

BROMLEY FARM QUARRY EXTENSION, UPPER CUMBERWORTH



LANDSCAPE & VISUAL IMPACT ASSESSMENT

Prepared by

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1 Introduction

- 1.1 This Landscape and Visual Impact Assessment (LVIA) has been prepared on behalf of Wavin Ltd for a planning application for an 8.4 hectare extension to Bromley Farm Quarry, Upper Cumberworth.
- 1.2 This LVIA considers the site and its surrounding context in both landscape and visual terms, to assess the potential effects of the proposed mineral extraction in the extension area and restoration of the site by the importation of inert waste upon:
- Landscape features;
 - Landscape character; and
 - Visual amenity.
- 1.3 The assessment has been prepared through a desk study analysis of the site and its landscape policy context as well as site visits in July 2022 and January 2023 to gain an appreciation of the landscape and visual context of the site.
- 1.4 The assessment has been guided by the Assessment Criteria set out in Appendix A and summarised in Section 2 below.

1.1 Summary of the Application

- 1.1.1 A brief summary of the application is as follows:
- The proposed 8.4 Hectare extension area consists of three fields in agricultural use lie within a larger allocated mineral site, Ref MAS3 in the Kirklees Development Plan, Adopted 2019.
 - Extraction of clay and shale which is transported approximately 5km to the Wavin Hazelhead Works factory for stockpiling prior to being used for manufacture of clay pipes.
 - Backfill of the quarry void with inferior quality mineral and shale overburden in addition to imported inert materials (subject to an Environmental Permit with the Environment Agency) to enable the site to be restored back close to original ground levels for restoration of the site back to agricultural grassland with areas of species rich grassland, shrub and tree planting
 - The extension area would be worked to an average depth of approximately 16 metres.
 - The reserves present have been calculated at approximately 760,000 tonnes which would equate to approximately 25 years supply
 - Anticipated rates of extraction would be a maximum of 35,000 tonnes per annum, but would fluctuate subject to market demand. The mineral would be extracted on a campaign basis, typically between March to September.
 - The clays and shales would be lifted using a 360 hydraulic excavator and no blasting would be required. A dozer would also be utilised for the reinstatement of topsoil for restoration.
 - The proposed operations would be an extension to a former quarry which is now fully restored. A new access into the extension area is proposed.

2 Methodology

2.1 This assessment follows best practice, as outlined in the following published guidance:

- Guidelines for Landscape and Visual Impact Assessment (3rd edition) - Landscape Institute / Institute of Environmental Management and Assessment (2013)
- An Approach to Landscape Character Assessment – Natural England (October 2014)
- National Character Area Profile 38 – Nottingham, Derbyshire & Yorkshire Coalfields (Natural England 2014)

2.2 In accordance with the published guidance, landscape (features and character) and visual impacts are assessed separately. The criteria for assessment are set out in Appendix A.

2.3 The main objectives of the assessment are as follows:

- To identify the landscape character of the application site and its surroundings and also any notable landscape features within the application site boundary.
- To determine the sensitivity of the landscape to the type of development proposed, through assessment of the value of the landscape and its susceptibility to harm as a result of the proposed development type;
- To identify potential visual receptors (i.e. People who would be able to see the development) and evaluate their sensitivity to the type of change proposed;
- To describe measures proposed to avoid, reduce or mitigate the potential adverse effects;
- To identify and describe any impacts of the development in so far as they affect the landscape and/or views of it; and
- To assess the relative level of impacts in terms of the magnitude of change, duration and reversibility of the effects.

2.4 Identification of the baseline landscape resource was determined following a site visit in July 2022 and January 2023 and an initial desktop study including review of:

- Ordnance survey maps
- Aerial photographs
- Datasets for rural designations from the MAGIC website (Multi Agency Geographic Information for the Countryside)
- Relevant planning policy
- National and local landscape character assessments
- Visual Assessment Methodology

2.5 The assessment of visual effects was undertaken on the basis of identifying key views from all directions and key receptor groups, illustrated by a series of photographs to represent the range of views and visual receptor types. The photographs were taken in July 2022 and January 2023 and are representational and not exhaustive.

Assessment of effects

- 2.6 The criteria set out in Appendix A are used as guidance in assessing the effects of the development.
- 2.7 The relative level of the effects identified is determined by combining judgements regarding the sensitivity of the landscape or visual receptor, magnitude of change, duration and reversibility of the effect, as set out in Appendix A.

Study Area

- 2.8 The main focus of this assessment was taken as a radius of approximately 2km from the application site boundary as, following the initial site visit, it was considered that beyond this distance, even with good visibility, the proposals would not be readily perceptible within the landscape due to the context of surrounding vegetation and topography.

Limitations

- 2.9 Access during site visits was restricted to publicly accessible locations. Assessment of landscape and visual impacts affecting views from private properties is therefore, based on assumptions. These assumptions have been based on interpretation of available desktop data, vegetation present at the time of the site visit and professional judgement.
- 2.10 This assessment of landscape and visual effects is based on the principle of the proposed development within the site and to inform and guide the layout of the development. The resulting effects of the development of the site represent a worst case scenario and where the development layout could take account of potential landscape or visual effects, this is identified along with any mitigation which may be adopted through which adverse effects may be reduced.

3 Landscape Designations & Planning Policy Context

3.1 Introduction

- 3.1.1 There are no landscape designations such as AONBs, National Parks or Registered Parks and Gardens within or adjacent to the Site.
- 3.1.2 The mineral extraction and restoration proposals are in accordance with the following policies concerned with landscape, visual, conservation and related aspects.

3.2 National Policy

- 3.2.1 Section 15 of the NPPF relating to the natural environment is of relevance to a consideration of landscape and environment matters. Paragraph 174 of the NPPF sets out the manner in which planning policies and decisions should contribute to and enhance the natural environment. In relation to a consideration of Landscape and Visual matters, criterion (a) and (b) of paragraph 170 are the most pertinent and state the following:

- (a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- (b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.'

- 3.2.2 The National Planning Policy Framework (July 2021) sets out the governments planning policies for England and how these are expected to be applied. NPPF paragraph 10 advises that:

"So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development."

Section 12, Achieving well-designed places, paragraph 130 on states that:

"Planning policies and decisions should ensure that developments:

- b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;
- c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change..."

- 3.2.3 Section 15, Conserving and enhancing the natural environment, paragraph 175 states that:

"Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value."

3.3 Mineral Working in the Green Belt

- 3.3.1 The National Planning Policy Framework (NPPF) sets out the government's planning policies for England and how these are to be applied, including the consideration and protection of environmental and amenity assets where necessary.
- 3.3.2 Paragraph 146 confirms that some types of development including mineral extraction are "not inappropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it".
- 3.3.3 Paragraph 170 in Section 15, Conserving and Enhancing the Natural Environment confirms that planning decisions should enhance the natural and local environment by:
- "recognising the intrinsic character and natural beauty of the countryside, and the wider benefits of natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland";
 - "minimising impacts on and providing net gains for biodiversity"; and by
 - "remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate".
- 3.3.4 Section 17 of the NPPF deals with the sustainable use of minerals including in paragraph 205 the need to "ensure that there are no unacceptable adverse impacts on the natural and historic environment ... and take into account the cumulative effect of multiple impacts from individual sites and / or from a number of sites in a locality", and "provide for restoration and aftercare at the earliest opportunity, to be carried to high environmental standards".
- 3.3.5 National Planning Practice Guidance (NPPG) provides guidance on the application of the NPPF and NPPG for the Natural Environment (MHCLG, 2016) promotes landscape character assessment as "a tool to help understand the character and local distinctiveness of the landscape and identify the features that give it a sense of place".
- 3.3.6 On July 22nd 2019, the Ministry of Housing, Communities & Local Government, published updated Online Guidance 'Advice on the role of the Green Belt in the planning system'. This included the following guidance (Paragraph: 001 Reference ID: 64-001-20190722, Revision date: 22 07 2019):
- 3.3.7 Assessing the impact of a proposal on the openness of the Green Belt, where it is relevant to do so, requires a judgment based on the circumstances of the case. By way of example, the courts have identified a number of matters which may need to be taken into account in making this assessment. These include, but are not limited to: openness is capable of having both spatial and visual aspects – in other words, the visual impact of the proposal may be relevant, as could its volume; the duration of the development, and its remediability – taking into account any provisions to return land to its original state or to an equivalent (or improved) state of openness; and the degree of activity likely to be generated, such as traffic generation'.
- 3.3.8 This LVIA identifies how the ability to see and perceive any change to the openness of the Green Belt would be limited and that the visual effects are limited and localised such that the openness will be preserved.

3.3.9 The issue of effects on openness is a matter of judgement, in the context of the site and the proposal and in the knowledge of the typical effects of mineral extraction, such judgement to be assisted and informed by the approach in other decisions and appeals.

3.3.10 The benefits of the proposal are great in terms of the need for the mineral, continuation of supply for a major employer in the local area, limitations on suitable local alternatives, the acknowledged policy safeguarding of the site because of the importance of the mineral and the economic benefits associated with it. These amount to very special circumstances that clearly outweigh any inappropriateness and any other harms, even if the scheme was judged not to meet the terms of Green Belt policy which is not accepted.

3.4 Local Policy

3.4.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning applications are determined in accordance with the Development Plan unless material considerations indicate otherwise.

3.4.2 The Council's Local Plan was adopted on the 27th February 2019 and is now the statutory development plan for Kirklees.

3.4.3 The relevant policies relating to Landscape and Visual Impact of this proposal are listed below:

Policy LP30 - Biodiversity & Geodiversity

The council will seek to protect and enhance the biodiversity and geodiversity of Kirklees, including the range of international, national and locally designated wildlife and geological sites, Habitats and Species of Principal Importance and the Kirklees Wildlife Habitat Network.

Natural environment

- (i) result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;
- (ii) minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;
- (iii) safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;
- (iv) establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and
- (iv) incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone.

Policy LP36 - Proposals for mineral extraction

Part 1

Proposals for mineral extraction will be considered having regard to:

- a. the impact on the environment including water resources and the best and the most versatile agricultural land;
- b. the impact on residential amenity, highway safety and local heritage assets;
- c. the impact on human health;
- d. any cumulative effects arising from multiple impacts from individual sites and/or a number of sites in a locality.

Part 2

Proposals to explore for, or extract minerals, including from former waste deposits will be permitted provided that they will not:

- a. cause unacceptable detriment to the landscape including its character or local visual amenity during or subsequent to extraction;

Proposals to extract minerals should be accompanied by sufficient information to demonstrate that such unacceptable impacts would not occur, or could be satisfactorily controlled, and to demonstrate the presence of and need for the mineral.

Policy LP37 - Site restoration and aftercare

Part 1

Mineral working will be permitted only where the council is satisfied that the site can be restored and managed to a high standard, the proposed restoration is sympathetic to the character and setting of the wider area and is capable of sustaining an appropriate after-use. Restoration proposals for mineral workings should be designed to:

- a. clearly indicate how the site will be restored and managed, before, during and after working;
- b. ensure that restoration is completed at the earliest opportunity including the use of progressive restoration techniques where appropriate;
- c. ensure that restoration and aftercare is appropriate with regard to the characteristics of the site's surroundings, including landscape character;
- d. demonstrate that adequate financial provision has been made to fulfil the proposed restoration and aftercare requirements; and
- e. include, where appropriate, provision for the extended management of a site beyond any aftercare period required by planning condition.

Part 2

Mineral working will be permitted only where the proposed site restoration delivers benefits such as enhancement of biodiversity interests, improved public access and the provision of climate change mitigation. Restoration proposals should therefore include:

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- a. measures to assist or achieve priority habitat or species targets and/or biodiversity Action Plan targets;
 - b. where appropriate, measures to protect and/or improve geodiversity and provide educational opportunities to visit such sites;
 - c. provision for increased flood storage capacity for sites which fall within high flood risk areas;
 - d. where appropriate, opportunities to provide for local amenity uses, including appropriate sport and recreational uses; and
 - e. measures to restore land back to agriculture for sites involving the best and most versatile agricultural land.

4 Site Context & Description

4.1 Baseline Conditions

- 4.1.1 The proposed extension to Bromley Farm Quarry covers an area of approximately 8.4 Hectares which includes the area required for the perimeter screening mounds to the north and east, the above ground overburden storage and the new access road. The full area to be extracted for mineral is currently in agricultural use for pasture.
- 4.1.2 The nearest residential areas to the site are Upper Cumberworth which is situated just 100m to the east of the edge of the village and Lower Cumberworth which is approximately 650m to the east. The larger settlement of Denby Dale is over 1km to the south east.
- 4.1.3 Within the wider landscape of the area there are variations within the local characteristics and landscape quality. There are substantial areas of settlement and major transport routes. The main transport route near to the site is the A635 to the south.
- 4.1.4 The proposed extension area is situated within broadly undulating topography and surrounded by agricultural land bounded by dry stone walls with some substantial woodland blocks which are located to the south of the A635. There are scattered farmsteads around the area with occasional strips of tree belts to the north and east with more significant woodland blocks to the south. The site lies within a wider area of green belt land identified in the Kirklees Development Plan.
- 4.1.5 There is another former quarry, also called Bromley Farm Quarry to the south which is now closed but unrestored and a small household waste recycling facility is situated approximately 150 metres to the south west.
- 4.1.6 Residential properties are located along Cumberworth Lane, approximately 350 metres to the west and 400 metres to the North East. The closest property, Lane Side Farm is located 100 metres to the northern site boundary.
- 4.1.7 The landscape is very open in the area and long views are afforded from all directions. However, although the site is on high ground, it is not prominent within the local landscape and it is not easily overlooked from the surrounding countryside.
- 4.1.8 The site as existing is most visible from the public footpath which runs along the western site boundary and a number of houses to the west along Cumberworth Lane which are at a slightly elevated position to the site.
- 4.1.9 The proposed extension area is already well screened by a combination of topography and established vegetation which screens views from the south and east. The site is most visible from the public footpaths to the east and west and a number of houses to the west along Cumberworth Lane which are at a slightly elevated position to the site. Some of this screening was planted for the previous quarry and is now well established.
- 4.1.10 The agricultural land is used predominantly for pastoral farming with distinctive walled enclosures forming linear patterns within the landscape. Along the site boundary and diving the areas of arable land are small derelict sections of dry stone walls

- 4.1.11 The development will result in the temporary loss of areas of arable grassland and a species poor hedgerow with occasional trees in the centre of the site. Boundary features would be protected and retained during the life of the quarry.

Public Footpaths

- 4.1.12 There are no PROW's that would need to be diverted as part of this proposal. The closest are DEN/86/30 and DEN86/50 to the north east.
- 4.1.13 The Denby & Cumberworth Circular trail Ref DEN/84/10 which is a heavily used footpath runs from south and west of the site where part of the route exits on Cumberworth Lane.
- 4.1.14 The main section of the route of the trail where views of the site could potentially be visible are to the west on a 200m unmarked route from the new site access point towards Cumberworth Lane.

Statutory Designated Sites

- 4.1.15 There are no sites covered by a statutory nature conservation designation within 2km of the proposed extension area. The nearest site is Pye Flatts Meadows Site of Special Scientific Interest (SSSI) located near Hoylandswaine approximately 6.5km south east of the study area.

Road Network

- 4.1.17 The site would be served from an existing unnamed road which adjoins the A635 Barnsley Road which has been constructed to a high standard. This access is a two lane highway which runs for approximately 500 metres to its junction and is also used to access to Council's waste recycling facility,
- 4.1.18 The site is bounded by Cumberworth Lane, a minor road to the north of the proposed extension area.

4.2 Local Designations

Listed Buildings

- 4.2.1 There are a number of listed buildings identified in the study area. The majority of these are located within the settlements with a small number of others scattered within the surrounding area. There will be no impact from the proposal on listed buildings.

Conservation Areas

- 4.2.2 Upper Cumberworth conservation area lies 500m to the west. It contains a small group of clustered houses and farm buildings centred on St Nicholas Church

Ancient Woodlands

- 4.2.3 There are no ancient woodlands in proximity to the proposed development.

SSSI's

- 4.2.4 There are no SSSI's in proximity to the proposed development.

Trees and Woodland

- 4.2.5 There are no trees or woodland that would be affected by the proposed extension area. The nearest woodland blocks are approximately 700 to 800m to the south.

Land Use

- 4.2.6 The site is located in a landscape which has undergone much change due to extraction of minerals in the past, and which continues to change with the presence of the previous Bromley Farm Quarry, and Bromley (Naylors) Quarry to the south which is now closed.
- 4.2.7 The land is classed as agricultural in arable use.

5. Landscape Context

5.1 Natural England National Character Area

- 5.1.1 The Site and the study area lie within the National Character Area (NCA) No 38 – Nottinghamshire, Derbyshire and Yorkshire Coalfield.

NCA No 38 is described as:

- a low-lying landscape of rolling ridges with rounded sandstone escarpments and large rivers running through broad valleys, underlain by Pennine Coal Measures.
- Local variations in landscape character reflecting variations in underlying geology.
- Several major rivers flow through the rural and urban areas of the NCA, generally from west to east in broad valleys.
- A mixed pattern of built-up areas, industrial land, pockets of dereliction and farmed open country.
- Small, fragmented remnants of pre-industrial landscapes and more recent creation of semi-natural vegetation, including woodlands, river valley habitats and subsidence flashes, with field boundaries of clipped hedges or fences.
- Many areas affected by urban fringe pressures creating fragmented landscapes, some with a dilapidated character, separated by substantial stretches of intact agricultural land in both arable and pastoral use. A strong cultural identity arising from a history of coal mining, steel making and other heavy industry which resulted from the close relationship between underlying geology and resource availability, notably water power, iron ore and coal. Features of industrial heritage such as mills, goits, tips, old railway lines, canals and bridges are evident, along with former mining villages.
- Many large country houses and estates established by wealthy industrialists in the 18th and 19th centuries and ancient monuments create focal points and important recreational opportunities within the landscape, such as Bretton Hall, Wentworth, Woodhouse, Temple Newsam, Nostell Priory, Bolsover Castle and the ruins of Codnor Castle.
- Extensive urbanisation, such as in the major cities of Leeds and Sheffield, with terraced and back-to-back housing and grand 19th-century municipal buildings and churches at their centres, now surrounded by extensive housing and industrial development.
- Widespread influence of transport routes, including canals, roads and railways, with ribbon developments emphasising the urban influence in the landscape.
- An extensive network of multi-user trails on former railway lines and canal towpaths, such as the Trans Pennine Trail and the Ebor Way.
- Continuing development pressure including land renewal and regeneration projects, especially along river corridors and around towns.

5.2 Development Description

Working Method & Visual Screening

- 5.2.1 The 8.4 Hectare extension area will effectively be divided into 5 Cuts. Topsoil and subsoil will be stripped and stored to a height of 5m where it will be used for

visually screening purposes to the north and east of the extension area and kept in storage for restoration.

- 5.2.2 The screening mounds will be seeded to grass at the earliest available opportunity. They will have an outer slope of 1 in 4 with the aim the blend in with the existing land.
- 5.2.3 Above ground storage of overburden is required to accommodate the overburden encountered in Phase 1 of the workings to enable the overburden generated from Cuts 2 to 5 to be backfilled directly into the quarry void. This will be the most visually intrusive aspect of the scheme but is located on lower ground which slopes away from potential visual receptors.. Above ground storage of material is usually a necessity of any opencast mineral workings to enable a sufficient void to be opened up to allow progressive restoration behind the workings with waste mineral. The full extent of this is shown on the phasing plans and will reach maximum capacity by the end of Phase 1 working. It will remain in-situ until the last phase of mineral extraction.

Proposed Restoration Scheme

- 5.2.4 There is considered to be significant potential for improvement of the landscape to be brought about by the introduction of new landscape features and wildlife habitats, which have been detailed on the submitted restoration plan, Ref 22007/510.
- 5.2.5 The aims of the restoration proposals are described as:
- To return the land to a beneficial land-use, similar to the previous quarry with a mixture of woodland planting, trees and shrubs with agricultural grassland
 - To enhance biodiversity in accordance with Kirklees Council's planning policies
 - To have regards to local planning policy and the Authority's Landscape Policies.
- 5.2.6 The proposed scheme, subject to approval by the Planning Authority but does include:
- 1.3 Ha of tree planting
 - 1.0 Ha of species rich grassland
 - 1.1 Ha of shrub planting
 - 3.75 Ha of agricultural grassland

Inert Waste Importation

- 5.2.7 To enable the site to be restored back close to original ground levels and agricultural use, inert waste is to be imported over the 25 year time period, otherwise a large open void would be left due to the lack of available restoration materials from solely on-site mineral wastes. This void would inevitably fill with water due to the impermeable nature of the underlying geology and create a large lake which would be incongruous in the locality and therefore imported material is a necessity to enable the site to be restored to a beneficial afteruse.

5.3 Site Specific Landscape Character

Landscape Quality

- 5.3.1 The extension area is wholly agricultural grassland for arable use. There are some small hedgerow trees within the site which need to be removed but the existing perimeter hedgerows and trees will be retained and utilized to add to the additional screening measures that are proposed and incorporated into the scheme.
- 5.3.2 The landscape quality of the surrounding area is considered to be moderate. The proposed extension area is largely devoid of surface landscape features and consequently the landscape quality is considered to be moderate. The development will result in the temporary loss of arable grassland and a species poor hedgerow with occasional small trees.
- 5.3.3 The significance of the proposal on the landscape would be assessed as moderate adverse for the duration of the operations due to the effects on the current land being open agricultural use but would be minor beneficial on completion of the restoration scheme.

Landscape Value

- 5.3.4 The proposed extension is not designated specifically as being of any significant landscape value and no Tree Preservation Order, Hedgerow Notice or other conservation designation applies.

Landscape Sensitivity

- 5.3.5 Due to the lack of the landscape features within the proposed extension area, and the historical and recent quarrying that has been undertaken in close proximity, the application site is not considered sensitive. The land is within Green Belt designation but the NPPF this is not considered inappropriate development so long as the openness is preserved.

Landscape Effect

- 5.3.6 The main effect on the landscape during extraction is in respect of the landform and land use, whilst other landscape characteristics remain relatively unaffected.
- 5.3.7 Overall the magnitude of effect is considered to be medium due to the length of the operations but will effectively be screened and be progressively restored with the aim to minimise the overall effect.
- 5.3.8 The sensitivity of the landscape is considered to be medium. Consequently, the significance of the effect of the restored site on the landscape is considered to be minor beneficial.
- 5.3.9 The duration of effect is long term at an estimated 25 years and the reversibility of effect is non-permanent as the site will be fully restored upon completion of mineral extraction.

5.4 Impact during works

- 5.4.1 The landscape of the area will be largely unaffected by the operations due mainly to its low visibility in the surrounding landscape.
- 5.4.2 The majority of the mineral extraction and infilling works undertaken are below ground surface and will not be seen due to the topography of the landscape and the existing and proposed screening measures. However, during the construction of the new access and the stripping of the soils to create the screening mound, the operations will involve vehicles and plant moving over the surface of the land. Also the movement of HGV's exporting mineral and importing waste for restoration will have a negative impact on the local landscape character and views from Cumberworth Lane, particularly when in close proximity to parts of the site that are not fully screened.
- 5.4.3 This impact is considered **minor adverse** as mineral extraction and waste infill have been a feature in the locality for many years.
- 5.4.4 However, the disruptive elements of these works are of a temporary nature and will be mitigated as far as is practicable.

5.5 Impact of the completed works

- 5.5.1 Without the importation of inert waste to create a suitable landform, a large open void would be the only option and due to the impermeable nature of the geology, the void would inevitably fill with water over time and create a large lake feature. It is considered that this would not fit in with the surrounding landscape and would look out of place in the locality.
- 5.5.2 The proposed final restoration scheme has been designed for long-term stability and would allow the land to be farmed for arable or pastoral use in the future.
- 5.5.3 The restoration scheme provides the opportunity to increase potential for habitat creation and provide an enhanced area of biodiversity.
- 5.5.4 The elements of the proposed restoration scheme include:
- Tree Planting (1.31Ha)
 - Species Rich Grassland (0.97Ha)
 - Shrub Planting (0.87 Ha)
 - Agricultural Grassland (5.0Ha)
- 5.5.5 It is considered that the mitigation measures proposed will ensure that the development can take place without permanent detriment to the visual appearance and quality of the surrounding landscape and should positively enhance the habitat value of the site.
- 5.5.6 Therefore, on completion of the restoration we consider the impact on the landscape character as **minor beneficial**.

5.6 Summary of Landscape Appraisal

- 5.6.1 A site-specific landscape assessment has been undertaken in order to identify the key characteristics of the landscape in accordance with current guidance and also to make an assessment of factors such as the landscape quality, sensitivity and capacity to absorb change or development. The site-specific assessment deals both with the application site and land in the immediate vicinity.
- 5.6.2 The Guidelines for Landscape & Visual Impact (GLVIA 3) sets out in Box 5.1 a range of factors that can help in the identification of valued landscapes. These factors include:
- Landscape quality (condition);
 - Scenic quality;
 - Rarity;
 - Representativeness;
 - Conservation Interests;
 - Recreation Value;
 - Perceptual aspects; and
 - Associations.
- 5.6.3 In terms of landscape quality, the site reflects that of its locality, comprising three agricultural fields with small hedgerow trees of low ecological value interspersed in the centre of the proposed extension area which would need to be removed but any perimeter trees along the site edges will be retained.
- 5.6.4 The agricultural fields total approximately 8 Hectares which will be lost temporarily for mineral extraction but will be progressively restored back to agricultural use with additional biodiversity enhancements.
- 5.6.5 The site is not considered to be valued in terms of the NPPF (Paragraph 174) as it is not covered by any statutory designations or identified as having high quality in any of the development plan documents or published landscape study documents.
- 5.6.6 The scenic quality of the site is reduced by the presence of operational and historic quarries in the area which has been in industrial use for decades.
- 5.6.7 With regard to rarity and representativeness, the site is currently under arable agricultural use and is therefore considered to be consistent with the land use of the landscape and is commonplace within the localised and wider setting and as such is not considered rare. There are no internal landscape features of note within the site.
- 5.6.8 In terms of conservation interests, there are no features which are considered significant to elevate the conservation value of the site or its setting.
- 5.6.9 The site is in agricultural use so has no recreational value apart from users of public footpaths outwith of the site which will be unaffected by the proposal.
- 5.6.10 In terms of the perceptual aspects of the site, the current and historic mineral and landfill sites reduces the perceived tranquillity of the site and its immediate surroundings. In terms of the site, it is considered that the perceptual value is low.

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- 5.6.11 With regard to literary, artistic and historic associations, there are no known links with regard to the site or its immediate setting.
- 5.6.12 On a large scale, the proposal will impact on an area having no outstanding features of regional, national or international importance. It is a disturbed landscape with intermingled housing, roads, railways, industrial buildings, redevelopment, intermixed with rural areas.
- 5.6.13 At a local scale, the proposed development lies in an area designated Green Belt in the LDF. There are no other formal designations applicable to the site or land immediately adjacent
- 5.6.14 The existing and previous historical Quarries do not positively contribute to characteristics of the surrounding area, although mineral extraction operations have taken place within the landscape of this region for many decades, so in that respect the existing quarries contribute in part to the overall landscape character of the area.
- 5.6.15 The appraisal of the baseline landscape of the proposed development identifies that it:
- i) It is allocated in the LDF as a larger site allocated as a Minerals area of search, subjects to a number of constraints being addressed
 - ii) Lies within the Green Belt
 - iii) No significant characteristic landscape elements will be lost
 - iv) The site is arable agricultural fields with no specific features of landscape or ecological interest
 - v) The area has historically been worked for mineral for many years historically and subsequently been used for landfill.
 - vi) The site will be restored back close to original ground levels and back to agricultural use in 25 years.
 - vii) The restoration scheme will add biodiverse areas to the land where it will not impact on future farming use.
- 5.6.16 The significance of the proposal on the landscape would be assessed as minor adverse when the site is operational due to the site being in agricultural use but is not in a valued landscape area with few ecological habitats.
- 5.6.17 The restoration scheme will restore the majority of the site back to agricultural use. Additional tree and hedgerow planting will add areas of biodiversity and wildlife habitat where practical and would not impact on future agricultural use.
- 5.6.18 We would therefore assess the proposal overall would be **minor beneficial** upon completion of the restoration scheme in accordance with the significance criteria for landscape effects.
- 5.6.19 With regards to Landscape sensitivity, the study area is assessed through professional judgment, as being of **Low** sensitivity. Similarly, most of the landscape of the study area is considered to be of **Low** quality.
- 5.6.20 The landscape value of the proposed site is assessed as being of medium/poor value as the application site is an open agricultural field but within a surrounding landscape of **low** value.
- 5.6.21 Overall the impacts on landscape character are considered to be of medium magnitude as they would not be considered substantially uncharacteristic when

considered against the surrounding landscape of current and historic mineral extraction and landfill.

6. Visual Effects

6.1 Introduction

- 6.1.1 The assessment of visual effects considers the potential for changes in views and visual amenity. The aim is to establish the area in which the development may be visible, the different groups of people who may experience views of the development, the places where they will be affected and the nature of the views and visual amenity (meaning the overall quality and pleasantness to a view).
- 6.1.2 Residential receptors, users of PROW's and users of allotments are of high visual sensitivity. Users of the local residential road network where the view is not the focus of the activity, are of medium visual sensitivity. Passengers on commercial railway lines are of low visual sensitivity.
- 6.1.3 Changes in views may give rise to adverse or beneficial visual effects through obstruction in views, alteration of the components of the view and through the opening up of new views by the removal of screening. Potential visual effects arising from the development, excluding mitigation, may include:
- Short term visual impact during the initial earthmoving and construction period arising from the use of machinery and stripping of vegetation and soils.
 - Short term visual intrusion and obstruction arising from the construction of perimeter screening bunds
 - Visual intrusion from ongoing extraction.
 - Visual intrusion from vehicles entering and leaving the site.
 - Visual effects of the overburden storage mound
- 6.1.4 This section will summarise the potential visual effects for the proposed extension area.
- 6.1.5 During the field study, a photographic record was made to represent the full range of potential views towards the site, from available viewpoints within the study area. These locations are shown on the visual photographs. No access to private locations has been obtained during the field study; the majority of photographs have been taken from as close to the properties as possible, from public locations.
- 6.1.6 Existing views of the site were examined from public footpaths, roads and individual properties.
- 6.1.7 Whilst there is professional judgement inherent in determining the category of impact, the assessment process is both systematic and structured. The assessment of visual impacts is based upon summer views obtained at the time of assessment.
- 6.1.8 Where significant differences in impact between summer and winter are apparent, these would be identified.
- 6.1.9 The sensitivity of a receptor and the level of impact upon it can be combined to assess the significance of the resultant effects.

Zone of Theoretical Visibility (ZTV)

- 6.1.10 To establish the potential extent of visibility, a ZTV has been produced. The ZTV was produced based on a LIDAR Composite Digital Surface Model (DSM) at a 2m spatial resolution which takes into terrain and large blocks of vegetation and gives a representation of where the site could be seen, given the complex landform of the study area.
- 6.1.11 The map indicates theoretical visibility only of the areas where there may be a line of sight. However, the site may not be actually visible in reality due to localized screening which is not represented by the DSM.
- 6.1.12 The site visit established the potential extent of visibility of the proposed development within the landscape. Given the complex topography of the study area, the visibility is limited by landform.
- 6.1.13 A Digital Terrain Model (DTM) has also been produced showing a representation of the bare ground (bare earth) topographic surface of the Earth excluding trees, buildings, and any other surface objects.
- 6.1.14 The DTM and DSM plans can be found in Appendix B of this report.

6.2 Principal Representative Viewpoints

- 6.2.1 There are two particular elements to this assessment which are:
- i) The landscape and visual impacts of the proposed quarry extension and ongoing operations and;
 - ii) The landscape and visual impacts of the proposed 5m high overburden storage mound
- 6.2.2 A photographic survey of the proposed extension area and the surroundings has been undertaken. Reference should be made to Drawing Ref 22007/600 in Appendix C for the locations from which the photographs to be referred to have been taken.
- 6.2.3 The representative viewpoints have been determined as those from:
- Closest Proximity Properties
 - Cumberworth Lane
 - Public Rights of Way
- 6.2.4 The extension area would not be visible from any other locations due to the topography surrounding the site and significant areas of tree cover.
- 6.2.5 A total of 12 representative viewpoints were chosen. The photographs and description of each viewpoint can be found in Appendix B. The description of each of the selected viewpoints is detailed below.
- 6.2.6 No other locations were included where there are no possible views into the site, so these were scoped out of this assessment.

Viewpoint 1

- 6.2.7 Viewpoint from the proposed site access looking north-east across the previous Bromley Farm Quarry which is now fully restored. The extension area is approximately 370m from this location.

Viewpoint 2

- 6.2.8 Viewpoint looking east from the Cumberworth Trail unmarked footpath across the restored former Bromley Farm Quarry

Viewpoint 3

- 6.2.9 Viewpoint further northward along the unmarked Cumberworth Trail PROW

Viewpoint 4

- 6.2.10 Viewpoint from the front driveway of 62 Cumberworth Lane. An established tree belt planted to screen the previous quarry mitigates any potential views into the proposed extension area.

Viewpoint 5

- 6.2.11 Viewpoint from Cumberworth Lane adjacent to Lane Side Farm. A screening mound constructed for the previous quarry mitigates views from pedestrians in this location.

Viewpoint 6

- 6.2.12 Viewpoint further eastwards on Cumberworth Lane. A hedgerow and occasional trees screen the extension area from this location. A perimeter screening mound will also be located along this boundary.

Viewpoint 7

- 6.2.13 Viewpoint from Cumberworth Lane looking south-west. The tree line in the distance is the extent of the extension area and will be the location of a 5m screening mound to mitigate potential views into the extension area.

Viewpoint 8

- 6.2.14 Another viewpoint further along Cumberworth Lane towards Lower Cumberworth looking south-west. The tree line in the distance is the extent of the extension area and will be the location of a 5m screening mound to mitigate potential views into the extension area.

Viewpoint 9

- 6.2.15 Winter viewpoint taken adjacent to 43 Cumberworth Lane. The natural topography restricts views of the extension area fields as existing which will be further mitigated by screening mounds.

Viewpoint 10

- 6.2.16 Viewpoint from unmarked PROW DEN/86/30 in Lower Cumberworth looking south-west

Viewpoint 11

- 6.2.17 Viewpoint from an unofficial walkway off PROW DEN/86/30 looking south-west

Viewpoint 12

- 6.2.18 Winter long distance viewpoint from A638 Barnsley Road looking north-east. The existing topography restricts views from this location. Distance to the extension area is approximately 900m.

6.3. Predicted Visual Effects

- 6.3.1 The nearest residential areas to the site are Upper Cumberworth which is situated just 400m to the east of the edge of the village and Lower Cumberworth which is approximately 300m to the east. The larger settlement of Denby Dale is over 1km to the east/south east.
- 6.3.2 Residential properties are located along Cumberworth Lane, approximately 350 metres to the west and 400 metres to the North East. The closest property, Lane Side Farm is located 100 metres to the northern site boundary.
- 6.3.3 In the long-term, once the site has been restored, earth bunds removed and with additional tree planting, the effects would be minor beneficial overall.

Roads

- 6.3.4 Any visual effects will be classed as long term at 25 years duration during the operational and restoration phases of the quarry. Passing vehicles would be limited to daytime hours which would give a minor adverse effect and would be temporary and infrequent. The screening measures proposed will mitigate any potential visual intrusion from passing motorists along Cumberworth Lane.

Footpaths and Tracks

- 6.3.5 There are no PROW's that would need to be diverted as part of this proposal. The closest are DEN/86/30 and DEN86/50 to the north east.
- 6.3.6 The Denby & Cumberworth Circular trail Ref DEN/84/10 which is a heavily used footpath runs from south and west of the site where part of the route exits on Cumberworth Lane.
- 6.3.7 All operations would be screened from any users of the PROW network adjacent to the site so there would be no potential impacts to consider.

Long Distance Viewpoints

- 6.3.8 The immediate area allows extensive views towards the landmarks of Castle Hill and Emley Moor on the horizon. The dominant feature looking north is the imposing Emley Moor Mast. Along the northern boundary of the site, to the north of Cumberworth Lane, the landscape is dominated by the outstretching agricultural fields towards Shelley and to the east towards Scissett and Clayton West.

- 6.3.9 The elevated views to the north from Shelley and Emley are considered negligible due to intervening vegetation, topography and occasional woodland blocks make any potential viewpoints imperceptible without the aid of binoculars.

6.4 Summary of Visual Appraisal

- 6.4.1 The low numbers of potential visual receptors to this proposal are such that they would be limited to a small number of properties in close proximity and users of the public footpath network and possibly road users along Cumberworth Lane.
- 6.4.2 Most residential properties on the edges of Lower and Upper Cumberworth do not face towards the site, being part of terraced or semi-detached houses along roads orientated in a east-west orientation. Select residential properties along Cumberworth Lane have the opportunity for glimpsed views from upper floors, limited by back garden fencing and vegetation.
- 6.4.3 Once in operation, views of the quarry bunding along northern and eastern boundaries would be visible, with only glimpses of activity within the quarry, including vehicles and plant along the access road., earth bunds removed and boundary hedgerows retained, the effects would be neutral with some minor benefits as a result of the proposed restoration scheme to increase biodiversity on the site.
- 6.4.4 Overall, the visual impact is assessing as a **Low** Magnitude of Change in such that any change in the view is not prominent but could be visible to some visual receptors. The duration of effect is long term at 25 years with the type of effect assesses as **neutral**.
- 6.4.6 All visual effects would be temporary in nature, and once the landscape is restored, would provide potential visual benefits to local receptors in the long-term with improvements and additional biodiversity included in the submitted scheme.

7. Conclusions

- 7.1 The landscape and visual context of the application site has been described in relation to a desktop study of published information alongside a site walkover in accordance with guidance on landscape and visual assessment.
- 7.2 Potential landscape and visual impacts of the proposed development have been identified taking mitigation into account to reduce or eliminate adverse effects where possible.
- 7.3 A medium scale 8.4 Hectare extension to Bromley Farm Quarry will have a temporary effect on the landscape and visual character of the area, albeit for a long term duration of 25 years.
- 7.4 The magnitude of change as a result of the temporary quarry is considered medium resulting in a moderate visual effect for a long term period of 25 years due to the fact the site is only visible from close viewpoints to the north, east and west, a small number of residential properties and users of the PROW network but effective screening would mitigate this as much as is possible.
- 7.5 The landscape character assessment concludes that the landscape of the proposed development area is overall of low sensitivity to change mainly due to the detracting effect of the previous and existing quarries in the area.
- 7.6 When putting into context against the surrounding landscape of historic mineral extraction in the area and the proposed restoration scheme with additional planting to increase biodiversity and habitats on the site, it is considered that the proposals are acceptable and would not be adverse in terms of landscape or visual impact.
- 7.7 To summarise, the overall level of effect of landscape and visual impact is assessed as ***moderate/minor***.

Silkstone Environmental
January 2023

APPENDIX A.

LANDSCAPE AND VISUAL ASSESSMENT CRITERIA

INTRODUCTION

This appendix presents the assessment criteria adopted for the assessment of landscape and visual effects arising from the proposed development.

The primary source of best practice for LVIA in the UK is 'The Guidelines for Landscape and Visual Impact Assessment', 3rd Edition (GLVIA3) (Landscape Institute and the Institute for Environmental Management and Assessment, 2013). The assessment criteria adopted to inform the assessment of effects has been developed in accordance with the principles established in this best practice document. It should however be acknowledged that GLVIA3 establishes guidelines not a specific methodology. The preface to GLVIA3 states:

'This edition concentrates on principles and processes. It does not provide a detailed or formulaic 'recipe' that can be followed in every situation – it remains the responsibility of the professional to ensure that the approach and methodology adopted are appropriate to the task in hand.'

The criteria set out below have therefore been developed specifically for this assessment to ensure that the methodology is appropriate and fit for purpose.

An LVIA must consider both:

- Effects on the landscape as a resource in its own right (the landscape effects); and
- Effects on specific views and visual amenity more generally (the visual effects).

Therefore, separate criteria are set out below for the assessment of landscape and visual effects.

NATURE (SENSITIVITY) OF LANDSCAPE FEATURES

The nature or sensitivity of an individual landscape feature or element reflects its susceptibility to change and the value associated with it. Sensitivity is therefore a function of factors such as the feature's quality, rarity, contribution to landscape character, degree to which the particular element can be replaced and cultural associations or designations that apply. A particular feature may be more 'sensitive' in one location than in another often as a result of local value associated with the feature. Therefore, it is not possible to simply place different types of landscape feature into sensitivity bands. Where individual landscape features are affected, professional judgement is used as far as possible to give an objective evaluation of its sensitivity. Justification is given for this evaluation where necessary.

The nature or sensitivity of individual landscape features has been described as very high, high, medium, low or very low.

NATURE (SENSITIVITY) OF LANDSCAPE CHARACTER

The nature or sensitivity of landscape character reflects its susceptibility to change and the value associated with it. It is essentially an expression of a landscape's ability to accommodate a particular type of change. It varies depending on the physical and perceptual attributes of the landscape including but not necessarily limited to: scale; degree of openness; landform; existing land cover; landscape pattern and complexity; the extent of human influence in the landscape; the degree of remoteness/ wildness; perception of change in the landscape; the importance of landmarks or skylines in the landscape; inter-visibility with and influence on surrounding areas; condition; rarity and scenic quality of the landscape, and the value placed on the landscape including any designations that may apply.

In this assessment, the nature or sensitivity of landscape character is considered with reference to a number of local character areas as defined in this LVIA for the purposes of this study. Information regarding the key characteristics of these character areas has been extrapolated from relevant published studies where possible but also informed by project specific field assessment. An assessment of landscape sensitivity to the development proposed has been undertaken employing professional judgement for relevant local landscape character areas.

The nature or sensitivity of landscape character has been described as very high, high, medium, low or very low.

NATURE (SENSITIVITY) OF VISUAL RECEPTORS

The nature or sensitivity of visual receptor groups reflects their susceptibility to change and the value associated with the specific view in question. Sensitivity varies depending on a number of factors such as the occupation of the viewer, their viewing expectations, duration of view and the angle or direction in which they would see the Site. Whilst most views are valued by someone, certain viewpoints are particularly highly valued for either their cultural or historical associations and this can increase the sensitivity of the view.

The following criteria are provided for guidance only and are not exclusive:

- Very Low Sensitivity – People engaged in industrial and commercial activities or military activities.
- Low Sensitivity - People at their place of work (e.g. Offices); shoppers; users of trunk/major roads and passengers on commercial railway lines (except where these form part of a recognised and promoted scenic route).
- Medium Sensitivity - Users of public rights of way and minor roads which do not appear to be used primarily for recreational activities or the specific enjoyment of the landscape; recreational activities not specifically focused on the landscape (e.g. Football); motel users.
- High Sensitivity – Residents at home; users of long distance or recreational trails and other sign posted walks; users of public rights of way and minor roads which appear to be used for recreational activities or the specific enjoyment of the landscape; users of caravan parks, campsites and 'destination' hotels; tourist attractions with opportunities for views of the landscape (but not specifically focused on a particular vista); slow paced recreational activities which derive part of their pleasure from an appreciation of setting (e.g. Bowling, golf); allotments.
- Very High Sensitivity - People at recognised vantage points (often with interpretation boards), people at tourist attractions with a focus on a specific view, visitors to historic features/ estates where the setting is important to an appreciation and understanding of cultural value.

It is important to appreciate that it is the visual receptor (i.e. The person) that has a sensitivity and not a property, public right of way or road. Also, the sensitivity of a receptor group is not influenced by the number of receptors. As an example, although many people may use a motorway, this does not increase the sensitivity of each receptor using it. Likewise, a residential property may only have one person living in it but this does not reduce the sensitivity of that one receptor. Whilst the number of receptors affected at any given location may be a planning consideration, for the purposes of this assessment it does not alter the sensitivity of the receptor group.

Where judgements are made about the sensitivity of assessment viewpoints, the sensitivity rating provided is an evaluation of the sensitivity of the receptor group represented by the viewpoint and not a reflection of the number of people who may experience the view.

For some developments (e.g. Wind energy developments) it important not to confuse the concept of visual sensitivity with the perception of the development. For example, it is recognised that some people consider wind turbines to be unattractive, but others enjoy the sight of them.

NATURE (MAGNITUDE) OF EFFECTS

The following discussion sets out the approach adopted in this LVIA in relation to a specific issue arising in GLVIA3 which requires a brief explanation.

Prior to the publication of GLVIA3, LVIA practice had evolved over time in tandem with most other environmental disciplines to consider the level of effect (relative significance) principally as a function of two factors, namely: sensitivity of the receptor and magnitude of the effect (the term 'magnitude' being a word most commonly used in LVIA and most other environmental disciplines to describe the size or scale of an effect).

Box 3.1 on page 37 of GLVIA3 references a 2011 publication by IEMA entitled 'The State of EIA Practice in the UK' which reiterates the importance of considering not just the scale or size of effect but other factors which combine to define the 'nature of the effect' including factors such as the probability of an effect occurring and the duration, reversibility and spatial extent of the effect.

The flow diagram on page 39 of GLVIA3 suggests that the magnitude of effect is a function of three factors (the size/scale of the effect, the duration of the effect and the reversibility of the effect).

For certain types of development (e.g. Residential) the proposed development is permanent and non-reversible. For other types of development (e.g. Wind and solar energy) the proposed development is for a time-limited period and would be largely reversible at the end of the scheme's operational period. Reversibility of a proposed development is a material consideration in the planning balance but does not reduce the scale of the effect (i.e. The 'magnitude' in the traditional and commonly understood sense of the word) during the period in which the scheme is operational. In this regard, it would be incorrect to report a lesser magnitude of change to a landscape or view as a result of a time- limited effect or the relative reversibility of the effect.

For clarification, the approach taken in this LVIA has been to consider magnitude of effect solely as the scale or size of the effect in the traditional sense of the term 'magnitude'. Having identified the magnitude of effect as defined above, the LVIA also describes the duration and reversibility of the identified effect, taking these factors into account as appropriate in the consideration of the relative level of effect.

In the context of the above discussion the following criteria have been adopted to describe the magnitude of effects.

NATURE (MAGNITUDE) OF EFFECTS ON LANDSCAPE FEATURES

Professional judgement has been used as appropriate to determine the magnitude of direct physical effects on individual existing landscape features using the following criteria as guidance only:

- Very Low Magnitude of Change - Negligible loss or alteration to existing landscape features;
- Low Magnitude of Change - Minor loss or alteration to part of an existing landscape feature;
- Medium Magnitude of Change - Some loss or alteration to part of an existing landscape feature; and
- High Magnitude of Change - Major loss or major alteration to an existing landscape feature.
- Very High Magnitude of Change - Total loss or alteration to an existing landscape feature.

NATURE (MAGNITUDE) OF EFFECTS ON LANDSCAPE CHARACTER

The magnitude of effect on landscape character is influenced by a number of factors including: the extent to which existing landscape features are lost or altered, the introduction of new features and the resulting alteration to the physical and perceptual characteristics of the landscape. Professional judgement has been used as appropriate to determine the magnitude using the following criteria as guidance only. In doing so, it is recognised that usually the landscape components in the immediate surroundings have a much stronger influence on the sense of landscape character than distant features whilst acknowledging the fact that more distant features can have an influence on landscape character as well.

- Very Low Magnitude of Change - Negligible loss or alteration to existing landscape features; no notable introduction of new features into the landscape; and negligible change to the key physical and/or perceptual attributes of the landscape.
- Low Magnitude of Change - Minor loss or alteration to existing landscape features; introduction of minor new features into the landscape; or minor alteration to the key physical and/or perceptual attributes of the landscape.
- Medium Magnitude of Change - Some notable loss or alteration to existing landscape features; introduction of some notable new features into the landscape; or some notable change to the key physical and/or perceptual attributes of the landscape.
- High Magnitude of Change - A major loss or alteration to existing landscape features; introduction of major new features into the landscape; or a major change to the key physical and/or perceptual attributes of the landscape.
- Very High Magnitude of Change - Total loss or alteration to existing landscape features; introduction of dominant new features into the landscape; a very major change to the key physical and/or perceptual attributes of the landscape.

NATURE (MAGNITUDE) OF EFFECTS ON VIEWS AND VISUAL AMENITY

Visual effects are caused by the introduction of new elements into the views of a landscape or the removal of elements from the existing view.

Professional judgement has been used to determine the magnitude of impacts using the following criteria as guidance only:

- Very Low Magnitude of Change - Negligible change in views;
- Low Magnitude of Change - Some change in the view that is not prominent but visible to some visual receptors;
- Medium Magnitude of Change - Some change in the view that is clearly notable in the view and forms an easily identifiable component in the view;
- High Magnitude of Change - A major change in the view that is highly prominent and has a strong influence on the overall view.
- Very High Magnitude of Change – A change in the view that has a dominating or overbearing influence on the overall view.

Using this set of criteria, determining levels of magnitude is primarily dependent on how prominent the development would be in the landscape, and what may be judged to flow from that prominence or otherwise.

For clarification, the use of the term 'prominent' relates to how noticeable the features of the development would be. This is affected by how close the viewpoint is to the development but not entirely dependent on this factor. Other modifying factors include: the focus of the view, visual screening and the nature and scale of other landscape features within the view. Rather than specifying general bands of distance at which the proposed development would be dominant, prominent or incidental to the view etc. The prominence of the proposed development in each view is described in detail for each viewpoint taking all the relevant variables into consideration.

TYPE OF EFFECT

The assessment identifies effects which may be beneficial, adverse or neutral. Where effects are described as neutral this is where the beneficial effects are deemed to balance the adverse effects.

For some developments (e.g. Wind energy developments) it is recognised that some people consider the development to be unattractive but others enjoy the sight of it. A landscape and visual assessment for these developments therefore assumes that all identified landscape and visual effects are 'adverse' unless stated otherwise. This allows decision makers to assess a worst-case scenario.

DURATION OF EFFECT

For the purposes of this assessment, the temporal nature of each effect is described as follows:

- Long Term – over 7 years
- Medium Term – between 1 and 7 years
- Short Term – under 1 year

REVERSIBILITY OF EFFECT

The LVIA also describes the reversibility of each identified effect using the following terms:

- Permanent – effect is non reversible
- Non permanent – effect is reversible

LEVEL OF EFFECT

The purpose of an LVIA when produced outside of the context of an EIA is to identify and describe the relative level of effects on landscape and visual amenity arising from the

proposed development. The judgements provided within the assessment may then inform the planning balance to be carried out by the determining authority.

The level (relative significance) of landscape and visual effects is determined by combining judgements regarding the sensitivity of the landscape or view, magnitude of change, duration of effect and the reversibility of the effect. In determining the level of residual effects, all mitigation measures are taken into account.

The relative level of effect is described as major, major/moderate, moderate, moderate/minor, minor or minor/no effect. No effect may also be recorded as appropriate where the effect is so negligible it is not even noteworthy.

APPENDIX B

Representative Viewpoints



VIEWPOINT LOCATION 1 – Viewpoint from the proposed site access looking north-east across the previous Bromley Farm Quarry which is now fully restored. The extension area is approximately 370m from this location.

**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 1 of 12



OS REF:	E 421510 N408690
Ground Level:	236m AOD
Date & Time:	14/07/2022 09:30am
Camera Ht:	1.5m





VIEWPOINT LOCATION 2 – Viewpoint looking east from the Cumberworth Trail unmarked footpath across the restored former Bromley Farm Quarry

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**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 2 of 12



OS REF:	E 421420 N 408750
Ground Level:	238m AOD
Date & Time:	14/07/2022 09:45am
Camera Ht:	1.5m





VIEWPOINT LOCATION 3 – Viewpoint further northward along the unmarked Cumberworth Trail PROW.

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**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 3 of 12



OS REF:	E 421365 N408805
Ground Level:	239m AOD
Date & Time:	14/07/2022 09:55am
Camera Ht:	1.5m





VIEWPOINT LOCATION 4 – Viewpoint from the front driveway of 62 Cumberworth Lane. An established tree belt planted to screen the previous quarry mitigates any potential views into the proposed extension area.

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**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 4 of 12



OS REF:	E 421313 N 408925
Ground Level:	241m AOD
Date & Time:	14/07/2022 10:10am
Camera Ht:	1.5m





VIEWPOINT LOCATION 5 – Viewpoint from Cumberworth Lane adjacent to Lane Side Farm. A screening mound constructed for the previous quarry mitigates views from pedestrians in this location.

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**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 5 of 12



OS REF:	E 421370 N408990
Ground Level:	237m AOD
Date & Time:	14/07/2022 10:20am
Camera Ht:	1.5m





VIEWPOINT LOCATION 6 – Viewpoint further eastwards on Cumberworth Lane. A hedgerow and occasional trees screen the extension area from this location. A perimeter screening mound will also be located along this boundary.

Bromley Farm Quarry Extension – January 2023

**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 6 of 12



OS REF:	E 421640 N 409230
Ground Level:	230m AOD
Date & Time:	14/07/2022 10:30am
Camera Ht:	1.5m





VIEWPOINT LOCATION 7 – Viewpoint from Cumberworth Lane looking south-west. The tree line in the distance is the extent of the extension area and will be the location of a 5m screening mound to mitigate potential views into the extension area.

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**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 7 of 12



OS REF:	E 421830 N 409280
Ground Level:	224m AOD
Date & Time:	14/07/2022 10:45am
Camera Ht:	1.5m





VIEWPOINT LOCATION 8 – Another viewpoint further along Cumberworth Lane towards Lower Cumberworth looking south-west. The tree line in the distance is the extent of the extension area and will be the location of a 5m screening mound to mitigate potential views into the extension area.

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**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 8 of 12



OS REF:	E 421930 N 409300
Ground Level:	224m AOD
Date & Time:	14/07/2022 10:55am
Camera Ht:	1.5m





**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 9 of 12



OS REF:	E 421990 N 409320
Ground Level:	222m AOD
Date & Time:	04/01/2023 09:30am
Camera Ht:	1.5m



VIEWPOINT LOCATION 9 – Winter viewpoint taken adjacent to 43 Cumberworth Lane. The natural topography restricts views of the extension area fields as existing which will be further mitigated by screening mounds.



VIEWPOINT LOCATION 2 – Viewpoint from unmarked PROW DEN/86/30 looking south-west

**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 10 of 12



OS REF:	E 421960 N 409280
Ground Level:	226m AOD
Date & Time:	14/07/2022 10:45am
Camera Ht:	1.5m





VIEWPOINT LOCATION 11 – Viewpoint from an unofficial walkway off PROW DEN/86/30 looking south-west

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**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 11 of 12



OS REF:	E 421950 N 409220
Ground Level:	226m AOD
Date & Time:	14/07/2022 10:55am
Camera Ht:	1.5m





VIEWPOINT LOCATION 12 – Winter long distance viewpoint from A638 Barnsley Road looking north-east. The existing topography restricts views from this location. Distance to the extension area is approximately 900m.

Bromley Farm Quarry Extension – January 2023

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**BROMLEY FARM QUARRY
Proposed Extension**

Viewpoint 12 of 12



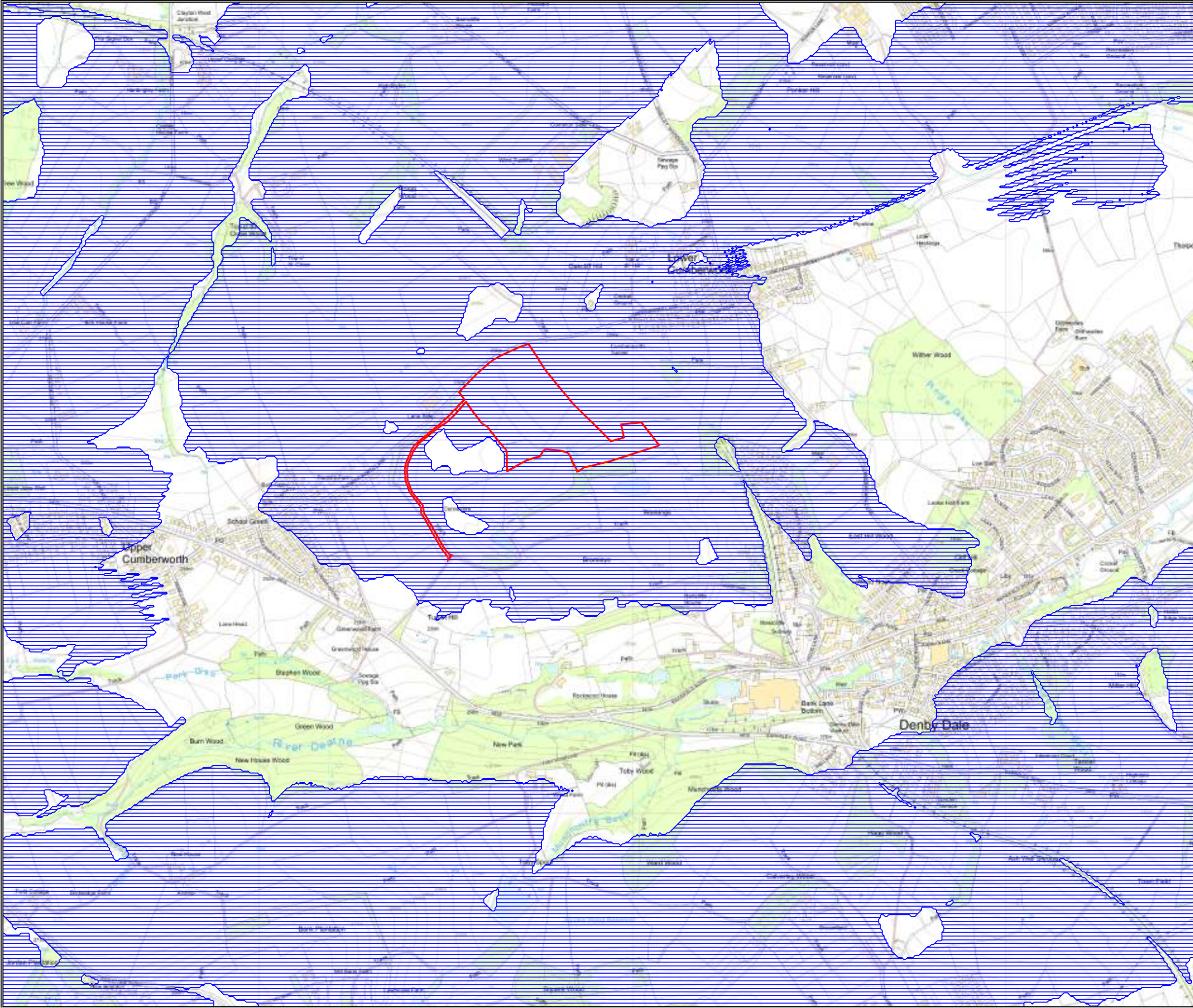
OS REF:	E 420710 N 408780
Ground Level:	251m AOD
Date & Time:	14/07/2022 14:20pm
Camera Ht:	1.5m



APPENDIX C

DTM & DSM PLANS

Proposed Restoration Scheme



- Site Boundary
- Zone of Visual Influence
(DTM) Bare Earth

Rev	Description	Date	Drawn	Chkd
-----	-------------	------	-------	------

Client:



Project:

BROMLEY FARM
QUARRY EXTENSION

Plan Title:

Zone of Visual Influence
DTM - Bare Earth Model

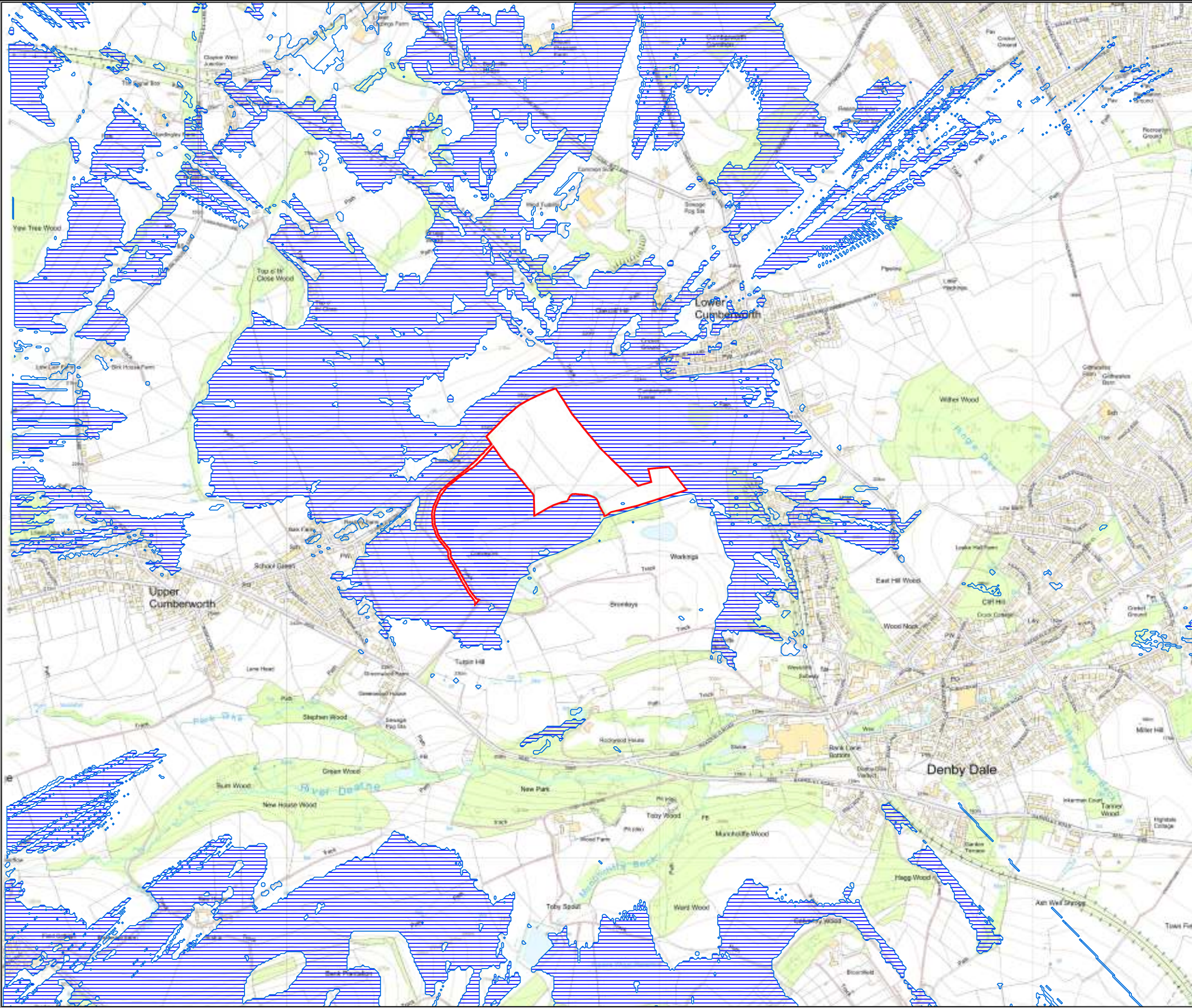
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Tel (0114) 2573487 Fax (0114) 2573459

Project No. 22007	Dwg No. 22007/700	Rev
Date: Jan 23	Drawn:MS	Chkd: PS
Scale: 1:10000 @ A3		

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Site Boundary



Zone of Visual Influence
(DSM) Buildings &
Vegetation included

Rev	Description	Date	Drawn	Chkd
-----	-------------	------	-------	------

Client:



Project:

**BROMLEY FARM
QUARRY EXTENSION**

Plan Title:

**Zone of Visual Influence
DSM - Buildings & Vegetation Included**

**Silkstone
Environmental Ltd**
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Tel (0114) 2573487 Fax (0114) 2573459

Project No. 22007	Dwg No. 22007/701	Rev
Date: Jan 23	Drawn: MS	Chkd: PS
Scale: 1:10000 @ A3		

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Tel (0114) 2573487 Fax (0114) 2573459

Prominent contour
(mAOD)[illegible]

Plan Title: Restoration Planting Scheme

Chkd: PS