Rob and Dena Frith trading as ***RDF*** Ecology
5 Stamford Road
Woodlaithes
Rotherham
South Yorkshire
S66 3YY
Tel: 01709 531 868
Enquiries: sales@rdfecology.co.uk
Web: www.rdfecology.co.uk

Bromley Farm Quarry

Biodiversity Enhancement and Management Plan

Prepared for Canova Clay Ltd

November 2025

	Staff Member	Position
Baseline Habitat Survey	Rob Frith BSc (Hons) MRSB	Principal Ecologist
Report prepared by	Rob Frith BSc (Hons) MRSB	Principal Ecologist
Reviewed by:	Dena Frith	Senior Ecologist
Approved by:	Rob Frith BSc (Hons) MRSB	Principal Ecologist
Notes:	**This report contains sensitive information concerning protected species and caution should be exercised when copying and distributing to third parties.**	

Report Status	Authorised for Release	Date	Position
DRAFT	Rob Frith	30 October 2025	Principal Ecologist
Final – with minor amendments	Rob Frith	12 November 2025	Principal Ecologist

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1. INTRODUCTION

1.1. Project Background

1.1.1. Planning Permission was granted by Kirklees Council on 1 December 20 June 2025 for quarrying operations for the extraction of clay, shale and incidental coal and subsequent restoration by means of importation of inert wastes at Bromley Farm Quarry, Barnsley Road, Upper Cumberworth, Huddersfield (hereafter referred to as 'the site') whose location and extent is shown in Figure 1.

1.1.2. Planning condition 8 requires that:

"Prior to commencing the exportation of minerals, a Biodiversity Enhancement and Management Plan (BEMP) shall be submitted to and approved in writing by the Mineral Planning Authority. The BEMP shall include a biodiversity net gain of 11.47 habitat units and net gain in hedgerow units of 0.3 in accordance with the details in the submitted Preliminary Ecological Assessment and shall include details of the following:

- *Description and evaluation of features to be managed and enhanced;*
- *Extent and location/area of proposed enhancement works on appropriate scale maps and plans;*
- *Ecological trends and constraints on site that might influence management;*
- *Aims and Objectives of management;*
- *Appropriate management Actions for achieving Aims and Objectives;*
- *An annual work programme (to cover an initial five-year period capable of being rolled forward over a period of 30 years);*
- *Details of the management body or organisation responsible for implementation of the BEMP;*
- *Ongoing monitoring programme and remedial measures; and*
- *The BEMP will be reviewed and updated every five years and implemented for a minimum of 30 years.*

The BEMP shall include details of the legal and funding mechanisms by which the long-term implementation of the BEMP will be secured by the developer with the management body responsible for its delivery. The BEMP shall also set out (where the results from the monitoring show that the Aims and Objectives of the BEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers fully functioning biodiversity objectives. The

development shall be implemented in accordance with the approved BEMP and all measures and features shall be retained in that manner thereafter.

***Reason**: In order to ensure the development provides ecological enhancement and creates measures sufficient to provide a biodiversity net gain in accordance with Policy LP30 of the Kirklees Local Plan and the National Planning Policy Framework."*

1.1.3. The approved restoration plan for the development includes the following ecological compensation measures:

Table 1—Biodiversity Enhancement Proposals

Habitat Type	Condition	Baseline	Lost	Retained	Enhanced	Created	Post Development
Habitats							
Other woodland; broadleaved	Moderate	0.051	0.000	0.051	0.000	1.080	1.131
Other woodland; broadleaved	Poor (enhanced to moderate)	0.175	0.000	0.000	0.175	0.000	0.175
Mixed scrub	N/A	0.076	0.076	0.000	0.000	0.870	0.870
Modified grassland	Poor	1.180	1.180	0.000	0.000	5.330	5.330
Other neutral grassland	Moderate	0.000	0.000	0.000	0.000	0.970	0.970
Bracken	N/A	0.100	0.100	0.000	0.000	0.000	0.000
Cereal crops	N/A	6.900	6.900	0.000	0.000	0.000	0.000
Totals (ha)		**8.482**	**8.256**	**0.051**	**0.175**	**8.250**	**8.476**
Hedgerows							
Line of trees	Moderate	0.135	0.135	0.000	0.000	0.000	0.000
Native hedgerow with trees	Moderate	0.095	0.000	0.095	0.000	0.150	0.245
Native hedgerow	Poor	0.197	0.000	0.197	0.000	0.000	0.197
Totals (km)		**0.427**	**0.135**	**0.292**	**0.000**	**0.150**	**0.442**

1.2. Project Brief and Objectives

1.2.1. ***RDF*** Ecology have been appointed to prepare a biodiversity enhancement and management plan (BEMP) to discharge planning condition 8

1.2.2. The plan will address the following matters:

- The aims and objectives of the plan and proposed habitat management
- Details of the management body that will be responsible for implementing the BEMP
- The current ecological baseline of the compensation areas and confirmation of the number of biodiversity units present on site prior to quarrying operations.

- The purpose and conservation objectives for the proposed ecological enhancement measures and the number of biodiversity units to be created through site restoration.
- A consideration of ecological trends that might influence management
- Mechanisms for delivery, management and monitoring of the biodiversity enhancement measures including schedules of work for the restoration works and the first 5 years of management.
- Mechanisms for adaptive management that allows a review of the management plan to be undertaken every five years, over a 30-year period. These reviews will show how progress towards target conditions progressing as set out in the agreed objectives. Where targets are not being met it would allow changes to be implemented in agreement with Kirklees Council, to guide management to achieve the stated objectives.

2. SITE HABITAT BASELINE

2.1. Introduction

2.1.1. The results of the baseline habitat surveys are presented below. Figure 2 illustrates the location and extent of all habitat types recorded on site.

2.2. Habitat Descriptions

2.2.1. The following Phase 1 habitat types (JNCC codes in parenthesis) were recorded on site during the field survey:

- Other woodland; broadleaved (w1g)
- Mixed scrub (h3h)
- Bracken (g1c)
- Other neutral grassland (g3c)
- Modified grassland (g4)
- Cereal crops (c1c)
- Hedgerows (h2)
- Dry Stone Wall (J2.5)

2.2.1. Other woodland; broadleaved (w1g)

2.2.1.1. Along the western site boundary with Cumberworth Lane are a number of areas of plantation woodland **(TN9)**. Tree species here included silver birch *(Betula pendula)*, alder *(Alnus glutinosa)*, hazel *(Corylus avellana)*, goat willow *(Salix caprea)*, pedunculate oak *(Quercus robur)*, ash *(Fraxinus excelsior)*, field maple *(Acer campestre)* and hawthorn *(Crataegus monogyna)*. The ground vegetation comprises a range of coarse grasses including false oat-grass *(Arrhenatherum elatius)*, cock's-foot *(Dactylis glomerata)*, common couch *(Elytrigia repens)* and Yorkshire fog *(Holcus lanatus)* with some developing bramble *(Rubus fruticosus agg.)* underscrub.

2.2.2. Mixed Scrub (h3h)

2.2.2.1. A small area of scrub and trees is present in the south of the site **(TN6)** with an area of tall ruderal and coarse grassland vegetation **(TN5)**.

2.2.2.2. Species included pedunculate oak, ash and hawthorn with dense bramble underscrub and stands of common nettle *(Urtica dioica)* and creeping thistle *(Cirsium arvense)*. Also present were a range of coarse grasses including false oat-grass, cock's-foot, common couch and Yorkshire fog.

2.2.3. Bracken (g1c)

2.2.3.1. Around the margins of the former spoil mound area areas of bracken *(Pteridium aquilinum)* dominated vegetation with some false oat-grass, cock's-foot and perennial ryegrass *(Lolium perenne)* and occasional stands of creeping thistle *(Cirsium arvense)*.

2.2.4. Other neutral grassland (g3c)

2.2.4.1. A small area of semi-improved grassland has been established on the site of a former spoil mound **(TN2)** and supported a range of common species including perennial rye-grass, red fescue *(Festuca rubra)*, common bent *(Agrostis capillaris)*, sweet vernal-grass *(Anthoxanthum odoratum)* and crested dog's-tail *(Cynosurus cristatus)* along with common mouse-ear *(Cerastium fontanum)*, ribwort plantain *(Plantago lanceolata)*, creeping buttercup *(Ranunculus repens)*, dandelion *(Taraxacum officinale agg.)*, common sorrel *(Rumex acetosa)*, white clover *(Trifolium repens)* and red clover *(Trifolium pratense)* and less frequent germander speedwell *(Veronica chamaedrys)*.

2.2.4.2. On the southern portion of the site is an area of abandoned arable land **(TN6)** which has become overgrown and comprises a mix of coarse tussocky grassland and ruderal vegetation. Species here included false oat-grass, cock's-foot, common couch, and Yorkshire fog with less frequent common bent and red fescue and damper hollows contained creeping bent *(Agrostis stolonifera)*. Ruderal and robust perennial species are at moderate to high abundance and included extensive stands of common nettle along with creeping thistle, broad-leaved dock *(Rumex obtusifolius)*, ragwort *(Senecio vulgaris)*, hogweed *(Heracleum sphondylium)* and localised stands of rosebay willowherb *(Chamerion angustifolium)*.

2.2.4.3. Less frequently encountered species included ribwort plantain, white dead-nettle *(Lamium album)*, red dead-nettle *(Lamium purpureum)*, creeping buttercup, dandelion, red and white clover.

2.2.4.4. Young ash and hawthorn saplings were frequent in the vegetation.

2.2.4.5. A smaller of similar vegetation was present along the southern boundary of the former topsoil mound **(TN11)**.

2.2.5. Modified Grassland (G4)

2.2.5.1. The proposed access for the quarry extension passes through an area of former quarry which has been restored modified grassland where the sward is dominated by perennial rye-grass, common bent and red fescue with some white clover and common sorrel.

2.2.6. Cereal crops (c1c)

2.2.6.1. The majority of the site comprises arable agricultural land which supports a limited range of common agricultural weed species including groundsel *(Senecio vulgaris)*, pineappleweed *(Matricaria discoidea)*, common poppy *(Papaver rhoeas)*, knotgrass *(Polygonum aviculare agg.)*, common chickweed *(Stellaria media)* and annual meadow-grass *(Poa annua)*.

2.2.7. Hedgerows (h2)

2.2.7.1. A tall hedgerow with some trees runs along the southern site boundary adjacent to a small ditch **(TN4)** and has developed from an outgrown hedgerow. Canopy species included pedunculate oak, goat willow, mature hawthorn, and field maple and occasional elder *(Sambucus nigra)*.

2.2.7.2. The ground vegetation comprises coarse grasses including false oat-grass, cock's-foot and Yorkshire fog and stands of common nettle with some developing bramble scrub and occasional bramble underscrub.

2.2.8. Dry Stone Wall (J2.5)

2.2.8.1. Along the site boundary and dividing the areas of arable a land were small derelict sections of dry stone walls **(TN1, TN7 and TN8)** which supported a small number of hawthorn and field maple saplings with false oat-grass, cock's-foot, Yorkshire fog and common couch and ruderal species including mugwort *(Artemisia vulgaris)*, creeping thistle and broad-leaved dock.

3. PLAN AIMS AND OBJECTIVES

3.1. Plan Aim

3.1.1. The aim of this plan is to set out the mechanisms for the delivery and management of biodiversity enhancement measures contained within the approved quarry extension planning permission and described in the site Restoration and Aftercare Report (CB Land Ltd January 2023).

3.2. Analysis

3.2.1. The development as proposed will result in the loss of habitats within the site boundary and the impacts of the development as proposed are summarised in Table 2 below.

Table 2—Habitat Impacts

Habitat	Impact	Area (ha)	Biodiversity Units
Other woodland; broadleaved	Retained	0.051	0.00
Other woodland; broadleaved	Enhanced	0.175	0.00
Mixed scrub	Lost	0.076	0.30
Modified grassland	Lost	1.180	2.36
Bracken	Lost	0.100	0.22
Cereal crops	Lost	6.900	13.80
	Total Lost	**8.256**	**16.68**

3.2.2. To mitigate these habitat losses a programme of habitat creation and enhancement was prepared along with a biodiversity net gain calculation using the Biodiversity Metric Calculation Tool (Version 4.0). The biodiversity proposals are shown in Silkstone Environmental Ltd drawing 22007/510 Rev A dated January 2023 and included in Appendix 2.

3.2.3. The habitat types selected for creation/enhancement have been carefully considered to match local habitats and to be achievable at this location taking account of the natural distribution of the habitats to be created and their local value.

3.2.4. The dominant habitat within the site is arable cropland. In the locality the dominant habitats are arable cropland, agriculturally improved, modified grassland and other neutral grassland, the latter typically being quite species poor. The typical agricultural grassland community in this part of Kirklees on flat or gently undulating land varies between MG6 *Lolium perenne – Cynosurus cristatus* grassland and MG7 *Lolium Perenne* leys. These grasslands are typically species poor, especially the latter, supporting a limited range of common and widespread agricultural species and those able to withstand intensive agricultural management.

3.2.5. More diverse grasslands outside of protected sites are generally limited to steeper ground or smaller sites unsuitable for agricultural intensification. Such habitats have decreased significantly in Kirklees in line with the rest of the UK and it is estimated that by 1984 in lowland England and Wales, semi-natural grassland had declined by 97% over the previous 50 years to approximately 0.2 million ha. Losses have continued during the 1980s and 1990s and have been recorded at 2-10% per annum in some parts of England. Recent conservation survey findings in Britain and Northern Ireland reveal that the impact has been pervasive, and an estimated extent of less than 15,000 ha of species-rich neutral grassland surviving today in the UK.

3.2.6. As a consequence of habitat losses, lowland meadows are listed as a habitat of principle importance in Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

3.2.7. In West Yorkshire neutral grassland occurs in all Natural Areas and administrative districts, however West Yorkshire Ecology estimate that in total species-rich neutral grassland is likely to be in the range of only 30-100ha (WYE 2019).

3.2.8. The Kirklees Biodiversity Action Plan includes a habitat action plan for species-rich grassland (Hay Meadows). The stated actions in the plan are:

- *Arrest the depletion of species-rich hay meadows.*
- *Secure favourable condition at existing sites where opportunities arise.*
- *Bring additional areas into favourable management.*
- *Restore areas of grassland to hay meadow especially where core areas of interest or importance remain.*
- *Continue with work to establish and map the total extent of the habitat and important species' groups.*

3.2.9. The Kirklees Biodiversity Action Plan includes a habitat action plans for:

- *Upland Oak Woodland*
- *Upland Mixed Ash Woodland*
- *Ancient Woodland*
- *Scrubland*
- *Semi Natural Grassland*

3.2.10. In consideration of the above priorities, the restoration proposals for the quarry extension provide an opportunity to create grassland and woodland habitats that are both listed as habitats of principle importance in Section 41 of the NERC Act 2006 and included as habitat action plans in the Kirklees Biodiversity Action Plan as well as areas of important mixed scrub habitat.

3.3. Plan Objectives

3.3.1. The objectives of the plan are set out in table 4 below.

Table 3—Plan Objectives

Proposal	Habitat Condition Objective	Target Condition
Broad-leaved woodland	To create an area of native species broadleaved woodland that will reflect the character of W10 *Quercus robur – Pteridium aquilinum – Rubus fruticosus* woodland. The new woodland will extend to approximately 1.08ha. An additional 0.175ha of plantation woodland will be enhanced through further planting of native species and an area established woodland along the southern site boundary (0.05ha) will be retained and protected during quarrying operations.	Moderate
Other neutral Grassland	To create new locally occurring wildlife hay meadows on the restored quarry to be used for hay production and livestock grazing. The target NVC community for the vegetation will be equivalent to NVC plant community MG5 *Cynosurus cristatus – Centaurea nigra* grassland. The MG5 grassland habitat occurs as grazed pasture and meadows throughout the Southern Pennines. The restored grassland will extend to approximately 1.84ha.	Moderate
Modified grassland	An area of modified grassland will be created to provide livestock grazing and hay or silage crops and will extend to approximately 4.2ha along and includes re-instatement of the improved grassland along the proposed quarry access track route. Thios area will be subject to more intensive agricultural management and consequently like to support a more limited range of grassland species.	Poor
Mixed Scrub	A new area of mixed species native scrub habitat will be created extending to approximately 1.12ha	Moderate

3.4. Plan Period

3.4.1. Condition 8 of the planning permission requires that the BEMP should cover the first 5 years of establishment with annual reports and thereafter be reviewed and updated once every 5 years. The BEMP must be implemented for a total of 30 years, with a 5 year rolling plan prepared which can then be rolled forward after each plan review.

3.4.2. The plan will be adaptive, to allow a review of the management plan to be undertaken in accordance with the reporting schedule and against the habitat objectives to allow changes to be implemented (in agreement with Kirklees Council) if monitoring shows that progress towards target conditions is not progressing as set out in the agreed objectives.

3.5. Plan Implementation

3.5.1. Canova Clay Ltd as developer and landowner will be responsible for the implementation of the plan and will be advised by ***RDF*** Ecology as well as other specialist contractors and consultants as required to form a Project Advisory Team.

3.5.2. The Project Advisory Team will be responsible for:

- Confirming specifications for trees and seed material to be used on the project and methods for habitat establishment.
- For supervising habitat creation and enhancement measures
- For completing monitoring works as specified in the plan.
- Providing annual progress reports in years 1 to 5 and thereafter once every 5 years.
- Updating the plan after 4 years and amending where necessary to produce a new 5 year rolling plan.

3.6. Habitat Units Created

3.6.1. The proposed restoration will result in a 91.28% net biodiversity gain for habitats delivering a net increase of 16.52 biodiversity units and a 17.73% net gain for hedgerows delivering a net increase of 0.3 biodiversity units. The results are summarised in Table 4 below.

Table 4—Surplus Habitat Units Calculation

Habitat Type	Baseline Units	Post Development Units	On-site Net Gain
Habitat Units	17.79	29.27	11.47
Hedgerow Units	1.69	1.99	0.3

3.7. Net Biodiversity Gain

3.7.1. The scheme as designed will result in a net gain of 11.47 habitat units and 0.30 hedgerows units. This is in compliance with the gains required by condition 8 in regard to delivered habitat and hedgerow biodiversity units.

4. PLAN PROPOSALS

4.1. The proposed implementation of the plan is set out in table 4 below along with the proposed monitoring regime to ensure compliance with the plan objectives. Details of soils treatment and ground restoration are included in the Restoration and Aftercare Report (CB land Ltd 2023).

Table 5—Plan Proposals and Implementation

Proposals	Habitat Condition Objective	Habitat Establishment and Management	Monitoring
Soil Management and selection	To identify and store suitable soils for wildflower lowland grassland creation and woodland planting	To identify, strip and store suitable low nutrient sub-soil for use in the creation of the other neutral grassland habitat. Richer top soils are to be stored separately and used for restoration of area where woodland, scrub and modified grassland habitats are to be created. Soil storage mounds to be seeded with an appropriate low maintenance grassland mix to prevent establishment of undesirable, ruderal species such as creeping thistle or docks which may cause problems during site restoration. Topsoil will be retained and utilised for the areas of modified grassland, woodland and scrub planting areas **Soil Usage in Restoration** The actual quantities of subsoil stored from the stripping operations shall be quantified prior to re-spreading, subsoils shall be respread evenly over the loosened overburden to the available thickness with minimal trafficking to prevent unnecessary compaction to the overburden layer. Following the laying of the subsoil, the whole depth of subsoil shall be ripped with a wing tyne subsoiler to alleviate compaction and to ensure that the profile is thoroughly loosened to its whole depth. Particular attention shall be paid to penetrating the interface with the previous layer which will ensure that no compacted layer exists once the relaying of soils has been completed any compaction at depth will not be capable of being alleviated. Stored topsoil shall be quantified and laid onto the subsoiled areas in the same fashion as the subsoil to an even thickness as determined by the resource available. On completion, the topsoil will be ripped with a subsoiler preferably with a wing tyne suitable for agricultural operations, particularly attention shall be paid to the correct working depth in ensuring the interface with the subsoil is pierced and alleviates any compaction caused through the spreading process. It is important that there is no intermixing of subsoil with topsoil in carrying out this operation. All works impacting soils shall be carried out when soil moisture levels are suitable to prevent compaction, the machines used in carrying out this operation shall be tracked vehicles whenever possible with low ground pressure tracks.	Annual monitoring to assess the need for chemical control of undesirable ruderal species such as creeping thistle or broad-leaved dock.

Proposals	Habitat Condition Objective	Habitat Establishment and Management	Monitoring
		Modified Grassland Areas The soils on these areas to shall be cultivated with typical operations consisting of discing, harrowing and rolling to produce a fine firm seedbed into which to sow grass seeds. Stone picking will be carried out as necessary to remove any material that would impede agricultural operations. **Woodland and Scrub Planting Areas** Prior to planting the area should be subject to subsoiling slightly across the contours at 2 metre centres over the area in which the trees will be planted. This operation will assist tree roots to penetrate, establish and promote the movement of and retention of water along the rip lines, in all aiding the development of the plants. **Other Neutral Grassland** Topsoil with lower nutrient levels will be prioritised for spreading on areas where other neutral grassland is to be created and compaction reduced as recommended above.	
New Woodland Planting	To establish new native mixed species woodland equating to W10 *Quercus robur – Pteridium aquilinum – Rubus fruticosus* woodland utilising locally occurring native species and to encourage natural regeneration of future woodland by erecting stock proof fencing around the new woodland planting to exclude livestock	The woodland creation area would be sown with a low maintenance grass seed mix such as Emorsgate EM1 Basic General Purpose Meadow Mixture (or other suitable alternative) prior to tree planting with the species composition provided in Appendix 1 The woodland planting will occur during the first available planting season October -March following the reinstatement of soils and the establishment of the grass sward Planting will occur during the planting season (October to March) but will avoid any prolonged periods of cold or frozen ground. The species mix is provided in Appendix 1. All species to be 45-60cm whips or light feathered plants and planted randomly at approximately 2m centres. The whole area to be fenced with stock proof fencing to prevent grazing by livestock. This will include rabbit fencing to exclude rabbits from the planting area and remove the need for plastic protective guards on individual trees. The fence specification may also be improved to prevent deer accessing the planting area. If fencing is not used appropriate tree shelters/guards must be used to prevent rabbit damage. Dead and poorly developing trees will be replaced with same species during the first 5 year period. By year 5 it is expected to achieve a 90% survival rate providing that any failed planting stations are evenly distributed throughout the woodland. Invasive species such as creeping thistle will be monitored and selectively treated with herbicide annually to control their development where required.	Annual monitoring in first 5 years and all dead or poorly developing trees to be replaced with new plants of same species at the next available planting season. Fencing to be monitored monthly as part of normal site inspections and repaired immediately if damaged. Vegetation growth will be monitored to identify any weed control measures that may be required

Proposals	Habitat Condition Objective	Habitat Establishment and Management	Monitoring
Mixed Scrub - Establishment	To create an area of mixed native scrub habitat with small open glades of other neutral grassland adjacent to an existing block of woodland	The scrub creation area would be sown with a low maintenance grass seed mix such as Emorsgate EM1 Basic General Purpose Meadow Mixture (or other suitable alternative) prior to tree planting with the species composition provided in Appendix 1 The woodland planting will occur during the first available planting season October - March following the reinstatement of soils and the establishment of the grass sward Planting will occur during the planting season (October to March) but will avoid any prolonged periods of cold or frozen ground. The species mix is provided in Appendix 1. All species to be 45-60cm whips planted randomly at approximately 2m centres. The whole area to be fenced with stock proof fencing to prevent grazing by livestock. This will include rabbit fencing to exclude rabbits from the planting area and remove the need for plastic protective guards on individual trees. The fence specification may also be improved to prevent deer accessing the planting area. If fencing is not used appropriate tree shelters/guards must be used to prevent rabbit damage. Dead and poorly developing trees will be replaced with same species during the first 5 year period. By year 5 it is expected to achieve a 90% survival rate providing that any failed planting stations are evenly distributed throughout the woodland. Invasive species such as creeping this will be monitored and selectively treated with herbicide annually to control their development	Annual monitoring in first 5 years and all dead or poorly developing trees to be replaced with new plants of same species at the next available planting season. Fencing to be monitored monthly and repaired immediately if damaged. Vegetation growth will be monitored to identify any weed control measures that may be required
Mixed Scrub - Management	To maintain a mixed age range of scrub and to maintain open glades of other neutral grassland	The long term management will include maintenance of small open glades within the planted area by removal of pioneer saplings on a rotational basis once every 5 years depending upon the degree of natural scrub establishment	Annual monitoring in first 5 years and all dead or poorly developing trees to be replaced with new plants of same species at the next available planting season. Fencing to be monitored monthly and repaired immediately if damaged. Vegetation growth will be monitored to identify any weed control measures that may be required Check for appropriate time to remove tree shelters/guards if used Pioneer scrub establishment in open glades to monitor every 5 years and removal to be competed where required to maintain the one native of the glades.

Proposals	Habitat Condition Objective	Habitat Establishment and Management	Monitoring
Hedgerow Planting - Establishment	To create 150m of native hedgerow with trees to replace that lost during the quarry operations	Prior to planting, remove all debris and stones over 50mm diameter along the planting length. Carry out weed control as necessary. All hedging plants are to be planted as 1+1 transplants in double staggered rows at 2 plants per linear meter with species mixed evening across the length. Hedge plants to be slit planted, carefully replacing any backfill and heel well in. Trees to grow on into hedgerow standards to be planted randomly but an at average of one plant per 5m length. If fencing is not used to protect the hedgerow, appropriate tree shelters/guards must be used to prevent rabbit damage.	Annual monitoring in first 5 years and all dead or poorly developing hedge plants and trees to be replaced with new plants of same species at the next available planting season. Fencing to be monitored monthly and repaired immediately if damaged. Vegetation growth will be monitored to identify any weed control measures that may be required
Hedgerow Planting - Management	To create 150m of native hedgerow with trees with dense hedge growth for nesting birds	Once established the hedgerow will be managed through hedgelaying at approximately 10-15 year intervals depending upon how well the hedgerow develops. Between 5-10 years the hedgerow will be lightly trimmed no more frequently than once every 2 years to retain an A-frame shape and developing a robust hedgerow in preparation for hedgelaying . Standard trees to be protected from damage during trimming. From 10 years the hedgerows suitability for laying will be reviewed and when ready will be laid in the traditional midland style. After the hedge has been laid ongoing management will be aimed at creating a thick stockproof hedgerow with an A-frame shape with a wide base and overall height of approximately 2m, five 5 years after hedgelaying.	Hedgerow development to be checked every 5 years to determine when laying would be appropriate and that trimming of hedgerow is not being detrimental. Check for appropriate time to remove tree shelters/guards if used.
Other Neutral Grassland - Establishment	To create new areas of lowland grassland equating to the MG5 *Cynosurus cristatus – Centaurea nigra* grassland community. The grassland will be managed as a traditional hay meadow with a later summer cut followed by livestock grazing.	At completion of the quarry restoration the area will be soiled with poorer quality soils saved from the initial ground clearance works. This will be cultivated and seeded with a commercially available seed mix approved by the Project Advisory Team or by a locally harvested grassland with an MG5 plant community validated by the project ecologist and approved by Kirklees Council. Commercial seed mixes currently available and recommended for use as an alternative are: Emorsgate seeds - EM2 – standard general purpose meadow mixture Germinal Seeds – RE1 Traditional Hay Meadow (MG5 Grassland) Seeding may be undertaken by broadcasting or by seed drilling, but of the latter approach is adopted seeds need to be set at a consistently shallow depth of no more than 10mm , otherwise germination rates will be impacted. After seeding and germination, the sward to be visually inspected and any creeping thistle, broad-leaved dock or other unwanted species would be selectively treated with approved herbicide. Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings and they will die before the year is out. Cutting the annual weeds in early August (after yellow rattle has seeded) and removal of arisings will reveal the young meadow.	Sward to be monitored 1 year after sowing to assess species diversity. At least 20 native species to be present in the sward and at least 10 species per 2m x 2m quadrat to be present by year 5

Proposals	Habitat Condition Objective	Habitat Establishment and Management	Monitoring
Other Neutral Grassland - Management	To create new areas of lowland grassland equating to the MG5 Cynosurus cristatus – Centaurea nigra grassland community. The grassland will be managed as a traditional hay meadow with a later summer cut followed by livestock grazing.	Once established the grassland will be managed as traditional hay meadow with a late summer hay crop (late July or early august) followed by livestock grazing until no later than March of the following year. Stock will be removed during periods of very wet weather to prevent excessive poaching of the ground. Supplementary feeding of livestock should be controlled carefully to prevent localised excessive poaching of the ground allowing unwanted species change to gain a foothold in the sward. Where grazing is not possible in any particular year an early autumn cut and removal of arisings may be required to prevent the vegetation from becoming tussocky.	Sward to be monitored every 5 years once established to ensure that management maintains at least 20 native species to be present in the sward and at least 10 species per 2m x 2m quadrat to be present.
Modified Grassland - Establishment	To create new areas of modified grassland to be returned to agricultural management	The better quality stored topsoil will be used in the area set aside for modified grassland creation. The soils will be tested by soil sampling for the pH, N:P:K and organic content. The results of these tests will indicate the need, if any, for soil amelioration and the application of fertiliser to correct any deficiencies, which may be present and which would prevent ongoing agricultural use of the area. Seeding is likely to be undertaken using a seed drill rather than broadcasting.	None proposed once the vegetation has become established
Modified Grassland - Management	Management of grassland to be undertaken by agricultural tenant	To be managed by the agricultural tenant and like to produce a species poor modified grassland subject to higher levels of input and management than areas of other neutral grassland	None proposed other than top confirm that modified grassland is still present.

4.1. Final Completion of Landscape Contract

4.1.1. During the first five years the quality and quantity of work completed would be detailed at the end of each year. Quality control would be undertaken by a field inspection and an assessment of any necessary changes to the programmed work would be made.

4.1.2. An inspection of all planting would take place to confirm final completion.

5. YEARLY MANAGEMENT AND MONITORING SCHEDULES

Item	Years				
	1	2	3	4	5
Other Neutral Grassland					
Cultivation of soils and re-seeding at the end of the site restoration	✓				
Cutting of vegetation in spring to aid sward development in Year 2	✓				
Cut of vegetation and removal of hay crop (July-August)			✓	✓	✓
Conservation grazing of aftermath with cattle		✓	✓	✓	✓
Monitoring of vegetation establishment	✓	✓	✓	✓	✓
Assessment of success of vegetation establishment			✓		✓
Tree and Shrub Planting					
Cultivation of soils and re-seeding at the end of the site restoration	✓				
Planting of trees and fencing of area or use installation of tree shelters/guards	✓				
Monitoring of tree establishment		✓	✓	✓	✓
Replacement of dead or poorly performing trees		✓	✓	✓	✓
Monitoring of ground vegetation development and assessment for management		✓	✓	✓	✓
Fence inspection and repair – checking of tree shelters/guards	✓	✓	✓	✓	✓
Hedgerow Planting					
Planting of hedgerow and fencing of area or use installation of tree shelters/guards	✓				
Monitoring of hedgerow establishment		✓	✓	✓	✓
Replacement of dead or poorly performing trees		✓	✓	✓	✓
Monitoring of ground vegetation development and assessment for management		✓	✓	✓	✓
Fence inspection and repair – checking of tree shelters/guards	✓	✓	✓	✓	✓
BEMP Monitoring and Review					
Review of Plan Aims and Objectives		✓	✓	✓	✓
Preparation of annual review to be submitted to Kirklees Council by 30 November each year.		✓	✓	✓	✓
Preparation of new 5 year rolling BEMP					✓

6. FIGURES

Figure 1—Site Location

Figure 2—Baseline Habitats

Bromley Farm Quarry Extension

KEY

Site Boundary

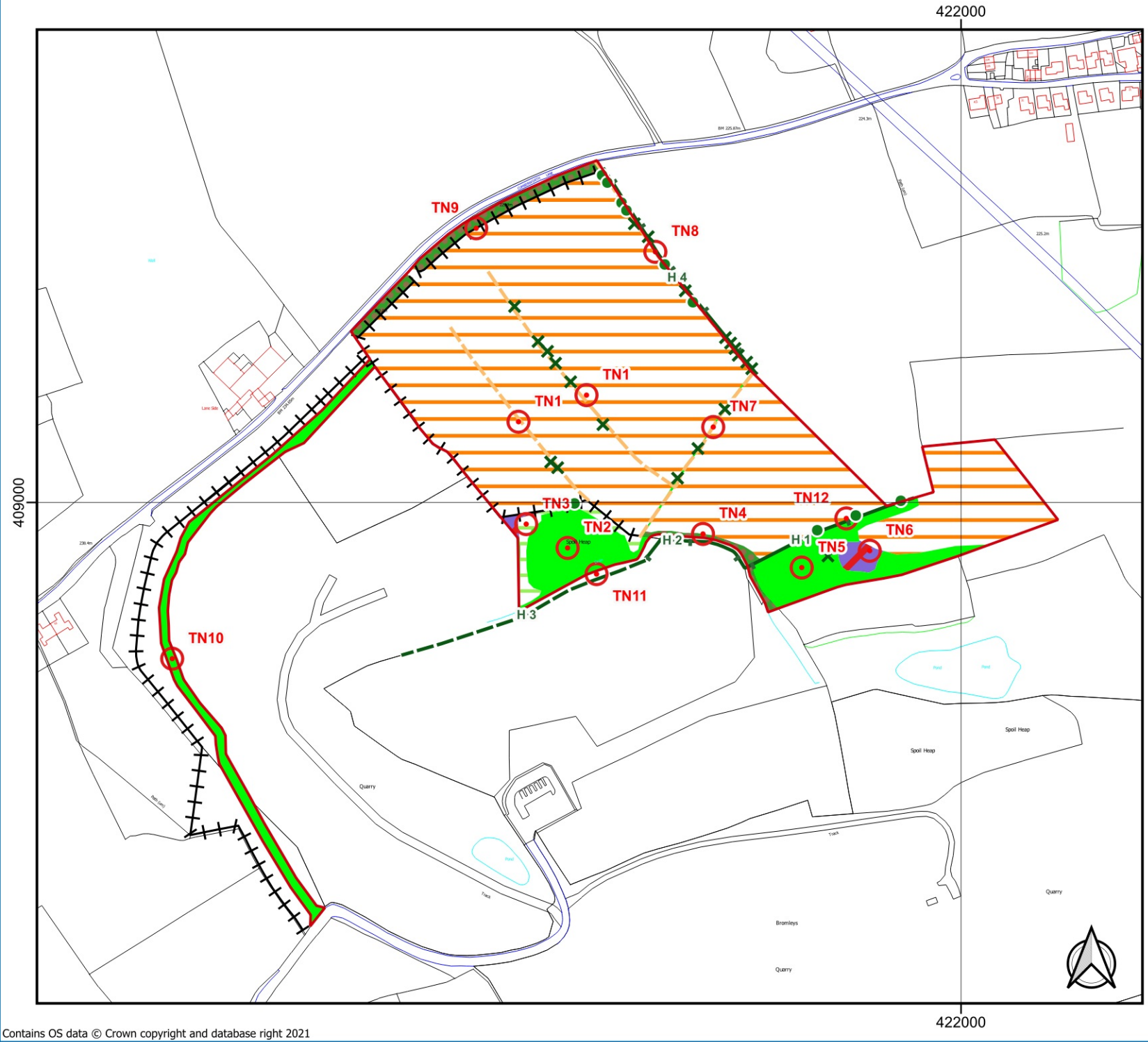
Scale: 1:25,000@A4

RDF ecology
Consultant Ecologists

5 Stamford Road
Woodlaithes Village
Sunnyside
Rotherham
South Yorkshire
S66 3YY

Tel 01709 531 868
e-mail sales@rdfecology.co.uk

Fig 1 - Site Location



Bromley Farm Quarry Extension

KEY

- Site Boundary

Hbitats

- Other woodland; broadleaved
- Mixed scrub
- Modified grassland
- Bracken
- Cereal crops
- Species poor hedgerow with trees
- Defunct species poor hedgerow
- Fence
- Dry stone wall
- Trees - Negligible Bat Risk
- Scattered scrub

Scale: 1:4,000 @A4

RDF ecology
Consultant Ecologists

5 Stamford Road
Woodlaithes Village
Sunnyside
Rotherham
South Yorkshire
S66 3YY

Tel 01709 531 868
e-mail sales@rdfecology.co.uk

Fig 2- Habitat Baseline

7. REFERENCES

7.1. Project References

Kirklees Council Planning Permission 2023/62/91280/E0 granted on 20 June 2025

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7.2. Technical References

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8. APPENDICES

8.1. Appendix 1—Woodand, Scrub and Hedgerow Planting Mixes

8.1.1. Woodland Planting Species

Common Name	Scientific name	% Mix	Root Condition	Height
Pedunculate Oak	*Quercus robur*	20%	Bare Root	60-90cm
Silver birch	*Betula pendula*	20%	Bare Root	60-90cm
Holly	*Ilex aquifolium*	5%	Container (7.5l)	100-120cm
Hazel	*Corylus avellana*	10%	Bare Root	60-90cm
Hawthorn	*Crataegus monogyna*	10%	Bare Root	60-90cm
Rowan	*Sorbus Aucuparia*	5%	Bare Root	60-90cm
Alder	*Alnus glutinosa*	5%	Bare Root	60-90cm
Elder	*Sambucus nigra*	5%	Bare Root	60-90cm
Scot's Pine	*Pinus sylvestris*	10%	Bare Root	60-90cm
Wild Cherry	*Prunus avium*	10%	Bare Root	60-90cm

8.1.2. Scrub Planting Species

Common Name	Scientific name	% Mix	Root Condition	Height
Field Maple	*Acer campestre*	5%	Bare Root	60-90cm
Hawthorn	*Crataegus monogyna*	50%	Bare Root	60-90cm
Blackthorn	*Prunus spinosa*	15%	Bare Root	60-90cm
Hazel	*Corylus avellana*	10%	Bare Root	60-90cm
Holly	*Ilex aquifolium*	5%	Container (7.5l)	100-120cm
Guelder Rose	*Viburnum opulus*	5%	Bare Root	60-90cm
Alder Buckthorn	*Frangula alnus*	10%	Bare Root	60-90cm

8.1.3. Hedgerow Planting Species

Common Name	Scientific name	% Mix	Root Condition	Height
Field Maple	*Acer campestre*	5%	Bare Root	60-90cm
Hawthorn	*Crataegus monogyna*	85%	Bare Root	60-90cm
Hazel	*Corylus avellana*	10%	Bare Root	60-90cm
Species to be included as hedgerow Standards				
Pedunculate Oak	*Quercus robur*			
Wild Cherry	*Prunus avium*			
Holly	*Ilex aquifolium*			

8.2. Appendix 2—Restoration Planting Scheme

Silkstone
Environmental Ltd
www.silkstoneenvironmental.co.uk
7, Hall Annex, Thorncliffe Park, Chapeltown, Sheffield, S35 2PH
Tel (0114) 2573487 Fax (0114) 2573459

Planning Application Area

Normal contour (mAOD)

225 Prominent contour (mAOD)

Rev	Description	Date	By	Chkd

Client: wavin

Project: BROMLEY FARM EXTENSION

Plan Title: Restoration Planting Scheme

Drawing No.	Rev
22007/510	A

Project No. 22007

Date: Jan 2023

Scale: 1:2000 @ A3

Drawn: MS

Chkd: PS