In relation to paragraphs 1.3.2 and 1.4 above the Council may transfer any Forge Maintenance Contribution Forge Seeding Contribution and/or the Forge Capital Contribution paid to the Council to the Forge Community Partnership who will thereafter be responsible for its expenditure on the Forge Contribution Purposes.

2. The First Owner covenants in respect of the Biodiversity Offsetting Land only as follows:

#### BIODIVERSITY OFF- SETTING MEASURES

- 2.1 Prior to the Commencement of Development to carry out the Biodiversity Offsetting Land Survey and to submit to the Council the results of the Survey and accompany the results with any proposed changes to the Biodiversity Enhancement and Management Plan unless the Council agree that further survey work is not required.
- 2.2 If the Biodiversity Offsetting Land Survey is required to be carried out pursuant to paragraph 2.1 not to Commence the Development until the Survey submission and any proposed changes to the Biodiversity Enhancement and Management Plan have been approved by the Council.
- 2.3 To implement the physical works set out in the Biodiversity Enhancement and Management Plan in respect of the Biodiversity Offsetting Land in accordance with the programme for those works set out in the Biodiversity Enhancement and Management Plan.
- 2.4 To observe the management and maintenance measures contained in the Biodiversity Enhancement and Management Plan in respect of the Biodiversity Offsetting Land for a period of thirty three years from the Commencement of Development.

### **THIRD SCHEDULE**

**1. The Council hereby covenants with the Owner:**

- 1.1 The Council will on the reasonable written request of the Owner at any reasonable time or times after any of the planning obligations under this Agreement have been fulfilled issue written confirmation thereof and / or at any reasonable time after all of the planning obligations under this Agreement have been fulfilled or at any reasonable time after this Agreement ceases to have effect issue written confirmation thereof and thereafter cancel all relevant entries in the Register of Local Land Charges.
- 1.2 To apply the Forge Capital Contribution the Forge Seeding Contribution and the Forge Maintenance Contribution towards the Forge Contributions Purposes and not to apply the Forge Capital Contribution Forge Seeding Contribution or Forge Maintenance Contribution for any other purposes and the Council shall (on the reasonable request of the payee or the payee's nominee) provide evidence that the monies have been so applied.
- 1.3 That in the event the Forge Capital Contribution Forge Seeding Contribution or Forge Maintenance Contribution or any part or parts thereof are not expended or committed towards the Forge Contribution Purposes within 10 (ten) years of their receipt by the Council then the sum or sums not expended plus interest accrued will be repaid by the Council to the party who paid the contribution.

## **FOURTH SCHEDULE**

### **Part 1**

#### **Specification of Temporary Sports Facilities Works**

- The removal of the existing running track;
- Dis-connection of existing running track flood lighting and removal of lighting standards.
- Areas disturbed by removal of track to be prepared and re-seeded to infill new areas, forming the football pitch;
- Orientation of existing football playing area to be re-positioned as indicated on the Temporary Sports Facilities Plan.;
- Existing supporters stand to be retained in current location;
- Existing storage container to be retained in current location;
- Unsurfaced entrance track to be extended (as shown in grey on the Temporary Sports Facilities Plan) to match existing creating both space for a car park area and safe area for spectators. Space to be provided for approximately 20 cars. No white lining will be included. Indicative specification to be crushed Type 1 fill.

### **Part 2**

#### **Specification of Parkside Permanent Works**

- Undertake site clearance to form new entrance off Sheffield Road. This entrance is to provide both club member and construction traffic access/egress;
- Provide a temporary surfaced access way and car park area;
- Undertake earthworks and re-modelling to create plateaus for new archery zone area and sports pitches;
- Drainage to the change of levels between the football pitches and archery area and the attenuation pond. Council to undertake drainage to the football pitches;
- The archery area is to be part turfed (to the archery runs) and part grass seeded to the remainder. The archery zone has been designed around 5m shooting lanes to a maximum of 90m range;
- Provide used temporary container storage that could be used as WC, sink, small kitchenette;
- Provide underground electricity and surface and foul water supplies to serve the temporary building. The capacities of the incoming services will be subject to the final application to utility providers and the availability of service capacity close to the site. Any future site services that are required including the diversion of existing to service the permanent community building will be provided by the Council.
- Permanent fencing 2.4m high will be installed to the site perimeter as indicated on the Parkside Permanent Works Plan.

- Finalise clearance and earthworks re-modelling to create required level plateau for sports pitches. Playing areas to be left with a topsoil surface ready to receive seeding/turf as part of the Council's subsequent works;
- Form new permanent entrance off Sheffield Road.

**FIFTH SCHEDULE**  
**Biodiversity Enhancement and Management Plan**



Newlands Developments

Land West of Sheffield Road, Hoyland

# **BIODIVERSITY ENHANCEMENT & MANAGEMENT PLAN**

September 2020

**FPCR Environment and Design Ltd**

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## **APPENDIX**

### Appendix A: Biodiversity Net Gain Calculations (Defra 2.0 Metric)

## 1.0 INTRODUCTION

- 1.1 The following Biodiversity Management Plan (BMP) has been prepared by FPCR Environment and Design Ltd. on behalf of Newlands Developments. The proposed development site is on Land West of Sheffield Road and includes a scheme of Green Infrastructure (GI) associated with commercial development plots (Planning Application ref. 2020/0647 - Land to the West of Sheffield Road, Hoyland, Barnsley).
- 1.2 Offsite habitat creation is also proposed on two parcels of land:
- Area A - 1.28ha of arable land adjacent the proposed development boundary (see Figure 2); and
  - Area B - 7.9ha of arable land at Broomhill Lane, Darfield approximately 7km north east of the proposed development site (see Figure 3).
- 1.3 This BMP provides the details of the overall management mechanisms and responsibilities, habitat creation methods, targeted management objectives and prescriptions, monitoring and provisional 5 year work programme objectives.
- 1.4 The BMP is based on the GI proposals for the site, detailed on Figure 1: Post Development Habitats Plan. A scheme for offsite habitat creation to provide a net biodiversity gain in accordance with the biodiversity impact assessment calculations (using the Defra 2.0 metric) proposed for the development site (see Figure 1: Post-development Habitats Plan and Appendix A).

### Site Location and Context

- 1.5 The proposed development site located west of the town of Hoyland between the town and the M1 motorway (central grid ref. SK 3554 9963) supports arable, neutral grassland and amenity grassland compartments together with native hedgerows and a limited extent of scrub and plantation woodland. The two arable field compartments selected for offsite habitat creation are located: Adjacent the southern application site boundary and Bell Ground (wood)(central grid ref. SK 3543 9916 – Area A); and south east of Darfield between the River Dearne and existing woodland associated with a disused railway corridor (central grid ref. SE 4216 0362 – Area B).

## **2.0 LEGISLATION, POLICY AND PROTECTED SPECIES**

- 2.1 All relevant EU and UK nature conservation law will be adhered to in relation to the protection of ecological features, ecological habitat creation and enhancements, and ongoing management. This will primarily include the protection afforded to nesting birds and reptiles under the Wildlife and Countryside Act 1981 (as amended); and to badgers under the Protection of Badgers Act 1992. Reference is also made to bats protected under the Wildlife and Countryside Act 1981 (as amended) and Conservation of Habitats and Species Regulations 2017. Where appropriate proposals also consider Habitats and Species of Principal Importance (H/SPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.
- 2.2 All woody and suitable ground nesting vegetation to be affected by ongoing management cutting and pruning works will be removed outside of the nesting season (March – August inclusive) or checked for the presence of nesting birds by an experienced ecologist if within this time.
- 2.3 For habitat management of scrub, grassland, hedgerow and wetland associated with the onsite scheme and Area A, where practices require cutting vegetation to ground level this will be undertaken during the reptile active season (March to mid-October) during suitable weather including when daytime temperatures are consistently above 9°C.

## **3.0 MANAGEMENT AND MONITORING RESPONSIBILITIES**

### **Management structure**

- 3.1 The responsibility for habitats in the onsite scheme will be passed onto a Principal Contractor to ensure they are created and managed by an experienced landscape contractor for the life of the development, or until such a time as it is passed via legal mechanism into the control of a third party, to be agreed by Barnsley Metropolitan Borough Council (BMBC) and any other relevant parties.
- 3.2 The creation and management of the offsite scheme will also be passed on to a Principal Contractor for management separately to the onsite scheme but nevertheless by an experienced landscape contractor for 33 years.

### **Monitoring and review**

- 3.3 Management of both the offsite and onsite schemes will run for a period of thirty years following initial creation (year one). The offsite habitat creation will be monitored annually for the first five years to ensure effective establishment. Throughout the period of both the onsite and offsite schemes the achievement of management objectives through the application of detailed prescriptions should be viewed as a dynamic process, responding to the establishment and development of the habitats and species, as well as to any community needs and aspirations. Towards the end of each five year period the management should be reviewed and amended as necessary to provide a five year rolling programme.
- 3.4 The progress of habitat creation will therefore be monitored and management prescriptions reviewed and altered where necessary to ensure habitat targets are met. This BMP should be

informed by updated and detailed surveys of the habitats to refine the identified objectives, targets and prescriptions as necessary.

- 3.5 The aims of future on-going management should continue to maintain the target habitats as set out herein.

#### **4.0 CONSERVATION OBJECTIVES**

- 4.1 The following strategic objectives for the site are set out to provide a steer for the detailed management objectives and management prescriptions set out further on:
- To provide a continuous corridor of habitats on site running north-south by a scheme of strategic habitat creation and enhancement.
  - Provision of specific features of faunal value located where most appropriate for the target species/group.
  - Provide measurable and achievable targets appropriate to each habitat to ensure condition targets are met as set out in the Management Target tables below in accordance with Defra Technical Supplement (Natural England, July 2019<sup>1</sup>).

#### **5.0 GENERAL MEASURES**

- 5.1 Habitat creation for the onsite scheme will be in accordance with details set out by Barry Chinn Associates Ltd in the Soft Landscaping Specification for the proposed development.
- 5.2 Scrub and aquatic planting is to be delivered and planted in accordance with Horticultural Trades Association (HTA) Standard 'Handling and establishing landscape plants' (obtainable from the HTA) Part III, paragraphs 6.2 to 6.6.
- 5.3 Planting is to remain materially undamaged, sturdy, healthy and vigorous, planted upright or well balanced with best side to front. Trees and shrubs are to be of good shape and without elongated shoots, grown in a suitable environment and hardened off before being delivered to the site.
- 5.4 All planting is to be true to name and free from pests, diseases, discoloration, weeds, fungus and physiological disorders.
- 5.5 All works are to be undertaken with due diligence, being sure to leave the works in a clean and tidy condition at completion and after any maintenance operations. Protect areas affected by planting operations using boards/ tarpaulins and do not place excavated or imported material directly on adjacent grassed areas.
- 5.6 All plants should be stored only when necessary in accordance with the HTA's 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part I, Part II and Part III, paragraphs 1.3.3 to 1.3.6, 3.0, and 4.0.
- 5.7 If plants/trees are unobtainable alternatives are to be agreed with the Ecologist/Landscape Architect in writing prior to ordering.

<sup>1</sup> Natural England (July 2019) *The Biodiversity Metric 2.0 – auditing and accounting for biodiversity – Technical Supplement (Beta Edition)*

- 5.8 After planting water plants to ensure that the full depth of topsoil is wetted. Apply water evenly and without damaging or displacing plants or soil. Continue to water as necessary to ensure the successful establishment and continued thriving of planting.
- 5.9 If water supplies are restricted or likely to become restricted by emergency legislation, do not carry out planting until instructed. If planting has been carried out, obtain instructions on watering.
- 5.10 Bare root deciduous planting shall be carried out from late October to late March; herbaceous plants (including aquatic and marginal) September/October or March/April. Container grown plants at any time of year if ground and weather conditions are favourable. Bare root deciduous planting to be carried out only during suitable ground and weather conditions. Planting shall not be carried out in waterlogged or frozen ground.
- 5.11 Notices will be provided at strategic locations, such as beside footpath entrances and the play area to encourage self-removal of general litter and dig waste. A general litter pick should be undertaken as appropriate to avoid harm to wildlife or encouragement of pests.

## 6.0 ONSITE SCHEME

### Habitat Creation, Management Objectives and Prescriptions

#### Management Targets

- 6.1 Target times to deliver management objectives have been provided within the tables, where these don't match the below (final condition targets required to achieve biodiversity units in accordance with the calculations tables – Appendix A) they are provided as desirable but not essential targets to enable identification of likely failing stands and trigger any early intervention necessary.

#### Essential Timing Targets (years) – to meet required condition

- Broadleaved woodland – 32+
  - Scrub (good condition) – 7
  - Scrub (moderate condition) – 3
  - Neutral grassland – 10
  - Attenuation (pond) – 3
  - Native hedgerow – 5
  - Amenity grassland, introduced shrub & non-native hedge – 1
- 6.2 Habitats in Table 1 below will be created onsite within the off-plot scheme (and detailed for Plot 1 - Hermes Plot) in accordance the submitted offsetting calculations and as detailed in the following section.

**Table 1: Onsite Habitat Creation**

| Habitat Type                 | Distinctiveness | Condition             | Extent (hectares/km) |
|------------------------------|-----------------|-----------------------|----------------------|
| Broadleaved woodland         | Medium          | Good                  | 5.08 ha.             |
| Mixed scrub (native)         | Medium          | Good                  | 2.55 ha.             |
| Mixed scrub (native)         | Medium          | Moderate <sup>±</sup> | 2.71 ha.             |
| Neutral grassland            | Medium          | Moderate              | 3.13 ha.             |
| Native species-rich hedgerow | Medium          | Moderate              | 3.48 km              |
| Attenuation (standing water) | High            | Moderate              | 0.67 ha.             |
| Amenity grassland            | Low             | Poor                  | 2.71 ha.             |
| Introduced shrub             | Low             | Poor                  | 0.04 ha.             |

<sup>±</sup> Due to site conditions in some areas it is anticipated that not all scrub planting will reach Good condition although every effort will be made to achieve this.

- 6.3 The outline on-plot scheme will include an additional 0.55 ha of amenity grassland, aside from Plot 1, for which detail is provided here. The creation of this on-plot green infrastructure will be the subject of a separate detailed application. Reference is made in the appropriate section below with regard to maximising value to wildlife of ornamental hedgerows (on-plot) however they are not included above as they contribute no biodiversity units to the overall scheme and make up only 0.06 km of proposed new hedges.
- 6.4 Limited areas of cropland and modified grassland subject to temporary loss to facilitate drainage infrastructure (burying of pipeline) will be returned to existing use/management immediately following short-term works and therefore do not feature in this BMP.

### **Broadleaved Woodland**

#### Creation

- 6.5 Inclusion of a range of broadleaved tree and shrub species providing fruit/flower/seed resources will be utilised for woodland creation. These will provide foraging opportunities for a wide range of vertebrate and invertebrate wildlife. Notwithstanding the structural screening requirements the inclusion of species of varied size and form will provide visual interest and structural wildlife value throughout the year.

**Table 2: Proposed Woodland Mix Planting**

| Common Name  | Scientific Name         | %  |
|--------------|-------------------------|----|
| Understorey  |                         |    |
| Wych Elm     | <i>Ulmus glabra</i>     | 10 |
| Common Alder | <i>Alnus glutinosa</i>  | 5  |
| Downy Birch  | <i>Betula pubescens</i> | 5  |
| Hazel        | <i>Corylus avellana</i> | 20 |

| Common Name              | Scientific Name           | %  |
|--------------------------|---------------------------|----|
| Hawthorn                 | <i>Crataegus monogyna</i> | 30 |
| Holly                    | <i>Ilex aquifolium</i>    | 5  |
| Crab apple               | <i>Malus sylvestris</i>   | 5  |
| Blackthorn               | <i>Prunus spinosa</i>     | 5  |
| Pedunculate oak          | <i>Quercus robur</i>      | 5  |
| Canopy (feathered trees) |                           |    |
| Field Maple              | <i>Acer campestre</i>     | 1  |
| Common Alder             | <i>Alnus glutinosa</i>    | 1  |
| Downy Birch              | <i>Betula pubescens</i>   | 1  |
| Wild Cherry              | <i>Prunus avium</i>       | 1  |
| Pedunculate oak          | <i>Quercus robur</i>      | 1  |

### Management

- 6.6 Detailed management interventions and targets are provided in Table 3 below with the aim of meeting at least 10 of the 12 criteria by year 33 with only minor variation. A target time to achievement is provided for each criterion to enable identification of likely failing stands and trigger early intervention.
- 6.7 The following management techniques will be provided to promote structural variation and allow light to reach the developing ground flora and scrub layer.
- Monitoring and infill planting into gaps to replace any dead or diseased specimens during establishment (years 1 to 5)
  - Trimming following establishment period (from year 5) including maintenance of a sinuous edge with a graded margin down to field/shrub layer (tapering edge from canopy height to 20cm).
  - Selective thinning of some dense stands to allow light to reach the ground and promote regeneration of seedlings and saplings (from year 5) – 1/3 to 1/2 of each compartment on rotation every 3-5 years.
  - Retention of all deadwood/trimmings (where not diseased) in situ including in brash piles and windrows as well as standing deadwood where safe to do so.

**Table 3: Woodland Management Targets**

| Condition Assessment Criteria/Objective                                                                                                               | Management Intervention                                                                                                                                                                                                                                                                                                                                                                                    | Target Time |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1. Area of complete canopy cover                                                                                                                      | <ul style="list-style-type: none"> <li>• Early promotion of canopy species including weed management and understorey scrub management.</li> <li>• Replacements of like-for-like in event of failure or promotion of neighbouring established specimens as deemed necessary.</li> </ul>                                                                                                                     | By year 15  |
| 2. Native species dominant (non-native species <10% vegetation cover)                                                                                 | <ul style="list-style-type: none"> <li>• Periodic monitoring and control/removal of non-native species as necessary</li> </ul>                                                                                                                                                                                                                                                                             | By year 5   |
| 3. A diverse age and height structure of trees                                                                                                        | <p>Periodic trimming/management of understorey scrub in planting groups including:</p> <ul style="list-style-type: none"> <li>• Regular cutting to create dense stands with graded margin (at woodland/glade edge); and</li> <li>• Infrequent management of selective stands to promote more open stands (including thinning of stands and light trimming to aid succession of canopy species).</li> </ul> | By year 32+ |
| 4. Free form damage from stock or wild mammals [bark stripping; browse line; damage to shoot tips] with <20% of vegetation browsed (in last 5 years). | <ul style="list-style-type: none"> <li>• Plantings protected with rabbit guards as necessary.</li> <li>• Monitoring and installation of deer fencing or other protection as deemed necessary.</li> </ul>                                                                                                                                                                                                   | By year 5   |
| 5. Evidence of successful tree regeneration (i.e. not browsed before well established) such as seedlings, saplings and young trees.                   | <ul style="list-style-type: none"> <li>• Periodic monitoring and control of browsing pressure as indicated above.</li> </ul>                                                                                                                                                                                                                                                                               | By year 32+ |
| 6. Standing and fallen dead wood of over 20 cm diameter are present including fallen large dead branches/stems and stumps.                            | <p>In every management year:</p> <ul style="list-style-type: none"> <li>• Retention of trimmings following management (where not diseased) in brash piles and windrows.</li> <li>• Retention of standing deadwood including branches and whole trees (where not diseased).</li> </ul>                                                                                                                      | By year 32+ |
| 7. Wetland habitat if they exist within the wood has little sign of drainage or channel straightening.                                                | N/A                                                                                                                                                                                                                                                                                                                                                                                                        | N/A         |
| 8. The area is protected from damage by agricultural and other adjacent operations.                                                                   | <ul style="list-style-type: none"> <li>• Through fencing or agreement with neighbouring tenant/land manager where adjacent land uses such as arable or pony grazing present.</li> </ul>                                                                                                                                                                                                                    | By year 1   |

| Condition Assessment Criteria/Objective                                                                     | Management Intervention                                                                                                                                                                                                                      | Target Time |
|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 9. There should be no evidence of inappropriate management (e.g. deep ruts, animal poaching or compaction). | <ul style="list-style-type: none"> <li>Monitoring in successive years following planting</li> </ul>                                                                                                                                          | By year 1   |
| 10. Invasive non-native plants* are below 5%                                                                | <ul style="list-style-type: none"> <li>Periodic monitoring and control/removal of non-native species as necessary</li> </ul>                                                                                                                 | By year 5   |
| 11. No signs of significant nutrient enrichment present.                                                    | <ul style="list-style-type: none"> <li>No nutrient enriched substrate/topsoil or fertilizers to be used during creation/establishment or at other times.</li> <li>Periodic monitoring and prevention of inappropriate management.</li> </ul> | From year 1 |
| 12. More than 3 different native trees and 3 shrub species in an average 10 m radius.                       | <ul style="list-style-type: none"> <li>To be provided through varied planting matrix from outset.</li> </ul>                                                                                                                                 | By year 1   |

\* American skunk cabbage *Lysichiton americanus*, Himalayan balsam *Impatiens glandulifera*, Japanese knotweed *Reynoutria japonica*, Cherry Laurel *Prunus laurocerasus*, Shalloon *Gaultheria shallon*, Snowberry *Symphoricarpos albus*, Variegated yellow archangel *Lamium galeobdolon subsp. Argentatum*, Rhododendron *Rhododendron ponticum*

## Scrub

### Creation

6.8 Areas of scrub will be created in accordance with the general planting specification and particulars detailed for woodland creation above. Notwithstanding this the following should be applied:

- Planting between November and March during the plants dormant period and protected from rabbits with spiral guards as conditions on site require.
- Plant in groups with each group supporting a mix of species with two to three or more of the same species planted together.
- Planting in irregular groups creating sinuous edge habitat (where appropriate in the context of the overall scheme) to maximise variation in microclimate, for the benefit of invertebrates.

**Table 4: Proposed Thicket Planting Mix (including feathered trees)**

| Common Name     | Scientific Name           | % cover* |
|-----------------|---------------------------|----------|
| Wych Elm        | <i>Ulmus glabra</i>       | 10       |
| Field Maple     | <i>Acer campestre</i>     | 5        |
| Dogwood         | <i>Cornus sanguinea</i>   | 5        |
| Hazel           | <i>Corylus avellana</i>   | 15       |
| Hawthorn        | <i>Crataegus monogyna</i> | 20       |
| Holly           | <i>Ilex aquifolium</i>    | 5        |
| Wild Privet     | <i>Ligustrum vulgare</i>  | 5        |
| Blackthorn      | <i>Prunus spinosa</i>     | 10       |
| Dog-rose        | <i>Rosa canina</i>        | 5        |
| Goat Willow     | <i>Salix caprea</i>       | 5        |
| Elder           | <i>Sambucus nigra</i>     | 5        |
| Guelder Rose    | <i>Viburnum opulus</i>    | 10       |
| Feathered Trees |                           |          |
| Field Maple     | <i>Acer campestre</i>     | -        |
| Common Alder    | <i>Alnus glutinosa</i>    | -        |
| Silver Birch    | <i>Betula pendula</i>     | -        |
| Downy Birch     | <i>Betula pubescens</i>   | -        |
| Aspen           | <i>Populus tremula</i>    | -        |
| Wild Cherry     | <i>Prunus avium</i>       | -        |
| Pedunculate Oak | <i>Quercus robur</i>      | -        |

\*% as indicated by planting schedule provided for thicket mix only.

Management

- Trimming following establishment period (by year 5 or 6) including maintenance of a sinuous edge with a graded margin down to field layer.
- Selective thinning of some stands and creation of open areas within/between stands to allow light to reach ground flora and promote regeneration of young shrubs.
- Selective clearing of scrub edge (roughly 1/3 to 1/5 every 2-3 years) down to ground to reduce dominance of species such as blackthorn and hawthorn and promote regeneration of young shrubs/herb edge.
- Annual mowing of herb/grass margin at scrub edge to maintain herb margin free of scrub growth.

Condition Assessment Rationale

- 6.9 Detailed management interventions and targets are provided in Table 5 below with the aim of meeting all 5 criteria with only minor variation for stands where 'Good' condition is targeted.
- 6.10 While management will be applied to maximise diversity in accordance with criteria specified it is anticipated some scrub may fail to achieve optimal condition due to its location and adjacent the built environment. Where this is the case (for compartments where 'Moderate' condition is targeted) failure of up to three criteria is acceptable as follows: Criterion 1. Single woody species cover >75%; 2. The age range is missing one class size; 4. Cover of undesirable and invasive species at 5-20%.

**Table 5: Scrub Management Targets**

| Condition Assessment Criteria/Objective                                               | Management Intervention                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Target Time |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1. At least three woody species, with no one species comprising more than 75% cover   | <ul style="list-style-type: none"> <li>• To be provided through varied planting matrix from outset.</li> <li>• Maintained through regular management</li> </ul>                                                                                                                                                                                                                                                                                                                       | From year 1 |
| 2. A good age range – a mixture of seedling, saplings, young shrubs and mature shrubs | Periodic trimming/management of scrub in planting groups including: <ul style="list-style-type: none"> <li>• Periodic clearance down to ground level in some areas at scrub edge to promote seedling and sapling growth;</li> <li>• Periodic cutting to create some dense stands with graded margin (at scrub/glade edge); and</li> <li>• Management of selective areas to promote more open stands (including thinning of stands and light trimming to aid regeneration).</li> </ul> | By year 7   |
| 3. Pernicious weeds and invasive species make up <5% of ground cover                  | <ul style="list-style-type: none"> <li>• Periodic monitoring and control/removal of non-native species as necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                       | By year 5   |
| 4. Well developed edge with ungrazed tall herbs                                       | <ul style="list-style-type: none"> <li>• Periodic cutting of scrub edges to create and maintain a graded margin.</li> <li>• Annual mowing of grassland/herb ground flora to maintain adjacent areas free of scrub growth.</li> </ul>                                                                                                                                                                                                                                                  | By year 5   |

| Condition Assessment Criteria/Objective       | Management Intervention                                                                   | Target Time |
|-----------------------------------------------|-------------------------------------------------------------------------------------------|-------------|
| 5. Many clearings and glades within the scrub | <ul style="list-style-type: none"> <li>Managed as above for criterion 2 and 4.</li> </ul> | By year 5   |

### Neutral Grassland

#### Creation

- 6.11 To avoid issues relating to high soil nutrient levels such as excessive pernicious weed growth which, can be difficult to solve upon establishment care should be taken in ground preparation. Soil sampling across the intended site will be done to establish the soil phosphate levels. An extractable phosphorous level of between 0 and 15 mg/l would be considered ideal. This is based on Warwickshire County Council guidance (May, 2018<sup>2</sup>).
- 6.12 In the event that nutrient levels are elevated employment of top soil stripping or inversion may be used to reduce soil nutrients available to establishing grassland. Ground preparation should include harrowing to a fine tilth and rolling to create a firm seed bed.
- 6.13 Emorsgate EM1 General Purpose Meadow Mix and EM8 Meadow Mixture for Wetlands will be sown in spring or autumn when soil moisture levels are higher, at a rate of 40kg/ha, 4g/m<sup>2</sup>.

#### Management

- Regular mowing in the first year to a height of 40-60mm is recommended to control annual weeds and balance growth of grasses and wildflowers (removing arisings).
- Dig out or spot treat pernicious weeds as necessary.
- Following establishment mow after flowering in July or August to around 50mm, removing arisings after they have dried (around 48 hours) to reduce soil nutrients.
- Mow re-growth in late autumn/winter and again in spring if needed (to around 50mm) to remove excess growth and take away arisings.
- Suspend cutting each year from mid-spring until after flowering in late summer and once established cutting can be reduced to a maximum of 2 cuts per year.

#### Condition Assessment Rationale – Moderate Condition

- 6.14 A condition score of 'Moderate' is targeted for smaller parcels of grassland in the north and in these areas criteria 1, 2 and 3 from the overarching Condition Assessment Criteria for grasslands have been swapped for those shown below which relate to grasslands targeted at 'Moderate' condition. Criteria 1,2 and 3 in Table 6 below more accurately encompass neutral grasslands of 'Moderate' condition recorded within the existing site and criteria 2. Has been supplemented with a range for coverage of wildflowers of 10-29% that is considered a more measurable and instructive target than merely <30%.

<sup>2</sup> Warwickshire County Council (03/05/2018) *Scientific evidence for habitat creation and restoration*.

Table 6: Grassland Management Targets – Moderate Condition

| Condition Assessment Criteria/Objective                                                                                                                                                                                               | Management Intervention                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Target Time |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1. Semi-improved sward supporting typical grasses including: cocksfoot, common bent, creeping bent, false oat-grass, red fescue, meadow foxtail, crested dogs-tail, Timothy, tufted hair-grass, sweet vernal grass and Yorkshire fog. | <ul style="list-style-type: none"> <li>Mowing in late summer (following seeding of wildflowers) with all arisings removed from grasslands after 48 hours (to allow for seed dispersal) to reduce soil nutrients.</li> </ul>                                                                                                                                                                                                                                              | By year 10  |
| 2. Total cover of wildflowers and sedges <30% (between 10 and 29%) excluding white clover, creeping buttercup and injurious weeds*.                                                                                                   | <ul style="list-style-type: none"> <li>Management as above for criterion 1.</li> <li>Where wildflower cover is low in successive years use of conservation harrowing to create bare areas necessary to promote wildflower germination should be considered including addition of wildflower seed following harrowing.</li> <li>Autumn sowing of yellow rattle following mowing/harrowing should be considered to reduce dominance of grasses.</li> </ul>                 | By year 10  |
| 3. Rye-grass cover <25%                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>Management as above for criterion 1.</li> <li>Habitat creation on nutrient-poor substrate will help reduce cover of rye-grass.</li> <li>Introduction of yellow rattle as above (criterion 2) should be considered where excessive cover of rye-grass persists.</li> </ul>                                                                                                                                                         | By year 10  |
| 4. Undesirable species* and physical damage <5% cover.                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Where large patches of injurious weeds persist cutting in early spring is recommended with arisings removed straight away.</li> <li>Use of weed wipes to treat persistent pernicious weeds (occurring in successive years over 5%).</li> <li>Where excessive and persistent physical damage evident use of fencing and interpretation should be considered depending on cause and where deemed likely to be effective.</li> </ul> | By year 5   |
| 5. Cover of bare ground >10% (including localised areas, for example, rabbit warrens).                                                                                                                                                | <ul style="list-style-type: none"> <li>Where bare ground is below threshold in successive years conservation harrowing as described above is recommended.</li> <li>Where use of harrow not considered appropriate scarification by hand (on smaller areas) should be considered.</li> </ul>                                                                                                                                                                              | By year 5   |
| 6. Cover of bracken <20% and scrub and bramble <5%.                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>Annual mowing to remove scrub.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                         | By year 5   |

\*creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common ragwort *Senecio jacobaea*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, white clover *Trifolium repens*, cow parsley *Anthriscus sylvestris*, marsh thistle *Cirsium palustre* and marsh ragwort *Senecio aquaticus*.

Condition Assessment Rationale – Good Condition

- 6.15 A condition score of 'Good' is targeted for larger parcels of grassland in the south and in these areas all criteria in the overarching Condition Assessment Criteria for grasslands are included in the table below.

**Table 7: Grassland Management Targets – Good Condition**

| Condition Assessment Criteria/Objective                                                                                                                                                                                                                                                                                                  | Management Intervention                                                                                                                                                                                                                                                                                                                                                                                                                                               | Target Time |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1. The area is clearly and easily recognisable as a good example of this type of habitat and there is little difference between what is described in the relevant habitat classifications and what is visible on site.                                                                                                                   | <ul style="list-style-type: none"> <li>Mowing in late summer (following seeding of wildflowers) with all arisings removed from grasslands after 48 hours (to allow for seed dispersal) to reduce soil nutrients.</li> </ul>                                                                                                                                                                                                                                           | By year 10  |
| 2. The appearance and composition of the vegetation on site should very closely match the characteristics for the specific Priority Habitat [i.e as described by either the Phase 1 Habitat Classification or the UK Habitat Classification], with species typical of the habitat representing a significant majority of the vegetation. | <ul style="list-style-type: none"> <li>Management as above for criterion 1.</li> <li>Where wildflower cover is low in successive years use of conservation harrowing to create bare areas necessary to promote wildflower germination should be considered including addition of wildflower seed following harrowing.</li> <li>Autumn sowing of yellow rattle following mowing/harrowing should be considered to reduce dominance of grasses.</li> </ul>              | By year 10  |
| 3. Total cover of wildflowers and sedges >30% excluding white clover, creeping buttercup and injurious weeds*.                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>Management as above for criterion 1.</li> <li>Habitat creation on nutrient-poor substrate will help reduce cover of rye-grass.</li> <li>Introduction of yellow rattle as above (criterion 2) should be considered where excessive cover of rye-grass persists.</li> </ul>                                                                                                                                                      | By year 10  |
| 4. Undesirable species* and physical damage <5% cover.                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>Where large patches of injurious weeds persist cutting in early spring is recommended with arisings removed straight away.</li> <li>Use of weed wipes to treat persist pernicious weeds (occurring in successive years over 5%).</li> <li>Where excessive and persistent physical damage evident use of fencing and interpretation should be considered depending on cause and where deemed likely to be effective.</li> </ul> | By year 5   |
| 5. Cover of bare ground >10% (including localised areas, for example, rabbit warrens).                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>Where bare ground is below threshold in successive years conservation harrowing as described above is recommended.</li> <li>Where use of harrow not considered appropriate scarification by hand (on smaller areas) should be considered.</li> </ul>                                                                                                                                                                           | By year 5   |
| 6. Cover of bracken <20% and scrub and bramble <5%.                                                                                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>Annual mowing to remove scrub.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                      | By year 5   |

\*creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common ragwort *Senecio jacobaea*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, white clover *Trifolium repens*, cow parsley *Anthriscus sylvestris*, marsh thistle *Cirsium palustre* and marsh ragwort *Senecio aquaticus*.

## Native Hedgerow

### Creation and Management

- New hedgerows will be planted with a mix of species so that a minimum of 5 species are present in each 30m section.
- Planting will be undertaken between October and the end of March avoiding hard frosts.
- Upon establishment (year 2-3) cut 50% of each length on a rotational basis between January and February (so that autumn fruits are available for wildlife) and again avoiding frost periods.
- Cut to no less 2m high.
- Retain a minimum 1.5m margin at base and cut every 3 years to promote dense cover.
- Laying hedge once new plantings have established between November and the end of February to maintain a dense structure.

**Table 8: Hedgerow Mix**

| Common Name  | Scientific Name           | %   |
|--------------|---------------------------|-----|
| Dogwood      | <i>Cornus sanguinea</i>   | 10  |
| Hazel        | <i>Corylus avellana</i>   | 10  |
| Hawthorn     | <i>Crataegus monogyna</i> | 50  |
| Holly        | <i>Ilex aquifolium</i>    | 2.5 |
| Wild Privet  | <i>Ligustrum vulgare</i>  | 2.5 |
| Blackthorn   | <i>Prunus spinosa</i>     | 10  |
| Dog-rose     | <i>Rosa canina</i>        | 5   |
| Wych Elm     | <i>Ulmus glabra</i>       | 5   |
| Guelder Rose | <i>Viburnum opulus</i>    | 5   |

### Condition Assessment Rationale

- 6.16 A condition score of 'Moderate' is targeted which allows for the failure of no more than 4 criterion (A1-D2 from Table 8 below) in total and failure of both attributes in a maximum of one functional group e.g. failure of attributes 1&2, 5&7 = Moderate condition.

**Table 9: Hedgerow Management Targets**

| Attributes and functional groupings (A-D)       | Criteria (min. requirements for 'favourable condition')                                                                                                                                                                                             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Target Time |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| A1. Height                                      | >1.5 m average along length                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>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.</li> <li>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)</li> <li>A newly planted hedgerow does not pass this criterion (unless it is &gt; 1.5m height)</li> </ul> | By year 5   |
| A2. Width                                       | >1.5 m average along length                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees.</li> <li>Outgrowths (e.g. blackthorn suckers) are only included in the width estimate when they &gt;0.5 m in height.</li> <li>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 practice).</li> </ul>   | By year 5   |
| B1. Gap - hedge base                            | Gap between ground and base of canopy <0.5m 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 area acceptable (see page 65 of the Hedgerow Survey Handbook).                                                                                                                                                                                                                                                     | By year 5   |
| B2. Gap – hedge canopy continuity               | <ul style="list-style-type: none"> <li>Gaps make up &lt;10% of total length; and</li> <li>No canopy gaps &gt;5m</li> </ul>                                                                                                                          | <ul style="list-style-type: none"> <li>This is the horizontal gappiness of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small).</li> <li>Access points and gates contribute to the overall gappiness, but are not subject to the &gt;5 m criterion (as this is the typical size of a gate).</li> </ul>                                                                                                                                  | By year 5   |
| C1. Undisturbed ground and perennial vegetation | <ul style="list-style-type: none"> <li>&gt;1 m width of undisturbed ground with perennial herbaceous</li> <li>vegetation for &gt;90% of length measured from outer edge of hedgerow, and is present on one side of the hedge (at least).</li> </ul> | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | By year 3   |

| Attributes and functional groupings (A-D) | Criteria (min. requirements for 'favourable condition')                                                        | Description                                                                                                                                                                                                                                                                                                           | Target Time |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 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 spp.</i> ), cleavers ( <i>Galium aparine</i> ) and docks ( <i>Rumex spp.</i> ). Their presence, either singly or together, should not exceed the 20% cover threshold.                                                                                              | By year 3   |
| D1. Invasive and neophyte species         | >90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species                | <ul style="list-style-type: none"> <li>Neophytes are plants that have naturalised in the UK since AD 1500.</li> <li>For information on neophytes see the JNCC website and for information on invasive non-native species see the GB Non-Native Secretariat website.</li> </ul>                                        | By year 3   |
| D2. Current damage                        | >90% of the hedgerow or undisturbed ground is free of damage caused by human activities                        | <ul style="list-style-type: none"> <li>This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes.</li> <li>This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).</li> </ul> | By year 4   |

## Attenuation

### Creation and Management

- 6.17 As shown on Figure 1 attenuation will be created with the following features engineered in:
- Sinuuous margins and sloping sides (graded profile between 45° and 20°) to maximise niches for wildlife and opportunities for emergent plants.
  - A depth sufficient to provide some permanent water.
- 6.18 The open water margins will be seeded with Emorsgate EP1 Pond Edge Mix and ground preparation, seeding and management will follow the above methods for neutral grassland.
- 6.19 This bankside habitat creation will be supplemented with introduction of the following native submerged and floating aquatic plants:
- Common water starwort - *Callitriche stagnalis*
  - Spiked water milfoil - *Myriophyllum spicatum*
  - Broad-leaved pondweed - *Potamogeton natans*
- 6.20 Management will include:
- Cutting 1/3 to 1/2 of bankside vegetation on rotation every 2-3 years to control cover
  - Mechanical removal of emergent vegetation on rotation to maintain 1/3 to 1/2 openwater.

### Condition Assessment Rationale

- 6.21 While creation methods and management aims to maximise biodiversity value given the artificial nature and drainage function of the feature it is acknowledged there is a limit to the attainable biodiversity value. Two of the main assessment criteria relating to presence of semi-natural riparian vegetation for 10m from pond edge and absence of artificial connections to other waterbodies have therefore been removed from the below table.
- 6.22 'Moderate' condition is targeted which allows some failure of the main assessment criteria and Table 10 below has therefore been supplemented with additional management intervention to meet the following targets:
- Non-native species comprise no more than 10% of vegetation
  - Submerged and floating plants limited but still present

**Table 10: Pond Management Targets**

| Condition Assessment Criteria/Objective                                                                                                                         | Management Intervention                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Target Time             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 1. Good water quality, with clear water (substrate can be seen) and no obvious sign of pollution in the water body.                                             | <ul style="list-style-type: none"> <li>• Periodic cut and removal of emergent vegetation (in accordance with above management).</li> <li>• Management/planting to promote emergent vegetation around inflow headwall (to help filter pollution/suspended material) including supplementary planting if deemed necessary</li> <li>• Monitor habitat quality and take remedial steps to prevent or treat pollution/eutrophication such as use of barriers/filters in event of upstream pollution event or removal of severe algal bloom/duckweed.</li> </ul> | By year 3<br><br>Annual |
| 2. Non-woodland ponds should be dominated by plants, be they submerged or floating (note dominance of duckweed is a sign of eutrophication).                    | <ul style="list-style-type: none"> <li>• Management to promote broad margin of emergent vegetation around permanent water/drawdown zone.</li> <li>• Supplementary planting including of submerged/floating species.</li> </ul>                                                                                                                                                                                                                                                                                                                             | By year 3               |
| 3. Non-woodland ponds [i.e. that have always been open] should not be shaded more than 50%                                                                      | <ul style="list-style-type: none"> <li>• Periodic trimming of bankside vegetation at least once every three years as necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                 | By year 3               |
| 4. Many ponds will be fishless, those which naturally contain fish should not be stocked and should contain a native fish assemblage.                           | <ul style="list-style-type: none"> <li>• No to be stocked with fish.</li> <li>• Periodic monitoring and removal of non-native fish introductions/other non-native animals<sup>±</sup> where evident.</li> </ul>                                                                                                                                                                                                                                                                                                                                            | Annual                  |
| 5. There are some artificial connections to other water bodies, but they are not delivering water of poor water quality or preventing water level fluctuations. | <ul style="list-style-type: none"> <li>• Creation to provide an area of permanent water with some water fluctuation.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                            | By year 1               |

| Condition Assessment Criteria/Objective                                                                                | Management Intervention                                                                                                                                                                                                                                                     | Target Time |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 6. Non-native species* should be absent (or make up no more than 10% of vegetation – to achieve 'Moderate' condition). | <ul style="list-style-type: none"> <li>Monitoring and control of non-native plants as necessary through normal management (to maintain threshold limits).</li> <li>Avoidance of herbicides and manually/mechanically remove persistent non-natives if necessary.</li> </ul> | By year 3   |
| 7. Less than 10% of the pond should be covered with duckweed or filamentous algae.                                     | <ul style="list-style-type: none"> <li>Monitor/treat/removal as necessary (as detailed for criterion 1).</li> </ul>                                                                                                                                                         | By year 3   |

\*Frequently occurring non-native animals include signal crayfish, zebra mussels, killer and demon shrimp and carp.

\*Any non-native species. Frequently observed non-native plant species include water fern, Australian swamp stonecrop parrot's feather, floating pennywort, Japanese knotweed and giant hogweed (on the banks).

### Urban / Amenity Habitats

- 6.23 The following habitats will be created as part of the scheme.
- Standard trees
  - Introduced shrub (Ornamental shrub, low ground cover planting & specimen shrubs)
  - Amenity grassland
  - Ornamental non-native hedge
- 6.24 While the land area covered by these habitats in the final proposed scheme is limited, they nevertheless perform an important function by providing interest for wildlife and connectivity through the built environment. Notwithstanding the management regime set out by the soft landscaping scheme (requiring regular maintenance) the following management principles should followed:

#### General

- Inputs of herbicide should be reduced to the minimum necessary (ideally only on persistent perennial weeds) and the use of mulch should be prioritised, including regular topping-up to replace that rotted down.
- Use of herbicide should not be considered a replacement for proper mulching which also helps to retain soil moisture.

#### Standard Trees

- Disease resistant elms have been included to provide opportunities for white letter hair-streak butterflies recorded locally.
- These trees should be selected for planting as close to native scrub plantings (also supporting elm) and offsite retained hedgerow/woodland as possible and replaced like-for-like as necessary.
- Pruning of the canopy of these trees should be more restrained and limited to the minimum necessary/appropriate for the location.

### Introduced Shrub

- While regular cutting will help to maintain vigour and promote flowering/fruiting cutting to varied heights should be encouraged to promote diversity.
- Cutting all specimens across the plot in a single period, particularly where this is likely to removes all flower/fruit interest for wildlife should be avoided where feasible to do so.

### Hedgerows

- The final heights/widths for 'formal' hedges should be the maximum acceptable, appropriate to the setting.
- While the minimum height should be 1m heights up to 2m or more should be permitted and/or encouraged where considerations of safety and appearance in-keeping with the surrounding scheme allow. Likewise, for widths.
- This will provide structural variety and valuable additional habitat for wildlife.

### Grassland

- As detailed in the Soft Landscape Works Maintenance and Management Proposals – 5 Years the cutting of species-rich grassland areas should be limited to once per year (following establishment) from mid-July with arising left to dry for 48 hours before removing (where excess arisings warrant) to allow seed to disperse.

## **Fauna**

### **Invertebrates**

- 6.25 A refuge area for insects will be created within the Insect Hotel/Biodiversity Zone next to Bell Ground (wood). This will comprise two features:
- A heap/cliff of substrate approximately 0.5m high by 1-2m wide providing an area of exposed substrate maintained as such and sheltered from the prevailing wind by scrub planting.
  - An 'Insect Hotel' comprising a variety of materials such as slates, cut garden canes/dead plant stems, deadwood and timber drilled with holes. The materials should be untreated with preservative and secured to provide horizontal crevices at least 0.3m deep. The unit may be constructed or bought ready-made from a reputable supplier and provided with a roof as necessary to ensure some protection from the weather.



**Photograph 1: Insect Hotel**

### **Bird Boxes**

- 6.26 12 bird boxes suitable for a range of species will be provided on retained mature trees such as at the edge of Bell Ground (wood). The following types from Schwegler or a similar alternative providing durable woodcrete boxes:
- Schwegler 1B with 32mm and 26mm holes
  - Schwegler 3S Starling Box
  - Schwegler No.5 Tawny Owl Box/ No. 4 Small Owl Box
- 6.27 Boxes will be installed following advice from an ecologist at least 3m from ground avoiding southern aspects.

## 7.0 OFFSITE SCHEME

- 7.1 In accordance with national guidance<sup>3</sup> the offsite habitat creation areas are located within the same LPA (Barnsley) and National Character Area (Nottinghamshire, Derbyshire and Yorkshire Coalfield). The national guidance recognises that compensation should be provided local to where losses occur, and within paragraph 5.22 states that *“When off-site compensation is within the local planning authority area (LPA) or the same National Character Area (NCA)<sup>13</sup> it is considered that those drivers have been addressed.”*
- 7.2 A number of locations were considered for offsite mitigation and while the use of some areas closer to the proposed development site was not possible due to tenancy restrictions the key requirement under the guidance, as detailed above, has been met. Further to this the sites chosen are strategically located buffering existing established woodland that will aid habitat creation/regeneration.

### Habitat Creation, Management Objectives and Prescriptions

- 7.3 The proposals will create scrub habitat with an associated mosaic of grassland and pond (within Area B) in the context of existing established woodland where it will provide complimentary habitats of most benefit to wildlife.
- 7.4 Area B, in particular, while located further from the proposed development site, is in proximity to two linear wildlife corridors (the River Dearne and linear woodland associated with disused railway line) which are themselves closely linked to more extensive woodland and wetland including the RSPB Dearne Valley – Old Moor reserve. The chosen habitat created in these locations will help provide bigger, better and more joined-up habitats of value for wildlife.

### Management Targets

- 7.5 Target times to deliver management objectives have been provided within the tables as prescribed by the Defra Biodiversity Net Gain metric, where these don't match the below (final condition targets required to achieve biodiversity units in accordance with the calculations tables – Appendix A) they are provided as desirable but not essential targets to enable identification of likely failing stands and trigger any early intervention necessary.
- 7.6 Figure 2 and 3 provide the boundaries for offsite areas A and B where the following scrub creation scheme is proposed. An attenuation feature will be provided on low lying ground at the south eastern edge of Area B.

#### Essential Timing Targets (years) – to meet required condition

- Scrub (good condition) – 7
  - Attenuation (pond) – 3
- 7.7 Habitats in Table 11 below in accordance the submitted offsetting calculations and as detailed in the following section.

<sup>3</sup> Natural England Joint Publication JP029, The Biodiversity Metric 2.0, auditing and accounting for biodiversity USER GUIDE, Beta Version

Table 11: Offsite Habitat Creation

| Habitat Type          | Distinctiveness | Condition | Extent | Location |
|-----------------------|-----------------|-----------|--------|----------|
| Mixed scrub (native)  | Medium          | Good      | 1.17   | Area A   |
| Mixed scrub (native)  | Medium          | Good      | 5.85   | Area B   |
| Pond (standing water) | High            | Good      | 0.15   | Area B   |

## Scrub

### Creation

7.8 Scrub will be created in accordance with the below method within Areas A and B:

- Following harvest of arable crops no further fertilizer or herbicide will be applied and in spring 2021 or the following autumn the substrate will be ploughed to bury any stubble/weed growth. The soil will then be harrowed to create an even bed (in Area B a pond will be dug and planted in accordance with the below).
- Native scrub will be planting between November and March during the plants dormant period and protected from rabbits with spiral guards as conditions on site require.
- Scrub planting will be designed to create a range of clearings, glades and rides throughout the planting in order to create significant areas of edge habitats and structural diversity. .
- Following scrub planting the prepared bed will be sown with Emorsgate EM1 Basic General Purpose Meadow Mixture.
- The planting mix in Table 12 below will be used and planting will be in naturalistic groupings with sinuous edges and spaces between groups to form glades of between 8m and 10m wide (covering roughly 80-90% of the total area).

Table 12: Scrub Mix

| Common Name  | Scientific Name           | % cover* |
|--------------|---------------------------|----------|
| Wych Elm     | <i>Ulmus glabra</i>       | 10       |
| Field Maple  | <i>Acer campestre</i>     | 5        |
| Dogwood      | <i>Cornus sanguinea</i>   | 5        |
| Hazel        | <i>Corylus avellana</i>   | 15       |
| Hawthorn     | <i>Crataegus monogyna</i> | 20       |
| Holly        | <i>Ilex aquifolium</i>    | 5        |
| Wild Privet  | <i>Ligustrum vulgare</i>  | 5        |
| Blackthorn   | <i>Prunus spinosa</i>     | 10       |
| Dog-rose     | <i>Rosa canina</i>        | 5        |
| Goat Willow  | <i>Salix caprea</i>       | 5        |
| Elder        | <i>Sambucus nigra</i>     | 5        |
| Guelder Rose | <i>Viburnum opulus</i>    | 10       |

\*% as indicated by planting schedule provided for thicket mix only.

#### Management – Grassland clearings and glades

- Regular mowing on grassland in the first year to a height of 40-60mm is recommended to control annual weeds and balance growth of grasses and wildflowers (removing arisings).
- Dig out or spot treat pernicious weeds as necessary.
- Following establishment mow after flowering in late July or August to around 50mm, removing arisings after they have dried (around 48 hours) to reduce soil nutrients.

#### Management - Scrub

- Monitoring and infill planting into gaps to replace any dead or diseased specimens during establishment (years 1 to 5)
- Trimming following establishment period (from year 5) including maintenance of a sinuous edge with a graded margin down to field layer (tapering edge from canopy height to 20cm).
- Selective thinning of some dense stands to allow light to reach the ground and promote regeneration of seedlings and saplings (from year 5)
- Selective clearing of scrub edge (roughly 1/3 to 1/5 every 2-3 years) down to ground to reduce dominance of species such as blackthorn and hawthorn and promote regeneration of young shrubs/herb edge.
- Annual mowing of herb/grass margin at scrub edge to maintain herb margin free of scrub growth (from year 1).

#### Condition Assessment Rationale

- 7.9 Detailed management interventions and targets are provided in Table 13 below with the aim of meeting all 5 criteria with only minor variation to meet the target of 'Good' condition.
- 7.10 Native grassland will be created and managed with a single cut in late summer with arisings to be removed to designated composting at the scrub margin. The grassland will help provide additional biodiversity benefit and provided areas are maintained free of scrub cover (roughly 10-20% of the total area) this target will have been met.

**Table 13: Scrub Management Targets (offsite)**

| Condition Assessment Criteria/Objective                                             | Management Intervention                                                                                                                                         | Target Time |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1. At least three woody species, with no one species comprising more than 75% cover | <ul style="list-style-type: none"> <li>• To be provided through varied planting matrix from outset.</li> <li>• Maintained through regular management</li> </ul> | From year 1 |

| Condition Assessment<br>Criteria/Objective                                            | Management Intervention                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Target Time |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 2. A good age range – a mixture of seedling, saplings, young shrubs and mature shrubs | Periodic trimming/management of scrub in planting groups including: <ul style="list-style-type: none"> <li>• Periodic clearance down to ground level in some areas at scrub edge to promote seedling and sapling growth;</li> <li>• Periodic cutting to create some dense stands with graded margin (at scrub/glade edge); and</li> <li>• Management of selective areas to promote more open stands (including thinning of stands and light trimming to aid regeneration).</li> </ul> | By year 5   |
| 3. Pernicious weeds and invasive species make up <5% of ground cover                  | <ul style="list-style-type: none"> <li>• Periodic monitoring and control/removal of non-native species as necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                       | By year 5   |
| 4. Well developed edge with ungrazed tall herbs                                       | <ul style="list-style-type: none"> <li>• Periodic cutting of scrub edges to create and maintain a graded margin.</li> <li>• Annual mowing of grassland/herb ground flora to maintain adjacent areas free of scrub growth.</li> </ul>                                                                                                                                                                                                                                                  | By year 5   |
| 5. Many clearings and glades within the scrub                                         | <ul style="list-style-type: none"> <li>• Managed as above for criterion 2 and 4.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                           | By year 5   |

## Neutral Grassland

### Creation

- 7.11 To avoid issues relating to high soil nutrient levels such as excessive pernicious weed growth which, can be difficult to solve upon establishment care should be taken in ground preparation. Soil sampling across the intended site will be done to establish the soil phosphate levels. An extractable phosphorous level of between 0 and 15 mg/l would be considered ideal. This is based on Warwickshire County Council guidance (May, 2018<sup>4</sup>).
- 7.12 In the event that nutrient levels are elevated employment of top soil stripping or inversion may be used to reduce soil nutrients available to establishing grassland. Ground preparation should include harrowing to a fine tilth and rolling to create a firm seed bed.
- 7.13 Emorsgate EM1 General Purpose Meadow Mix and EM8 Meadow Mixture for Wetlands will be sown in spring or autumn when soil moisture levels are higher, at a rate of 40kg/ha, 4g/m<sup>2</sup>.

### Management

- Regular mowing in the first year to a height of 40-60mm is recommended to control annual weeds and balance growth of grasses and wildflowers (removing arisings).
- Dig out or spot treat pernicious weeds as necessary.
- Following establishment mow after flowering in July or August to around 50mm, removing arisings after they have dried (around 48 hours) to reduce soil nutrients.

<sup>4</sup> Warwickshire County Council (03/05/2018) *Scientific evidence for habitat creation and restoration*.

- Mow re-growth in late autumn/winter and again in spring if needed (to around 50mm) to remove excess growth and take away arisings.
- Suspend cutting each year from mid-spring until after flowering in late summer and once established cutting can be reduced to a maximum of 2 cuts per year.

#### Condition Assessment Rationale – Good Condition

- 7.14 A condition score of 'Good' is targeted for offsite grassland. All criteria in the overarching Condition Assessment Criteria for grasslands are included in the table below.

**Table 14: Grassland Management Targets – Good Condition (offsite)**

| Condition Assessment Criteria/Objective                                                                                                                                                                                                                                                                                                  | Management Intervention                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Target Time |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1. The area is clearly and easily recognisable as a good example of this type of habitat and there is little difference between what is described in the relevant habitat classifications and what is visible on site.                                                                                                                   | <ul style="list-style-type: none"> <li>• Mowing in late summer (following seeding of wildflowers) with all arisings removed from grasslands after 48 hours (to allow for seed dispersal) to reduce soil nutrients.</li> </ul>                                                                                                                                                                                                                                               | By year 10  |
| 2. The appearance and composition of the vegetation on site should very closely match the characteristics for the specific Priority Habitat [i.e as described by either the Phase 1 Habitat Classification or the UK Habitat Classification], with species typical of the habitat representing a significant majority of the vegetation. | <ul style="list-style-type: none"> <li>• Management as above for criterion 1.</li> <li>• Where wildflower cover is low in successive years use of conservation harrowing to create bare areas necessary to promote wildflower germination should be considered including addition of wildflower seed following harrowing.</li> <li>• Autumn sowing of yellow rattle following mowing/harrowing should be considered to reduce dominance of grasses.</li> </ul>              | By year 10  |
| 3. Total cover of wildflowers and sedges >30% excluding white clover, creeping buttercup and injurious weeds*.                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• Management as above for criterion 1.</li> <li>• Habitat creation on nutrient-poor substrate will help reduce cover of rye-grass.</li> <li>• Introduction of yellow rattle as above (criterion 2) should be considered where excessive cover of rye-grass persists.</li> </ul>                                                                                                                                                      | By year 10  |
| 4. Undesirable species* and physical damage <5% cover.                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• Where large patches of injurious weeds persist cutting in early spring is recommended with arisings removed straight away.</li> <li>• Use of weed wipes to treat persist pernicious weeds (occurring in successive years over 5%).</li> <li>• Where excessive and persistent physical damage evident use of fencing and interpretation should be considered depending on cause and where deemed likely to be effective.</li> </ul> | By year 5   |

| Condition Assessment Criteria/Objective                                                | Management Intervention                                                                                                                                                                                                                                                                     | Target Time |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 5. Cover of bare ground >10% (including localised areas, for example, rabbit warrens). | <ul style="list-style-type: none"> <li>Where bare ground is below threshold in successive years conservation harrowing as described above is recommended.</li> <li>Where use of harrow not considered appropriate scarification by hand (on smaller areas) should be considered.</li> </ul> | By year 5   |
| 6. Cover of bracken <20% and scrub and bramble <5%.                                    | <ul style="list-style-type: none"> <li>Annual mowing to remove scrub.</li> </ul>                                                                                                                                                                                                            | By year 5   |

\*creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common ragwort *Senecio jacobaea*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, white clover *Trifolium repens*, cow parsley *Anthriscus sylvestris*, marsh thistle *Cirsium palustre* and marsh ragwort *Senecio aquaticus*.

## Pond

### Creation and Management

- 7.15 A pond will be dug to 1500m<sup>2</sup> within Area B where existing standing water is present will be created and any existing emergent vegetation present will be saved and replanted in the new feature. The following features will also be engineered in:
- Sinuous margins and sloping sides (graded profile between 45° and 20°) to maximise niches for wildlife and opportunities for emergent plants.
  - A depth of 1.5 to 2m sufficient to provide some permanent water.
- 7.16 The open water margins will be planted with some native emergent species in several groupings however banks will be left with bare substrate to allow natural colonisation. Emergent species from the following list will ideally be sourced locally:
- Flag iris – *Iris pseudocorus*
  - Marsh marigold – *Caltha palustris*
  - Common club-rush – *Schoenoplectus lacustris*
  - Branched bur-reed – *Sparganium erectum*
  - Common reed – *Phragmites australis*
- 7.17 This bankside habitat creation will be supplemented with introduction of the following native submerged and floating aquatic plants:
- Common water starwort - *Callitriche stagnalis*
  - Spiked water milfoil - *Myriophyllum spicatum*
  - Broad-leaved pondweed - *Potamogeton natans*

### Condition Assessment Rationale

- 7.18 Creation methods and management will aim to maximise biodiversity value to meet 'Good' condition.

**Table 15: Pond Management Targets (offsite)**

| Condition Assessment Criteria/Objective                                                                                                      | Management Intervention                                                                                                                                                                                                                                                                                                                                  | Target Time             |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 1. Good water quality, with clear water (substrate can be seen) and no obvious sign of pollution in the water body.                          | <ul style="list-style-type: none"> <li>Periodic cut and removal of emergent vegetation (in accordance with above management).</li> <li>Monitor habitat quality and take remedial steps to prevent or treat pollution/eutrophication such as use of barley straw bale submerged in water and removed periodically to reduce nutrient build-up.</li> </ul> | By year 3<br><br>Annual |
| 2. Non-woodland ponds should be dominated by plants, be they submerged or floating (note dominance of duckweed is a sign of eutrophication). | <ul style="list-style-type: none"> <li>Management to promote a margin of emergent vegetation around permanent water/drawdown zone.</li> </ul>                                                                                                                                                                                                            | By year 3               |
| 3. Non-woodland ponds [i.e. that have always been open] should not be shaded more than 50%                                                   | <ul style="list-style-type: none"> <li>Periodic trimming of bankside vegetation at least once every three years as necessary.</li> </ul>                                                                                                                                                                                                                 | By year 3               |
| 4. Many ponds will be fishless, those which naturally contain fish should not be stocked and should contain a native fish assemblage.        | <ul style="list-style-type: none"> <li>No to be stocked with fish.</li> <li>Periodic monitoring and removal of non-native fish introductions/other non-native animals<sup>±</sup> where evident.</li> </ul>                                                                                                                                              | Annual                  |
| 5. Ponds should not be artificially connected to other water bodies, e.g. ditches.                                                           | <ul style="list-style-type: none"> <li>Creation to provide an area of permanent water with some water fluctuation.</li> </ul>                                                                                                                                                                                                                            | By year 1               |
| 6. Non-native species* should be absent                                                                                                      | <ul style="list-style-type: none"> <li>Monitoring and control of non-native plants as necessary through normal management (to maintain threshold limits).</li> <li>Avoidance of herbicides and manually/mechanically remove persistent non-natives if necessary.</li> </ul>                                                                              | By year 3               |
| 7. Less than 10% of the pond should be covered with duckweed or filamentous algae.                                                           | <ul style="list-style-type: none"> <li>Monitor/treat/removal as necessary (as detailed for criterion 1.</li> </ul>                                                                                                                                                                                                                                       | By year 3               |

\*Frequently occurring non-native animals include signal crayfish, zebra mussels, killer and demon shrimp and carp.

\*Any non-native species. Frequently observed non-native plant species include water fern, Australian swamp stonecrop parrot's feather, floating pennywort, Japanese knotweed and giant hogweed (on the banks).

### Ditch

- 7.19 A length of wet ditch habitat will be created on low lying habitat at the southern boundary of offsite Area B. The ditch will be 200m long x 3m wide (covering 600m<sup>2</sup>) with a minimum depth of 2m and a shallow profile of 45° or less on the northern bank. The feature will be planted with native emergent and aquatic vegetation as detailed above for the pond but will not be linked to this neighbouring waterbody. The following additional emergent and aquatic species will be planted on a matrix to ensure a 10 different species per 20m of ditch:

### Emergent plants

- Brooklime – *Veronica beccabunga*
- Arrowhead – *Sagittaria sagittifolia*
- Sweet flag – *Acorus calamus*

#### Aquatic plants

- Frogbit – *Hydrocharis morsus-ranae*
- Whorled water milfoil - *Myriophyllum verticillatum*

#### Condition Assessment Rationale

- 7.20 Creation methods and management will aim to maximise biodiversity value to meet 'Good' condition.

**Table 16: Ditch Management Targets (offsite)**

| Condition Assessment Criteria/Objective                                                                                                                                                                                                      | Management Intervention                                                                                                                                                                                                                                                                                                                                      | Target Time                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 1. Good water quality, with clear water (substrate can be seen) and no obvious sign of pollution in the water body.                                                                                                                          | <ul style="list-style-type: none"> <li>• Periodic cut and removal of emergent vegetation (in accordance with above management).</li> <li>• Monitor habitat quality and take remedial steps to prevent or treat pollution/eutrophication such as use of barley straw bale submerged in water and removed periodically to reduce nutrient build-up.</li> </ul> | By year 3<br><br>Annual    |
| 2. Clear water dominated by plants, be they submerged or floating (note dominance of duckweed is a sign of eutrophication).                                                                                                                  | <ul style="list-style-type: none"> <li>• Management to promote a margin of emergent vegetation around permanent water/drawdown zone.</li> </ul>                                                                                                                                                                                                              | By year 3                  |
| 3. A range of submerged and floating leaved plants should be present. As a guide more than 10 species of emergent, floating or submerged species in a 20 m ditch length or 7 species of submerged or floating species in 150 m canal length. | <ul style="list-style-type: none"> <li>• Periodic trimming of bankside vegetation at least once every three years as necessary.</li> <li>• Monitoring and supplementary planting as necessary.</li> </ul>                                                                                                                                                    | By year 5<br><br>By year 3 |
| 4. A marginal fringe of emergent vegetation should be present.                                                                                                                                                                               | <ul style="list-style-type: none"> <li>• As above for criterion 3.</li> </ul>                                                                                                                                                                                                                                                                                | -                          |
| 5. The water body should not be impacted by use of the riparian land.                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• Ditch will be buffered from farming practices to the south by existing trackway and bank of coarse grassland and scrub.</li> </ul>                                                                                                                                                                                  | From year 1                |
| 6. If a fish assemblage is present it should comprise of a range of native species and the assemblage should not reach an excessive biomass or be overly dominated by benthivorous or zooplanktivorous fish.                                 | <ul style="list-style-type: none"> <li>• No to be stocked with fish.</li> <li>• Periodic monitoring and removal of non-native fish introductions/other non-native animals<sup>±</sup> where evident.</li> </ul>                                                                                                                                              | Annual                     |

| Condition Assessment Criteria/Objective                                                                                                                                                      | Management Intervention                                                                                                                                                                                                                                                     | Target Time |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 7. Sufficient water levels should be maintained; as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains and linear waterbody should be maintained. | <ul style="list-style-type: none"> <li>Minimum water depth of 0.5-1m will be maintained through monitoring.</li> </ul>                                                                                                                                                      | By year 5   |
| 8. Less than 10% of the ditch or linear waterbody should be heavily shaded.                                                                                                                  | <ul style="list-style-type: none"> <li>Monitoring and removal of scrub/tree cover as necessary</li> </ul>                                                                                                                                                                   | From year 1 |
| 9. Non-native species* should be absent                                                                                                                                                      | <ul style="list-style-type: none"> <li>Monitoring and control of non-native plants as necessary through normal management (to maintain threshold limits).</li> <li>Avoidance of herbicides and manually/mechanically remove persistent non-natives if necessary.</li> </ul> | By year 3   |
| 10. Less than 10% of the ditch should be covered with duckweed or filamentous algae.                                                                                                         | <ul style="list-style-type: none"> <li>Monitor/treat/removal as necessary (as detailed for criterion 1.</li> </ul>                                                                                                                                                          | By year 3   |

<sup>‡</sup>Frequently occurring non-native animals include signal crayfish, zebra mussels, killer and demon shrimp and carp.

\*Any non-native species. Frequently observed non-native plant species include water fern, Australian swamp stonecrop parrot's feather, floating pennywort, Japanese knotweed and giant hogweed (on the banks).

## MONITORING

- 7.21 In order to ensure that the habitats created within the site reach and maintain their maximum value to nature conservation, all habitats will be monitored annually by the appointed landscape contractor. Regular monitoring by a suitably experienced ecologist will also be undertaken during the habitat establishment stage to ensure that creations measures are suitable to achieve the objectives.
- 7.22 Results of this monitoring will be used to inform changes to the management plan (including five-year work programme) which this BMP will inform. The detailed management prescriptions set out in the management plan will be altered if required following monitoring and in agreement with the landscape contractor, Barnsley Metropolitan Borough Council and any other stakeholders. This BMP and work programme will be reviewed on a five-year rolling basis, with the work programme fully reviewed at the end of the initial five year period by those involved in site management.
- 7.23 A detailed work programme will be set annually by the landscape contractor or other parties managing the site.
- 7.24 While general monitoring will be undertaken annually to inform the forthcoming year's work programme a more detailed habitat assessment of the semi-natural habitats should also be undertaken between April and September at years 2 and 5 of the work programme by an experienced ecologist. Results should be reported back and feed into a five-year management plan review, to enable assessment of the management prescriptions against the defined objectives for each habitat. Where objectives are not being adequately met, appropriate action will be put in place (such as detailed in the Management Target tables for each habitat) to amend management prescriptions, with any refinements incorporated into the updated management plan and annual work programme. At this time the need for, and frequency of, detailed habitat assessments should be set accordingly for each habitat as necessary and incorporated within subsequent management plan periods.

## Five Year Work Programme

### Onsite Scheme

| Habitat/<br>Feature                                  | Regular Operations/Works<br>(Years 1-5)              | Anticipated Frequency of Visits/Operations (see note below) |   |   |   |   |   |   |   |   |   |   |   | Frequency, notes                                                                          |
|------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|-------------------------------------------------------------------------------------------|
|                                                      |                                                      | J                                                           | F | M | A | M | J | J | A | S | O | N | D |                                                                                           |
| Woodland                                             | Planting                                             |                                                             |   |   |   |   |   |   |   |   |   |   |   | Year one only                                                                             |
|                                                      | Maintenance (including individual trees)             |                                                             |   |   |   |   |   |   |   |   |   |   |   | Annually to year 5                                                                        |
|                                                      | Selective thinning & trimming a sinuous edge         |                                                             |   |   |   |   |   |   |   |   |   |   |   | Year 5 onward (thinning), 1/3 to 1/2 on rotation Every 3-5 years.                         |
|                                                      | Control of pernicious weeds/undesirable ground cover |                                                             |   |   |   |   |   |   |   |   |   |   |   | as necessary subject to monitoring.                                                       |
| Scrub                                                | Planting                                             |                                                             |   |   |   |   |   |   |   |   |   |   |   | Year one only                                                                             |
|                                                      | Maintenance                                          |                                                             |   |   |   |   |   |   |   |   |   |   |   | Annually to year 5                                                                        |
|                                                      | Selective thinning & trimming a sinuous edge         |                                                             |   |   |   |   |   |   |   |   |   |   |   | From year 2 – to promote regeneration of seedlings and saplings                           |
|                                                      | Control of pernicious weeds/undesirable ground cover |                                                             |   |   |   |   |   |   |   |   |   |   |   | Annually as needed to Year 5 then thereafter as determined by monitoring                  |
| Neutral Grassland/wet grassland (attenuation margin) | Seeding                                              |                                                             |   |   |   |   |   |   |   |   |   |   |   | Year 1 only in spring and/or autumn                                                       |
|                                                      | Cutting/weed control                                 |                                                             |   |   |   |   |   |   |   |   |   |   |   | Year 1 as required for weed control (including in spring), otherwise annually from year 2 |

| Habitat/<br>Feature  | Regular Operations/Works<br>(Years 1-5)     | Anticipated Frequency of Visits/Operations (see note below) |   |   |   |   |   |   |   |   |   |   |   | Frequency, notes                                                                                                                      |
|----------------------|---------------------------------------------|-------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------------------------------------------------|
|                      |                                             | J                                                           | F | M | A | M | J | J | A | S | O | N | D |                                                                                                                                       |
| Hedgerow<br>(native) | Planting                                    |                                                             |   |   |   |   |   |   |   |   |   |   |   | Year 1 only                                                                                                                           |
|                      | Maintenance                                 |                                                             |   |   |   |   |   |   |   |   |   |   |   | To year 5                                                                                                                             |
|                      | Cutting                                     |                                                             |   |   |   |   |   |   |   |   |   |   |   | From year 3/ as necessary subject to monitoring                                                                                       |
| Attenuation          | Creation & planting                         |                                                             |   |   |   |   |   |   |   |   |   |   |   |                                                                                                                                       |
|                      | Maintenance/replacement                     |                                                             |   |   |   |   |   |   |   |   |   |   |   | To year 5                                                                                                                             |
|                      | Management – cutting and mechanical removal |                                                             |   |   |   |   |   |   |   |   |   |   |   | Cutting on rotation 1/3 to 1/2 every 2-3 years – removing arisings.<br>Mechanical removal as needed to maintain 1/3 to 1/2 open water |

## Offsite Scheme

| Habitat/<br>Feature | Regular Operations/Works<br>(Years 1-5)                    | Anticipated Frequency of Visits/Operations (see note below) |   |   |   |   |   |   |   |   |   |   |   | Frequency,<br>notes                                                                          |
|---------------------|------------------------------------------------------------|-------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|----------------------------------------------------------------------------------------------|
|                     |                                                            | J                                                           | F | M | A | M | J | J | A | S | O | N | D |                                                                                              |
| Scrub               | Planting                                                   |                                                             |   |   |   |   |   |   |   |   |   |   |   | Year one only                                                                                |
|                     | Maintenance                                                |                                                             |   |   |   |   |   |   |   |   |   |   |   | Annually to year 5                                                                           |
|                     | Selective thinning & trimming a<br>sinuous edge            |                                                             |   |   |   |   |   |   |   |   |   |   |   | From year 2 – to promote regeneration of seedlings and saplings                              |
|                     | Control of pernicious<br>weeds/undesirable ground<br>cover |                                                             |   |   |   |   |   |   |   |   |   |   |   | Annually as needed to Year 5 then thereafter as determined by<br>monitoring                  |
| Grassland           | Seeding                                                    |                                                             |   |   |   |   |   |   |   |   |   |   |   | Year 1 only in spring and/or autumn                                                          |
|                     | Cutting/weed control                                       |                                                             |   |   |   |   |   |   |   |   |   |   |   | Year 1 as required for weed control (including in spring), otherwise<br>annually from year 2 |

| Habitat/<br>Feature | Regular Operations/Works<br>(Years 1-5)        | Anticipated Frequency of Visits/Operations (see note below) |   |   |   |   |   |   |   |   |   |   |   | Frequency,<br>notes                                                                                                                   |
|---------------------|------------------------------------------------|-------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------------------------------------------------|
|                     |                                                | J                                                           | F | M | A | M | J | J | A | S | O | N | D |                                                                                                                                       |
| pond and<br>ditch   |                                                |                                                             |   |   |   |   |   |   |   |   |   |   |   |                                                                                                                                       |
|                     | Creation & planting                            |                                                             |   |   |   |   |   |   |   |   |   |   |   |                                                                                                                                       |
|                     | Maintenance/replacement                        |                                                             |   |   |   |   |   |   |   |   |   |   |   | To year 5                                                                                                                             |
|                     | Management – cutting and<br>mechanical removal |                                                             |   |   |   |   |   |   |   |   |   |   |   | Cutting on rotation 1/3 to 1/2 every 2-3 years – removing arisings.<br>Mechanical removal as needed to maintain 1/3 to 1/2 open water |
|                     | Cutting/weed control                           |                                                             |   |   |   |   |   |   |   |   |   |   |   | Year 1 as required for weed control, otherwise annually from year<br>2                                                                |

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## Key

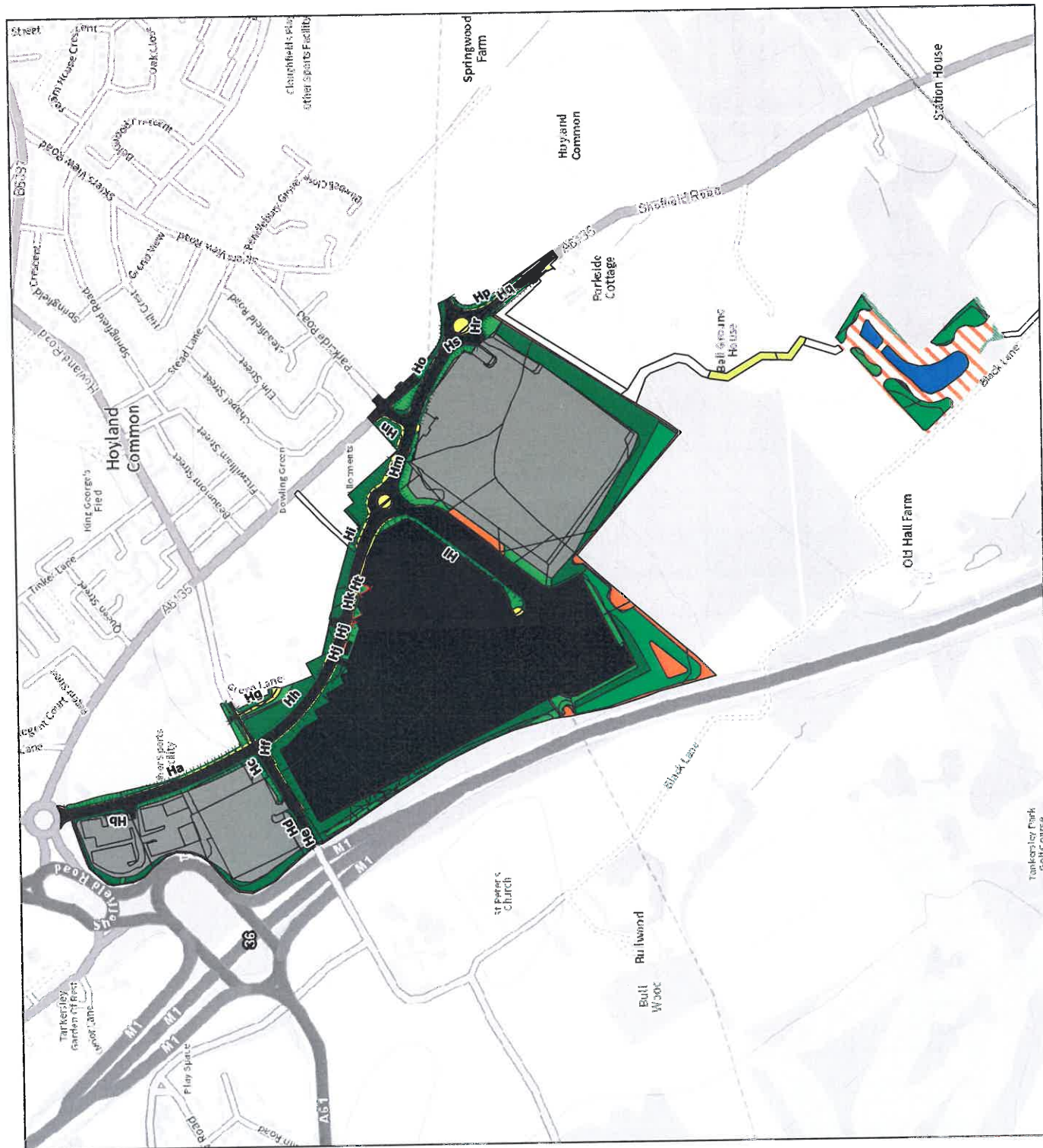
### Post-development Habitats

- Amenity Grassland
- Arable - temporarily lost
- Built Environment
- Neutral Grassland (moderate condition)
- Neutral Grassland (good condition)
- Modified Grassland - temporarily lost
- Ornamental Shrub Planting
- Outline Plots: 90% built environment  
10% amenity grassland

- Pond
- Scrub (moderate condition)
- Scrub (good condition)
- Plantation Woodland
- Retained Woodland

### Hedgerow Creation

- Hedges: Introduced shrub
- Intact hedge - native species-rich



Newlands Developments  
Land West of Sheffield Road,  
Hoyland  
South Yorkshire  
S26 6JH

POST-DEVELOPMENT HABITAT PLAN

Scale: 1:7000  
Date: 17/07/2020  
Drawing No: 9295

**Figure 1**

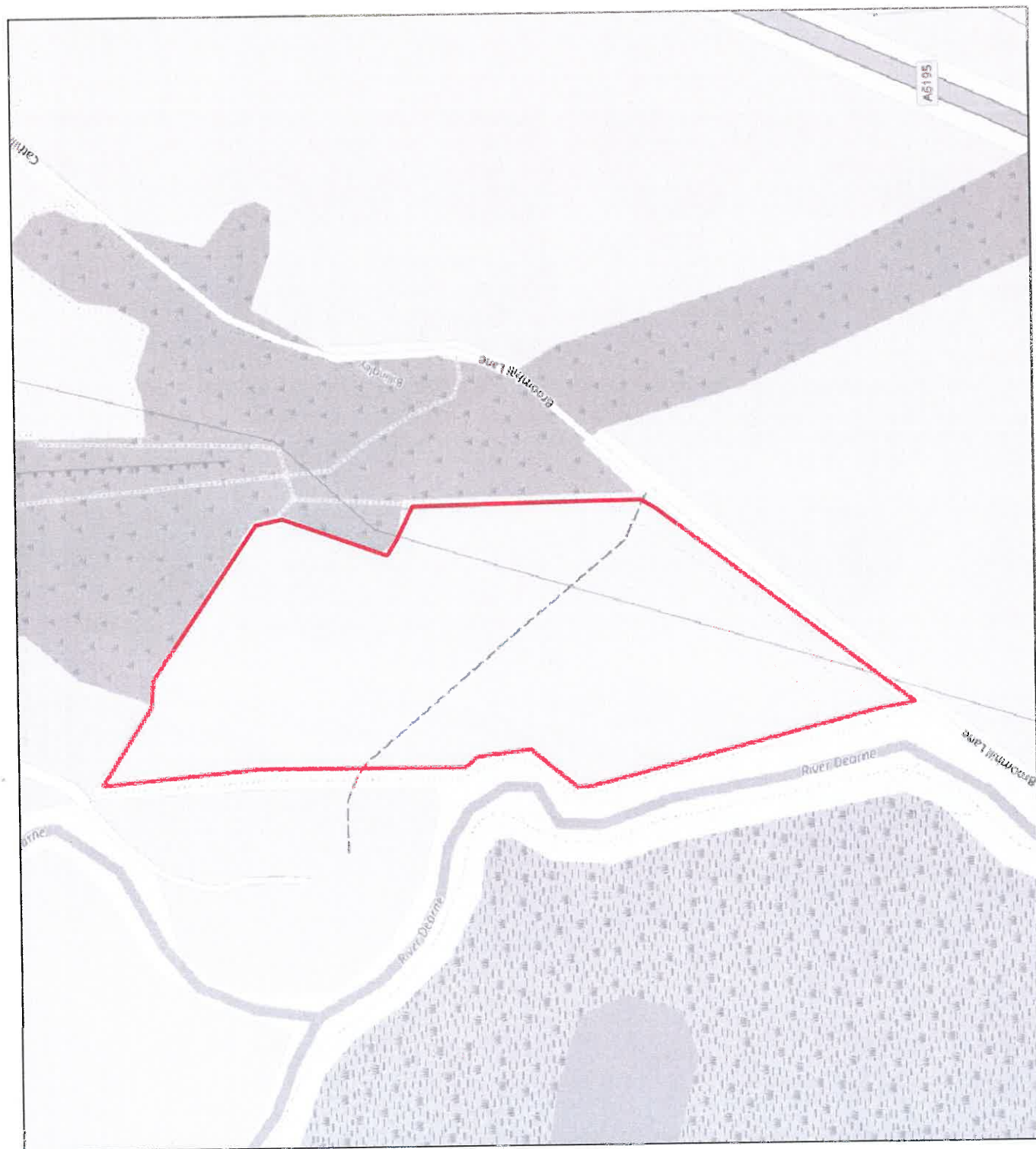


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## Key

**Area A Site Boundary**



fpcr

**Newlands Developments**  
Land West of Sheffield Road,  
Hoyland  
**AREA A SITE BOUNDARY PLAN**

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02041-06

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**Figure 3**

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## Appendix A: Biodiversity Impact Assessment Calculator Sheets

### Onsite Habitats - Baseline

| Ref | Broad Habitat       | Habitats and areas                                     |                 | Habitat distinctiveness | Habitat condition  | Ecological connectivity | Strategic significance                                    | Suggested action to address habitat losses                      | Ecological baseline<br>Total habitat units |
|-----|---------------------|--------------------------------------------------------|-----------------|-------------------------|--------------------|-------------------------|-----------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------|
|     |                     | Habitat type                                           | Area (hectares) |                         |                    |                         |                                                           |                                                                 |                                            |
| 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 | 0.65                                       |
| 2   | Urban               | Urban - Developed land; sealed surface                 | 0.39            | Very Low                | N/A - Other        | N/A                     | Location ecologically desirable but not in local strategy | Compensation Not Required                                       | 0.59                                       |
| 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            | Very 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 hedgerow units |                 | Retention category biodiversity value |                |             |            |  |
|---------------------------------|--------------|-------------------------------------------------|-------------------------|-----------------------|-------------------|-------|-------------------------|-------------------------|-----------------------------------------------------------|-----------------------------------|--------------------------------------------|------------------------------------|-----------------|---------------------------------------|----------------|-------------|------------|--|
| Baseline # ref                  | Hedge number | Hedgerow type                                   | Length km               | Distinctiveness Score | Condition         | Score | Ecological connectivity | Connectivity multiplier | Strategic significance                                    | Strategic significance multiplier | Suggested action to address habitat losses | Length retained                    | Length enhanced | Units retained                        | Units enhanced | Length lost | Units lost |  |
| 1                               |              | Native Hedgerow                                 | 0.09                    | Low                   | 2                 | 2     | Low                     | 1                       | Within area formally identified in local strategy         | High strategic significance       | 1.15                                       |                                    |                 | 0                                     | 0              | 0.09        | 0.414      |  |
| 2                               |              | Native Hedgerow - Associated with bank or ditch | 0.18                    | Medium                | 4                 | 3     | Low                     | 1                       | Within area formally identified in local strategy         | High strategic significance       | 1.15                                       |                                    |                 | 0                                     | 0              | 0.18        | 2.484      |  |
| 3                               |              | Native Hedgerow                                 | 0.31                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.31        | 2.046      |  |
| 4                               |              | Native Hedgerow                                 | 0.14                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.14        | 0.924      |  |
| 5                               |              | Native Hedgerow                                 | 0.13                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.13        | 0.858      |  |
| 6                               |              | Native Hedgerow                                 | 0.09                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.09        | 0.594      |  |
| 7                               |              | Native Hedgerow - Associated with bank or ditch | 0.09                    | Medium                | 4                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.09        | 1.188      |  |
| 8                               |              | Native Hedgerow                                 | 0.13                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.13        | 0.858      |  |
| 9                               |              | Native Hedgerow - Associated with bank or ditch | 0.05                    | Medium                | 4                 | 2     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.05        | 0.44       |  |
| 10                              |              | Native Hedgerow                                 | 0.36                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.36        | 2.376      |  |
| 11                              |              | Native Hedgerow                                 | 0.15                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.15        | 0.99       |  |
| 12                              |              | Native Hedgerow                                 | 0.23                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        | 0.04                               |                 | 0.264                                 | 0              | 0.19        | 1.254      |  |
| 13                              |              | Native Hedgerow                                 | 0.03                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.03        | 0.198      |  |
| 14                              |              | Native Hedgerow                                 | 0.2                     | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        | 0.2                                |                 | 1.32                                  | 0              | 0           | 0          |  |
| 15                              |              | Native Hedgerow                                 | 0.13                    | Low                   | 2                 | 1     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        |                                    |                 | 0                                     | 0              | 0.13        | 0.286      |  |
| 16                              |              | Native Hedgerow                                 | 0.01                    | Low                   | 2                 | 3     | Low                     | 1                       | Within area formally identified in local strategy         | High strategic significance       | 1.15                                       |                                    |                 | 0                                     | 0              | 0.01        | 0.069      |  |
| 17                              |              | Native Hedgerow                                 | 0.02                    | Low                   | 2                 | 3     | Low                     | 1                       | Within area formally identified in local strategy         | High strategic significance       | 1.15                                       |                                    |                 | 0                                     | 0              | 0.02        | 0.138      |  |
| 18                              |              | Native Hedgerow                                 | 0.01                    | Low                   | 2                 | 3     | Low                     | 1                       | Within area formally identified in local strategy         | High strategic significance       | 1.15                                       |                                    |                 | 0                                     | 0              | 0.01        | 0.069      |  |
| 19                              |              | Native Hedgerow                                 | 0.17                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        | 0.17                               |                 | 1.122                                 | 0              | 0           | 0          |  |
| 20                              |              | Native Hedgerow                                 | 0.14                    | Low                   | 2                 | 3     | Low                     | 1                       | Within area formally identified in local strategy         | High strategic significance       | 1.15                                       | 0.14                               |                 | 0.966                                 | 0              | 0           | 0          |  |
| 21                              |              | Native Hedgerow                                 | 0.06                    | Low                   | 2                 | 3     | Low                     | 1                       | Location ecologically desirable but not in local strategy | Medium strategic significance     | 1.1                                        | 0.06                               |                 | 0.396                                 | 0              | 0           | 0          |  |
| 22                              |              | Native Hedgerow                                 | 0.14                    | Low                   | 2                 | 3     | Low                     | 1                       | Within area formally identified in local strategy         | High strategic significance       | 1.15                                       | 0.14                               |                 | 0.966                                 | 0              | 0           | 0          |  |
| 23                              |              | Native Hedgerow with trees                      | 0.09                    | Low                   | 2                 | 3     | Low                     | 1                       | Within area formally identified in local strategy         | High strategic significance       | 1.15                                       | 0.08                               |                 | 0.552                                 | 0              | 0.01        | 0.069      |  |

## Onsite Habitats – Creation

| Proposed habitat                                  | Area (hectares) | Distinctiveness | Condition          | Ecological connectivity | Strategic significance                                    | Temporal Time to target condition/years | Difficulty of creation category | Habitat units delivered |
|---------------------------------------------------|-----------------|-----------------|--------------------|-------------------------|-----------------------------------------------------------|-----------------------------------------|---------------------------------|-------------------------|
| Urban - Amenity grassland                         | 0.78            | Low             | Poor               | Low                     | Location ecologically desirable but not in local strategy | 1                                       | Low                             | 1.65                    |
| 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 | 30+                                     | 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          | Good               | Low                     | Within area formally identified in local strategy         | 15                                      | Low                             | 15.69                   |
| Woodland and forest - Other woodland; broadleaved | 2.11            | Medium          | Good               | Low                     | Within area formally identified in local strategy         | 37+                                     | Medium                          | 6.24                    |

## Onsite Hedgerows – Creation

| Baseline ref | New hedge number | Proposed habitats            |           | Habitat distinctiveness | Habitat condition | Spatial quality         |                                                           | Temporal multiplier            | Hedge units delivered |
|--------------|------------------|------------------------------|-----------|-------------------------|-------------------|-------------------------|-----------------------------------------------------------|--------------------------------|-----------------------|
|              |                  |                              |           |                         |                   | Ecological connectivity | Strategic significance                                    |                                |                       |
|              |                  | Habitat type                 | Length km | Distinctiveness         | 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

[illegible]

## Offsite Habitats - Creation

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\\fcr-vm-04\earlywork\9200\9295\eco\bmp\9295 bemp report appendix a.docx

**EXECUTED as a DEED** (but not )  
 Delivered until dated) by affixing )  
 The Common Seal of )  
**BARNSELY METROPOLITAN** )  
**BOROUGH COUNCIL** )




No. 2138  
 IN REGISTER

~~Borough Secretary~~/Authorised Signatory

|                                                                                                                                                               |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <p>Executed as a deed by <b>WENTWORTH TRUSTEE COMPANY LIMITED</b> acting by <b>WILLIAM JAMES RUFUF GETHING</b>, a director in the presence of a witness:.</p> | <hr/>        |
| <p>Witness signature:</p>                                                                                                                                     | <p>Name:</p> |
| <p>Witness name:</p>                                                                                                                                          |              |
| <p>Witness address:</p>                                                                                                                                       |              |

|                                                                                                                                                           |              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <p>Executed as a deed by <b>RIPPLE TRUSTEE COMPANY LIMITED</b> acting by <b>WILLIAM JAMES RUFUF GETHING</b>, a director in the presence of a witness:</p> | <hr/>        |
| <p>Witness signature:</p>                                                                                                                                 | <p>Name:</p> |
| <p>Witness name:</p>                                                                                                                                      |              |
| <p>Witness address:</p>                                                                                                                                   |              |

**EXECUTED** as a **DEED** by **THE WENTWORTH CHARITY** acting by two of its trustees:

.....  
Trustee Signature

Trustee Name: ...DAVID HUNTON

Witness  
Signature: .....

Witness  
Name: .....

Witness  
Address: .....

.....

Witness  
Occupation:.....

.....  
Trustee Signature

Trustee Name: ...CYNTHIA SHAW

Witness  
Signature: .....

Witness  
Name: .....

Witness  
Address: .....

.....

Witness  
Occupation:.....

|                                                                                                                                                                                         |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <p>Executed as a deed by <b>HOYLAND DEVELOPMENTS LTD</b> acting by a director in the presence of a witness:.</p> <p>Witness signature:</p> <p>Witness name:</p> <p>Witness address:</p> | <p>_____</p> <p>Name:</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|

Executed as a deed by **EQUITES  
NEWLANDS (HOYLAND) LIMITED**  
acting by a director in the presence of a  
witness:.

Witness signature:

Witness name:

Witness address:

---

Name: