

# GAYLES QUARRY, RICHMOND for STAINTON QUARRY LTD



**LANDSCAPE & VISUAL IMPACT APPRAISAL**  
**JANUARY 2022**

STAINTON QUARRY LTD  
GAYLES QUARRY, RICHMOND  
NORTH YORKSHIRE

## LANDSCAPE AND VISUAL IMPACT APPRAISAL REPORT

Project Ref: 19/1013		Document Ref: 19/1013/SQ/LA/V.1		
Revision	Purpose of Issue	Author	Approver	Date
V.0	DRAFT	JMH	GMB	06.11.2019
V.1	FINAL	JMH	GMB	06.01.2022
V.2	PLANNING	JMH	GMB	19.01.2022

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Cover photograph: View south into existing quarry from adjacent footpath



## 1 INTRODUCTION

Barton Howe Associates Ltd have been commissioned by Stainton Quarry Ltd, in August 2019 to undertake a Landscape and Visual Impact Appraisal (LVIA) of the proposed sandstone extraction and restoration scheme, at Gayles Quarry, Richmond, North Yorkshire.

This LVIA report has been undertaken to a methodology prepared on the basis of 'Guidelines for Landscape and Visual Impact Assessment (3<sup>rd</sup> Edition 2013)' published by the Landscape Institute/Institute for Environmental Management and Assessment (GLVIA3); see Appendix 1. The assessment describes the existing landscape (physical landscape and landscape character) in context with the wider landscape together with the potential viewpoints, and considers the proposed mineral extraction scheme in respect of potential effects upon the landscape and visual receptors.

A landscape strategy, to consider necessary mitigation and potential enhancement, also forms part of this assessment. Preparation of this LVIA, including field inspections, has been undertaken by a suitably experienced Chartered Landscape Architect.

## 2 THE STUDY AREA

A study area, see Figure 1, has been defined on the basis of desk top study and field observation; Figure 1 also identifies the location and extent of the proposed extraction scheme. The study area boundary is considered to be inclusive of those areas with potential for landscape and visual effects as a result of the proposed development; based upon the applied methodology.

The study area boundary extends to some 3.8 kilometres (kms) from the site centre to the north, 2 km to the east, 500 metres to the south and 2.5 kms to the west. This area that includes the villages of Ravensworth, Whashton, Whashton Green, Gayles and Dalton.

Both the context to this study area and proposed extraction scheme are described in Section 3 and Section 4 of this report.

## 3 SITE CONTEXT AND DESCRIPTION

The proposed mineral extraction scheme is located to within, and adjacent to an abandoned quarry to the south-east of Gayles; some 630 metres distant.

The proposed scheme includes both the existing, derelict Gayles Quarry and areas of adjoining pastureland to the south and west encompassing an area some 4.8 hectares; the site centre is located at OS Grid Reference NZ 12789 06610. The existing Gayles Quarry has been the subject of previous extraction; a quarry was established in the late 18<sup>th</sup> century (evident on the Ordnance Survey 1<sup>st</sup> Edition map of 1857) and remained operational until the early 20<sup>th</sup> century. The excavated quarry faces and subsequent 'bowl' were left in situ and have been subject to natural regeneration over the subsequent years, resulting in a matrix of dense scrub, scattered trees, hedgerows, dense bracken, ruderal vegetation and bare ground. The remnant spoil heaps associated with former extraction are located to the north of the existing 'bowl' and also feature established vegetation. There are areas of unimproved neutral grassland, semi-improved neutral grassland, semi-improved acid grassland and acid dry dwarf shrub heath in areas of the site outwith the existing quarry 'bowl'.

The base of the existing quarry 'bowl' is situated within the range of @247 to @253 metres AOD. The quarry 'bowl' is located on the north facing slope of undulating topography that rises from some 244 metres AOD (along the northern fringe of the proposed extraction area) to a high point of approximately 267 metres AOD

to the south-east corner of the site. Further south, landform rises to some 390 metres at Gayles Moor. This north facing slope is cut by small water courses to form a series of 'Gills' e.g. Priest Gill to the east and Throstle Gill to the west, that drain north into the shallow valley along Holme Beck; then on to the wider valley of the River Tees. The steeper valley sides, within which Gayles Quarry is located, ease in gradient close to Ravensworth, the latter situated at @120 metres AOD. The landscape beyond rises gently, broken by intervening rolls or smaller dips created by small watercourses.

A public right of way (PRoW), North Yorkshire County Council (NYCC) reference number 20.32/4/2, is routed through the site from the adjacent (unnamed) road to the east, skirting the northern edge of the site across existing fields to the hamlet of Gayles to the north-west of the site.

The immediate boundaries to the 'bowl' and vegetated spoil heaps consist of pastureland with occasional scrub/trees. To the north a stone wall field boundary, downslope of the quarry 'bowl', demarcates a boundary to pastureland beyond. The closest highway, Slip Inn Bank, is situated further north (some 400 metres) and is cut into the prevailing south-north gradient of the local topography. To the west is an area of woodland that stretches along the valley side towards Gayles. To the east is the unnamed road which is bounded by sections of stone walls, hedgerow and hedgerow trees. The closest property, Quarry House, an isolated dwelling located to the eastern boundary of the unnamed road some 70 metres from the existing quarry 'bowl'. North of the quarry, the land continues to rise, forming a gentle roll towards Gayles Moor featuring further areas of rough pasture with scrubland and stone wall boundaries.

The wider landscape is rural, principally an agricultural landscape within which are situated small villages and hamlets linked by a network of small highways along the valley sides and within the valley bottom. The A66, a major east/west trunk road passes along the southern fringe of the Tees valley, some 3.2 kms north of Gayles Quarry. Woodland blocks are scattered across the valley sides being less frequent within wide valley floor. Linear stretches of woodland hug the banks of the River Tees. The area has a long history of mineral extraction with extant quarries at Duns Bank (Ravensworth) and Gatherley Moor (Gilling West) for example. Locally active sites are situated at Forcett Quarry (East Layton), Kilmond Wood, Hulands Quarry (both to the far west, close to Bowes), Low Grange Quarry and Breedon Barton Quarry to the far east.

The higher land, to the south, consists of moorland with extensive areas of pastureland and numerous small woodland blocks. Much of the higher land is used by the Ministry of Defence for military training and is denoted as a 'Danger Area'; the boundary of which lies close to the southern fringe of Gayles Quarry.

#### **4 PROPOSED DEVELOPMENT**

The proposed mineral extraction and restoration scheme would consist of:

- Initial site establishment, including construction of a vehicular access into the existing quarry 'bowl' and construction of screening bunds.
- Phased extraction and construction of further screening bunds.
- Sequential restoration during the phased extraction.
- Final restoration upon completion of extraction.
- Incorporation of ecological features to ensure 'no nett loss' of habitat; ecological assessment and mitigation is discussed in a separate report prepared by RDF Ecology (ref Gayles Quarry, Ecological Impact Assessment).

The scheme proposals are illustrated at Appendix 2 of this report. They include details of the proposed infrastructure to enable extraction and processing, a phased extraction plan, a phased restoration plan and proposed final restoration scheme with finished site levels.

A more detailed scheme development description is set out below:

#### *Site Establishment*

The initial phase of works would consist of constructing the vehicular access from the existing track that adjoins the south-east corner of the site. A stock proof fence would be erected around the site boundary. Within the existing Gayles Quarry 'bowl', vegetation removal would take place together with construction of a stockpile platform. A screening bund at the junction of the vehicular access into the site and existing track would be created utilising material removed from the cutting to accommodate the site access. Both the screening bund and cutting slopes would be seeded. The area of existing rough pasture located between the new site access and existing track, to the east of the quarry void, would be planted with trees to create a longer-term woodland area.

The existing Public Right of Way that fringes the present quarry 'bowl' would be temporarily re-located, for safety reasons, further north i.e. along the existing, north facing slope at a further distance from the works; the footpath would be returned to its original route during the final restoration phase.

It is anticipated that the site establishment phase would be undertaken over a period of six months.

#### *Phase A*

Soil stripping and substrate removal would take place, soils would be stockpiled. Overburden within the Phase A area would be removed and, initially, used to supplement the existing spoil mounds to the northern fringe of the quarry in order to create screening. The bunds would be soiled, from on-site stores, and seeded.

The southern edge of the quarry void would be re-profiled, to remove the 90° slope thus creating a shallower face angle, then soiled and seeded.

Extraction would commence, including removal of usable stone from the overburden, down to a depth of @243 metres AOD. Phase A extraction would commence at the north-west corner, working east then south.

Overburden removal in Phase A is estimated to take place over a period of 3 months, with extraction over a period of 3.5 to 4 years.

#### *Phase B*

Upon completion of extraction within Phase A, Phase B would commence. Soil stripping and substrate removal would take place within Phase B, with both stored on site for the restoration of Phase A. Overburden would then be removed, initially utilised to create additional screen bunds to the northern edge of Phases B and C. Soils would be taken from on site stores to cover the new screen bunds which would then be seeded.

Extraction would then commence, including removal of usable stone from the overburden, also down to a depth of @243 metres AOD. Phase B extraction would take place from east to west.

During Phase B, overburden and soils from site would be used to restore Phase A.

The duration of Phase B is estimated to be some 5 to 6 years.

#### *Phase C*

Completion of Phase B would enable extraction to commence in Phase C. Again, soil stripping and substrate removal would be the initial element of working. Both materials would be stored on site for the restoration of

Phases B and C, overburden would then be removed. When a depth of 3 metres below present ground level has been achieved, the northern slope would be re-profiled, soiled and seeded.

Extraction would then commence, including removal of usable stone from the overburden, also down to a depth of @243 metres AOD. Phase C extraction would also take place from east to west.

The duration of Phase C is estimated to be some 4 to 5 years.

#### *Final Restoration*

Restoration of Phases B and C would take place working north to south upon completion of extraction. The screening bunds to the north would be retained; the intention being to establish heathland/grassland of ecological interest on the bund slopes. Phases B and C would achieve restoration contours and the Public Right of Way be returned to its original route.

The site access and screen bund to the south-east corner of the site would also be removed and restoration to grassland undertaken, in particular infilling of the cutting.

The restoration scheme would be subject to a management regime to ensure establishment and future development of completed landscape. Existing soils would be retained for use on site as part of the restoration scheme. Any new planting areas would consist of plant material that is of local provenance, where possible, to enhance sustainability.

For the purposes of this appraisal, the proposed development is considered to be temporary i.e. the period of extraction activity will not constitute a permanent feature and the site will be subsequently restored. It should be noted that an area of existing quarry void would be retained, however this is considered comparable to the present quarry 'bowl' which has formed a longstanding feature within the landscape.

The final restoration phase is estimated to take place between some 6 to 12 months.

## **5 METHODOLOGY**

The methodology employed to undertake this LVIA is detailed at Appendix 1 and is considered to follow the current, best practice, namely 'Guidelines for Landscape and Visual Impact Assessment (3<sup>rd</sup> Edition 2013)' authored by the Landscape Institute/Institute for Environmental Management and Assessment.

This LVIA examines the baseline landscape and visual resources, the sensitivity of such resources, the potential magnitude of changes to these resources as a result of the proposed development and the consequent significance of effect. Where appropriate, mitigation or enhancement measures are considered; these include primary mitigation which is considered to form an essential part of the proposed improvement scheme.

The cumulative effect of the proposed development within the context of any existing mineral extraction schemes within the study area together with approved (but not yet implemented) and submitted planning applications (validated applications only) for mineral extraction has also been considered in this appraisal; reported at section 9 of this report.

## **6 PLANNING CONTEXT**

A separate assessment of planning policy at all levels has been undertaken by R K Wood Planning Consultants and is reported separately.

## Local Plan

North Yorkshire County Council (NYCC) are the relevant local planning authority for mineral applications; the draft NYCC Minerals and Waste Local Plan (originally published in November 2016) has recently undergone consultation; there is no currently projected date for adoption. Relevant, landscape related policies in the Consultation Draft include D02 'Local amenity and cumulative impacts', D06 'Landscape', D10 'Reclamation and aftercare' and D11 'Sustainable design, construction and operation of development'.

Policies 'saved' from the previous NYCC Minerals Plan (1997) include those related to 'Local Environment and Amenity' (policy 4/14) and 'Progressive Restoration' (policy 4/19).

At a District level, the local planning authority is Richmondshire District Council. The 'Richmondshire Local Plan 2012-28' Core Strategy was adopted in December 2014. Core policies include Policy CP12 'Conserving and Enhancing Environmental and Historic Assets', and Policy CP13 'Promoting High Quality Design'.

## Supplementary Planning Documents

Supplementary Planning Documents (SPD) do not provide new policies but support policies. There appear to be no relevant SPD's, within the Richmondshire Local Plan Core Strategy, in respect of landscape issues that would offer additional information to this appraisal.

## Conservation Areas

There are Conservation Areas at Gayles, Dalton, Hartforth, Ravensworth, Kirby Hill, Gilling West, and Whashton.

## Designated Sites

In respect of the Historic Environment within the study area, Scheduled Monuments within proximity of the proposed site include Ravensworth Castle and the park wall (also Grade I listed), located some 1.2 kms to the north-east of the proposed extraction site boundary, the former 18<sup>th</sup> century Copper Mill at Whashton Green (1.7 kms to the south-east), several cup marked stones and a ring cairn on the north facing slopes of Feldom Rigg within the MoD area to the south (closest approach 750 metres to the south-west), and Castle Steads hillfort and associated earthworks, a prehistoric site close to Throstle Gill/Buxton Gill (1.5 kms to the west). More distant sites include the Roman Fort/settlement at Carking Moor Farm (3.6 kms to the north-east), two moated sites at The Old Hall, East Layton (4.8 kms to the north-east), the Iron Age oppidum/settlement at Stanwick St John (6.2 kms north-east), the medieval settlement site at Hutton Hall (5.7 kms to north-west), and the medieval Church and Church Cross at Barningham (5.9 kms to north-west).

There are numerous Listed Buildings located in the nearby villages of Gayles, Kirkby Hill, Ravensworth, Whashton, Dalton, Hartforth, Newsham, West Layton, East Layton and Forcett.

Further cultural heritage detail can be found in the Archaeological Desk Based Assessment and Heritage Statement (Archaeological Services Durham University: August 2019).

Park Wood, to the west of Gayles Quarry is designated as 'Ancient and Semi-Natural Woodland' and a locally designated (NYCC) 'Site of Importance for Nature Conservation' (SINC). There is a further SINC at Priest Gill to the east of the site and adjacent unnamed road.



## 7 LANDSCAPE ASSESSMENT

The landscape i.e. the physical landscape, features setting and character has been assessed at two levels, national and regional.

As referenced within the ‘National Character Areas (England)’ undertaken by Natural England, the site falls within Character Area 21 ‘Yorkshire Dales’. At a regional level, a Landscape Character Assessment has been undertaken by NYCC; the ‘North Yorkshire and York Landscape Characterisation Project’ (May 2011). Given the high level of detail within the regional level landscape assessment, no local appraisal has been undertaken.

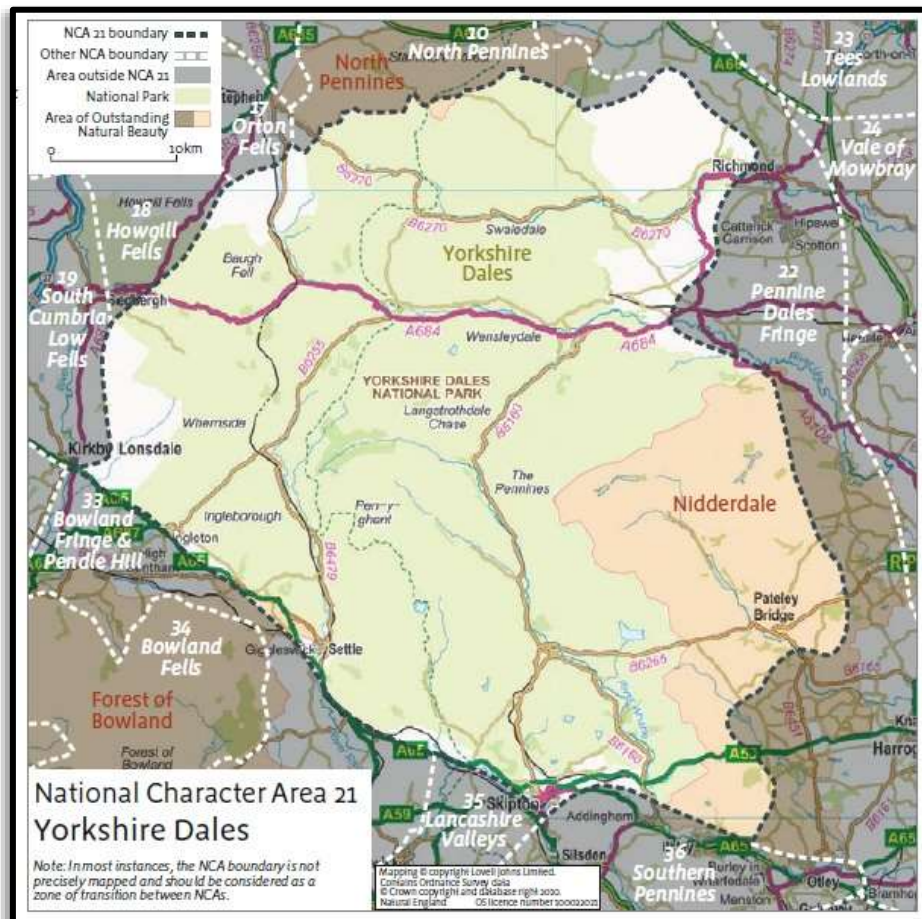
A historic landscape assessment, nor interpretation of the ‘Historic Landscape Character’ project for North Yorkshire, York and the Lower Tees Valley (NYCC December 2010), does not form part of this appraisal; a discrete archaeological assessment has been undertaken for Gayles Quarry. However, relevant references to the historic landscape both within and immediately adjacent to Gayles Quarry, as described within the NYCC Historic Landscape Character report, are noted below by way of context to the landscape assessment.

### National Level Landscape Character Appraisal

The site of the proposed extraction scheme is located within National Character Area (NCA), NCA 21: Yorkshire Dales, however the study area extends north and east into two further NCAs, NCA 10: North Pennines, and NCA 22 Pennine Dales Fringe. All three NCAs have been considered in this appraisal.

#### Yorkshire Dales Character Area

**Plate 1: NCA 21 (Natural England: 2015)**



The *Yorkshire Dales Character Area* is situated in the Pennine uplands, forming part of a chain of upland areas that run down the centre of northern England. The landscape is characterised by contrasts, between the Dales below and the moorland above. Small villages and farmsteads are tucked into sheltered corners with the dale sides characterised by a network of stone walls and scattered field barns. There are large areas of managed grouse moor in north and east of the NCA.

The area contained within NCA 21 is illustrated at Plate 1 above.

The landscape is highly valued for its range and quality of recreational opportunities including long distance routes such as the Pennine Way. The high ground in the NCA provides impressive views of surrounding NCAs.

The dramatic topography, combined with high rainfall, gives the area an important role as the headwater for many of Yorkshire's major rivers. Most of the large rivers flow to the east through the Pennine Fringe and into the Vale of York.

The area is distinctive for its well-preserved archaeology, spanning Mesolithic to modern industrial site, and its traditional architecture. It is also the location of internationally and nationally rare habitats such as limestone pavement and upland hay meadows.

Key characteristics are described as:

- Large-scale upland landscape of high, exposed moorland, with blanket bog and heath, dissected by dales which are often deep and have their own distinctive character.
- Plateaux of high moorland overlying Yoredale Group geology in the north and Millstone Grit in the east, forming typically stepped profiles to the dale sides and dramatic weathered features such as Brimham Rocks.
- Wide, glaciated valleys, with rough grazing on upper slopes, permanent pastures on dale sides and fields cut for hay and silage in the more fertile valley bottoms.
- Remnant semi-natural broadleaved woodland on valley sides and in gills, contrasting with large, rectangular blocks of conifers in some dales.
- Large numbers of characteristic stone field barns, particularly in Swaledale and Wensleydale, and strong patterns of drystone walls, with very large, rectangular enclosures on fell tops, much smaller enclosures in dales, and often older, irregular patterns around settlements.
- Evidence of historic land use from prehistoric times through to the present still highly visible as a result of relatively low levels of cultivation and development.
- Great Scar Limestone in the south and west giving rise to a classic glacio-karst landscape with cave systems, outcrops, scars, gills, gorges and extensive limestone pavements.
- Gritstone, sandstone and limestone buildings including scattered farmsteads, particularly in the north and west, and small nucleated villages on valley floors, often close to river crossing points and transport routes.
- A number of major rivers rise on the high moorlands of the NCA and have made a defining contribution to the character of the area by carving out river valleys, gorges and waterfalls and forming a sinuous, dynamic focal point for many valleys and settlements.
- A strong sense of tranquillity and remoteness, with low levels of intrusion and light pollution.
- Dramatic topography with wide panoramic views, making a defining contribution to sense of place, from high mountain summits to sheltered valleys and gorges.
- A well-known landscape with many opportunities for outdoor recreation and enjoyment, including well-connected and maintained networks of access routes and open access areas, and widespread

availability of information to enhance understanding and appreciation (such as interpretation panels and visitor centres).

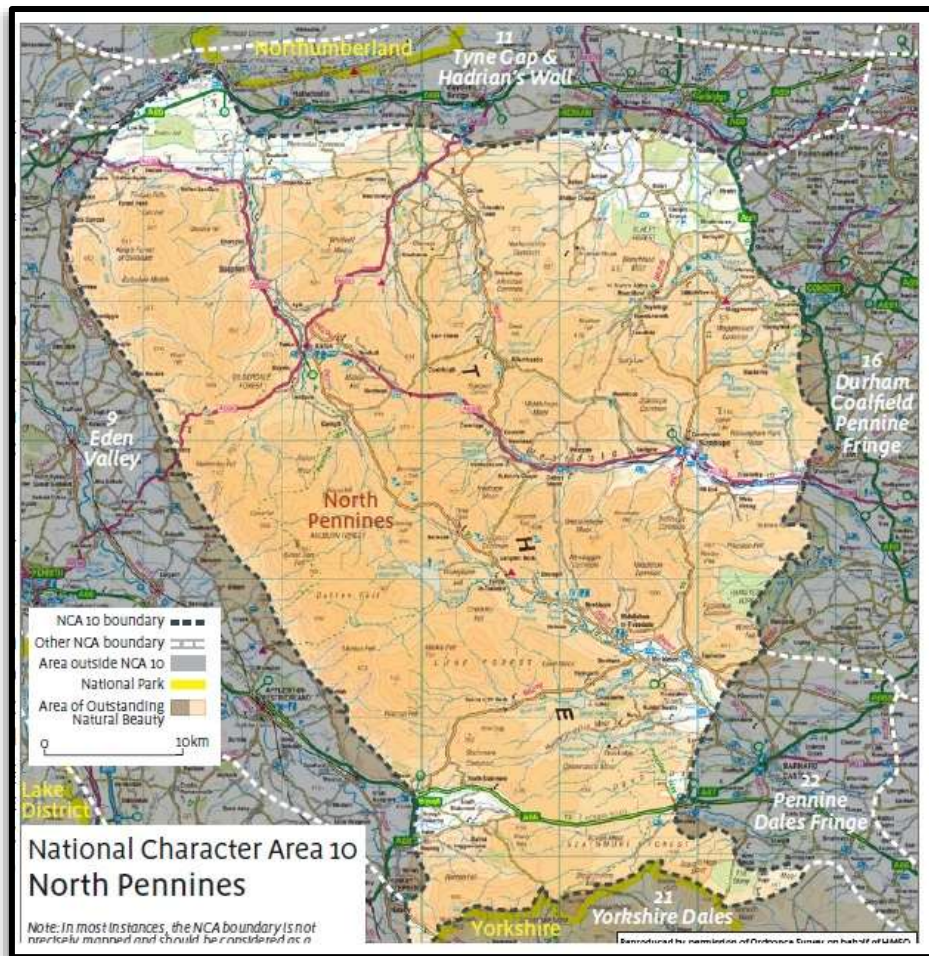
The character of the Yorkshire Dales NCA today is summarised thus, *“The distinctive character of the Yorkshire Dales NCA has evolved over thousands of years through the interactions of humans and the environment. The dramatic topography of the area, combined with a relatively harsh climate, low population density and remoteness from major centres of population, has limited the opportunities for agricultural intensification and modern development, resulting in widespread semi-natural habitats and a well-preserved historic landscape with many visible reminders of the area’s past”*.

North Pennines Character Area

The *North Pennines Character Area* is situated at the northern end of the Pennine ridge with a distinctive identity that features remote upland moorlands divided by quiet dales. It is characterised by a sense of remoteness, with few settlements and contains some of the highest and most exposed moorland summits in England. The area’s natural beauty is reflected in the fact that 88% of it has been designated as the North Pennines Area of Outstanding Natural Beauty (AONB). It is a largely undisturbed landscape with sheep and cattle rearing constituting the predominant farming practice, and features few villages.

The area contained within NCA 10 is illustrated at Plate 2 below.

**Plate 2: NCA 10 (Natural England: 2013)**



Several major rivers arise in this upland area flowing out west to the Irish Sea or east to the North Sea. A combination of impervious rocks and high rainfall make this an important area for water capture with rivers and reservoirs supplying water to downstream industries and conurbations.

There are extensive areas of semi-natural moorland, and grassland habitats form important links between adjoining uplands to the north and south with their similar habitats. The few roads and settlements are contained within valleys, reinforcing the area's sense of remoteness and tranquillity.

The area has a long history of mining including the mining and smelting of lead ore which expanded in the mid 19<sup>th</sup> century with the introduction of the railway but was in decline during the late 1800's leading to significant depopulation. Large scale quarrying took place in Teesdale (Whin Sill outcrop) and Weardale (limestone). During the 19<sup>th</sup> and 20<sup>th</sup> centuries several reservoirs were constructed to supply industry and the populations of Tyneside, Wearside and Teesside. During this latter period, management of upland areas for grouse shooting joined livestock grazing as the key influences upon the extensive heather moorland.

Future challenges for the area include continued land management that will facilitate restoration and enhancement of important habitats, especially blanket bog, heath, calcareous grasslands, upland hay meadows, calamarian grasslands and broadleaved woodland and scrub.

Key characteristics are noted to be:

- A broad, gently undulating plain which is centred on the valley of the River Hull and is drained by a network of canals, ditches and canalised tributaries.
- A distinctive upland landscape of upland plateaux divided by broad pastoral dales, each with its own distinctive character, most of it designated as an Area of Outstanding Natural Beauty (AONB).
- Strong landform of summits capped by Millstone Grit, with underlying alternating limestones, sandstones and shales of the Yoredale Series, creating stepped profiles to the dales.
- Igneous intrusions of dolerite forming Whin Sill, with striking crag outcrops and waterfalls. A dramatic scarp slope along the western edge, falling to the Eden valley.
- Much of the area is designated as a UNESCO European and Global Geopark for its many geological sites and features, including minerals.
- Remote and extensive moorlands of blanket bog, heathland and acidic grassland, managed for sheep and grouse. These moorlands support internationally important habitats, including arctic-alpine flora and populations of waders and raptors.
- A long tradition of livestock rearing combined with mining has created a landscape of enclosed pastures and meadows within the dales, with strong field patterns defined by drystone walls.
- Significant grassland habitats, including limestone grasslands, upland hay meadows, and calamarian grasslands on mining spoil, along with extensive acid grasslands.
- Area of high rainfall, with many fast-flowing streams and several major rivers flowing outwards from the hills, down the wide dales. These provide clean water and create a range of freshwater habitats.
- A very tranquil landscape, with a sense of remoteness. A low population, little light pollution, a slow rate of change, extensive open moorlands with panoramic views and a unique sense of wildness, all providing an inspirational recreational experience.
- The use of local sandstone and gritstone, with stone or slate for roofs, gives a strong vernacular character and unity to the villages, farmsteads and field barns.
- Tree cover is limited to river gorges, gills and stream sides, with copses around dispersed farmsteads. There are fragments of juniper scrub and some large conifer plantations on moorland fringes.
- A rich cultural history – from prehistoric settlements and defensive bastle houses to more recent industrial activity – with extensive evidence of early lead mining, extraction of other minerals and quarrying.



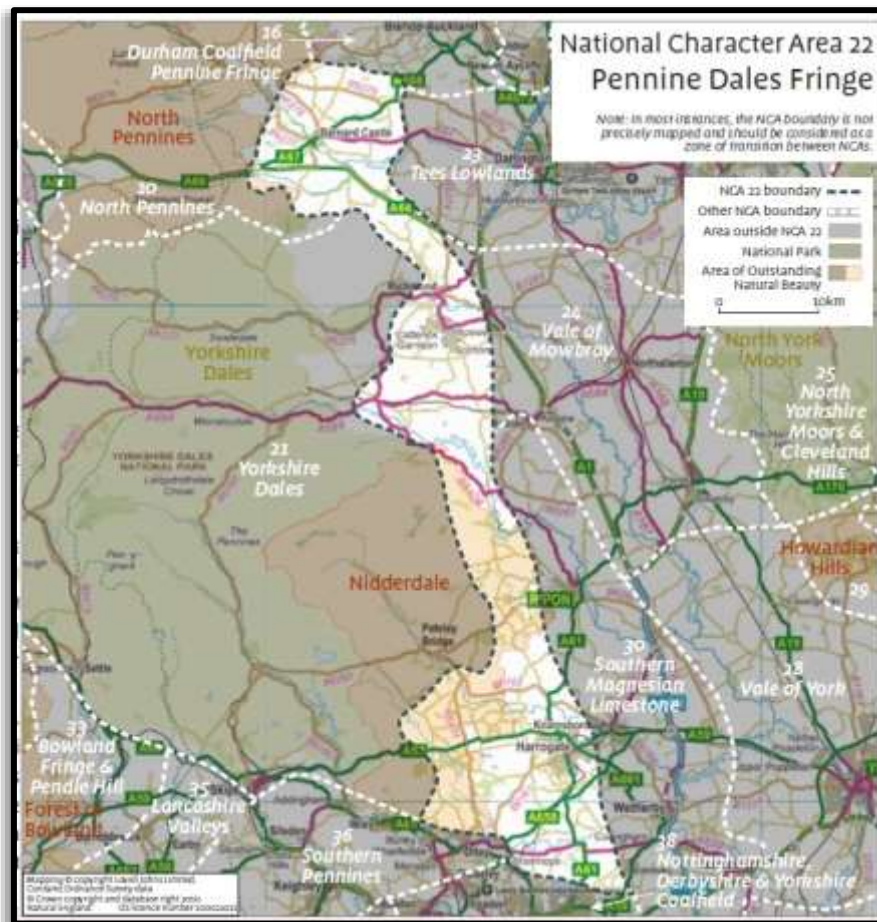
The North Pennines NCA today is described as, “*broad dales, with their strong patterns formed by fields enclosed by drystone walls, and dispersed farmsteads and field barns built of local stone, contrast with the open uplands*”.

### Pennines Dales Fringe Character Area

The *Pennines Dales Fringe Character Area* lies between the uplands of the Pennines to the west and the Magnesian Limestone ridge and arable lowlands to the east. It is a transitional landscape between upland and lowland. The land has a varied topography including exposed upland moorland fringes and plateaux dropping to lower foothills with the higher ground separated by major river valleys and minor tributary valleys. Almost 23% of the area is located within the Nidderdale AONB.

The area contained within NCA 22 is illustrated at Plate 3 below.

**Plate 3: NCA 22 (Natural England: 2015)**



Broad valleys, widening to the east with their more fertile soils support arable crops, while steeper, higher land in the west supports predominantly livestock farming.

Broadleaved woodland (many of ancient origin), coniferous and mixed plantations, and numerous small woods and hedgerow trees all contribute to the well wooded character of the area. Hamlets, villages and small market towns are particularly distinctive, with strong visual unity, being constructed of local stone.

Rich prehistoric and Roman archaeology, alongside historic parklands, contribute to a strong sense of history. There are numerous recreation opportunities with country houses, historic parklands, reservoirs and major

rivers. The discovery of Mesolithic and Neolithic stone tools and flint scatters has revealed much about the early history of the area together with extensive bronze and iron age settlements and prehistoric carved rocks on some moorland areas. With increased settlement in the Iron Age/Romano-British period there is much evidence of Roman activity; there are large remains of Roman settlements along what is now the A66, such as those at Greta Bridge and Cataractonium, and adjacent river valleys.

The area retains a strong pattern of settlements, some market towns have charters that date back to the 12<sup>th</sup> century. The 18<sup>th</sup> century brought extensive planned enclosure of open land under the Parliamentary Enclosure Acts; with hillside pastures divided up into allotments for local farmers. This resulted in a new upland landscape of straight roads, regular large scale fields with predominantly stone wall boundaries whilst in lowland areas the enclosure retained the shape of the narrow, rectilinear, medieval ‘furlongs’. The Pennine Dales Fringe NCA is dramatically different to other areas on the eastern Pennine fringe in that it never experienced significant industrial activity. There are however, numerous historic quarries for limestone and sandstone.

Key characteristics are noted to be:

- Side slopes of Pennine Dales uplands, predominantly sloping down to the east, but with locally varied topography formed by several significant river valleys running from west to east, including the Wharfe, Washburn, Nidd, Ure, Swale and the broad vale of the Tees.
- A transitional landscape between the Pennine uplands to the west and the low-lying fertile landscape of the Vale of York to the east; mainly pastoral in the west, with rough grazing on the moorland edge, merging into mixed farming, with arable on the lighter soils in the east.
- A well-wooded landscape, with woodland along valleys, many copses and plantations on the side slopes, and hedges with hedgerow trees in the lower lying arable areas.
- Several historic parklands, with woodlands and veteran trees.
- Field boundaries of drystone walls on higher ground and hedges in lower areas.
- A generally tranquil and rural area, with a distinctly ancient character in some parts, with several small, historic market towns including Kirkby Malzeard, Middleham, Masham, Richmond and Barnard Castle, linked by a network of minor roads.
- Vernacular buildings predominantly built of Millstone Grit, mingling with Magnesian Limestone in the east, with roofs of stone flags, Welsh slate and some pantiles, creating strong visual unity to rural settlements and farmsteads.
- Many rivers, including the Tees, Ure, Nidd and Wharfe, forming important landscape features along with their broad, glacially widened valleys. Smaller rivers, such as the Burn, Laver, Kex Beck and the Skell flow through steep-sided valleys following courses cut by glacial meltwaters.
- The well-wooded valley of the River Washburn has been dammed to create a series of reservoirs, and provides a popular recreation destination for those living in the Leeds conurbation.
- Historically rich area with many parklands, abbeys and historic buildings, well visited by adjacent urban populations, as well as medieval and Roman earthworks.

The Pennine Dales Fringe NCA today is described as, *“The landform slopes from west to east, incised by river valleys to form contrasting exposed plateaux, small enclosed valleys and broad river valleys. Narrower valleys tend to hold small-scale intimate landscapes with widespread woodland and, in the east there is a dense hedgerow network with many mature trees. Broader valleys along the main rivers.....create an open and gently undulating landscape with arable crops grown on the lower-lying, more fertile land to the east”*.

### **Regional Landscape Character Assessment**

A regional Landscape Character Assessment (LCA), the ‘North Yorkshire and York Landscape Characterisation Project’, was undertaken on behalf of NYCC in 2011. The LCA divides the County into a series (39 number) of



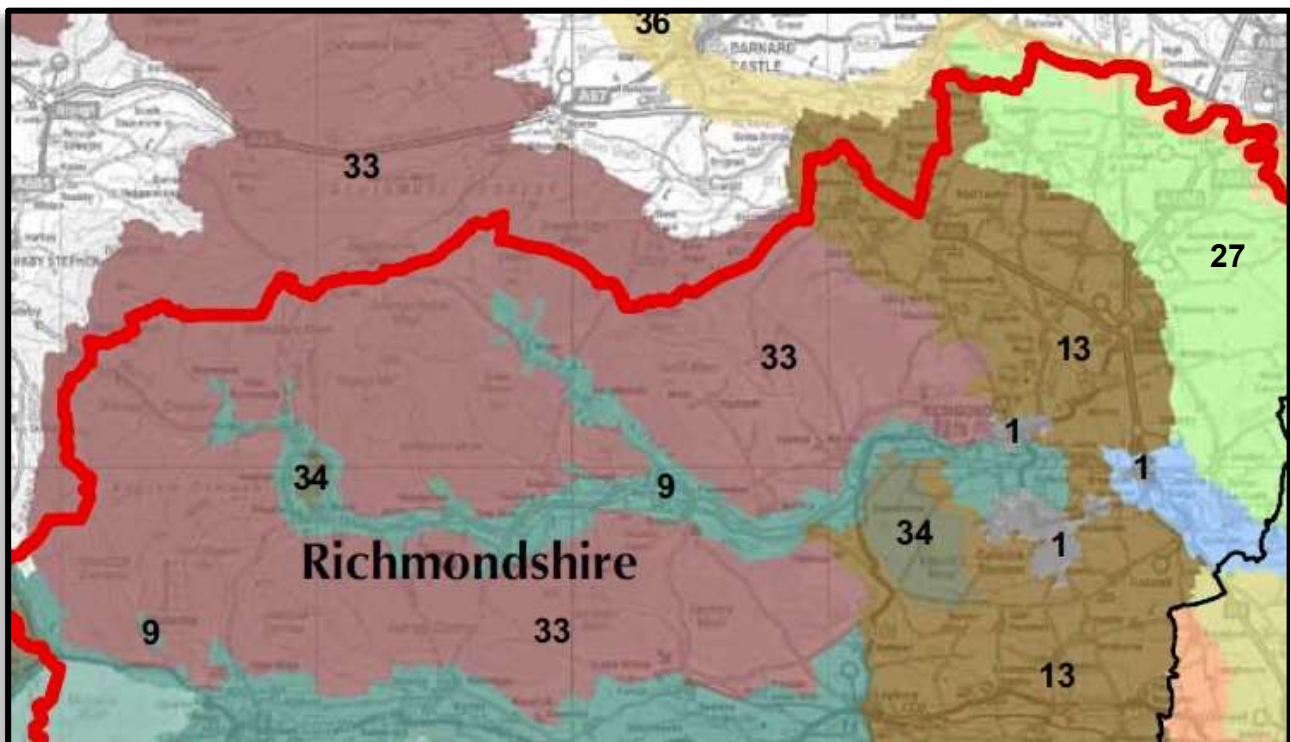
'Landscape Character Types' (LCT) which describe geographical areas that share key characteristics relating to land use, topography, vegetation cover, settlement pattern and visual aspects. The LCT's describe broadly correlate with the boundaries of the NCA's. The LCT's are grouped within the LCA into nine, over-arching, Primary Landscape Units where similar characteristics are shared.

The LCA also considers previously undertaken, District level character assessments and notes that these form a good fit with the County LCA project. In addition to the physical influences upon the current landscape character, including geology, the project also examined historic human and cultural influences. Current land cover and management practices together with the key forces for change, including settlement pattern, the role of agriculture (North Yorkshire is primarily a rural county), development and mineral extraction, were also examined in the LCA.

The site of the proposed mineral extraction scheme, and immediate environs, are located within LCT 13: 'Moors Fringe' with the boundary of LCT 33: 'Gritstone High Plateau' located close by, to the south and the northern part of the study area extending into LCT 27: 'Vale Farmland with Dispersed Settlements'; hence all three LCT's are described here.

The relative, geographical location of the three LCT's is illustrated at Plate 4 below, an extract taken from Figure 3.1 of the LCA entitled 'Primary Landscape Units and Landscape Character Types'. The Primary Landscape Units, and hence LCT's, within Richmondshire occupy the north-west extent of North Yorkshire; the administrative boundary of the County is denoted by the red line on the map extract.

**Plate 4: LCT 13, 33 and 27 Locations (NYCC LCA: 2011)**



#### LCT 13: 'Moors Fringe'

This LCT is grouped within the Primary Landscape Unit 'Upland Fringe and Valley Landscape' in the LCA.

Key characteristics of the LCT, as described in the LCA, are:

- Varied rolling landform offering extensive views;
- Gently sloping landscape which forms a transition between higher moors and fells to the west and the lower magnesian limestone ridge to the east;
- Predominantly rural landscape with an associated relatively strong sense of tranquillity;
- A patchwork of arable and pastoral fields which are delineated by stone walls and hedgerow field boundaries;
- Dispersed settlement pattern of small villages and large farmsteads linked by a network of minor roads;
- A mosaic of habitats including moorland and acid grassland support a large number of wading bird species;
- Settlements generally display buildings which are predominantly constructed from local stone, resulting in strong visual unity;
- Historic parklands and wooded estates enclosing a number of country houses are scattered throughout the landscape; and,
- Reservoirs are key landscape features in places.

This LCT is further described:

*“The Moors Fringe Landscape Character Type is situated to the west of Richmond, Masham and Harrogate, and runs north-south across the Study Area. It also occurs at the southern edge of the Yorkshire Dales National Park and northern edge of the Forest of Bowland AONB. It comprises the gently sloping eastern fringes of the Yorkshire Dales (Limestone Moors) to the north and Gritstone Low Moors and Fells to the south. There is local variation in topography. The Moors Fringe is crossed by the valleys of River Swale, River Ure and River Nidd, which drain west to east. This is a transitional landscape lying between predominantly arable landscapes to the east and pastoral farming to the west. Wooded valley slopes, plantations, numerous small woodlands and hedgerow trees provide a sense of enclosure within this Landscape Character Type. Enclosure patterns vary greatly depending on location and historic origin, including larger scale enclosures with very strong landscape patterns, and small-scale irregular field patterns, close to villages and often of medieval origins. There is a transition in the type of field enclosure, varying from hedges in the east to dry stone walls at higher elevations in the west. This is an essentially rural landscape that is largely undeveloped with an associated relatively strong sense of tranquillity. It supports a moderate density of small villages and large farmsteads linked by a network of minor roads. Settlements in the area are predominantly constructed from local stone, thereby resulting in strong visual unity and sense of harmony with the surrounding landscape, mostly using Millstone Grit but with some limestone in the east. Historic parklands and wooded estates enclose a number of country houses including Grantley Hall, Mowbury House, Swinton Park and Jervaulx Park. Reservoirs are numerous, reflecting the demands of the growing urban populations in the valleys”.*

A series of definitive attributes are noted, presented in tabular format as below.

<b>Geology</b>	<ul style="list-style-type: none"> <li>• This area is characterised by a mixture of millstone grit bedrock and Diamicton superficial deposits</li> <li>• A large proportion of the area is covered by Diamicton</li> </ul>
<b>Topography &amp; Drainage</b>	<ul style="list-style-type: none"> <li>• Local topographic variations, however the landscape slopes gently from west to east, marking the east-facing side slopes of Yorkshire Dales</li> <li>• At the edges of the Yorkshire Dales, landform slopes from north to south, whilst at the edges of the Forest of Bowland AONB, landform slopes from south to north</li> </ul>

	<ul style="list-style-type: none"> <li>The fringe is interrupted in places by river valleys that drain west to east at the edges of the Yorkshire Dales</li> </ul>
<b>Land Cover</b>	<ul style="list-style-type: none"> <li>An essentially rural landscape with mixed arable and pastoral farming</li> <li>Typically well-wooded valley slopes, and with plantations, numerous small woodlands and hedgerow trees</li> </ul>
<b>Enclosure/Field Pattern</b>	<ul style="list-style-type: none"> <li>Fields vary from large-scale and regular to small-scale and irregular</li> <li>Reservoirs are numerous, reflecting the demands of growing urban populations to the east</li> </ul>
<b>Settlement Pattern</b>	<ul style="list-style-type: none"> <li>Scattered large farmsteads and a moderate density of small villages, typically of medieval origin, linked by a network of minor roads</li> <li>Settlements predominantly constructed from local stone, mostly using Millstone Grit but with some limestone in the east</li> </ul>
<b>Visible Historic Features</b>	<ul style="list-style-type: none"> <li>Constable Burton Hall and park</li> <li>Walburn Hall and medieval settlement</li> <li>Fountains Abbey and Studley Royal designed landscape</li> <li>Hackfall wood designed landscape</li> <li>Navy camp and Prisoner of War Camp at Breary Bank</li> <li>Ridge and furrow and lynchet field systems</li> <li>Historic parklands and wooded estates enclose a number of country houses including Grantley Hall, Mowbury House, Swinton Park and Jervaulx Park</li> </ul>

Forces for change have been evaluated in the LCA and are described thus:

#### *Agricultural Change and Land Management*

- Conversion of remnant grassland to arable or pasture, resulting in the loss of relict field systems around farmsteads;
- Intensification of agriculture resulting in loss of field boundaries and hedgerow trees;
- Conifer plantation forestry has had a considerable impact on the character and landscape pattern of the Moors Fringe in the past;
- The changing fortunes of the farming industry have resulted in the deterioration of drystone walls and the use of post and wire fencing for stock proofing; and,
- Outside of protected nature conservation areas, ecological interest has been depleted through agricultural improvements.

#### *Development and Infrastructure*

- Potential new development which could be visually intrusive, particularly on the higher slopes and result in loss of sense of tranquillity;
- Road widening or by-pass schemes, affecting the A66 for example, resulting in standardised designs and highway elements, including lighting columns, which are potentially discordant with the character of roads and boundary features;
- Disrepair of traditional farm buildings resulting in gradual decay and loss. Conversion has the potential to introduce standardised suburban elements which are not consistent with local landscape character;
- New large-scale farmsteads and agricultural buildings can introduce dominant landscape elements, resulting in changes to existing landscape character;

- Pressure for new housing within the landscape in close proximity to Harrogate; and,
- Conversion of barns, especially where new access arrangements and domestication of the setting are required, is likely to change the predominantly rural character of the Moors Fringe

The LCA also notes that this LCT is of, *“High visual sensitivity as a result of the strong intervisibility with adjacent higher, and lower, LCT’s”*. Landscape and cultural sensitivity is also concluded to be High; largely, *“a result of the intact pattern of hedgerows and field boundary walls, the patchwork of historic ‘designed’ landscapes, predominantly rural character and relatively strong sense of tranquillity”*.

In terms of managing landscape change, the LCA sets out guidance principles for the Physical and Ecological character that include, *“Protect the pastoral character.... Conserve and restore drystone walls.... Manage areas of woodland, allowing to thicken....Manage grazing to facilitate natural regeneration of woodland....Encourage the management of permanent pasture to maximise its ecological value....Remove invasive, non-native species”*. For the Cultural and Historic character it is recommended that, *“Manage and restore historic parklands and traditional buildings, retaining veteran trees and re-introducing wood pasture....Ensure that the strong visual unity of settlements and traditional buildings is maintained....Protect the rich range of historic landscape features....Maintain sustainable grazing intensities and scrub management on archaeological sites....Restore and maintain historic parklands....Encourage a built form which respects the simple architecture of farmsteads and cottages and reflects the characteristic settlement pattern”*. Finally, in respect of Aesthetic and Perceptual Character the LCA notes, *“Maintain public access to enable enjoyment of this landscape....Seek opportunities to develop educational access scheme to promote the strong agricultural, forestry, cultural and historical significance of the landscape”*.

### LCT 33: ‘Gritstone High Plateau’

LCT 33 forms part of the ‘Gritstone Landscapes’ Primary Landscape Unit, as described in the LCA, with key characteristics noted as:

- Blanket bog;
- Characteristic moorland vegetation composed of heather and dwarf shrubs;
- Flat upland plateau;
- Important upland bird assemblages;
- Expansive, undeveloped character;
- Open skylines and extensive views;
- Strong sense of tranquillity and remoteness throughout, with associated dark night skies;
- Muted colours;
- MOD ranges within plantations at the north-eastern edge.

The LCT is further described as:

*“This Landscape Character Type is situated in the far northwestern part of the Study Area and extends northwards into Cumbria and County Durham. It comprises elevated, gently rounded hills, often with stepped sides facing valleys, forming broad plateaux to the north and south of Swaledale (in the Yorkshire Dales National Park). Plateaux are dissected by steep sided gullies, and plateaux edges are often defined by dark, blocky gritstone outcrops, with scree below. Watercourses tend to be rocky, with grass, heather or rush banks and occasional trees on rock and cliffs in sheltered gills. Deep layers of peat overlay carboniferous rocks, whilst millstone grits outcrop locally in summits and gullies. Landcover is dominated by extensive tracts of acid grassland, blanket bog and upland heath, creating an interesting and recognisable landscape pattern. The landscape is widely grazed by sheep and heather moorland is managed for grouse shooting. Settlement is*

*generally absent from the open moor tops, but scattered traditional farmsteads with modern outbuildings are often located at the fringes of the dales which cut through this Landscape Character Type. The landscape is large-scale and is predominantly rural with an associated strong sense of isolation and tranquillity. Long distance views across open moorland to distant summits, as well as panoramic views of the northern dales and Cumbrian fells contribute to recognisable sense of place. Occasional disused mine-workings are also features. The moors generally have a rugged, unmanaged and remote character, with human influences largely limited to occasional fences and cairns, with few roads or tracks crossing the plateaux. The extensive moorland and heath habitats support diverse upland bird communities”.*

Attributes are noted to be:

<b>Geology</b>	<ul style="list-style-type: none"> <li>• This area is predominantly underlain by rocks of the Millstone Grit Series</li> <li>• Superficial deposits of peat cover much of the landscape</li> </ul>
<b>Topography &amp; Drainage</b>	<ul style="list-style-type: none"> <li>• This is a substantial area of continuous upland which extends beyond the study boundary</li> <li>• Extensive plateau summits contrast with steep valleys sides of adjacent character areas</li> <li>• Large areas of impeded drainage have led to the formation of blanket bog</li> <li>• The area is drained by a number of high order streams</li> </ul>
<b>Land Cover</b>	<ul style="list-style-type: none"> <li>• Summit areas are covered by blanket bog, giving way to dwarf shrub heath on drier ground</li> <li>• Lower slopes tend to be occupied by unimproved calcareous or neutral grassland</li> <li>• Pockets of acid grassland</li> <li>• Smaller areas of improved grassland exist at the margins of the area</li> </ul>
<b>Enclosure/Field Pattern</b>	<ul style="list-style-type: none"> <li>• Extensive, contiguous areas of unenclosed heather moorland</li> <li>• Large blocks of parliamentary enclosures defined by straight, dry stone wall, field boundaries</li> <li>• Blanket bog</li> <li>• Large area of common land consisting of Askrigg, Angram and Abbotside Common</li> </ul>
<b>Settlement Pattern</b>	<ul style="list-style-type: none"> <li>• Settlement is absent from the open moor tops, but scattered traditional farmsteads with modern outbuildings are present near the dale fringes. The landscape is characterised by an absence of built structures with few roads or tracks crossing the plateau</li> </ul>
<b>Visible Historic Features</b>	<ul style="list-style-type: none"> <li>• Moorland with extensive lead mining in south of area</li> <li>• Large stone quarries high above the reservoirs</li> <li>• Large areas of moorland which are dominated by a history of lead extraction</li> <li>• Lead mines and smelt mills at moulds side west of Langthwaite</li> <li>• Lead mines, ore works and smelt mills at Old Gang on Reeth High Moor</li> <li>• Prehistoric carved rocks and associated remains including cairns and a field system 800m south of Haythwaite, Barningham moor</li> <li>• Moss Dam</li> <li>• Marrick ore hearth lead smelt mill</li> <li>• Medieval settlement and field system at Walburn Hall</li> </ul>

Forces for change have been evaluated in the LCA and are described thus:

#### *Agricultural Change and Land Management*

- High stocking densities in recent decades have resulted in a decline in the extent of heather;

- Moorland drainage has led to the erosion or degradation of peat in places. In addition to the damage to peatland habitats this has affected water quality with increased peat solids both in suspension and in sediments in watercourses;
- Sheltering of stock within upland woodlands, together with grazing by rabbits and roe deer is preventing regeneration in some woodlands. Light grazing can be beneficial in places to maintain the ground flora or a mosaic of open ground, scrub and woodland; and,
- Semi-natural woodlands occur as isolated features. Many have little active management and are often grazed by livestock which inhibits natural regeneration.

#### *Development and Infrastructure*

- Decline and loss of relics of the mining and quarrying industry due to intrusive land management practice;
- Increased risk of moorland fires, footpath and summit erosion and disturbance of birds as a result of pressure for public access; and,
- Evidence of the erection of post and wire fences on moorland which introduces boundary features into a predominantly open landscape.

#### *Climate Change*

- The ecosystem services which upland areas provide including mitigating flood risk, providing water, sequestering carbon, and providing habitat and recreation, need to be retained in the face of economic and climatic changes;
- Without management there is likely to be increasing invasion of upland bogs and heaths by trees and scrub with estimated temperature increases;
- Increasing incidence of intense rainfall events may result in increased soil erosion and associated flash floods. Expansion of Gill Woodland and blocking of grips could help to mitigate against flooding;
- Increased temperatures and drier summers may cause a declining water table and the release of carbon from peat soils to the atmosphere. Research commissioned by the 'moors for the future' programme has shown that management and restoration of moorlands can reverse this effect; and,
- In the long term it is thought that the climatic conditions will become too unsuitable for the continued formation of Peat in moorland areas;

This LCT is noted to be of, *“High visual sensitivity as a result of elevated, open nature of this landscape, which facilitates panoramic views across adjacent landscapes. There is a strong intervisibility with surrounding Landscape Character Types”*. Landscape and cultural sensitivity is also concluded to be High, *“resulting from predominantly intact landscape pattern of blocky gritstone outcrops, predominantly rural character and strong sense of remoteness and tranquillity throughout, with associated dark night skies”*.

In terms of managing landscape change, the LCA states for the Physical and Ecological character, *“Protect and positively manage large, open and expansive areas of moorland....Seek opportunities to restore, extend and re-link moorland habitats....Seek opportunities to block moorland grips to benefit soil and water management and habitat restoration....Where possible, restore acidic grasslands to dwarf-shrub heath communities and implement sustainable grazing regimes....Manage livestock densities to avoid poaching of soils....Improve and maintain blanket bog in good condition in order to preserve the high soil carbon content and protect underlying archaeological and paleoenvironmental deposits....Protect important geological exposures, including gritstone outcrops, using semi-natural landcover to enhance landform features”*. For the Cultural and Historic character it is recommended to, *“Maintain the visibility of upstanding archaeological remains and ground features....Encourage the use of local (gritstone) building materials....Restore and provide interpretation of,*



*extractive and industrial sites such as quarries and limekilns....Maintain sustainable grazing intensities and low levels of scrub.”. In respect of Aesthetic and Perceptual Character the LCA notes, “Maintain public access to enable enjoyment of this landscape and the sense of ‘escapism’ and ‘inspiration’ it provides whilst protecting vulnerable habitats, through a network of public footpaths and open access land....Protect key views to adjacent Yoredale Moors and Fells, Vale Farmland and Dispersed Settlements and Farmed Dales....Conserve the predominantly rural character overall sense of tranquillity and remoteness; and dark night skies”.*

#### LCT 27: ‘Vale Farmland with Dispersed Settlements’

LCT 27 is grouped within the ‘Farmed Lowland and Valley Landscapes’ Primary Landscape Unit and the key characteristics, as described in the LCA, are:

- Generally low lying, gently rolling landscape which contain several small river corridors;
- Distant sense of enclosure in views east and west provided by the backdrop of the North York Moors and Yorkshire Dales;
- A medium to large-scale agricultural landscape which is delineated by a network of mature hedgerows, often containing hedgerow trees;
- Dispersed settlement pattern of farmsteads, small hamlets and villages;
- Extensive use of local clays for brick making and pantiles for roofing; and,
- The A1 (M) transport corridor runs north south across the landscape and exerts a human influence.

LCT 27 is further described:

*“Topography within this Landscape Character Type is predominantly flat to gently rolling and displays a patchwork of medium to large-scale arable fields which are interspersed with pockets of improved grassland and deciduous woodland, which provides an intermittent sense of enclosure. Fields are generally delineated by a network of mature hedgerows, often containing hedgerow trees. The landscape is crossed by a network of river corridors including the Swale and its tributaries the Wiske and the Cod Beck. In the north, river valleys tend to be narrow and are often tree lined while in the south the flood plain broadens and meandering rivers are often embanked. Airfields (several of which date from WWII) and the major transport corridor of the A1(M) impart a human character onto this otherwise predominantly rural landscape. Settlement pattern comprises a combination of dispersed, scattered farmsteads, small villages and hamlets (several of which originate from the medieval period). Villages often display a linear pattern, following the course of road corridors. Several historic houses or halls and their associated parkland landscapes are scattered throughout this landscape. This is a predominantly rural landscape with a relatively strong sense of tranquillity throughout”.*

Definitive attributes are noted to be:

<b>Geology</b>	<ul style="list-style-type: none"> <li>• Much of the area is covered by glacial till from the Devensian period</li> <li>• Alluvium and river terrace deposits are present in the river corridors</li> </ul>
<b>Topography &amp; Drainage</b>	<ul style="list-style-type: none"> <li>• The Landscape Character Type forms a vale between the Yorkshire Dales to the west and the Cleveland Hills and North York Moors to the west</li> <li>• The land is generally low lying</li> <li>• Glacial features such as moraines and eskers create minor undulations in the landform</li> <li>• The ground rises at the vale fringes</li> <li>• A number of small rivers and becks flow through the landscape with some, such as the river Leven draining into the Tees Basin to the north</li> </ul>
<b>Land Cover</b>	<ul style="list-style-type: none"> <li>• Arable cereals and improved grassland create a complex land cover pattern</li> </ul>

	<ul style="list-style-type: none"> <li>• Smaller areas of calcareous grassland are present particularly adjacent to water courses</li> <li>• Small areas of deciduous woodland are scattered throughout the landscape</li> </ul>
<b>Enclosure/Field Pattern</b>	<ul style="list-style-type: none"> <li>• Piecemeal enclosures with irregular field boundaries are present within the Landscape Character Type particularly on areas of freer draining soil</li> <li>• Areas of planned enclosures characterised by medium sized fields and regular field patterns</li> <li>• Areas of large modern fields are common throughout the LCT</li> </ul>
<b>Settlement Pattern</b>	<ul style="list-style-type: none"> <li>• Settlement is generally concentrated on the high ground and is scattered throughout the landscape, resulting in a dispersed pattern</li> <li>• Villages frequently display a linear form, running along roads</li> <li>• Church towers and spires are prominent landmarks</li> <li>• Farmsteads are dispersed throughout the Vale with many dating from the Parliamentary enclosure period</li> <li>• Estate villages have strong individual character. Great Thirkleby, for example, contains buildings of a distinctively mid-Victorian Gothic Style</li> </ul>
<b>Visible Historic Features</b>	<ul style="list-style-type: none"> <li>• Ravensworth motte and bailey castle, water defence features, park pale and shrunken medieval village</li> <li>• Carkin Moor Roman fort and prehistoric enclosed settlement 400 m west of Carkin Moor Farm</li> <li>• Two moated sites, the site of a dovecote and further associated features to the north of Old Hall</li> <li>• Late Iron Age oppidum, Iron Age and medieval settlement, early Christian church and sculpture and post-medieval emparkment</li> <li>• Manfield Shrunken medieval village and associated field system</li> <li>• Copper mine and medieval ridge and furrow</li> <li>• South Cowton deserted medieval village, immediately south west of Cowton Castle</li> <li>• Birkby medieval settlement and associated field system, moated site and fish ponds</li> <li>• Moulton medieval settlement, field system and moated site</li> <li>• Medieval village of Lazenby</li> <li>• Little Smeaton medieval village and rabbit warrens, immediately South East of Westhorpe Hall</li> <li>• Deighton moated site</li> <li>• Harlsey Castle</li> <li>• Winton medieval settlement including fishponds and field system immediately south of Winton House</li> <li>• Sigston Castle</li> <li>• Upsall Castle</li> <li>• Medieval settlement and associated field system and post-medieval chapel, adjacent to Manor House Farm</li> <li>• Tunstall medieval settlement</li> <li>• Forcett Hall Registered Park and Garden</li> <li>• Copper mining and ridge and furrow fields at Middleton Tyas</li> <li>• Deserted medieval village at Tanton</li> <li>• Arts and crafts style estate village at East Rounton</li> <li>• Late Iron Age tribal capital and Saxon church at Stanwick</li> <li>• Designed landscape and Iron Age earthworks at Forcett</li> <li>• Ravensworth Castle</li> <li>• Deserted medieval village and church at High Worsall</li> </ul>

Forces for change have been evaluated in the LCA and are described thus:

#### *Agricultural Change and Land Management*

- Lack of management of existing broad leaved woodlands resulting in a gradual decline with a large proportion of over-mature trees and lack of young trees to replace them;
- Decline in the management and quality of hedgerows;
- Decline in the management of parkland and associated features;
- Conversion of permanent pastures to arable could potentially affect hedgerows and archaeological features including earthworks; and,
- Pollution of watercourses from adjacent arable fields.

#### *Development and Infrastructure*

- Pressures for housing along main road corridors, and on redundant airfields could affect the dispersed settlement pattern and predominantly rural character;
- In a flat landscape such as this development can often be contained by vegetation, however if the species chosen are not characteristic of the area it can cause loss of distinctiveness
- New development within historic villages may not be consistent with the historic form of the village and the vernacular materials and design of buildings; and,
- Pressure for the development of infrastructure within the vale possibly including new overhead transmission lines and cables, pipelines, roads, energy and services infrastructure.

LCT 27 is noted to be of, *“Moderate visual sensitivity as a result of the combination of open views of adjacent Landscape Character Types and sense of enclosure provided by pockets of deciduous woodland”*. Landscape and cultural sensitivity is stated to be High, *“as a result of the dispersed settlement pattern, pockets of historic parkland and predominantly rural character”*.

In terms of managing landscape change, the LCA states for the Physical and Ecological character, *“Manage, restore and thicken hedgerows for landscape structure and diversity....Ensure effective catchment management to sustain water quality....Encourage conservation of key habitats and landscape features and expand the resource through habitat restoration....Seek opportunities to revert arable farmland to permanent pasture....Create small native broadleaf woodlands....In arable areas introduce and manage arable options such as conservation headlands, pollen and nectar mixes, to encourage birds, invertebrates and rare arable plants....Restore, extend and link existing fragmented areas and broadleaf woodland and actively manage these”*. For the Cultural and Historic character it is recommended to, *“Protect the dispersed settlement pattern of villages, small hamlets and farmsteads....Minimise disturbance and damage to archaeological sites resulting from cultivation....Strengthen historic field systems and patterns through hedgerow planting and management....Conserve and enhance local vernacular through restoration of traditional farmsteads, farm buildings and cottages and use of traditional materials....Protect historic landscape features deserted medieval village, castel and moated sites....Strengthen historic landscape patterns through hedgerow restoration and management....Protect and manage parklands, retaining veteran trees and re-introducing wood pasture”*. In respect of Aesthetic and Perceptual Character the LCA notes, *“Protect the predominantly rural character and associated sense of tranquillity....Maintain key views to adjacent Landscape Character Types....Protect and enhance public enjoyment of the landscape, including appreciation of the sense of escapism it provides, through identifying opportunities to create new circular routes or links to existing public rights of way”*.

## Historic Landscape Character for North Yorkshire, York and the Lower Tees Valley

The study area for the historic landscape characterisation project includes the whole of North Yorkshire as well as the Lower Tees Valley; a total area in excess of 891,000 hectares. Within this study area the landscape is characterised into Broad Character Types within which are sub-divided into associated landscape character (HLC) types.

The site of Gayles Quarry is located within the 'Extractive' Broad Character Type, and HLC Type of 'Quarry Sandstone'. It is noted within the HLC that the area is, "*an area of inactive sandstone quarrying which consists of two quarries, with no associated buildings.... The extraction is concentrated and of a moderate scale, with sufficient legibility.*" The reference to two quarries includes a further, but disconnected, remnant sandstone extraction site to the south-east beyond the unnamed road now largely obscured by woodland. This Broad Character Type extends to the north-west up to Park Wood and to the south-east across Quarry House and adjacent fields up to Grove Gill House.

To the east and south, the Broad Character Type is 'Enclosed Land'; within the HLC type of 'Planned large scale parliamentary enclosure'. To the north there is further 'Enclosed Land', however this falls within the 'Piecemeal enclosure' HLC Type. Park Wood, to the west is Broad Character Type 'Woodland' and 'Broad-leaved plantation' HLC Type. Immediately south of Park Wood and west of Gayles Quarry, the area is also of 'Enclosed Land' Broad Character Type but noted as 'Intake' HLC Type.

## Landscape Assessment

### Landscape – Baseline

The regional LCA ('North Yorkshire and York Landscape Characterisation Project') undertaken by NYCC in 2011 is considered to furnish an appropriate, and relevant, level of detail in respect of the landscape baseline elements in accordance with the criteria noted at para. 5.4 of GLVIA3, hence no separate landscape assessment baseline has been prepared beyond a field based description of the proposed extraction site and immediate environs.

### Landscape – Sensitivity

The NCA presents a 'higher level' assessment of a larger geographical area, nonetheless key aspects of the landscape, land use and activities are noted within these assessments that contribute to the overall character of the local area.

In respect of NCA 21, the area within which the proposed extraction scheme is situated, the landscape is consistent with descriptors that include, "*large scale upland landscape*", "*wide glaciated valley with rough grazing on upper slopes*", "*remnant semi-natural broadleaved woodland on valley sides*", "*strong sense of tranquillity and remoteness*", and "*dramatic topography with wide panoramic views, making a defining contribution to sense of place*".

The northern part of the study area includes NCA 10 and NCA 22. The landscape within NCA 10 is noted as, "*a distinctive upland landscape of upland plateaux divided by broad pastoral dales*", "*a long tradition of livestock rearing combined with mining*", "*the use of local sandstone and gritstone....gives a strong vernacular character*", and "*a rich cultural history....extraction of other materials and quarrying*". With reference to NCA 22, "*a transitional landscape between the Pennine uplands to the west and Vale of York to the east....with rough grazing on the moorland edge*", "*field boundaries....hedges in lower areas*", "*a generally tranquil and rural area*", and "*vernacular buildings predominantly built of Millstone Grit*".

LCT 13 of the NYCC LCA, the assessed character type within which the proposed extraction site and immediate environs are located, describes key characteristics, “rolling landform offering extensive views”, “predominantly rural landscape”, “strong sense of tranquillity”, “a patchwork of arable and pastoral fields...hedgerow field boundaries”, “dispersed settlement pattern....linked by minor roads”, and relevant definitive attributes, “an essentially rural landscape”, “numerous small woodlands”, “fields vary from large-scale and regular to small-scale and irregular”,

The NYCC LCA notes that the landscape/cultural sensitivity of LCT 13 to be *High*, however the defining characteristics noted for this LCT do not correlate with the landscape at the proposed extraction site and immediate areas. The adjacent LCT’s, LCT 33 and LCT 27, are also described with a landscape/cultural sensitivity that is *High* (LCT 33) within the LCA report.

This appraisal notes the landscape sensitivity attributed to the locality by the NYCC LCA and, despite evidence of previous mineral workings at Gayles Quarry, subsequent regeneration has resulted in re-vegetated feature that echoes the ‘remoteness’ and ‘tranquillity’ identified by the various character assessments. Whilst there are no specific landscape designations within Gayles Quarry, or the proposed extraction area, the features of the present quarry and the rough pastureland contribute to elements of landscape character; but are likely to be replaceable in the medium term. Both the existing quarry, and immediate environs, display a strong sense of place with perceptual qualities that are potentially vulnerable. Based upon the criteria noted within the LVIA methodology at Appendix 1, landscape sensitivity at the site and immediate environs is hence considered to be *Medium/High*.

### ***Landscape – Magnitude of Effect***

In respect of direct impacts upon the landscape, the proposed extraction scheme would result in the removal, or deterioration, of areas that include trees, scrub and rough pasture. These are summarised below:

- Tree groups and individual trees – 22 number (of the total 24 number within the site area)
- Scrub – 0.71 ha
- Grassland (all types) – 0.96 ha

The remainder areas of the site consist of dense bracken and ruderal vegetation. The species rich hedgerow to the eastern boundary of the site would be retained.

It is considered that direct effects upon landscape features would not extend beyond the boundary of the proposed scheme. Indirect effects upon landscape character and setting are however, likely to occur beyond the site into the adjacent landscape.

As noted above, it is likely that the proposed extraction scheme would however, give rise to changes that are considered likely to impact upon overall landscape character at a local level; as a result of scale of change e.g. changes to the adjacent landform as a result of extraction, loss of vegetation and localised effects upon tranquillity.

Based upon field study, a comparison has been made of the potential effects, if any, upon the key characteristics noted for those LCT’s relevant to the proposed extraction scheme and within the study area to assist an appraisal of the likely magnitude of effect arising from the proposals; see Table 7.1 below.

**Table 7.1: Local Landscape Type (NYCC LCA: 2011)**

<b>LCT 13 Characteristic</b>	<b>LVIA Comment</b>	<b>Potential Nature of Effect</b>
Varied rolling landform offering extensive views.	Existing quarry set within north facing slope of rolling landscape with locally higher ground to southern edge offering panoramic views north.	Scale of proposals would not affect overall nature of landform, localised and temporary effects are likely. Panoramic views would remain.
Gently sloping landscape which forms a transition.	The proposed extraction would include removal of stone from an area of natural topography to the south and west of the existing 'bowl	Local scale effects as a result of extraction, temporary until sequential restoration takes place. Overall landform would not be affected.
Predominantly rural landscape with relatively strong sense of tranquillity.	The area has a history of mineral extraction and this activity is not incompatible within a rural landscape.	Mineral extraction and subsequent restoration would impact upon tranquillity. Short term, localised effects upon tranquillity; in particular from adjacent PRow. Presence of quarry traffic on local highway network may also have some effect.
Patchwork of arable/pastoral fields with stone wall and hedgerow boundaries.	Extraction would take place within the boundaries of the existing field system.	There would be a temporary loss of rough pasture until restoration works are complete. The overall field pattern and existing boundaries would be unaffected.
Dispersed settlement pattern.	There are few properties close to Gayles Quarry, but none within the site boundary.	Settlement pattern would not be affected by the proposals.
Mosaic of habitats support wading birds.	Evidence of breeding population of Oystercatchers to south of the site.	Wading bird populations would not be directly affected by the proposals.
Settlements contain buildings constructed of local stone.	There are few properties close to Gayles Quarry, but none within the site boundary.	Buildings of local stone would not be directly affected by the proposals.
Historic parklands and wooded estates are scattered throughout the landscape.	There are no historic parklands and/or wooded estates within or adjacent to the Gayles Quarry.	Historic parklands and/or wooded estates would not be directly affected by the proposals.
Reservoirs are key landscape features.	There are no reservoirs within or adjacent to the Gayles Quarry.	Reservoirs would not be directly affected by the proposals.
<b>LCT 33 Characteristic</b>	<b>LVIA Comment</b>	<b>Potential Nature of Effect</b>
Blanket Bog.	Not present at Gayles Quarry.	No direct effect.
Characteristic moorland vegetation composed of heather and dwarf shrubs.	There are small areas of acid dry dwarf shrub heath along the existing PRow within the site.	The habitat would be retained with no direct effect.



Flat upland plateau.	Gayles Quarry not located within this LCT.	No direct effect upon this LCT characteristic.
Important upland bird assemblages.	Breeding populations of curlew and lapwing appear to be present south of the site.	Areas used by these bird populations would be unaffected by the proposals.
Expansive, undeveloped character.	Scale of proposed development at Gayles Quarry, in relation to LCT, would be small. Extent of development would be limited and temporary.	Limited effect upon this LCT characteristic.
Open skylines and extensive views.	The proposed extraction would be primarily below natural ground level. Perimeter of site shares this characteristic.	No direct effect upon open skylines or extensive views.
Strong sense of tranquillity, remoteness throughout, associated dark night skies.	Proposed extraction would re-introduce activity to relatively remote location.	Mineral extraction and subsequent restoration would impact upon tranquillity. Short term, localised effects upon tranquillity; in particular from adjacent PRoW. Presence of quarry traffic on local highway network may also have some effect. Extent of proposed works and working hours unlikely to create major lighting effect.
Muted colours.	Nature of proposed activity unlikely to conflict with this characteristic.	No direct effect upon this LCT characteristic.
MoD ranges within plantations at north-eastern ridge.	MoD ranges located to the immediate south of the proposed extraction site.	No direct effect upon this LCT characteristic.
<b>LCT 27 Characteristic</b>	<b>LVIA Comment</b>	<b>Potential Nature of Effect</b>
Generally low lying, gently rolling landscape, several smaller river corridors.	Gayles Quarry not located within this LCT.	No direct effect upon this LCT characteristic.
Distant enclosure in views east/west by backdrop of North Yorks Moors and Yorkshire Dales.	The proposed extraction would be primarily below natural ground level.	No direct effect upon enclosure of views.
Medium to large scale agricultural landscape, network of hedgerows with hedgerow trees.	Gayles Quarry not located within this LCT.	No direct effect upon this LCT characteristic.
Dispersed settlement pattern.	No properties within this LCT close to Gayles Quarry.	Settlement pattern would not be affected by the proposals.

Use of local clays for brick making and roof tiles.	Not a characteristic of the site or immediate environs.	No direct effect upon this LCT characteristic.
A1(M) transport corridor runs north/south across landscape, exerts human influence.	Not a characteristic of the site or immediate environs.	No direct effect upon this LCT characteristic.

The proposed scheme would result in the loss of mature trees, scrubland and rough pasture; the trees and scrub are wholly contained within the existing quarry 'bowl'. A remnant, discontinuous stone wall field boundary crosses the western part of the site. Boundary vegetation to the northern extent of the existing quarry 'bowl', together with the elevated landform and escarpment, would be retained. The proposed extraction activity would break natural ground and create localised changes to topography; with consequential, if temporary, effects upon LCT characteristics. The nature of the proposed operations are such that some localised effects upon tranquillity are also likely; again, a potential conflict with LCT characteristics. Such effects are however, likely to be limited in both scale and duration, impacting only upon very few of the key characteristics or noted attributes of the relevant LCTs. Extraction activity is likely to introduce features, or elements, that may not be considered uncharacteristic e.g. mechanical plant, given the history of mineral extraction; this is noted in the description of LCT33, the adjacent landscape type that Gayles Quarry borders.

Where mitigation is possible e.g. the provision of a vegetated bund to limit potential visual effects, the nature of such a measure is potentially uncharacteristic in the rolling landform of the wider landscape. However, local topography, namely the small escarpment to the northern fringe of the site and adjacent mounds, would provide some context and visual reference for such a mitigation measure. Screen planting, in this locality, is likely to take several years to achieve an effective screen, likely beyond the lifespan of the proposed extraction and hence is not considered to be a fully effective mitigation measure; although a degree of amelioration may be anticipated. It is concluded that the Magnitude of Effect, based upon the relevant table of the appended LVIA methodology at Appendix 1, would be *Medium*.

### ***Landscape – Level of Effect***

The Level of Effect upon the landscape as a result of the proposed extraction scheme would consist of both direct, physical impacts i.e. the loss of vegetation and temporary changes to local topography, together with effects upon landscape character as a consequence of proposed extraction/restoration activity e.g. tranquillity. It is considered that such effects would be temporary, although replacement vegetation would take several years to form an effective replacement. Extraction activity is likely to introduce features that may not be considered uncharacteristic given the history of mineral extraction within the local landscape. Effects upon landscape character are similarly, not considered to be permanent and the proposed extraction would result in only a negligible loss of characteristic features. An effective restoration scheme would replace the loss of features and reinstate elements of rough pasture and biodiversity habitat. It is considered that, with reference to relevant table in Appendix 1, and consideration of the local landscape, that the Level of Effect during the operational period of mineral extraction upon the landscape would be *Moderate Adverse*.

Upon completion of restoration, residual effects are likely to reduce. Cessation of quarrying activity coupled with the establishment of a planting scheme would result in re-vegetation featuring a matrix of habitats that may contribute to landscape character. Restoration contours would differ from the original topography, particularly within the new extracted areas, but generally reflective of the bumps and hollows within the wider landscape. A consequent *Minor Adverse* residual Level of Effect is anticipated.

## 8 VISUAL ASSESSMENT

### *Visual Baseline*

An initial inspection visit was undertaken during September 2019 to define the potential visual receptors and the visual context of the proposed mineral extraction site study area. A subsequent inspection was undertaken in October 2019 to conduct a field based assessment of potential visual effects at the identified receptors, or groups of receptors, and to inform the scheme design. A further site inspection was then undertaken in July 2021 to undertake the final assessment of potential visual effects. Weather conditions during the October 2019 visit were overcast with fair to good visibility, whilst conditions during the July 2021 visit were very good with some light cloud but excellent visibility. A photographic record, to illustrate viewpoints, was taken during both the October 2019 and July 2021 inspections. Given the improved visibility at the latter visit, photographs from this inspection are used within this LVA; see Figure 3 for the location of viewpoints and Photo Sheets A to E for the views; details of the photographic equipment used to record the viewpoints are noted on the Photo Sheets.

All viewpoints visited were publicly accessible, and included local highways, footpaths, residential areas and public open space. The latter site inspection was undertaken in mid-summer hence vegetation was in full leaf, offering screening to potential views. The nature of the proposed scheme is such that the potential screening effects from vegetation in leaf, in particular roadside hedgerows and woodland planting, may be an important factor in potential visual effects, such visual effects (as noted for this appraisal) may increase during winter months.

Visual horizons have been mapped on the basis of desk top study (OS digital mapping) and verified by field inspection. The visual horizons, and consequent visual envelope, take account of physical features within the landscape including landform, woodland, hedgerows and buildings; see Visual Analysis Figure 2. Visual receptors were noted during the inspection and a record is presented in tabular form, see Appendix 3, aided by detailed annotations to describe the nature of view. The location of visual receptors is also noted at Figure 2. Views were assessed from ground level only, at eye level, from publicly accessible locations. For the purposes of this appraisal, visual receptors are grouped on the basis of location where a similar visual effect may be experienced, however the nature (sensitivity) of viewpoint i.e. residential property, commercial property, recreation ground, highway and footpath is also noted and the constituent group that make up each location are noted; the latter to ensure that the scale of potential effect is assessed. Given the extent of the study area, and number of likely receptors, the Photo Sheets illustrate representative viewpoints.

In respect of the proposed development, it is contended that visual effects beyond 3km are unlikely to be of significance hence the visual envelope, for the purposes of assessment, is limited to this distance.

Views to the north are extensive, given the elevated location of the proposed mineral extraction site and south to north slope of leading to the open landscape of the Tees valley. The visual envelope extends to the southern boundary of the A66; there are limited viewpoints north of this highway with views from Public Rights of Way, highways and residential properties effectively screened by well vegetated boundaries along the roadside. From New Lane, to the north east of Ravensworth, the visual envelope arcs eastwards encompassing open agricultural land, isolated properties and areas of mature woodland towards Whashton and Whashton Green. To the west of New Lane the visual envelope encompasses further agricultural land, local highways and scattered properties up to Dalton to the north-west. Existing features within this arc, principally local changes in topography and mature vegetation limit the extent of view towards Gayles Quarry. Views up to the site area available from within Ravensworth, the village green offers a particular vantage point, together with the Public

Right of Way that heads west from the village alongside Dalton Beck. Where views are available, they tend to be distant with the site forming part of a wider vista, backgrounded by higher ground to the south.

Due west of Gayles Quarry, a combination of mature woodland (Park Wood) effectively limits the visual horizon to a distance of circa 1km. North-east of Dalton there are a limited number properties, together with local highways, from where distant, glimpsed views are possible with more distant viewpoints at Dick Scot Lane.

The site is visually contained to the south, primarily by elevated topography. The rising land continues south into the moorland areas situated within the MoD land; hence is not publicly accessible. The rising land effectively limits views to a distance of approximately 500 metres.

To the east, the site boundary consists of a stone wall and discontinuous hedgerow with occasional mature trees along both sides of the unnamed road. The vegetation creates, particularly when in leaf, a close visual horizon, reinforced by further mature vegetation within the adjacent fields and small block of woodland east of Quarry House. Again, the rolling landscape, together with mature vegetation, effectively limits the visual horizon at the north-east to close quarters; some 400 metres at Priest Gill Bank.

In summary, it is observed that the visual horizons are closely drawn to the south, west and east, with more distant horizons to the north-east, north and north-west. Given that these horizons are primarily limited by topography and larger blocks of vegetation, it is anticipated that these will persist throughout the seasons i.e. be less affected by vegetation not in leaf.

#### ***Visual Assessment – Sensitivity***

The sensitivity of receptor is considered to vary according to the status of the visual receptor; see the appended methodology at Appendix 1. Visual receptors have been identified through both desk top study and field inspections. Within this LVIA report they are categorised thus:

High – Residential properties, Public Rights of Way.

Medium – Highways.

Low - Commercial properties, outdoor sport/recreation grounds.

The sensitivity of each receptor noted during the field inspections is detailed at Appendix 3.

#### ***Visual Assessment – Magnitude of Effect***

The scale of change associated with each receptor, based upon the criteria outlined at Table 6 of the appended methodology has been assessed. This scale of effect takes account of the context of existing view and the predicted change that will arise as a result of the proposed development (including primary mitigation); noted at Appendix 3.

For each receptor group identified a field inspection has been undertaken at the closest publicly accessible location i.e. note that no visits have been made to individual residential properties or gardens. It is accepted that the actual view from individual receptors may vary, however it is the likely nature of effect that has been considered and results in particular groupings.

#### ***Residential Receptors***

In respect of residential receptors, it is considered that the magnitude of effect would range from Negligible to Medium with worst case effects likely to be experienced at one property, Quarry House, during construction

of the perimeter screening bund to the north-east corner of the site. A Low magnitude of effect is anticipated at two receptor locations, R12 (28 and 34 to 48 The Green, off Waitlands Lane, Ravensworth) and R15 (Tofta House, Stoneygate Bank, Ravensworth) where distant views of the initial site establishment are likely. Where a Negligible magnitude of effect is assessed, this would be a result of partial and distant views (most likely in winter months), primarily during the initial establishment period. No View has been recorded from a number of residential receptor locations.

#### *Public Rights of Way/Bridleways*

At Public Rights of Way, the magnitude of effect is anticipated to range from High to Negligible. Short term effects are assessed at receptor location F1 (PRoW 20.32/5/1) located immediately adjacent to the quarry. Initial establishment i.e. construction of the screen bunds, would be visible at close range for a short period of time including works associated with a temporary diversion of the footpath. Once diverted, to the south, the High magnitude of effect would persist with views into the Phase A extraction area. Views to Phases B and C would be less intrusive from the more distant location of the diverted footpath along the southern boundary with views over the site to the distant horizon. Views into Phase C would be at relatively close distance along the western boundary.

A Medium magnitude of effect is considered at receptor location F2 (PRoW 20.32/4/2) over a short distance of footpath looking south, up the existing slopes towards the northern edge of the site where bund construction would be visible over a short duration. Low magnitude of effect is assessed at receptor locations F9 (PRoW 20.55/3/1) and F24 (PRoW 20.55/9/1). From F9 there are distant, oblique but clear views to the site where the bund construction would be visible. At F24, views towards the site are screened by a combination of topography and vegetation at the southern part of the footpath. The northern section, close to Ravensworth Castle, would receive distant, oblique and partial views of the initial site establishment, intervening vegetation screens the majority of view. In common with residential receptor locations, where a Negligible magnitude of effect is assessed, this would be a result of partial and distant views (most likely in winter months), primarily during the initial establishment period. No View has been recorded from a number of footpath locations.

#### *Highways*

At highway receptor locations, the magnitude of effect would range from Medium to Negligible, with No View recorded from a number of locations. A 'worst case' Moderate magnitude of effect is anticipated at very short sections of H18 (the unnamed track to the east of Gayles Quarry) whilst a Low magnitude of effect has been assessed at two receptor locations, H1 (Priest Gill Bank, Kirby Hill) and H14 (Stoneygate Bank). There are very limited opportunities for views from receptor H1, primarily breaks in roadside vegetation along the southern boundary of the highway to the north-east of Gayles Quarry. At receptor location H14, views to the site are available at breaks in the vegetation across the stone wall field boundary, however these are distant and oblique. A Negligible magnitude of effect is assessed at receptor locations with distant and partial views of the site primarily during the site establishment period.

#### *Parks/Recreation Areas and Community Facilities*

For Parks/Recreation Areas and Community Facilities receptor locations, the magnitude of effect was assessed as Medium at two locations, namely P2 (Ravensworth Primary School) and P3 (Ravensworth Castle). In both instances, the locations offer medium distance views up towards the site with some intervening vegetation. Construction of the northern perimeter bunds would be visible for a short duration, with activities backgrounded by higher land to the south.

### *Commercial Properties*

Turning to Commercial Property receptor locations, the magnitude of effect was assessed to range from Low to Negligible. A Low magnitude effect is anticipated at one receptor location C6 (Foxhill Caravan Park). The caravan park is bounded by extensive vegetation, however views to Gayles Quarry are possible from the southern edge of the site. Views are distant with the quarry forming one element of wider vista. Temporary site establishment, including the site access and screening bunds, is likely to be visible. A Negligible magnitude of effect is assessed at commercial property receptor locations with distant and partial views of the site primarily during the site establishment period.

### **Visual Assessment – Level of Effect**

#### *Residential Receptors*

Some 19 residential receptor locations were assessed, the level of effect ranged from Moderate Adverse to Minor Adverse. A Moderate Adverse effect was assessed from one property location, Quarry House (R1). It is noted that a 'worst case' Major Adverse level of effect, over a short period, duration construction of the screening bund to the north-east corner of the site. Following completion of the screening bund a Moderate Adverse effect is assessed, based upon filtered views through the existing vegetation along the adjacent unnamed road to the site where limited activity at the boundary of Phase A is likely to be visible, particularly in winter months. Such activity would be limited to soil/overburden stripping. Deeper excavations would be screened by intervening landform and the new screening bund. Removal of the screen bund and final restoration would be visible at the north-east corner of the site, the new woodland area established to the east of Phase A would form a screen to further views.

Moderate Adverse effects are assessed at two residential receptor locations, R12 (28 and 34 to 48 The Green Ravensworth), and, R15 (Tofta House). These are considered to be 'worst case' effects experienced during site establishment. Following completion of the screening bunds, the seeded slopes would become less prominent with extraction activity screened from view. Final restoration activity would be visible but over some distance.

A Minor Adverse level of effect is assessed at six receptor locations, R5 (Gayles Field, Low Lane, Dalton), R6 (Broaches House, Low Lane. Dalton Grange, Dunsa Manor, Dick Scot Lane), R7 (Low Fields, Sikelands Farm, East Dalton Fields, Old Dunsa Bank, Green Bank Farm), R9 (Mainsgill Farm: dwelling), R13 (30, 32, 50 – 58 The Green, 39 Flats Bank, 4 Mill Court, Ravensworth), and, R14 (41 – 53 Waitlands Road, Ravensworth). The visual effects would arise as a result of distant and partial views, primarily during site establishment and final restoration activity.

#### *Public Rights of Way/Bridleways*

Potential visual effects were assessed from 25 Public Right of Way/Bridleway receptor locations. A worst case Major Adverse level of effect has been assessed at one location, receptor F1 (PRoW 20.32/5/1). The eastern part of this footpath is located immediately adjacent to site, where close proximity, clear views of initial operations would be visible; namely construction of the diverted route and adjacent screen bunds. The footpath would be temporarily diverted further south, at higher elevation, with intermittent views of workings; in particular the access track into the quarry and Phases A and C. The higher elevation of the footpath would offer views to the north over the quarry area. More limited views are available from the western section of the existing footpath due to intervening topography and the screening effect of Park Wood. Restoration works would also be visible at close distance and the retained bunds to the north and north-eastern corner may screen views north from limited sections of the reinstated footpath.



A Moderate Adverse level of effect is anticipated at three receptor locations, F2 (PRoW 20.32/4/2), F9 (PRoW 20.55/3/1), and, F24 (PRoW 20.55/9/1). At receptor location F2, views from the footpath close to Slip Inn Bank are screened by intervening topography, however clear views are available from the central section of the path, along 200 metre contour line, where initial site establishment works including new screen bunds would be visible. At F9, there are clear views south towards the site from that section of footpath in open fields adjacent to Dalton Beck i.e. west of Ravensworth. The site is backgrounded by higher land but distant views of site establishment and construction of screen bunds would be available. Further west, views are screened by vegetation. At receptor location F24, in particular the northern section of footpath close to, and east of Ravensworth Castle, there are distant but oblique views up to the site; although intervening mature trees limit the extent of view. Where visible, the site is backgrounded by higher land, however initial site establishment to the northern edge of the site together with final restoration, would be visible. Upon completion of the screening bunds, activity within the quarry would be effectively screened from view. The southern section of receptor F24, consists of the footpath rising up towards Slip Inn Bank from the open fields immediately south of Ravensworth Castle. For this section of footpath, views are screened by a combination of topography and vegetation.

Minor Adverse effects are assessed at a further nine receptor locations, namely F8, F10, F11, F12, F14, F15, F17, F18, and F19. Again, the anticipated level of effect arises from distant and partial views, primarily during site establishment and final restoration activity.

#### *Highways*

Eighteen highway receptor locations were assessed with the level of effect ranging from Minor Adverse to Negligible Adverse. A Moderate Adverse effect has been assessed at H18 (the unnamed track to the east of Gayles Quarry). Views to site from H18 are largely screened by intervening topography, stone boundary wall and roadside vegetation. There are two, short sections of the track with partial views into site, adjacent Quarry House and where track turns to south-east adjacent proposed quarry entrance. A screen bund is proposed adjacent to the latter location, however the initial site establishment and vehicle movements would be visible. The bund would screen views into extraction area with the proposed woodland adjacent to Phase A supplementing existing vegetation to also screen views. A Minor Adverse effect was assessed at two locations, H1 (Priest Gill Bank) and H14 (Stoneygate Bank).

At receptor location H1, there are limited views from the highway. Further east, towards Kirby Hill, intervening topography and vegetation screens views of the site. Closer to the site, to the north-east, there are breaks in the roadside hedgerow along the southern boundary of highway from which glimpsed views are available. At the closest viewpoint, a field entrance, there would be views to north-east corner with site establishment works (including bund construction) visible over Quarry House. Intervening vegetation, mature trees along unnamed track leading uphill to Quarry House effectively screens further views.

From receptor location H14, close to Ravensworth, there are views to the site looking south-west where construction of screening bunds to northern perimeter of site and final restoration would be visible. Intervening vegetation along the roadside, and built form (Ravensworth Castle), creates a partial screen to views.

#### *Parks/Recreation Areas and Community Facilities*

Four Parks, Recreation Areas and Community Facilities receptors were identified and assessed with a Minor Adverse level of effect noted at receptor locations P2 (Ravensworth Primary School) and P3 (Ravensworth Castle). Both locations are situated to the fringe of Ravensworth with views looking south up towards the higher ground at Gayles Quarry. Views from the school grounds are also partially screened by adjacent, mature

vegetation. The receptors are relatively distant with the quarry forming part of a wider vista. Construction of the northern screening bunds are likely to be the most visible activity with subsequent extraction screened from view. There would also be views to the final phase of restoration, as the bunds are removed.

#### *Commercial Properties*

A total of twelve commercial properties were assessed for potential visual effects with the level of effect ranging from Minor Adverse to Negligible Adverse.

A Minor Adverse level of effect is anticipated at just one receptor location, C6 (Foxhall Caravan Park, New Lane, Ravensworth). The caravan park is bounded by extensive vegetation, however views to Gayles Quarry are possible from the southern edge of the site, looking across Ravensworth. At this receptor location views are distant, with site forming one element of wider vista. Temporary construction work to create both the internal site access and screening bunds to the northern fringe of the site would be visible.

Negligible Adverse effects are likely at four receptor locations, C3 (Sykelands Grange Self Catering Accommodation, Dick Scot Lane, Dalton), C4 (Greenbank Barns, Waitlands Lane, Ravensworth), C5 (Foxhall Caravan Park, New Lane, Ravensworth), and C7 (Mainsgill Farm Shop, A66). All four locations are situated to the north at some distance from the site with oblique and/or partial views of the site. The site forms a small element within a wider vista at these locations. The initial site establishment, partial views of the soil/overburden stripping to the southern fringes of Phases A, B and C, together with final restoration activity likely to be visible.

## **9 CUMULATIVE ASSESSMENT**

A search has been undertaken of planning applications, and subsequent decision notices where relevant, for similar development (minerals and waste) that lie within or immediately abuts the study area i.e. a radius of 3km from the site centre to coincide with the visual envelope; note that we exclude smaller applications (such as extensions to residential properties) or smaller, temporary applications. The period of search has encompassed the last five years i.e. that period within which approved schemes would be expected to have been completed or construction begun. Recently validated, up to the end of September 2021 (preparation of data for draft reporting, applications have also been included during the search of the NYCC online planning register.

As a result of the planning search, no sites of similar development appear to be approved/validated within the study area. The closest site approval being the grant of a 10 year extension up to 2026, (Ref C1/29/15P/CM dated 30<sup>th</sup> October 2020) to the existing extraction at Forcett Quarry, East Layton (on behalf of Hanson Quarry Products) located some 4.9 kms to the north-east.

The closest working quarry is Forcett Quarry, located beyond the study area.

No other suitable sites, or prospective development, have been identified for cumulative assessment.

## **10 MITIGATION STRATEGY**

To mitigate the potential effects, both landscape and visual, that may arise as a result of the proposed scheme, a strategy has been considered and incorporated within the illustrative layout. This strategy consists of 'primary or embedded mitigation', namely the inclusion of mitigation measures as an integral part of the scheme proposals including the operational design to avoid and/or reduce potential landscape and visual

effects. Operation includes both site establishment and phasing operations. As a result, a number of mitigation measures have been included to address potential effects, described in Table 10.1 below.

**Table 10.1: Proposed Mitigation Measures**

PROPOSED MITIGATION	RATIONALE
Limit visual effects through retention of existing topography	<p>The existing, vegetated spoil heaps to the northern fringe of the existing 'bowl' would be retained to afford screening.</p> <p>The proposed extraction area would be limited to the north-east hence be located within higher ground.</p> <p>The phasing sequence would maximise the screening potential of unworked ground i.e. so that operations progress 'behind' natural ground with removal of the remainder part of a particular phase consisting of the final, short duration operation.</p>
Retain existing boundary hedgerows and trees.	<p>To maintain existing landscape features, historic field boundaries and visual screening to minimise potential impacts upon the landscape and visual receptors.</p> <p>To maintain key characteristics identified within LCT 13 and LCT 27. To promote the intentions of managing landscape change within LCT 13.</p>
Retain existing vegetation and landform to northern boundary of the proposed extraction area.	To maintain existing landscape feature, i.e. topography, and visual screening to open landscape north of the site. Minimise potential impacts upon the landscape and visual receptors.
Provision of a vegetated bund to the north and north-eastern boundary.	<p>To address views, and potential visual effects, from PRoW number 20.32/4/2, the hamlet of Gayles, and Slip Inn Bank.</p> <p>The bunds are designed to reflect local topography for landscape integration.</p> <p>To create a vegetated boundary that would link visually and physically to mature vegetation along the northern extent of the proposed extraction area.</p>
Reinforcement of the eastern site boundary, currently a hedgerow with occasional trees, with new planting, during site establishment, to create a new, permanent woodland area, with the inclusion of some evergreen element to improve winter months screening.	To address views from the eastern edge of the site to the closest residential property.
Adjacent Public Right of Way (20.32/5/1).	The Public Right of Way would be temporarily re-routed further south, at a higher elevation, during the works to create a distance between the working area and publicly

	accessible route. Views would tend to be over and across the working quarry.
Provision of a vegetated bund to the south-eastern corner of the site.	To address views from the adjacent track, also used by walkers, into the vehicular access and extraction area.  The bund is designed to reflect local topography with massing/orientation to intercept views into the extraction area from the adjacent unnamed track.
Provision of tree and shrub planting, native species where appropriate, within the proposed mitigation scheme.	Restoration planting would consist of native species, with an emphasis upon local provenance, characteristic of North Yorkshire to maintain local character features and biodiversity.  A woodland belt along the eastern boundary of the site would be established in the early part of the scheme and retained to compensate for the loss of trees.
Restoration landform rationale	The restoration landform aims to create a balance of restored contours that are close to existing in order to maintain an element of rough pasture, together with quarry faces/open areas that are suitable for habitat creation to increase biodiversity. The establishment of heathland/grassland to the screening bunds would result in retention of all but the southernmost bund to facilitate continued value from these habitats.

In liaison with the project Ecologist, a restoration strategy that incorporates the measures noted in Table 10.1 above has been created. The site restoration aims to incorporate a range of biodiversity/landscape features considered appropriate to the location and intended end use. The proposed key features are:

- Extensive wildflower grassland suitable for informal grazing based upon proposed restoration contours across the majority of the site;
- Retention of some extraction area within the central portion of the site with some re-profiling to create varied contours/slopes with natural revegetation to form an open mosaic habitat;
- Woodland belt to the eastern boundary, planted in the early stages of scheme implementation, retained as a permanent feature, fringed with neutral grassland. Both areas subject to management;
- Retained screening bund to the north-west restored to heathland adjacent to retained acid grassland/heathland present to the western edge of the site;
- Further restored acid grassland/heathland to the north-west of the extraction area to link existing/restored acid grassland areas;
- Further open mosaic habitat across the northern extent of the site to incorporate both disturbed and undisturbed areas, natural revegetation in this area; and,
- Retained northern screening bunds with developing wildflower grassland.

The proposed landscape mitigation strategy masterplan is illustrated at Figure 4.

## 11 CONCLUSIONS

A landscape and visual impact appraisal has been undertaken for the proposed extraction and restoration scheme at Gayles Quarry. The appraisal has, in accordance with the appended methodology, considered the key features that contribute to the local landscape, including physical characteristics of the site, immediate environs and landscape character, together with an assessment of the visual context and potential visual effects; with particular reference to local visual receptors. Relevant, reference documents e.g. the North Yorkshire and York Landscape Characterisation Project, have been considered in order to identify the key attributes and value of the local landscape together with the context of the proposed extraction site. The potential for cumulative effects has also been considered.

The landscape is considered to be of *Medium/High* sensitivity. The proposed development would not be uncharacteristic of features within the existing landscape, the area has a history of mineral extraction with ongoing mineral extraction (outside the study area but noted in this report) hence would not introduce 'new' features within the existing LCT. There would be limited removal of landscape features with negligible, and temporary, loss of features that contribute to landscape character. Tree loss would be compensated by the establishment of a new woodland belt along the eastern boundary of the site. Both vegetation and, to a limited extent, landform would be reinstated as part of the restoration scheme hence the proposed mineral extraction is considered to result in a *Low/Medium* magnitude of effect. Consequently, the level of effect upon the landscape during operation is considered to be *Moderate Adverse* with a *Minor Adverse* residual effect upon completion of restoration.

The location and orientation of the site is such that there are relatively few viewpoints close the existing quarry. A combination of intervening topography and mature vegetation form an effective screen. There are notable exceptions, footpath receptor F1 (PRoW 20.32/5/1) located immediately adjacent to the site is likely to receive worst case, *Major Adverse* visual effects during initial site establishment as works are undertaken to re-route the footpath away from the proposed working area and during extraction activity at Phases A and C. Final restoration would also be visible at close distance. The retained bunds to the north of the site, in particular the one to the north-eastern corner, may screen views over limited sections of the reinstated footpath. Just one residential receptor, H1 (Quarry House), is anticipated to receive a *Moderate Adverse* level of effect, however a 'worst case', very short term *Major Adverse* may be experienced during construction of the screen bund to the north-east corner of the site. It should be noted that the property is orientated north/south with just one window directly overlooking the adjacent unnamed road, and hence the north-east corner of the site. Views from the edge of the property/garden at the vehicular entrance to the property are possible but the site is largely screened from view. Further *Moderate Adverse* levels of effect are assessed for views from a short section of highway receptor H18 (unnamed track adjacent to Gayles Quarry), footpath receptors F2 (PRoW 20.32/4/2), F9 (PRoW 20.55/3/1), and, F24 (PRoW 20.55/9/1), such effects are anticipated to be short term during initial site establishment with extraction activity screened by perimeter bunds and final restoration less intrusive.

Views from local settlements, to the east and west, tend to be screened by intervening topography, however some views would be possible from the more distant Ravensworth to the north. A combination of intervening topography and mature vegetation also limits views from the wider footpath network and highways. Where views are possible, they are likely to be glimpsed, partial and/or oblique hence the level of effect is assessed to be minor or negligible.

In respect of visual effects, it is contended that those receptors assessed as likely to receive higher visual effects are limited in number and likely to experience such effects over a short period of time. The proposed mitigation, namely perimeter bunds, would effectively screen the longer-term mineral extraction activity.

The proposed mineral extraction scheme includes primary (embedded) mitigation, primarily perimeter bunds which would be shaped to reflect local topography and vegetated. These bunds would provide a key screening effect to mineral extraction activity, from viewpoints to the north, north-west and north-east in particular. The majority of bunds would be retained, with anticipated biodiversity interest, and integrated into the restoration scheme. A new, permanent woodland area is proposed to the east of Phase A to be established early in the scheme programme. This woodland would, over time, create an effective screen to local visual receptors; notably, Quarry House and the adjacent unnamed road. The woodland would also offer visual continuity to existing, local woodland, compensatory planting for lost trees and additional habitat.

## 12 REFERENCES

Chris Blandford Associates/North Yorkshire County Council: North Yorkshire and York Landscape Characterisation Project (May 2011)

Landscape Institute/Institute of Environmental Management and Assessment: Guidelines for Landscape and Visual Impact Assessment; Third Edition (2013)

The Landscape Institute: GLVIA3 Statement of Clarification 1/13 (June 2013)

Natural England: National Character Areas (England); NCA 21 Yorkshire Dales (2015), NCA 10 North Pennines (2013), and NCA22 Pennine Dales Fringe (2015)

North Yorkshire County Council: Minerals and Waste Local Plan, Consultation Draft (originally published in November 2016)

North Yorkshire County Council: 'Historic Landscape Character' project for North Yorkshire, York and the Lower Tees Valley (December 2010)

North Yorkshire County Council: Minerals Plan (1997)

Richmondshire Council: 'Richmondshire Local Plan 2012-28' Core Strategy (December 2014)

### **Web based resources**

Google Earth Pro

MAGIC.gov.uk

North Yorkshire County Council 'Rights of Way'





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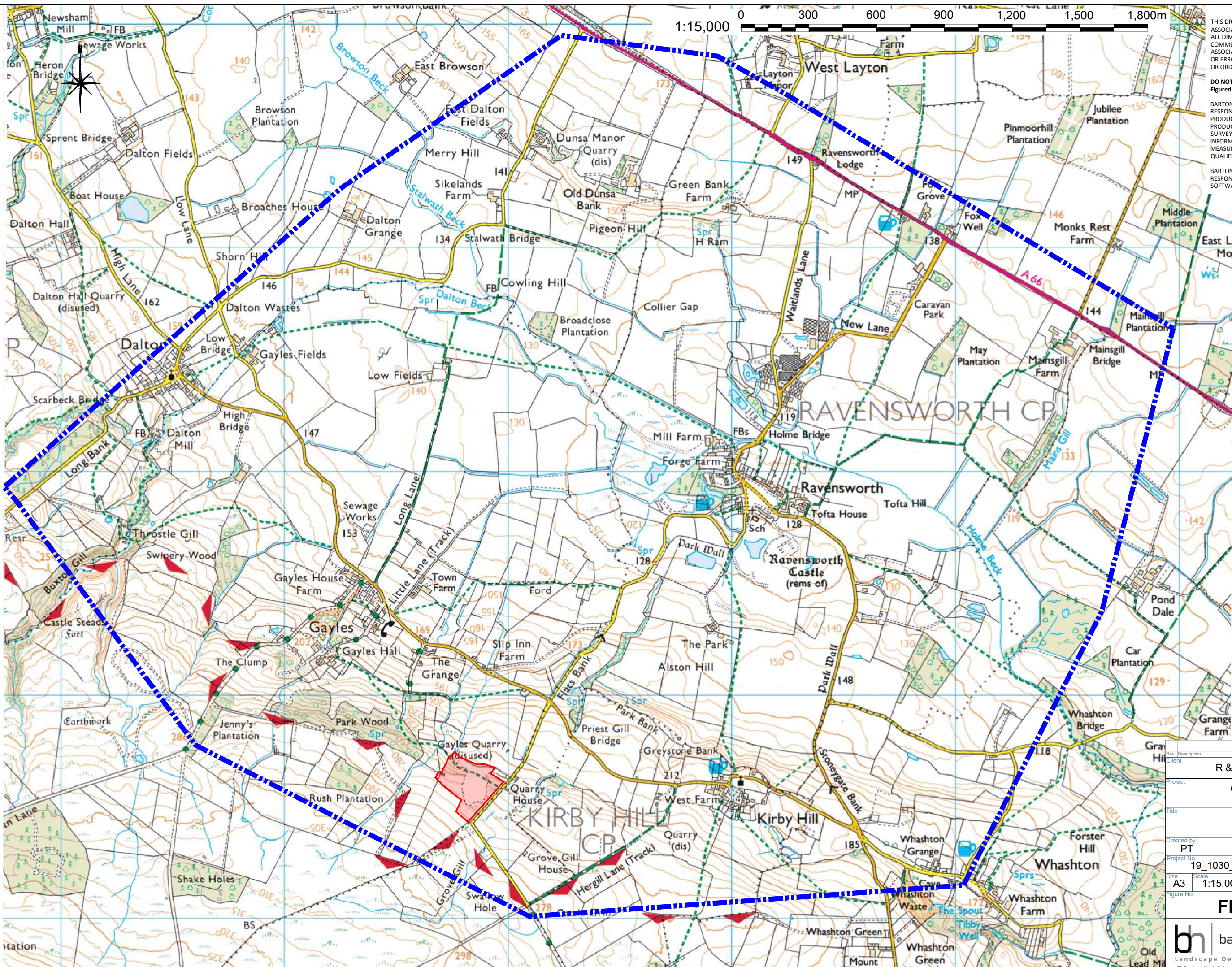
## FIGURES



1:15,000 0 300 600 900 1,200 1,500 1,800m

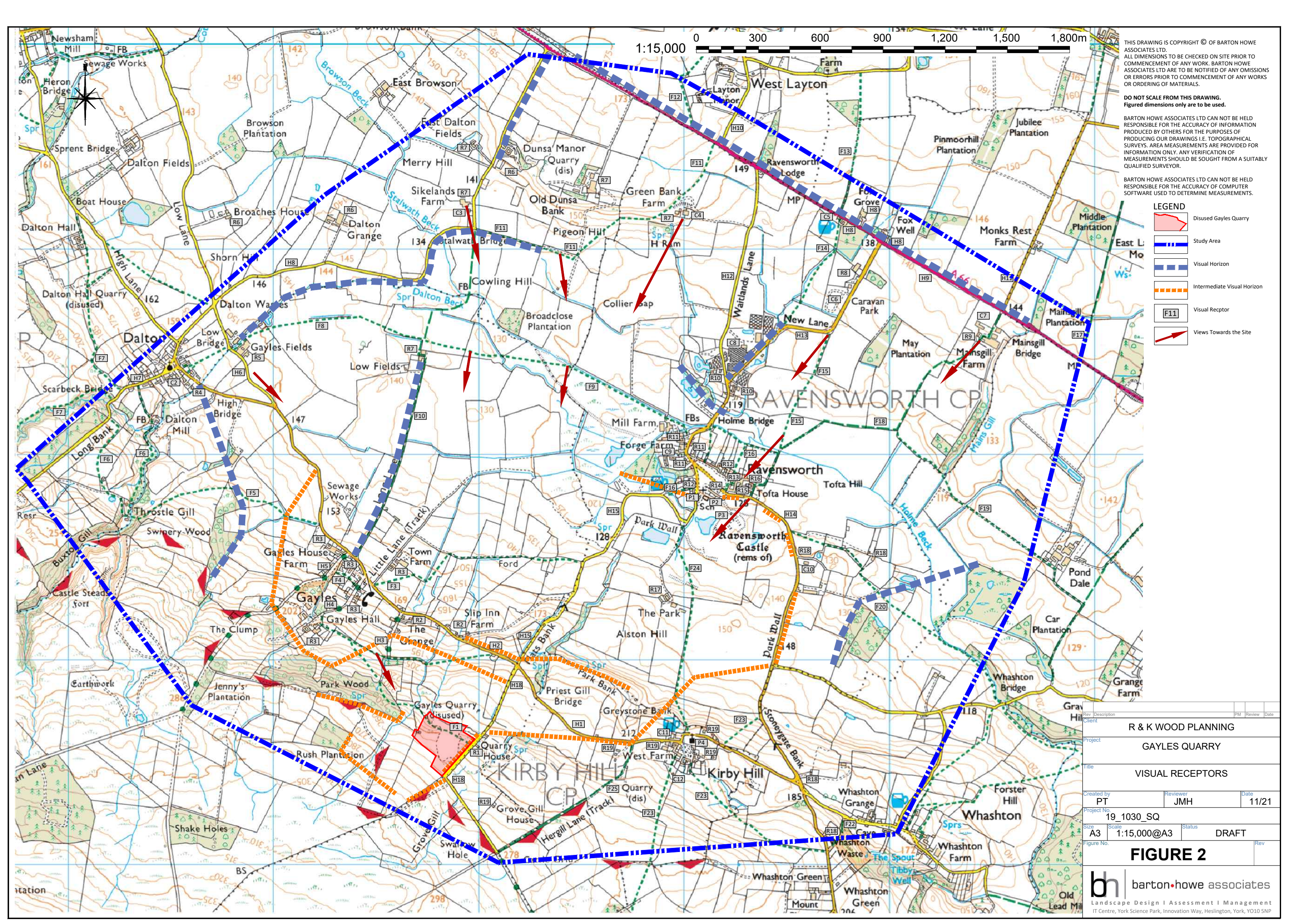
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**LEGEND**  
 Disused Gayles Quarry  
 Study Area



Rev	Description	PM	Review	Date
Client	R & K WOOD PLANNING			
Project	GAYLES QUARRY			
Title	LOCATION PLAN			
Created by	Reviewer	Date		
PT	JMH	11/21		
Project No.	19_1030_SQ			
Size	Scale	Status	DRAFT	
A3	1:15,000@A3			
Figure No.	<b>FIGURE 1</b>			





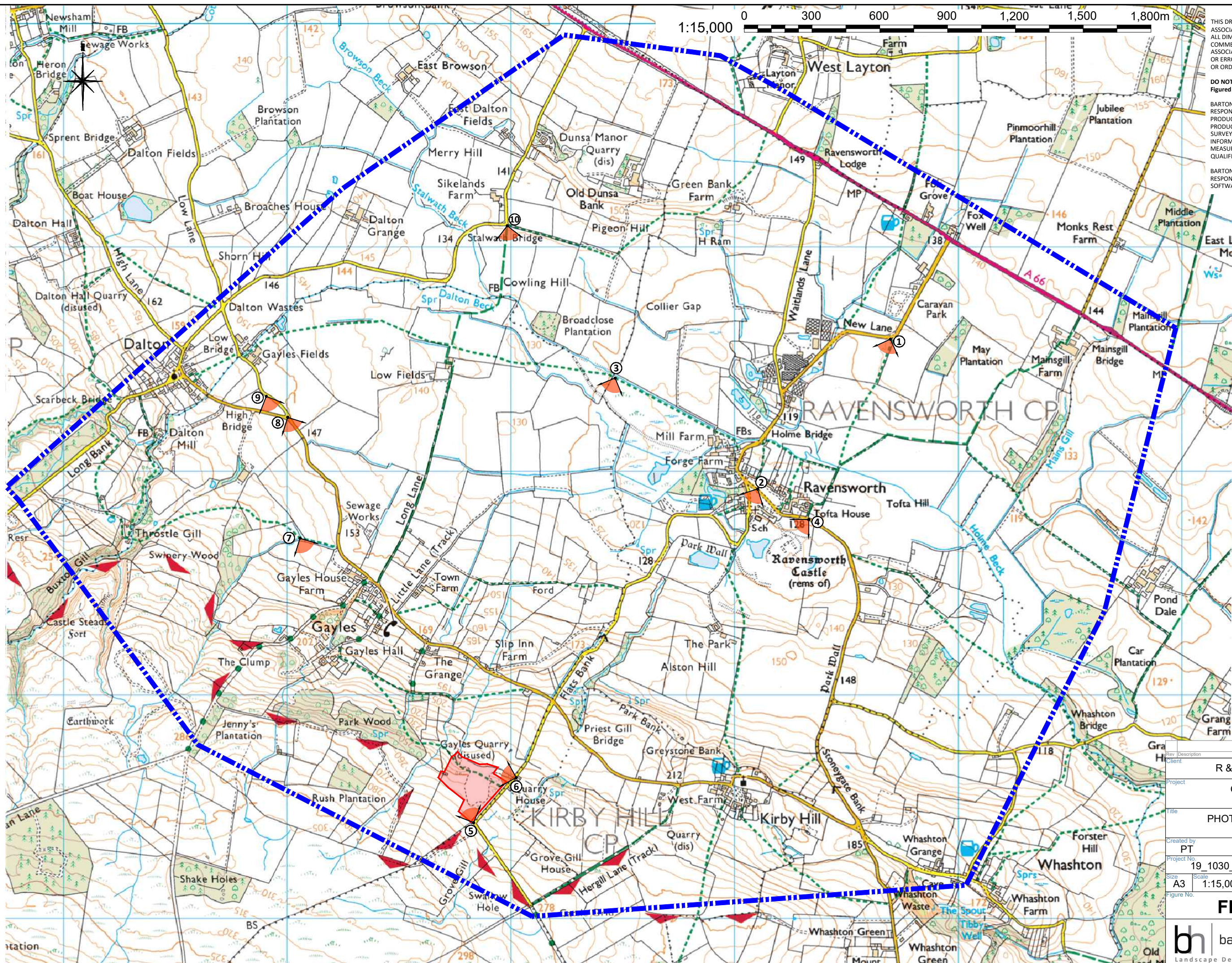
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- LEGEND**
- Disused Gayles Quarry
  - Study Area
  - Visual Horizon
  - Intermediate Visual Horizon
  - F11 Visual Receptor
  - Views Towards the Site

Client	R & K WOOD PLANNING	
Project	GAYLES QUARRY	
Title	VISUAL RECEPTORS	
Created by	Reviewer	Date
PT	JMH	11/21
Project No.	19_1030_SQ	
Size	Scale	Status
A3	1:15,000@A3	DRAFT
Figure No.	Rev	

**FIGURE 2**








1:15,000 0 300 600 900 1,200 1,500 1,800m

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**LEGEND**

-  Disused Gayles Quarry
-  Study Area
-  Photograph Location

Rev	Description	PM	Review	Date
Client	R & K WOOD PLANNING			
Project	GAYLES QUARRY			
Title	PHOTOGRAPH LOCATIONS			
Created by	PT	Reviewer	JMH	Date
Project No.	19_1030_SQ			
Size	A3	Scale	1:15,000@A3	Status
Figure No.	FIGURE 3			DRAFT







## PHOTO PLATES



Description of View: View from public footpath close to New Lane, looking south. Built form at Ravensworth can be identified at the middle point of the photograph. The site is located below the horizon to the south-west of this viewpoint., backgrounded by higher land and vegetation.

Camera and View Details:  
 Sony Alpha7/50mm focal length lens  
 Field of View: 47 degrees  
 Date/Time of Photo: 29.07.21/11.29 am

Viewpoint Location: PRow20.55/13/1  
 Ravensworth  
 GPS: Lat 54.2820673; Long -1.4628799  
 OS Elevation: 138m

P1



Description of View: Looking south-west to the front of property number 38 at The Green. This view looks directly towards the site which is situated below the horizon with some mature vegetation screening part of northern and eastern edges of the site.

Camera and View Details:  
 Sony Alpha7/50mm focal length lens  
 Field of View: 47 degrees  
 Date/Time of Photo: 29.07.21/11.45 am

Viewpoint Location: Ravensworth Green,  
 across Waitlands Road  
 GPS: Lat 54.2758926; Long -1.4659518  
 OS Elevation: 131m

P2





Description of View: View from public footpath to the west of Ravensworth alongside Dalton Beck looking south towards the site. The site forms a small element of the distant view with some screening provided by vegetation close to the site.

Camera and View Details:  
 Sony Alpha7/50mm focal length lens  
 Field of View: 47 degrees  
 Date/Time of Photo: 29.07.21/11.55 am

Viewpoint Location: PRow20.55/3/1  
 Ravensworth  
 GPS: Lat 54.2810493; Long -1.4721551  
 OS Elevation: 122m

P3



Description of View: Looking south from Stoneygate Bank across the open fields around Ravensworth Castle. The site is situated in the distance below the horizon with some mature vegetation screening part of north-eastern and eastern edges of the site.

Camera and View Details:  
 Sony Alpha7/50mm focal length lens  
 Field of View: 47 degrees  
 Date/Time of Photo: 29.07.21/12.04 pm

Viewpoint Location: Stoneygate Bank,  
 Ravensworth adjacent Ravensworth Castle  
 GPS: Lat 54.2755003; Long -1.4651717  
 OS Elevation: 135m

P4





Description of View: View from track adjacent to the site entrance looking north-west with extensive views across the open countryside beyond. Vegetation and walls screens some views into the site. Proposed screen bunding, to limit views of the access track into the quarry 'bowl' would obstruct this view for the duration of the works.

Camera and View Details:  
 Sony Alpha7/50mm focal length lens  
 Field of View: 47 degrees  
 Date/Time of Photo: 29.07.21/12.32 pm

Viewpoint Location: Unnamed track adjacent the site entrance, Gayles  
 GPS: Lat 54.2711014; Long -1.4812345  
 OS Elevation: 267m

P5



Description of View: Looking due west from the entrance gate to Quarry House. The site is partially visible through and beyond the existing vegetation. At this viewpoint just the north-eastern edge of the site would be visible with short duration of works to create the northern perimeter bund visible on the horizon; to screen subsequent activity. Views to the south-west are partially screened by vegetation along the unnamed track and topography beyond.

Camera and View Details:  
 Sony Alpha7/50mm focal length lens  
 Field of View: 47 degrees  
 Date/Time of Photo: 29.07.21/12.38 pm

Viewpoint Location: Unnamed track, photo adjacent entrance gate to Quarry House  
 GPS: Lat 54.2717464; Long -1.482396  
 OS Elevation: 236m

P6





Description of View: Footpath slightly elevated relative to adjacent highway, view looking south-east across western extent of Gayles. View to site screened by a combination of topography, built form and vegetation.

Camera and View Details:  
 Sony Alpha7/50mm focal length lens  
 Field of View: 47 degrees  
 Date/Time of Photo: 29.07.21/12.44 pm

Viewpoint Location: PRoW20.32/6/1, Gayles  
 GPS: Lat 54.2751332; Long -1.4848624  
 OS Elevation: 160m

P7



Description of View: looking south-east from Low Lane and High Lane, Dalton. Views to site are largely screened by roadside vegetation heading towards Gayles, but with some glimpsed views from highway.

Camera and View Details:  
 Sony Alpha7/50mm focal length lens  
 Field of View: 47 degrees  
 Date/Time of Photo: 29.07.21/12.49 pm

Viewpoint Location: Low Lane, Dalton  
 GPS: Lat 54.2810025; Long -1.4858867  
 OS Elevation: 150m

P8





Description of View: looking south-east from Low Lane adjacent to Gayles Fields. Very distant view of site which is backgrounded by higher land and vegetation to horizon.

Camera and View Details:  
 Sony Alpha7/50mm focal length lens  
 Field of View: 47 degrees  
 Date/Time of Photo: 29.07.21/12.52 pm

Viewpoint Location: Low Lane, Dalton  
 GPS: Lat 54.2813893; Long -1.495480  
 OS Elevation: 155m

P9



Description of View: looking south across open countryside towards the site. Site is visible in distance but part of wider vista and backgrounded by higher land. Eye level views further east from this public right of way partially screened by walls and topography.

Camera and View Details:  
 Sony Alpha7/50mm focal length lens  
 Field of View: 47 degrees  
 Date/Time of Photo: 29.07.21/14.06 pm

Viewpoint Location: Bridleway 20.18/13/1  
 off Dick Scot Lane  
 GPS: Lat 54.2837777; Long -1.484646  
 OS Elevation: 140m

P10



# APPENDICES

# **APPENDIX 1**

## LVIA Methodology

## Landscape and Visual Impact Appraisal Methodology

### METHODOLOGY

This appraisal methodology based upon the principles of 'Guidelines for Landscape and Visual Impact Assessment' (3<sup>rd</sup> Edition) Landscape Institute/Institute of Environmental Management and Assessment. The methodology is a means to, "... identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and visual amenity" (Page 4, para 1.1).

This appraisal methodology, prepared for non EIA projects, is considered to be compliant with the GLVIA3 Statement of Clarification 1/13 (dated June 2013).

This appraisal methodology considers both the landscape and visual effects as distinct elements. Both elements are studied in a comparable process:

**Baseline Assessment** – the provision of an assessment relating to the baseline (existing) conditions both within and around the project site as a result of both desk top study and field inspection. In order to consider visual effects a baseline area of study i.e. the extent of visibility, is determined with visual receptors identified and, where publicly accessible, visited. Relevant, landscape planning, statutory and non-statutory designations are also identified.

**Landscape Appraisal** – the sensitivity of landscape receptors is determined, as a result of their recognised value i.e. designation, features and condition. The likely nature and scale of change upon the physical landscape resource and/or landscape character resulting from the proposed development is considered to appraise the potential magnitude of effect. The resulting level of effect can be positive (beneficial), neutral or negative (adverse).

**Visual Appraisal** – the sensitivity of visual receptors is determined as a result of the location, extent (geographical) of visibility and differing groups of people or nature of user e.g. residential, and/or the activity of user e.g. visitor to a recognised viewpoint. The nature of change to a visual receptor determines the potential magnitude of effect. The resulting level of effect can be positive (beneficial), neutral or negative (adverse).

The sensitivity of both landscape and visual receptors is summarised in the following section.

#### *Sensitivity of Landscape and Visual Receptors*

The sensitivity of a landscape receptor recognises the ability of this resource to accommodate change or accept new features without significant, detrimental effects upon the essential character or existing features of the landscape. This sensitivity is defined at three levels, High, Medium and Low; where High is the most sensitive.

The sensitivity of a visual receptor recognises the susceptibility to change based principally upon the activity undertaken at that viewpoint. This potential change at differing visual receptors i.e. residential, place of work, recreational, together with visual amenity, also recognises the likely nature of exposure e.g. is the view a major focus of the viewpoint or is the receptor transient.

The typical range of determinants for both landscape and visual receptors are noted in the following table. Where a particular viewpoint includes more than one receptor type, that likely to be of greatest sensitivity is employed for the purpose of this appraisal methodology i.e. the worst case scenario.

	<b>Landscape Receptor</b>	<b>Visual Receptor</b>
<b>High Sensitivity</b>	Where the landscape resource/character is of high value e.g. National Parks, Registered Parks and Gardens and/or susceptible landscape characteristics, features or perceptual qualities and strong sense of place i.e. features that make a strong/positive contribution to landscape character and would take a considerable time to replace	Locations where people are engaged in an activity or occupation where their attention or interest may be focussed upon views or visual amenity e.g. residents, walkers, visitors to heritage assets, designated viewpoints and/or views with an emphasis upon the landscape
<b>Medium Sensitivity</b>	Where the landscape resource/character is of moderate value e.g. Locally designated landscapes and/or moderately susceptible landscape characteristics, features or perceptual qualities i.e. features that contribute to landscape character but would be replaceable in the medium term	Locations where people are engaged in an activity or occupation that includes an interest in views and visual amenity e.g. outdoor recreation such as cyclists, scenic routes, general road/rail users, those engaged in outdoor work (i.e. farmers) and schools/colleges including their outdoor spaces
<b>Low Sensitivity</b>	Where the landscape resource/character is of low value e.g. degraded landscapes with a predominance of detracting elements and/or limited susceptibility and poor sense of place, with features that would be easily replaceable and generally offers scope for enhancement	Locations where people are engaged in an occupation or activity with limited or minimal focus upon views or visual amenity e.g. retail and industrial workers, commuter routes. Also where views do not contribute to the quality of working life e.g. outdoor sports (users and spectators), where views are not a key characteristic

### *Magnitude of Effect to Landscape and Visual Receptors*

The magnitude of effect evaluates the size, scale, extent and duration of potential change to the landscape receptor. This potential change may include the loss or addition of new features, including those features that contribute to landscape character, in relation to the scale or size of development. The extent, in geographical terms, would include potential changes to the site only or beyond i.e. setting at a larger scale. Duration considers the period of development and consequent changes to the landscape e.g. minerals development may be short term and result in landscape restoration. For the purposes of this methodology, short term is considered be up to five years duration, medium term from 5 to 10 years and long term 10 to twenty years.

In respect of visual effect, the degree of change from the existing view, distance of receptor from the project site and the duration of effect contribute to the magnitude of effect.

For both landscape and visual receptors, the magnitude of effect is appraised at three levels:

	<b>Landscape Receptor</b>	<b>Visual Receptor</b>
<b>High Magnitude of Effect</b>	A total loss of, or large scale alteration to, key features/characteristics of the landscape resource and/or introduction of dominant elements as a result of the proposed development considered to be uncharacteristic of the receiving landscape	A total loss of, or large scale alteration to, key features/characteristics of the view/visual amenity and/or introduction of dominant elements as a result of the proposed development considered to be uncharacteristic of the existing view/visual amenity
<b>Medium Magnitude of Effect</b>	A moderate/partial loss of, or large scale alteration to, key features/characteristics of the landscape resource and/or introduction of prominent elements as a result of the proposed development but may not be considered uncharacteristic of the receiving landscape	A moderate/partial loss of, or large scale alteration to, key features/characteristics of the view/visual amenity and/or introduction of prominent elements as a result of the proposed development but may not be considered uncharacteristic of the existing view/visual amenity
<b>Low Magnitude of Effect</b>	A minor loss of, or small scale alteration to, key features/characteristics of the landscape resource and/or introduction of elements as a result of the proposed	A minor loss of, or small scale alteration to, key features/characteristics of the view/visual amenity and/or introduction of elements as a result of the proposed development considered to

	development considered to be characteristic of the receiving landscape	be characteristic of the existing view/visual amenity
--	--	---

There are instances where the magnitude of effect may be considered 'Negligible' or that 'No Change' would result from the development proposals. In respect of Landscape Resources this may be the result of a development that results in such a minor loss of features or introduces elements characteristic of the existing situation hence the potential effect can be classified as 'Negligible' or where no change to the Landscape Resource is anticipated then 'No Change' may be attributed.

The potential magnitude of effect upon visual receptors can be similarly defined. Where the proposed development would be at such a distance from a receptor or result in a change that is largely indiscernible, and would hence have little effect upon a view, then a 'Negligible' effect may result. Where no change to the existing view can be discerned then 'No Change' may be attributed.

#### *Level of Effect to Landscape and Visual Receptors*

The Level of effect is considered to be the result of interaction between the sensitivity of receptor and the anticipated magnitude of effect. Level of Effect is not absolute and reflects the potential effects relative to the proposed development at a particular site. A higher level of effect would be anticipated at a more sensitive receptor appraised to receive a higher magnitude of effect. Level of Effect to both the landscape resource and visual receptors is based upon the following matrix, however GLVIA3 advises against an over reliance upon matrices hence the professional judgement of a Chartered Landscape Architect is also employed to determine such an effect.

	High Magnitude of Effect	Medium Magnitude of Effect	Low Magnitude of Effect	Negligible Magnitude of Effect	No Change
High Sensitivity	Major	Major/Moderate	Moderate	Minor	No Change
Medium Sensitivity	Major/Moderate	Moderate	Moderate/Minor	Minor/Negligible	No Change
Low Sensitivity	Moderate	Moderate/Minor	Minor	Negligible	No Change

Note also that the Level of Effect may be adverse, neutral or beneficial depending upon the nature of the proposed development e.g. an adverse effect may arise from a development at a greenfield site that removes key landscape resource features or results in a deterioration of view at visual receptors, a neutral effect may result where a development neither weakens nor strengthens key features or views, and a beneficial effect may result from the restoration of a despoiled site.

For developments that are able to provide extensive mitigation then a 'residual' visual Level of Effect may also be added.

The Level of Effect may, in descriptive terms, be summarised in the following table.

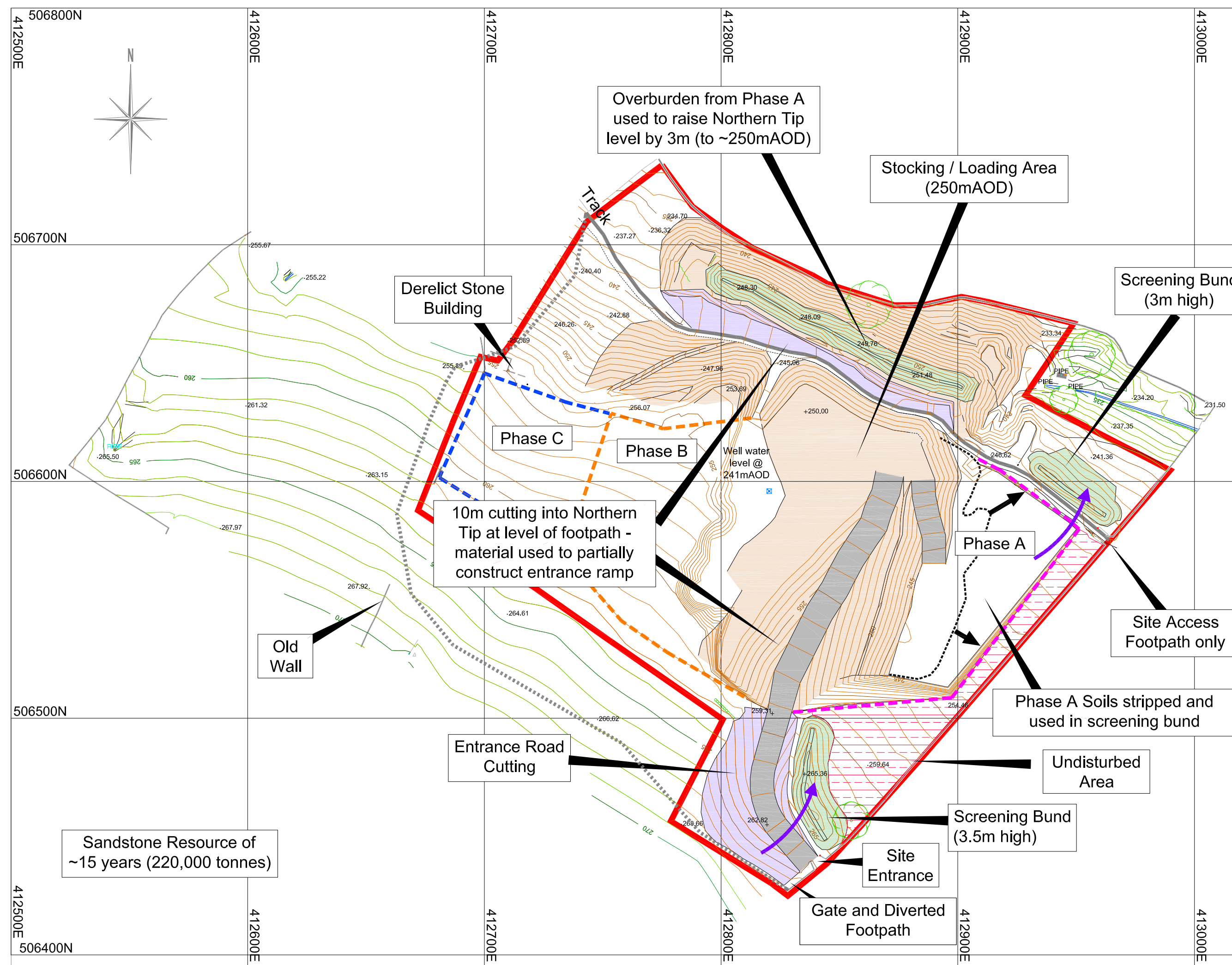
Level of Effect	Landscape Resource	Visual Receptors
Major Adverse	The proposed development would introduce features considered to be discordant and/or intrusive leading to a loss or substantial deterioration of key features, characteristics and/or setting	The proposed development would introduce features considered to be visually discordant and/or intrusive and would substantially affect views/visual amenity leading to a loss or substantial deterioration of the key visual characteristics
Moderate Adverse	The proposed development would introduce features considered to be discordant and/or	The proposed development would introduce features considered to be visually discordant

	intrusive leading to a discernible or partial deterioration of key features, characteristics and/or setting	and/or intrusive to views/visual amenity leading to a discernible or partial deterioration of the key visual characteristics
<b>Minor Adverse</b>	The proposed development would introduce features that would lead to a slight deterioration of key features, characteristics and/or setting	The proposed development would introduce features that would lead to a slight deterioration of the key visual characteristics
<b>Neutral</b>	The proposed development would introduce features characteristic of the site and/or setting, would complement the pattern and scale of the existing landscape and maintain landscape character	The proposed development would introduce features that are visually characteristic with no obvious change to views/visual amenity
<b>Minor Beneficial</b>	The proposed development would introduce features characteristic of the site and/or setting, would complement the pattern and scale of the existing landscape and offers the potential to improve characteristic landscape features and benefit landscape character	The proposed development would introduce features that are visually characteristic with a perceptible benefit to views/visual amenity
<b>Moderate Beneficial</b>	The proposed development would introduce a range of features characteristic of the site and/or setting, would accord with the pattern and scale of the existing landscape and improve the existing landscape resource by the removal of discordant features, partial restoration of the landscape to improve landscape character	The proposed development would be visually characteristic with a clear and obvious benefit to views/visual amenity
<b>Major Beneficial</b>	The proposed development would be characteristic of the site and/or setting, would significantly improve the existing landscape resource through restoration of the landscape and improve landscape character	The proposed development would result in a substantial improvement to views and visual amenity



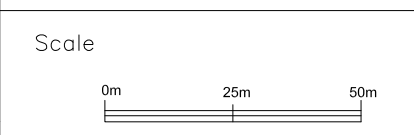
## **APPENDIX 2**

### Proposed Extraction Scheme



**Key**

- Application Area (5Ha)
- Tip
- Undisturbed Area
- Proposed Cutting
- Proposed Screening Bund
- ➔ Direction of Working
- Phase A Outline
- Phase B Outline
- Phase A Outline
- Current Extent of Quarry Face
- ↻ Soil Movements
- Proposed Footpath Diversion
- Contours (Quarry)
- Contours (Topo)



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**Site**  
Gayles Quarry

**Project**  
2021 Planning Application

**Title**  
Plan GQW21-1  
Phased Working Scheme  
Phase A

Scale: 1:1500 @ A3  
File: GQ Phase 1 and Entrance Design V6.dwg  
Drawn by: BGD Date: 14/01/2022

**Greenfield enviro**  
1 Commercial Road, Keyworth, Nottingham NG12 5JS  
Email: admin@greenfieldenviro.co.uk  
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Overburden from Phase A used to raise Northern Tip level by 3m (to ~250mAOD)

Stocking / Loading Area (250mAOD)

Screening Bund (3m high)

Derelict Stone Building

Phase C

Phase B

Phase A

10m cutting into Northern Tip at level of footpath - material used to partially construct entrance ramp

Site Access Footpath only

Phase A Soils stripped and used in screening bund

Old Wall

Entrance Road Cutting

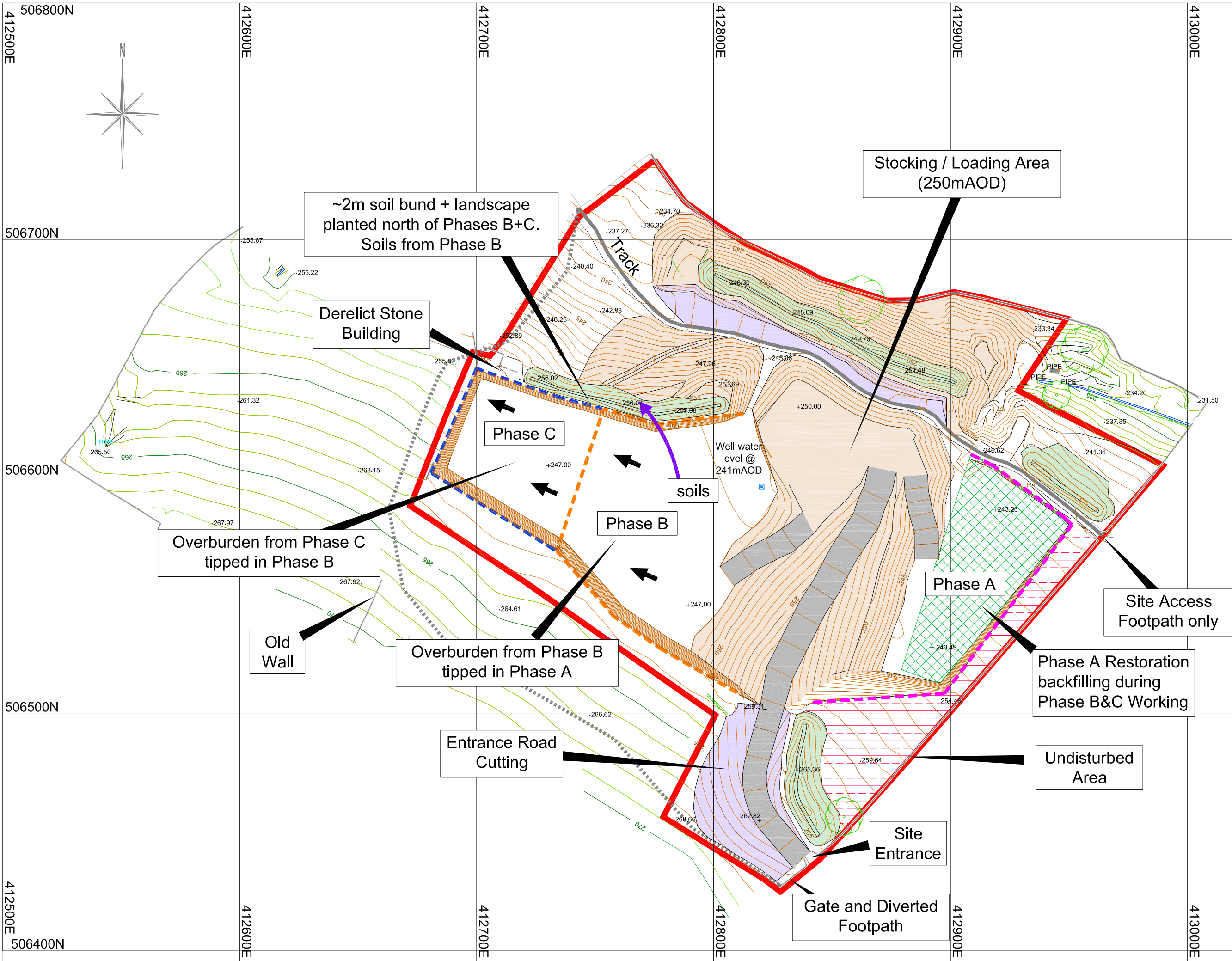
Undisturbed Area

Screening Bund (3.5m high)

Sandstone Resource of ~15 years (220,000 tonnes)

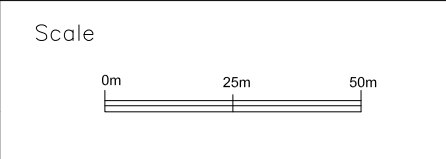
Site Entrance

Gate and Diverted Footpath



**Key**

- Application Area (5Ha)
- Tip
- Undisturbed Area
- Proposed Cutting
- Proposed Screening Bund
- ➔ Direction of Working
- Phase A Outline
- Phase B Outline
- Phase A Outline
- Current Extent of Quarry Face
- ↻ Soil Movements
- Proposed Footpath Diversion
- Contours (Quarry)
- Contours (Topo)



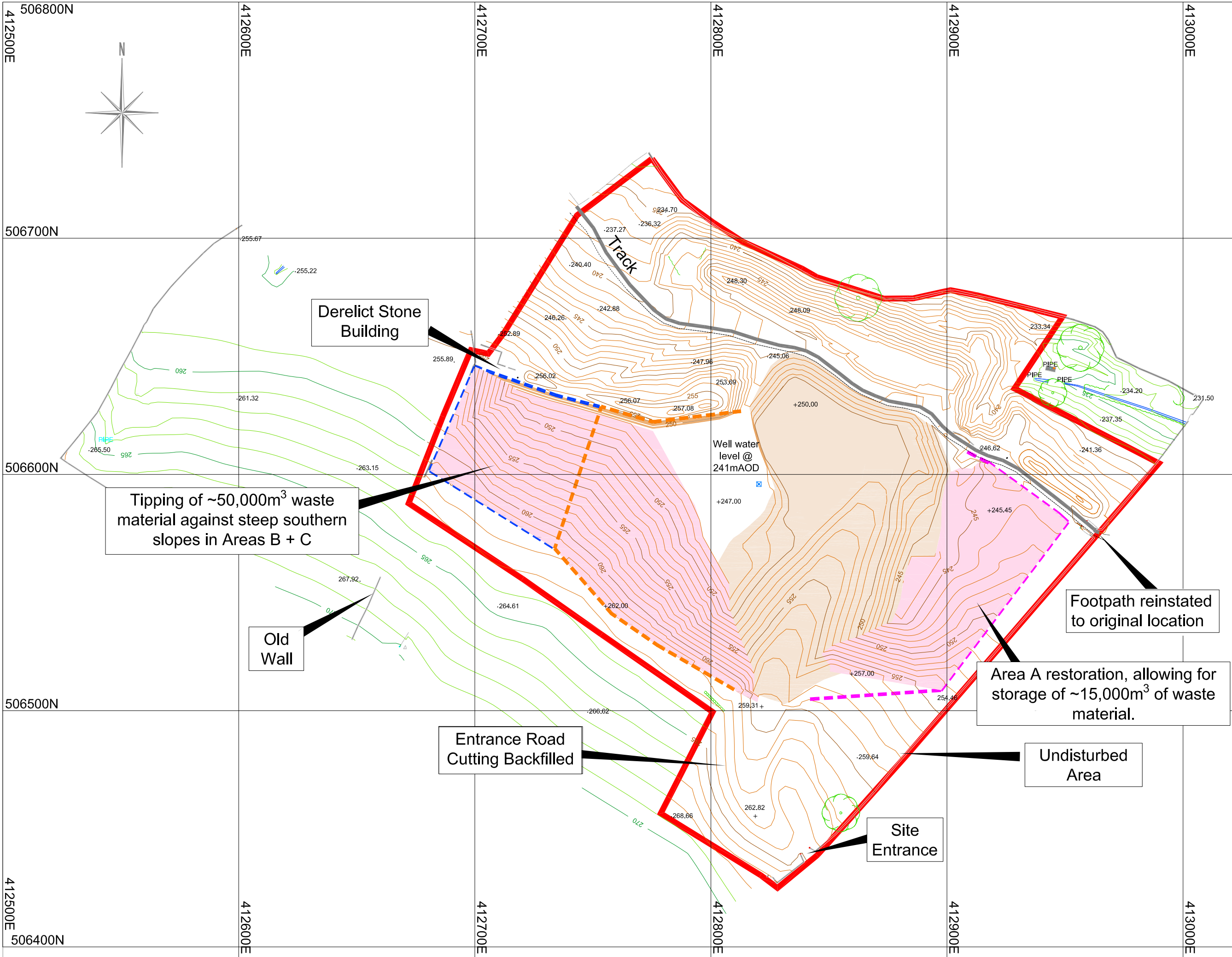
Site surveyed by Greenfield Environmental March 2021, and by Landform Surveys July 2019. Based upon 2021 Ordnance Survey 1:2500 digital base with the permission of The Controller of Her Majesty's Stationary Office. © Crown Copyright. Licence No. 100020505. The copyright of this drawing and its contents are the sole property of Greenfield Environmental and must not be copied or shown to third parties without prior consent of the Company or its clients.

Site  
**Gayles Quarry**  
 Project  
**2021 Planning Application**  
 Title  
**Plan GQW21-2**  
**Phased Working Scheme**  
**Phases B & C**

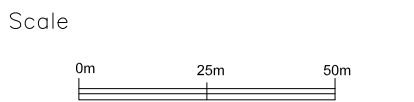
Scale: 1:1500 @ A3  
 File: GQ Phase 2 Extraction Design V6.dwg  
 Drawn by: BGD Date: 14/01/2022

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- Key
- Application Area (5Ha)
  - Tip
  - Waste Material
  - Phase A Outline
  - Phase B Outline
  - Phase C Outline
  - Contours (Quarry)
  - Contours (Topo)



Site surveyed by Greenfield Environmental March 2021, and by Landform Surveys July 2019  
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Site  
**Gayles Quarry**  
 Project  
 2021 Planning Application  
 Title  
 Plan GQW21-3  
 Conceptual Restoration Design

Scale: 1:1500 @ A3  
 File: GQ Restoration Design v4.dwg  
 Drawn by: BGD Date: 14/01/2022

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## **APPENDIX 3**

### Schedule of Predicted Visual Effects

### Appendix 3 – Schedule of Predicted Visual Effects

<b>GAYLES QUARRY</b>						
<b>Residential Properties</b>						
<b>Reference</b>	<b>Address</b>	<b>Distance: to site boundary</b>	<b>Receptor Sensitivity</b>	<b>Magnitude of Effect</b>	<b>Level of Effect</b>	<b>Field Observation Comments</b>
R1	Quarry House, unnamed track adjacent to Gayles Quarry.	15m	High	<b>Medium</b>	<b>Moderate Adverse</b>	Topography and existing vegetation screen views to south-east towards the site. The property is orientated north/south with just one window directly overlooking the adjacent unnamed road. Views from the edge of the property/garden at the vehicular entrance to the property are possible but largely screened. Views are possible to the very north-east corner of the site where construction of a bund would be visible at relatively close proximity but over a very short duration (potentially several weeks). The 'worst case' magnitude of effect during construction of the single bund would be 'High' with a 'Major Adverse' level of effect. In winter months there would be views through the vegetation alongside the unnamed road however a combination of perimeter bund and topography would screen subsequent working of the quarry.
R2	Lilac Cottage, Kirkwall, East View Cottage, The Grange, properties at East Street, Gayles. Thimbleby Cottage, Yellow House, Slip Inn Farm, The Lodge properties at Slip Inn Bank, Gayles.	365m	High	<b>No View</b>	<b>No View</b>	Views screened by intervening topography and vegetation.
R3	Gayles Hall, Gayles Hall Farm, Woodlea, The Manor House, The Bungalow, 3 number cottages off Middle Street, Lavender Cottage, Hill View, Sundial Cottage, Orchard House, Appletree Cottage, L'Anson Ho	454m	High	<b>No View</b>	<b>No View</b>	Views to site screened by combination of intervening topography and existing vegetation; in particular Park Wood.

**Appendix 3 – Schedule of Predicted Visual Effects**

	properties at Middle Street, Gayles. Numbers 1-4, Warren House and Fern Cottage Watling Close, Gayles. The Stables (2 properties), Cedavath, Hinds Garth, Travers House, Bay House, Slip Inn Bank, Gayles. Holme Forge, The Willows, Belmont House, West View, Pleasant View, Gayles House, Greenacres, Rose Cottage, numbers 1-6, Green House, West Street, Gayles. 6 properties at The Pinfold, off West Street, Town Farm, Gayles.					
R4	Properties to the south-eastern fringe of Dalton including Throstle Gill Farm. Curlew Lodge, Hilltop Lodge, Lodge Cottage, The Grove, Stone Cottage, Gillsmere, Hill View, Ashlea, Blackleach House, Rose Cottage, numbers 1-2, Church Cottage, Holmedale, Chapel Row, Quiet Ways, Mount Pleasant, Moor Lane, Dalton. Dalton Gill, Kimbali, The Limes, Shalom, Garden Cottage,	2km	High	<b>No View</b>	<b>No View</b>	Views to site screened by combination of intervening topography and existing vegetation; in particular Park Wood.



### Appendix 3 – Schedule of Predicted Visual Effects

	1-2 The Cottages and Burnstables, Slip Inn Bank, Dalton. Low Bridge, Low Lane, Dalton.					
R5	Gayles Field, Low Lane, Dalton	2km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Potential for distant, limited view through gaps in existing vegetation to part of site, with activities during screen bund construction visible. Subsequent phases screened by intervening topography and vegetation. Not a key element of view and site is just discernible at this distance.
R6	Broaches House, Low Lane. Dalton Grange, Dunsa Manor, Dick Scot Lane,	2.49km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Views in summer screened by mature trees along Dalton Beck, potential for distant winter views through trees, also to construction of screen bunds. Not a key element of view and site is just discernible at this distance.
R7	Low Fields (off Slip Inn Bank), Sikelands Farm, East Dalton Fields, Dick Scot Lane, Old Dunsa Bank, Green Bank Farm (Ravensworth).	1.75km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Distant view, site backgrounded by higher land, site activity would be largely screened by new bunds to north of extraction area. Intervening vegetation at some receptors creates partial view only.
R8	Foxhall Inn (dwelling), Foxhall Cottage, Fox Grove, Foxwell Cottage, Foxwell Lodge, Foxwell Farm, Mill Cottage, Two Hoots, A66. Foxholme, New Lane, Ravensworth.	3km	High	<b>No View</b>	<b>No View</b>	Ground level views screened by vegetation at boundary of property and/or within adjacent fields.
R9	Mainsgill Farm (residential dwelling)	3.12km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Views screened by vegetation to garden boundary, potential glimpsed and distant view in winter. Site would appear part of wider vista.

### Appendix 3 – Schedule of Predicted Visual Effects

R10	The Willows, New Lane, Ravensworth. Holme Cottage, Dales View, 1-4, Holme House, Brookfield, Mill Wood, Glen Grove, Avalon, Waitlands, Fairview, Christmas House, Waitlands Lane, Ravensworth.	2km	High	<b>No View</b>	<b>No View</b>	Views to site screened by combination of intervening topography and existing vegetation; principally trees along Throstle Gill and Swinery Wood.
R11	Sunset Cottage, The Cedars, Minerva Cottage, 12 – 18, 20 – 26, Becksides Barn, Mill Farm House, The Forge, 3-13, Forge Farm, 13a – 26 Waitlands Lane, Ravensworth. 1-15 Mill Close, Park House, The Barn, 37 Flats Bank, 1-3 Mill Court, 60 The Green Ravensworth.	1.57km	High	<b>No View</b>	<b>No View</b>	Screened by adjacent built form and mature vegetation. Number 60 The Green, screened by properties to south side of Waitlands Road.
R12	28 and 34 to 48 The Green (Waitlands Lane), Ravensworth	1.74km	High	<b>Low</b>	<b>Moderate Adverse</b>	Distant view, site set against wider vista of upland area over Waitlands Road and properties to south. Initial operations would be intermittently visible as access road constructed from south-east corner of site (with some existing vegetation screening entry point to site). Construction of screening bunds would be clearly visible. As bunds vegetate visual effects likely to reduce.
R13	30, 32, 50 – 58 The Green, 39 Flats Bank, 4 Mill Court Ravensworth	1.74km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Partial views, screened by adjacent vegetation/buildings. Numbers 30 and 32 screened by mature tree on The Green in summer months but partial views in winter months. Properties 50 to 58 main elevations face west, very oblique view from front of property to site. Views from 4 Mill Court largely screened by adjacent built form.
R14	41 – 53 Waitlands Road, Ravensworth	1.63km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Ground level views are largely screened by adjacent school buildings and/or garden boundary planting. Potential for very limited views through vegetation in winter months, particularly during site establishment phase.

### Appendix 3 – Schedule of Predicted Visual Effects

R15	Tofta House, Stoneygate Bank, Ravensworth	1.78km	High	<b>Low</b>	<b>Moderate Adverse</b>	Property elevated relative to adjacent highway, main elevation is south facing. High boundary wall. Distant view to site from main elevation but site appears as part of wider vista. Initial operations, including new screen bunds likely to be visible, subsequent operations screened from view.
R16	The Cottage, The Granary, The Bothy, Field House, Hay Barn, The Smithy, Low Barn, off Stoneygate Bank, Ravensworth	1.77km	High	<b>No View</b>	<b>No View</b>	Views screened by adjacent buildings.
R17	The Granary, The Arches, The Mill, Castle Mill, off Flats Bank, Ravensworth	1.12km	High	<b>No View</b>	<b>No View</b>	No view, screened by topography and mature vegetation
R18	Stoneygate Farm, Holme Beck Barn, Stoneygate Bank, Ravensworth. Stoneygate Cottage, Hill House, Stoneygate Bank, Whashton	1.63km	High	<b>No View</b>	<b>No View</b>	No view, screened by topography and mature vegetation
R19	East Holme, The Vicarage, Moonraker, West Farm, West Cottage, Daykn Daykn Cottage, Manor Cottage, Manor Farm, The Cottage, Ivy Cottage, Rose Cottage, Lane Cottage, Gorse Grove, Holme Garth, Kir-Kot, Armstrong House, East View, Kelia Cottage, East Farmhouse, East Cottage, The Old Grammar School House, Knackery, off Priest Gill Bank, Kirby Hill. Grove Hill House, Gayles.	910m	High	<b>No View</b>	<b>No View</b>	No view, screened by topography and mature vegetation.

### Appendix 3 – Schedule of Predicted Visual Effects

Footpaths and Bridleways						
Reference	Address	Distance: to site boundary	Receptor Sensitivity	Magnitude of Effect	Level of Effect	Field Observation Comments
F1	NYCC PRoW 20.32/5/1: adjacent to Gayles Quarry	0m	High	<b>High</b>	<b>Major Adverse</b>	Footpath located immediately adjacent to site, clear views of initial operations at close proximity from eastern section of path. Footpath would be diverted to south at higher elevation with subsequent views of quarry access and Phases A and C. Restoration visible at close distance. More limited views from western section of existing path due to topography and screening effect of Park Wood. Retained northern bunds would limit views north from sections of reinstated path.
F2	NYCC PRoW 20.32/4/2: Slip Inn Bank to Middle St, Gayles	269m	High	<b>Medium</b>	<b>Moderate Adverse</b>	Views close to Slip Inn Bank are screened by intervening topography but clear views from central section, along 200 metre contour line where initial operations including new screen bunds would be visible. Key element of view tends to be to north towards Ravensworth and across open landscape i.e. away from site. Partial views from western section of path then screened by Park Wood closer to Gayles.
F3	NYCC PRoW 20.32/2/1: Flats Bank to Slip Inn Bank, Gayles	673m	High	<b>No View</b>	<b>No View</b>	View screened by intervening topography.
F4	NYCC PRoW 20.32/3/1: Middle St to West St, Gayles	773m	High	<b>No View</b>	<b>No View</b>	No view, screened by adjacent built form.
F5	NYCC PRoW 20.32/6/1: Low Lane to Throstle Gill	1.1km	High	<b>No View</b>	<b>No View</b>	Screened by intervening topography and mature woodland at Park Wood.
F6	NYCC PRoW's 20.18/8/1 and 20.18/9/1: south of	1.76km	High	<b>No View</b>	<b>No View</b>	No view, screened by intervening topography.

### Appendix 3 – Schedule of Predicted Visual Effects

	Moor Lane/Scarbeck Bank, Dalton					
F7	NYCC PRoW's 20.18/6/1 and 20.18/4/2: west of Scarbeck Bank, Dalton	2.2km	High	<b>No View</b>	<b>No View</b>	No view, screened by intervening topography and mature woodland.
F8	NYCC PRoW 20.32/1/1: Dalton to Low Fields	1.84km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Partial but distant view.
F9	NYCC PRoW 20.55/3/1: Low Fields to Ravensworth	1.83km	High	<b>Low</b>	<b>Moderate Adverse</b>	Clear views to site from section of footpath in open fields adjacent to Dalton Beck, west of Ravensworth. Site is backgrounded by higher land but distant views of site establishment period and construction of screen bunds.
F10	NYCC Bridleway 20.32/7/2: Slip Inn Bank to Dick Scot Lane	876m	High	<b>Negligible</b>	<b>Minor Adverse</b>	No view from southern extent of bridleway, screened by vegetation. Partial view from northern extent adjacent PRoW 20.55/3/1.
F11	NYCC PRoW 20.18/13/1: Dick Scot Lane to A66, Ravensworth	2.07km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Limited views to south due to boundary wall and raised topography to south.
F12	NYCC PRoW 20.72/1/1: A66 to West Layton	3.14km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Potential for view across A66 at point where footpath meets highway and break in vegetation. Distant view, site forms part of wider vista and not a key element in view.
F13	NYCC PRoW 20.38/8/1: A66 to West Lane, West Layton	3.13km	High	<b>No View</b>	<b>No View</b>	Screened by vegetation
F14	NYCC PRoW 20.55/2/1: New Lane to A66, Ravensworth	2.54km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Views to northern section of footpath screened by woodland. Intermittent vegetation along path forms partial screen but distant view from southern extent close to New Lane. Trees at boundary of New Lane also create a screen.

### Appendix 3 – Schedule of Predicted Visual Effects

F15	NYCC PRoW 20.55/13/1 New Lane to Holme Beck, Ravensworth	1.75km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Distant view to south-west towards site, initial site establishment would be visible and potential soil stripping/overburden removal to Phases, A B and C plus some final restoration. Site forms part of wider vista, comprises small element of view. At Holme Beck, topography and built form at Ravensworth screen view.
F16	NYCC PRoW's 20.55/4/2 and 20.55/5/1: north of Ravensworth. 20.55/8/1, Ravensworth.	1.51km	High	<b>No View</b>	<b>No View</b>	No view
F17	NYCC Bridleway 20.23/5/1: A66 to Moor Lane, East Layton	3.45km	High	<b>Negligible</b>	<b>Minor Adverse</b>	View at southern extent across A66. Site is distant and part of wider vista. As bridleway heads north woodland and mature vegetation screen views south.
F18	NYCC Bridleway 20.55/6/1: A66 to Stoneygate Bank	1.77km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Distant view to south-west towards site. Site forms part of wider vista, comprises small element of view. Close to Holme Beck, immediately north of Ravensworth, topography and built form screen views.
F19	NYCC PRoW 20.33/18/1: Pond Dale	2.54km	High	<b>Negligible</b>	<b>Minor Adverse</b>	Intermittent, distant view from short sections of footpath at western end close to Stoneygate Bank. To east screened by vegetation and farm outbuildings.
F20	NYCC PRoW 20.55/11/1: Stoneygate Bank to Comfort Lane, Ravensworth	1.83km	High	<b>No View</b>	<b>No View</b>	No view, screened by intervening mature vegetation and topography
F21	NYCC PRoW's 20.73/1/1 and 20.73/3/1: north of Whashton	2.13km	High	<b>No View</b>	<b>No View</b>	No view, screened by intervening topography
F22	NYCC Bridleway 20.73/6/1: west of Whashton	1.82km	High	<b>No View</b>	<b>No View</b>	No view, screened by intervening topography
F23	NYCC PRoW's 20.39/2/1, 20.73/8/1, and 20.55/10/1: south and east of Kirby Hill	938m	High	<b>No View</b>	<b>No View</b>	No view, screened by intervening topography

### Appendix 3 – Schedule of Predicted Visual Effects

F24	NYCC PRoW 20.55/9/1: Priest Gill Bank, Kirby Hill to Flats Bank, Ravensworth	950m	High	<b>Low</b>	<b>Moderate Adverse</b>	Southern section of footpath, sloping ground from Slip Inn Bank to the open fields immediately south of Ravensworth Castle, views are screened by a combination of topography and vegetation. Close to, and east of the Castle, there are distant but oblique views up to the site, although intervening mature trees limit the extent of view. Where visible, the site is backgrounded by higher land. Screening bunds to the northern edge of the site would screen activity within Gayles Quarry.
F25	NYCC Bridleway 20.39/4/1: Priest Gill Bank, west of Kirby Hill	448m	High	<b>No View</b>	<b>No View</b>	Views west screened by intervening vegetation.



### Appendix 3 – Schedule of Predicted Visual Effects

Highways						
Reference	Address	Distance: to site boundary	Receptor Sensitivity	Magnitude of Effect	Level of Effect	Field Observation Comments
H1	Priest Gill Bank, Kirby Hill	348m	Medium	Low	Minor Adverse	Limited views from breaks in vegetation (hedgerow) to southern boundary of highway. Closest viewpoint, field entrance, offers views to north-east corner of the site over Quarry House. Intervening vegetation, mature trees along unnamed track leading uphill to Quarry House effectively screens further views.
H2	Slip Inn Bank, Gayles	410m	Medium	No View	No View	Vegetation and change in level screens views to south from highway. At gaps in vegetation, and in winter months, views continue to be screened by intervening topography.
H3	East Street, Gayles	476m	Medium	No View	No View	Views screened by adjacent built form, vegetation and intervening topography.
H4	Middle Street, Gayles	708m	Medium	No View	No View	Views screened by intervening topography and built form.
H5	West Street, Gayles	885m	Medium	No View	No View	Views screened by intervening topography and built form.
H6	Low Lane, Dalton	1.74km	Medium	Negligible	Negligible Adverse	Distant oblique views

### Appendix 3 – Schedule of Predicted Visual Effects

H7	Moor Lane/Scarbeck Bank, Dalton	2.14km	Medium	<b>No View</b>	<b>No View</b>	Views screened by intervening topography and built form.
H8	Dick Scot Lane, Dalton	2.13km	Medium	<b>Negligible</b>	<b>Negligible Adverse</b>	Distant and oblique views from highway close to Sykelands Grange. Vegetation along highway and banks of Stalwath Beck/Dalton Beck screens views to west and closer to Dalton. Section of highway close to A66, views screened by combination of vegetation (including trees around Dunsa Manor) and highway boundary (hedgerow and boundary wall).
H9	A66	3.08km	Medium	<b>Negligible</b>	<b>Negligible Adverse</b>	Distant views from limited sections of the A66 to east of Moor Lane (East Layton) and west of Waitlands Lane where there are breaks in the boundary vegetation and the highway is elevated. Views are transient and oblique over some distance, @3.6kms. Site appears part of wider vista. Operations visible likely to be limited to construction of perimeter screen bunds to northern edge of site, backgrounded by higher land to south.
H10	Collier Lane, West Layton	3.14km	Medium	<b>No View</b>	<b>No View</b>	Views to south/south-west screened by boundary hedgerow (to eastern side of highway) and at junction of A66 by vegetation along southern boundary of A66.
H11	Moor Lane, East Layton	3.30km	Medium	<b>Negligible</b>	<b>Negligible Adverse</b>	Distant, oblique view from southern extent of highway at junction with A66. Views across building complex of Mainsgill Farm. Site forms very small part of extensive vista. Not a key element of view. Further north, highway is bounded by hedgerows and trees which screen views.
H12	Waitlands Lane, Ravensworth	1.71km	Medium	<b>Negligible</b>	<b>Negligible Adverse</b>	Views from northern section of highway, north of Ravensworth Nurseries to A66. Site forms part of wider vista and is backgrounded by higher land. Principal visual effects arising from construction of screening bunds to northern perimeter of site.
H13	New Lane, Ravensworth	1.73km	Medium	<b>Negligible</b>	<b>Negligible Adverse</b>	Distant views from limited sections of highway, primarily at section immediately south of Foxhall Caravan Park; highway boundary is low hedgerow with limited number of hedgerow trees. Site forms part of wider vista, initial site establishment

### Appendix 3 – Schedule of Predicted Visual Effects

						would be visible and potential soil stripping/overburden removal to Phases, A B and C plus some final restoration. New bunds to northern extent of quarry would screen views of extraction activity.
H14	Stoneygate Bank, Ravensworth	1.79km	Medium	<b>Low</b>	<b>Minor Adverse</b>	Views from section of highway close to Ravensworth looking south-west. Some intervening vegetation and built form (Ravensworth Castle). Site appears part of wider vista. Principal visual effects arising from construction of screening bunds to northern perimeter of site.
H15	Flats Bank, Ravensworth	399m	Medium	<b>No View</b>	<b>No View</b>	Views south screened by intervening topography and boundary vegetation.
H16	Comfort Lane, Whashton	1.62km	Medium	<b>No View</b>	<b>No View</b>	No view, screened by intervening topography
H17	Rachel Lane, Whashton	2.1km	Medium	<b>No View</b>	<b>No View</b>	No view, screened by intervening topography
H18	Unnamed track to east of Gayles Quarry	0m	Medium	<b>Medium</b>	<b>Moderate Adverse</b>	Views to site are largely screened by intervening topography, stone boundary wall and roadside vegetation. There are two, short sections of track with partial views into site, adjacent Quarry House and where track turns to south-east adjacent proposed quarry entrance. Screen bund proposed adjacent to latter. Initial site establishment and vehicle movements would be visible. Bund would screen views into extraction area.

### Appendix 3 – Schedule of Predicted Visual Effects

Parks/Recreation Areas and Community Facilities						
P1	Chapel and Village Meeting Room, Ravensworth	1.63km	Low	No View	No View	View screened by adjacent built form, including boundary walls, and vegetation.
P2	Ravensworth C of E Primary School	1.56km	Low	Medium	Minor Adverse	Distant view from grounds of school where site appears part of wider vista. Some screening from vegetation close to school. Site forms part of wider vista, new bunds to northern extent of quarry would screen views of extraction activity.
P3	Ravensworth Castle (and Park Wall)	1.41km	Low	Medium	Minor Adverse	Grade I Listed Building (castle and Park Wall), not publicly accessible. Views up to site (observed from adjacent highway). Operations to create screening bunds will be visible.
P4	St Peter and St Felix Church, Kirby Hill	1km	Low	No View	No View	Screened by adjacent built form and vegetation.

### Appendix 3 – Schedule of Predicted Visual Effects

Commercial Properties						
Reference	Address	Distance: to site boundary	Receptor Sensitivity	Magnitude of Effect	Level of Effect	Field Observation Comments
C1	Gayles Hall Barns, The Manor House (B&B premises), Gayles	710m	Low	No View	No View	Residential dwelling assessed at Receptor R3.
C2	Holmedale, Moor Lane, Dalton	2.11km	Low	No View	No View	Residential dwelling assessed at Receptor R4.
C3	Sykelands Grange Self Catering Accommodation, Dick Scot Lane, Dalton	2.52km	Low	Negligible	Negligible Adverse	Residential dwelling assessed at Receptor R6. Distant view from car park where site appears part of wider vista. Site establishment, including bund construction, would be visible at distance.
C4	Greenbank Barns, Waitlands Lane, Ravensworth	2.74km	Low	Negligible	Negligible Adverse	Residential dwelling assessed at Receptor R6. Oblique and distant view to site. Site establishment, partial views of the soil/overburden stripping to the southern fringes of Phases A, B and C, together with final restoration activity likely to be visible.
C5	Fox Hall Inn, A66.	3.07km	Low	Negligible	Negligible Adverse	Residential dwelling assessed at Receptor R8. Partial, distant view from car park. Site appears part of wider vista. Some intervening vegetation. Initial site establishment, partial views of the soil/overburden stripping to the southern fringes of Phases A, B and C, together with final restoration activity likely to be visible.
C6	Foxhall Caravan Park, New Lane, Ravensworth	2.69km	Low	Low	Minor Adverse	Caravan park is bounded by extensive vegetation including trees and a hedgerow, however views are possible from the southern edge of the site across Ravensworth. Views are distant with site forming one element of wider vista. Temporary construction work to create both the internal site access and screening bunds would be visible.

### Appendix 3 – Schedule of Predicted Visual Effects

C7	Mainsgill Farm Shop (building complex including restaurant, and shop) A66.	3.1km	Low	<b>Negligible</b>	<b>Negligible Adverse</b>	Residential dwelling assessed at Receptor R9. Partial, oblique and distant view. Vegetation along unnamed track to east of site assists screening. Site establishment, bund construction, soil/overburden stripping to the southern fringes of Phases A and B, together with final restoration activity visible at distance.
C8	Ravensworth Nurseries, New Lane, Ravensworth.	2.12km	Low	<b>No View</b>	<b>No View</b>	Views screened by mature boundary vegetation.
C9	Bay Horse Inn, Ravensworth.	1.68km	Low	<b>No View</b>	<b>No View</b>	No view, screened by adjacent built form.
C10	Stoneygate Farm Shop and Café, Stoneygate Bank, Ravensworth	1.70km	Low	<b>No View</b>	<b>No View</b>	No view, screened by intervening topography and extensive boundary vegetation, in particular to eastern boundary of Stoneygate Bank.
C11	Shoulder of Mutton, Priest Gill Bank, Kirby Hill	968m	Low	<b>No View</b>	<b>No View</b>	No view, screened by combination of adjacent built form, vegetation and intervening topography.
C12	Gorse Grove (B&B premises), Kirby Hill	1km	Low	<b>No View</b>	<b>No View</b>	Residential dwelling assessed at Receptor R18.

#### Notes:

**Distance to site;** measured at assumed boundary of property/receptor to nearest boundary of proposed development site. All distances are measured in Google Earth Pro.

*End of report*