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HABITAT MANAGEMENT AND MONITORING PLAN

At

Hollin Royd Farm
Lane Head Road
Cawthorne
Barnsley
S75 4AJ

NGR: SE 26538 07299

Prepared for: Elliot Pemberton, Five Seventy-Three Ltd
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UES reference: UES04605/06



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1 PROJECT BACKGROUND

1.1 Introduction

Planning permission has been granted with conditions by Barnsley Metropolitan Borough Council on the 13th of June 2025 (reference number 2024/0600) for:

“Demolition of existing lean to agricultural shed and erection of replacement agricultural building to form livestock, machinery and feed store.”

United Environmental Services (UES) Ltd were commissioned to produce this habitat management and monitoring plan (HMMP) to discharge condition 4 of planning permission 2024/0600:

“The development shall not commence until a Habitat Management and Monitoring Plan (the HMMP) prepared in accordance with the approved Biodiversity Gain Plan has been submitted to an approved by the Local Planning Authority. The HMMP shall include:

a) a non-technical summary;

b) the roles and responsibilities of the people or organisation(s) delivering the [HMMP];

c) the planned habitat creation and enhancement works to create or improve habitat to achieve the biodiversity net gain in accordance with the approved Biodiversity Gain Plan;

d) the management measures to maintain habitat in accordance with the approved Biodiversity Gain Plan for a period of 30 years from the completion of development; and

e) the monitoring methodology and frequency in respect of the created or enhanced habitat to be submitted to the local planning authority, and approved in writing by, the local planning authority;

f) a timetable for implementation and completion of creation and enhancement works;

g) notice in writing shall be given to the Council within 10 working days of the implementation of the HMMP;

h) notice in writing shall be given within 10 working days of the completion of the habitat creation and enhancement works as set out in the HMMP and a completion report, evidencing the completed habitat enhancements, has been submitted to, and approved in writing by the Local Planning Authority;

i) thereafter the created and/or enhanced habitat specified in the approved [HMMP] shall be managed and maintained in accordance with the approved [HMMP] for a period of 30 years following the completion of the development.

Reason: To ensure the development delivers a biodiversity net gain on site in accordance with Local Plan Policy BIO1 and Schedule 7A of the Town and Country Planning Act 1990.”

A biodiversity net gain (BNG) assessment was undertaken by United Environmental Services (UES) on 13th August 2024 using DEFRA’s statutory metric (Job Number UES UES04605/02), and the baseline value of the proposed development site was calculated as 0.17 habitat units, 0.09 hedgerow units and 0 watercourse units using DEFRA’s statutory biodiversity metric.



Based on the development plans provided, the ecological value of the site post-development was assessed as 0.23 habitat units (a net gain of 31.32%) and 0.12 hedgerow units (a net gain of 38.04%), with no net change in watercourse units. This is based on the:

Retention of:

- 0.01ha of Grassland (modified grassland – poor condition)
- 0.015ha of Urban (developed land; sealed surface - condition assessment N/A)
- 0.022km of Line of trees (moderate condition)

Creation of:

- 0.04ha of Urban (developed land; sealed surface – condition assessment N/A)
- 0.02ha of Grassland (other neutral grassland – moderate condition)
- 0.0244ha of Individual trees (rural tree – moderate condition)
- 0.02ha of Urban (artificial unvegetated, unsealed surface – condition assessment N/A)
- 0.005km of Species-rich native hedgerow (moderate condition)

The overarching aim of this HMMP is for created habitats to achieve their target condition within the set ‘time to target condition’ period and retained habitats to be maintained in their current condition. Habitat types and conditions that have been targeted are based on what is considered realistic and achievable onsite. This HMMP is a document that focuses on the delivery of long-term management and monitoring of created or retained features. This HMMP provides detailed management and maintenance information for years 1 – 5 of the proposed development with broader management aims for the lifetime of the BNG commitment, i.e. 30 years. The progress towards reaching this aim is monitored regularly and reported in annual habitat management updates.

1.2 Roles and responsibilities

The responsibility for ensuring that the initial habitat retention, enhancement and creation works are undertaken lies with the landowner. They will be responsible for ensuring that the habitat retention, enhancement and creation works are carried out in accordance with this HMMP.

Subsequent management of the habitats on site will be the responsibility of the management company for the site. They must ensure that the ongoing measures detailed within this HMMP are implemented. They will also be responsible for instructing a suitably qualified ecologist (SQE) to undertake monitoring surveys to assess the establishment of habitats as well as monitoring them for any changes affecting their quality or function. The ongoing management and monitoring detailed within this report will be secured via a service agreement and management charge imposed on the residents.

Table 1 – Roles and responsibilities

	Organisation	Contact name
Ecological consultancy responsible for producing the HMMP	UES Ltd.	Ysobella Cox
Landowner	N/A	Mr Nigel Priest
Management company	N/A	Mr Nigel Priest
Local Planning Authority (LPA) responsible for reviewing the HMMP	Barnsley Metropolitan Borough Council	Environmental Planning Department



1.3 Site summary

A preliminary ecological appraisal was undertaken by UES on 13th August 2024 (report reference number UES04605/05). The proposed development site has an area of approximately 0.11ha comprising a stone lean-to agricultural building, access road and modified grassland. A line of trees is also present to the south of the development area. The wider ownership boundary is largely dominated by a modified grassland field, with buildings, hardstanding and a traditional orchard in the western corner.

The proposed development includes the demolition of the existing dry stone wall storage shed, followed by the construction of a new agricultural barn.

The preliminary ecological appraisal has highlighted potential issues with the following ecological receptors on or adjacent to site: amphibians, badgers, bats, birds, hedgehogs and trees. Provided these issues are addressed in accordance with the recommendations detailed in this report, the development may proceed without adversely impacting the aforementioned ecological receptors.

1.3.1 Amphibians, badgers and hedgehogs

No evidence of amphibians, badgers or hedgehogs was observed on site during the walkover survey. The development area has limited potential to support these species; however, there is potential that they could be using the wider ownership boundary.

The following RAMs should be implemented on site during the construction phase of the development:

- No trenches or excavations will be left open overnight. They will be backfilled or covered with board, or alternatively fitted with a means of escape for any animal which may become trapped within, such as a plank or slope leading out of the bottom of the excavation at an angle of 45°. All excavations left open overnight will be checked for trapped wildlife in the morning.
- Any potential refugia on site or created as part of the works should be removed by hand or checked for sheltering amphibians and hedgehogs prior to their removal by mechanical means or burning. Potential refugia can include piles of leaf litter, log piles and brash piles.
- Any pipes will be stored with caps on to prevent entry by wildlife, and materials such as barbed wire will be stored so that animals cannot become entangled in them.
- Any chemicals or harmful materials will be stored so that they cannot be accessed by wildlife.
- Excavations will be checked immediately before they are backfilled to ensure that no animals have become trapped.



1.3.2 Bats

Bats in buildings:

There is a single building located within the proposed development site. A bat presence / absence survey was undertaken of the building onsite by UES in August 2024 (report reference UES04605/03). Common pipistrelle *Pipistrellus pipistrellus* were recorded foraging between the barn and a woodstore shed during the survey, with a *Myotis sp.* also recorded but not directly observed. However, no bats were found to be roosting within the building onsite during the survey.

Bats in trees:

Trees 3 and 4 will be felled as part of the proposed development, whilst Trees 2 and 5 will be subject to arboricultural works to reduce the crown by 2.5m and crown lift by 2.5m respectively. As such, a ground level tree assessment (GLTA) will need to be undertaken to assess the potential of these trees to support roosting bats. If any trees due to be impacted are found to have potential to support roosting bats, further surveys may be required from May to August inclusive.

Any external lighting installed as part of the development should be designed to be wildlife friendly and avoid overspill onto the retained tree lines and hedgerows.

1.3.3 Breeding birds

Site clearance, arboricultural works and vegetation clearance are to take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and works need to take place during this period, a targeted nest survey is to be undertaken immediately prior to the works by a suitably qualified ecologist or an ecological clerk of works appointed to oversee the works.

1.3.4 Trees

Site clearance and setting out may involve the direct loss of trees onsite as an ecological resource or may result in damage to any trees which are to be retained. Construction activities too close to the RPAs of retained trees could cause permanent damage.

Trees, in particular those forming a linear feature across the site, should be retained where possible. RPAs should be established and implemented around the trees which are to be retained. Where necessary, these areas should be adequately protected by appropriately designed protective barriers and ground protection throughout the entire development process.



2 PLANNED MANAGEMENT ACTIVITIES

2.1 Habitat retention

Habitats due to be retained onsite are limited to 0.022km line of trees (moderate condition), 0.01ha modified grassland (poor condition) and 0.015ha of developed land; sealed surface (condition assessment not required).

Root protection areas (RPAs) should be established and implemented around the trees which are to be retained. Where necessary, these areas should be adequately protected by appropriately designed protective barriers and ground protection throughout the entire development process.

2.2 Habitat enhancement

No habitats will be enhanced as part of the proposed development.

2.3 Habitat creation

Table 3 below provides a summary of the habitats due to be created onsite. Each habitat will require establishment and a certain level of maintenance and monitoring to ensure that they are providing the ecosystem function required of them. Sections 2.3.1 - 2.3.3 detail the habitats being created onsite, and the specific management measures for each habitat. A detailed landscaping plan has been produced by A² Studio in February 2026 (drawing number HRF - A2 - CON - 001; Rev A) as shown at Appendix 2 – Landscape design.

Table 2 – Habitat creation and enhancement summary

Baseline habitat type	Target habitat type	Area	Targeted condition	Years to targeted condition	Condition assessment targets
Grassland	Other neutral grassland	0.02ha	Moderate	5	Pass condition criteria A, C, D and E.
Individual trees	Rural tree	0.0244ha	Moderate	27	Pass condition A, B, D and F
Urban	Artificial unvegetated, unsealed surface	0.02ha	N/A	0	N/A
Urban	Developed land; sealed surface	0.04ha	N/A	0	N/A
Hedgerow	Species-rich native hedgerow	0.005km	Moderate	5	Pass condition criteria A, B and E



2.3.1 Other neutral grassland

Table 3 – Habitat creation (other neutral grassland)

<p>Targeted condition assessment criteria</p>	<p>A) The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type. <i>Note – this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.</i></p> <p>C) Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.</p> <p>D) Cover of bracken <i>Pteridium aquilinum</i> less than 20% and cover of scrub (including bramble) less than 5%.</p> <p>E) Combined cover of species indicative of suboptimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging activities) accounts for less than 5% of total area. <i>If any invasive non-native species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.</i></p>
<p>Creation approach</p>	<p>The landscaping plan incorporates the creation of other neutral grassland around the new agricultural building. The grassland will be created by sowing an EM2 standard general purpose meadow mixture. The composition of the Emorsgate EM2 mixture is detailed below:</p> <p><u>Wildflowers</u></p> <ul style="list-style-type: none"> • Betony <i>Betonica officinalis</i> • Black medick <i>Medicago lupulina</i> • Bladder campion <i>Silene vulgaris</i> • Common knapweed <i>Centurea nigra</i> • Cowslip <i>Primula veris</i> • Hedge bedstraw <i>Galium album</i> • Lady's bedstraw <i>Galium verum</i> • Meadow buttercup <i>Ranunculus acris</i> • Meadow crane's-bill <i>Geranium pratense</i> • Oxeye daisy <i>Leucanthemum vulgare</i> • Red campion <i>Silene dioica</i> • Selfheal <i>Prunella vulgaris</i> • Tufted vetch <i>Vicia cracca</i> • Wild carrot <i>Daucus carota</i> • Yarrow <i>Achillea millefolium</i> <p><u>Grasses</u></p> <ul style="list-style-type: none"> • Common bent <i>Agrostis capillaris</i> • Crested dog's-tail <i>Cynosurus cristatus</i> • Red fescue <i>Festuca rubra</i> • Smaller cat's-tail <i>Phleum bertolonii</i> • Smooth-stalked meadow-grass <i>Poa pratensis</i> <p>The initial sowing and ground works should be carried out by a suitably experienced contractor and may take place between April and October. In the first year, the likely flush of weeds should not be cut until mid-late summer. The first cut should be undertaken from early August; mown vegetation should be left in situ for 48 hours, before being collected and disposed of at a licensed tip. The cuttings must not be left, as this will increase the level of nutrients within the soil and prohibit the</p>



	<p>establishment of the wildflower grassland. The grassland can then be mown regularly until late March, with competitive weeds removed as needed over this period.</p> <p>The provision of wildflower grassland will provide immediate benefits for wildlife in the form of foraging, breeding and sheltering opportunities. In the longer term, the grassland will also be colonised naturally by additional native plant species.</p> <p>Alternative wildflower grassland mixtures could be used; however, these will be agreed with the project ecologist first to ensure they contain similar and appropriate native species.</p>
Management approach	<p>From the second year onwards, the grassland can be subject to a summer hay cut in August, following which cuttings should be left to dry and shed seed for 1-7 days before being removed. The grassland can then be mown regularly as considered necessary until spring, from which time no cutting or grazing should occur until the August hay cut.</p> <p>Any litter or debris should be removed from the area prior to cutting and underneath these materials should be checked for sheltering wildlife.</p> <p>Checks for bracken, bare ground, invasive non-native species and species indicative of suboptimal condition will be undertaken on an ongoing basis as part of the vegetation management works and monitoring surveys. It will be the responsibility of both the management company appointed to manage the habitats onsite, and the ecologist undertaking the monitoring surveys to identify any issues and rectify.</p>
Potential risks and remedial measures	<p>Grassland fails to meet required species diversity and condition assessment. Consider scarification and over-sowing with additional seed mix. Ensure management regime is allowing for flowers to set and shed seeds while also stripping nutrients from the system.</p> <p>If the cover of bare ground is >5% then over-sowing will be undertaken.</p> <p>If the cover of scrub is >5% then scrub removal will be undertaken.</p> <p>If invasive species are present they will be treated in-situ.</p>

2.3.2 Individual trees (Rural tree)

Table 4 – Habitat creation (Rural trees)

Targeted condition assessment criteria	<p>A) The tree is a native species (or more than 70% within the block are native species).</p> <p>B) The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap</p> <p>D) There is little or no evidence of an adverse impact on tree health by human activities (Such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.</p> <p>F) More than 20% of the tree canopy area is oversailing vegetation beneath.</p>
Creation approach	<p>Two trees will be removed as part of the proposed development. However, to increase biodiversity onsite the planting scheme includes areas of native tree</p>



	<p>planting. The proposed landscaping plan indicates that the following native tree species will be planted:</p> <ul style="list-style-type: none"> • Beech <i>Fagus Sylvatica</i> • Field maple <i>Acer campestre</i> • Pedunculate oak <i>Quercus robur</i> • Scots pine <i>Pinus sylvestris</i> • Silver birch <i>Betula pendula</i> • Whitebeam <i>Sorbus aucuparia</i> <p>Tree planting should be undertaken in the winter when trees are dormant as this will help to reduce damage and increase establishment rates. Trees should be planted between November and March (inclusive).</p> <p>Newly planted trees should be staked to aid growth and they should then be protected from deer, squirrel or rabbit damage using tree spirals or guards. For the first growing season following planting, vegetation within a one metre diameter of the base of each tree should be treated by the application of a glyphosate-based herbicide by knapsack sprayer, by an operative holding PA1 and PA6 licences, in order to reduce competition from weeds and grasses. This should first be carried out in April and throughout the following summer in response to new weed growth. Care must be taken to avoid spray drift onto the leaves or bark of the newly planted tree. Alternatively, a mulch material such as chippings or bark can be laid around the base of the tree within a one metre diameter.</p> <p>The proposed tree planting will provide nesting opportunities for birds and array of foraging opportunities for invertebrates, which will in turn provide increased foraging opportunities for other faunal species.</p>
Management approach	<p>Once planted and established the proposed trees should not require any management in the long-term, unless addressing issues with disease or damaged limbs that cause health and safety concerns. If any intensive pruning is to be undertaken, it should be avoided during the nesting bird season (March to August inclusive), or alternatively a check for nesting birds can be undertaken immediately prior to the works.</p>
Potential risks and remedial measures	<p>If the newly planted trees fail to establish these will be replaced like-for-like during the next planting season.</p>

2.3.3 Species-rich, native hedgerow

Table 5 – Habitat creation (Hedgerows)

Targeted condition assessment criteria	<p><i>B2) Gap – hedgerow canopy continuity</i> <i>Gaps make up <10% of total length; and no canopy gaps >5m.</i></p> <p><i>C1) Undisturbed ground and perennial vegetation.</i> <i>>1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length</i></p> <p><i>D1) Invasive and neophyte species</i> <i>>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.</i></p> <p><i>D2) Current damage</i> <i>>90% of the hedgerow or undisturbed ground is free of damage caused by human</i></p>
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	<i>activities</i>
Creation approach	<p>The landscaping scheme proposes native, species-rich hedgerow planting within the south-western section of the site. The hedgerow will contain the following species:</p> <ul style="list-style-type: none"> • Blackthorn <i>Prunus spinosa</i> • Dog Rose <i>Rosa canina</i> • Dogwood <i>Cornus sanguinea</i> • Hawthorn <i>Crataegus monogyna</i> • Hazel <i>Corylus avellana</i> <p>See section 2.3.2 for tree planting guidance. Trees are to be planted in a double staggered row.</p> <p>The proposed hedgerow planting will provide foraging opportunities for invertebrates, including larval stages, adult herbivorous species and pollinators. Providing a range of planted species will support a greater diversity of invertebrate species, which will in turn benefit other faunal species that will predate these invertebrates, such as bats and birds. In addition, the hedgerow planting will provide increased nesting opportunities for birds and sheltered commuting opportunities for amphibians and small mammals.</p>
Management approach	<p>Hedgerows will be maintained to encourage thickening growth and to reach the desired height of 3m gradually, by increasing the cutting height of the hedge by small amounts each year. Incremental height increase is the key to the hedge management cycle, sympathetically allowing a hedgerow to progress slowly through its natural growth cycle without putting it under damaging stress. It also promotes a dense healthy hedgerow. Using this approach, a hedgerow may take many tens of years to complete a full cycle of growth, and at all times during this remain dense, healthy and functional. The hedgerow will be maintained in accordance with the Hedgelink - Hedgerow Management Cycle, stages 1-10, with the aim to keep the hedgerow healthy at all times by allowing it to cycle between points 3 and 8. Side trimming of hedgerows in an 'A' profile to a promote healthy hedgerow base should be undertaken in January or February. Hedgerows will be cut along one side annually, alternating between the two sides of the hedgerow each year, so that each side of the hedgerow being cut every two years. All hedgerow cuttings to be collected and removed.</p> <p>The ongoing management / trimming of hedgerows should be avoided during the nesting bird season (March to August inclusive), or alternatively a check for nesting birds can be undertaken immediately prior to the works.</p>
Potential risks and remedial measures	<p>If the newly planted trees fail to establish these will be replaced like-for-like during the next planting season.</p>



3 MONITORING SCHEDULE

3.1 Monitoring strategy

This HMMP includes a schedule of ecological monitoring and reporting and a mechanism to secure the agreement and implementation of contingency measures in the event that monitoring reveals that habitats on site are failing to achieve their target distinctiveness and/or condition.

3.2 Monitoring methods and intervals

Monitoring will occur annually in years 1 – 5 and then every 5 years thereafter, as detailed in Table 10 below. Years 1 - 5 will monitor initial habitat creation works and ensure the initial management is successful. Subsequent years will assess the long-term success and ensure conditions are met by year 30. Additional monitoring is to occur at any time should significant remedial work be required, or condition not determined to be met.

Table 5 – Monitoring methods and intervals

Habitat type	Monitoring methods
Grassland	<ul style="list-style-type: none">• Undertake quadrat sampling to identify the habitat type that is establishing and then number of species per m².• Estimate percentage of bare ground, bramble and bracken cover.• Identify the presence of any non-native invasive species.• Collect a botanical species list across grassland to check against target species list.• Survey to be undertaken in June or July.
Trees	<ul style="list-style-type: none">• Check for failed specimens and any impact on tree health.• Assess management including any damage to trees.• Survey to be completed between April and September.
Hedgerows	<ul style="list-style-type: none">• Record height and width of hedgerow if established.• Record presence of any gaps and gap between ground and base of canopy.• Assess management including any damage to hedgerow and absence of 1m width of adjacent undisturbed ground.• Survey to be completed between April and September.

3.3 Monitoring reports

The management company will be responsible for monitoring the establishment of habitats as well as monitoring them for any changes affecting their quality or function. It is also the responsibility of the management company to instruct a SQE to undertake the monitoring surveys and reporting as detailed in section 3.2, and to submit this report to Barnsley Metropolitan Borough Council for review.

A SQE will prepare a monitoring report annually from years 1 – 5, then every 5 years thereafter, which will be informed by the monitoring surveys conducted that year, as detailed in section 3.2. The SQE will be responsible for undertaking a condition assessment of the habitats onsite and comparing them against the target conditions detailed in sections 2.2 and 2.3 of this report to identify any issues. Following each condition assessment, a report will be produced and submitted to the landowner detailing if the habitats are achieving their target



distinctiveness and condition. Once the time to target condition for each habitat has been reached, a BNG calculation will be undertaken using the most up-to-date Defra biodiversity metric to quantify the value of the habitats, which will also be included within the report. These reports will be submitted to the LPA by the management company to ensure that the conditions of the planning permission are being met. If habitats are not achieving their target distinctiveness and / or condition, the management strategy will be reviewed and amended where necessary and a meeting will be arranged with the management company. After years 1 - 5, the requirement for condition assessments every year will be reviewed and may be decreased to every five years, until thirty years of monitoring has been completed.

3.4 Adaptive management

Adaptive management is a systematic approach to natural resource management that involves monitoring and evaluating the effectiveness of management actions then adjusting as necessary to improve outcomes over time. It is an iterative process in which management actions are followed by targeted monitoring outcomes. These, in turn, inform the ongoing management.

The results of the monitoring surveys will identify if any management changes are necessary in order to achieve the desired habitat distinctiveness and condition. If habitats are not achieving their target distinctiveness and / or condition, the management strategy will be reviewed and amended where necessary and a meeting will be arranged between the management company and SQE.



4 CONCLUSION

The habitat creation and management detailed within the report will result in a net gain in biodiversity. As such, it is considered that the proposed development is compliant with both national and local planning policy with regards to biodiversity net gain. Moreover, the monitoring and management of the created habitats, and subsequent reporting of results, as stipulated in section 3, will ensure that the site will provide appropriate biodiversity enhancements for at least 30 years.

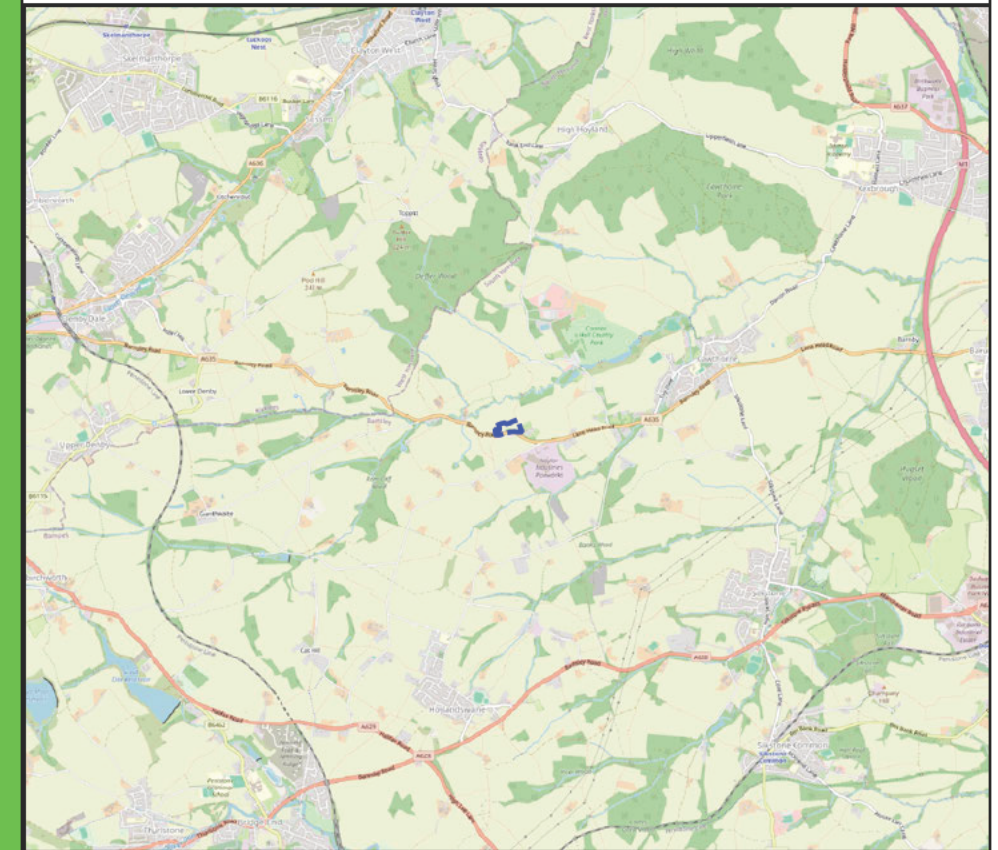


APPENDICES

Appendix 1 – UKHab plan

UK Habitat Classification Plan

Site: Hollin Royd Farm
 NGR: SE 26538 07299
 Author: Bethany Dineley
 Date: 08/10/24



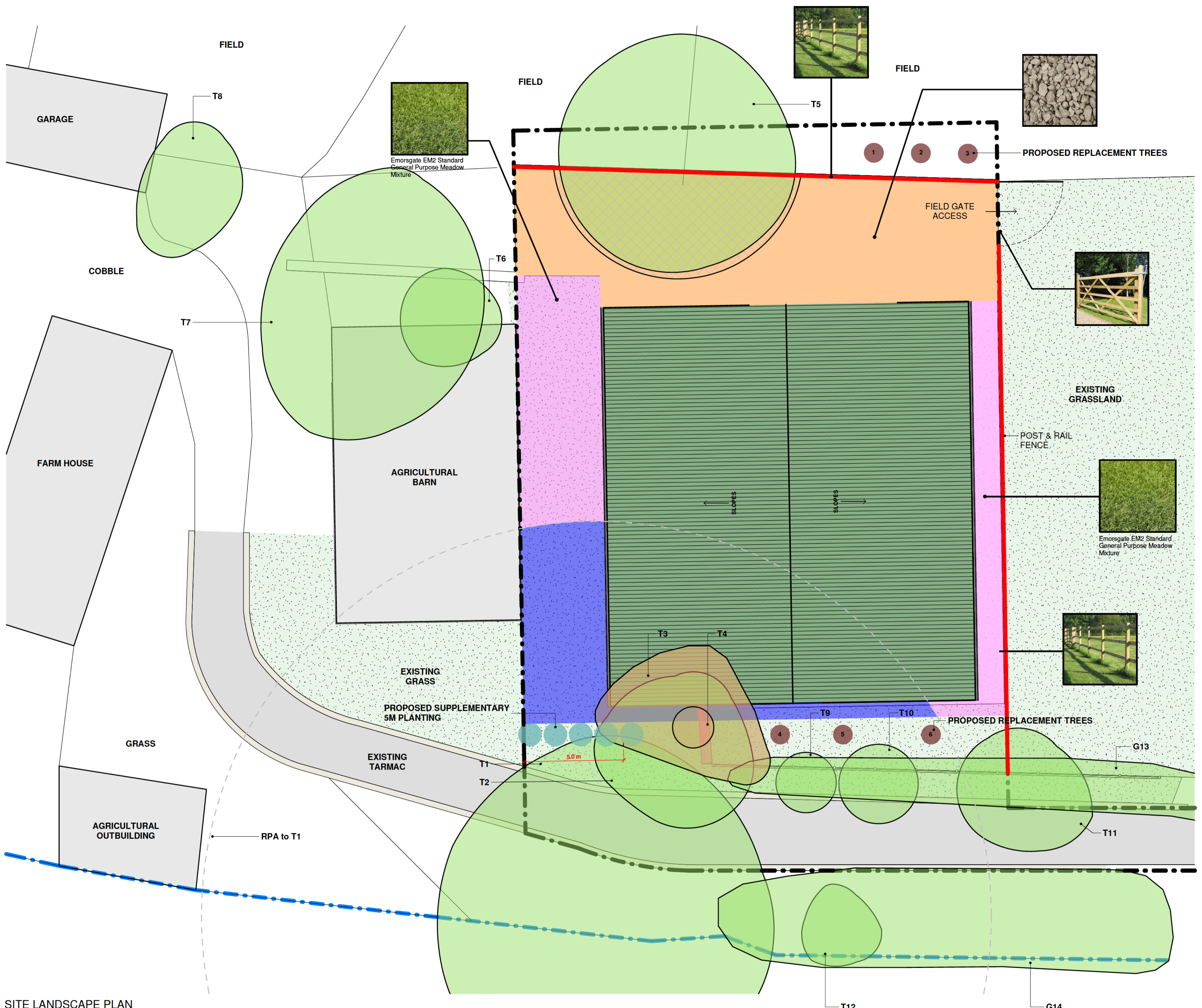
- Site ownership boundary
- Development boundary
- g4 - modified grassland
- u1b - developed land. sealed surface
- u1b5 - buildings
- u1e - built linear features
- 32 - scattered trees
- 33 - line of trees

MAP DATA FROM ©2024 GOOGLE, IMAGERY FROM ©2024 GOOGLE

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Appendix 2 – Landscape design



- Application Boundary Adjacent Buildings
- ### Hard Landscaping Key
- Permeable Compact Gravel - Limestone Crushed Base Type 1 or similar**
The use of a cellular confinement system will be utilised to create the hardstanding area that encroaches into the RPA of T5 without having adverse effects
 - Cellular Confinement System (Below Gravel)**
The use of a cellular confinement system will be utilised to create the hardstanding area that encroaches into the RPA of T5 without having adverse effects
A cellular confinement system provides a load transfer mattress which prevents direct loads on tree roots and reduces the bearing pressure on subsoil's by stabilising aggregate surfaces against rutting under wheel loads. Figure 5 shows a side view of the cellular confinement system.
 - Methodology**
Surface layer such as grass or gravel to be scraped off for levelling purposes. This can be done either by hand or by very small machinery to a maximum depth of 50mm.
• Spread a thin layer of 4/20 or 20/40 aggregate material over the length of the proposed hardstanding area to fill any small rut and to level area.
• Lay base geotextile material with at least 30cm overlaps. It is recommended that the base geotextile is made of polypropylene or polyester (min. 300g/m²) with a CBR puncture resistance of 4000N.
• Extend the cellular confinement systems over the area of the proposed hardstanding.
• Fill the voids within the Geoweb with a 4/20 or 20/40 aggregate material working into the voids. Help settlement of the stone by a minimum of four passes of a smooth roller (max. weight of 1000kg/m width without vibration), or alternatively by several passes with a tracked excavator.
• Install peg and board edge supports of other approved edging.
• Lay an upper layer of geotextile over the Cellular Confinement System (not for tarmac surfaces). The upper geotextile is required for protecting the infill matrix; this can be of the same thickness as the base layer or slightly thinner (100-300g/m²)
• Construct finished permeable surface
 - Ground Protection (beneath grass / replanting)**
The areas around T1 & T2 will need to be protected by ground protection measures during construction. For pedestrian access and for the use of pedestrian-operated plant up to a gross weight of 2t, interlinked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane can be used as ground protection.
 - Post & Rail Fence**
Pressure-treated softwood or oak, approx. 1.1-1.2m height, or 3 horizontal rails. Sensitive installation methods to be utilised around trees T5 and T11. Timber rails and posts sourced from local builder / agricultural merchants.

- ### Planting / Soft Landscaping Key
- Replanted Grass - Emorsgate EM2 Standard General Purpose Meadow Mixture**
After construction of new agricultural shed, top soil to be made good and levelled to approximate existing site along building boundaries. Debris to be cleared, ground to be cultivated and high quality grass seeds to be sown evenly in places shown in pink on plan to match existing soft landscaped areas. Areas to right side of new barn to have native species rich wildflower meadow mix appropriate to local soil conditions.
 - Proposed Supplementary Planting: 5m additional planting for Bio-diversity Gain**
Planted as mixed native hedge, 5 plants per linear meter in a staggered double row. Around 0.5 - 1.2m high at planting. Primary species to be Hawthorn, Blackthorn, Hazel, Dog Rose and Dogwood. Planted in order to support birds, pollinators and small mammals all year round.
 - Proposed Replacement Trees:**
To give a greater diversity of age class on the site, increasing sustainability. Give a greater diversity of species and therefore wildlife habitat. All tree sizes to be 10-12 cm girth and 1.0 - 1.2m in height at planting. Varieties as follows: Acer campestre, Betula pendula, Pinus sylvestris, Quercus robur, Sorbus aucuparia and Fagus Sylvatica. Planting in line with 20240600 Arboricultural Impact Assessment.

Tree Reference	Category	Notes (from Arboriculturalist)	Retained
			Y N
T1	B1	English Oak - Good Vitality	
T2	C1	Wild Cherry - Asymmetric Crown, Low Aesthetic Value - Reduce Crown by 2.5m	
T3	C1	Wild Cherry - Asymmetric Crown, Low Aesthetic Value	
T4	C1	Lawson's Cypress - Multi-stemmed at base, no defects	
T5	B1	English Oak - Good Structure, No Defects - Crown lift by 2.5m	
T6	B1	Silver Birch - Single Straight Stem, No Defects	
T7	B1	Sycamore - Good Form & Vitality	
T8	C1	Laburnum - Reduced Vitality	
T9	C1	English Oak - Single Stem, no defects	
T10	C1	English Oak - Single Stem, no defects	
T11	B1	Horse Chestnut - Slender, no defects	
T12	C1	Norway Maple - Slightly suppressed. No defects.	
G13	C1	Hed Cedar, Oak, Hazel, Chestnut & Holly - Young Screening Group	
G14	C1	Cypress, Cedar, Oak, Magnolia, Cotoneaster - Denses, no defects noted	
G15	B1	Ash, Wild Cherry Oak - Ash in decline, no defects noted	

Notes:
All planting shall be carried out in the first planting and seeding season following completion of the development. Any trees or plants which die, are removed or become diseased within five years shall be replaced in accordance with the approved details. The approved landscaping details shall be implemented no later than the first planting and seeding season following the completion of the new building; and any trees or plants which die within a period of 5 years from first being planted, or removed, or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species.

CONDITION 05

A	Updated based on Ecologist comments	30/04/26	EP
Rev	Description	Date	By

A² STUDIO.

CONDITIONS

INFORMATION	COMMENT	APPROVAL	TENDER	CONSTRUCTION	AS BUILT

CLIENT
Mr & Mrs Priest

PROJECT
0462 - 001 Proposed erection of agricultural barn at Hollin Royd Farm

DWG NO.	REV.
HRF - A2 - CON - 001	A

SITE LANDSCAPE PLAN

DRAWN BY	DATE	SCALE	SHEET SIZE
EP	09/02/26	1:100	A1

SITE LANDSCAPE PLAN
1 : 100