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Planning Application Supporting Statement
Horn Crag Quarry
A.D. Calvert Architectural Stone Supplies Ltd.

Document Reference: 232/5--R2.1- Supporting Statement

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Minerals
Waste
Environment

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Chapter 1: Introduction

1.1 General

1.1.1 *The Mineral Planning Group Ltd.* (MPG) has been commissioned by *A. D. Calvert Architectural Stone Supplies Ltd.* (Calverts) to prepare a Planning Application and accompanying supporting statement for a dimension stone quarry at Horn Crag Quarry ('The Site'), near Silsden at grid ref: SE 05303 47994. The Site is a historic quarry, last worked in the 1980s.

1.2. Site Location

1.2.1 The Site is located approximately 1.9km to the northeast of the centre of Silsden and approximately 3km to the southwest of the centre of Addingham, as shown in drawing ref: *232/5 - 1*

1.3. Aims and Proposals

1.3.1 This planning application is for a dimension stone quarry, extracting stone block for the production of traditional building materials. The total site area would be approximately 5.9ha. Block and mineral suitable for dimension stone would be extracted from The Site and then transported by road to the applicant's processing facilities.

1.3.2. This planning application aims to:

- Extract some 520,000 tonnes of dimension stone at The Site.
- Facilitate the maintenance of the local traditional architectural character and the restoration of historic buildings using locally distinctive building stone.
- Provide an ecological and landscape driven restoration scheme, delivering a net gain in biodiversity upon completion and a landscape feature representative of the name 'Horn Crag'.

1.4. Regulations and The Supporting Statement

14.1 A screening opinion was sought from Bradford Metropolitan District Council, which concluded that Under the Town and Country Planning (Environmental Impact Assessment (EIA)) Regulations 2017 (as amended), an EIA is not necessary for the proper determination of this planning application. Whilst the proposed development is not classed as EIA, a number of environmental considerations and studies have been carried out.

14.2. The Supporting Statement contains the following:

- Introduction
- Site Description
- Operational Details
- Planning Policy, Need and Alternative Assessment
- Flood Risk Assessment
- Dust and Air Quality
- Hydrogeological Risk Assessment
- Noise Impact Assessment
- Landscape Assessment and Photomontage
- Transport Statement
- Heritage Stone Survey
- [redacted]
- Breeding Bird Survey
- SPA Bird Foraging Survey
- [redacted]
- Bat Activity Survey
- Bat Emergence Survey Report
- Bat Hibernation Report
- Reptile Survey
- Arboricultural Survey
- Ecological Impact Assessment
- Supporting Plans and Drawings

1.5. The Applicant

15.1 *A. D. Calvert Architectural Stone Supplies Limited* (Calverts) are an industry-leading supplier of Natural stone to construction projects throughout the UK. Calverts are based in Leyburn in North Yorkshire.

Chapter 2: Site Description

2.1. General Description

2.1.1. Horn Crag Quarry is located approximately 1.9km to the northeast of the centre of Silsden, at grid ref: SE 05303 47994 (See drawing ref: *232/5 - 1*).

2.1.2. The Site occupies an area of approximately 5.9ha, which includes a short access track to Fishbeck Lane, though the proposed area to be extracted would be around 3.92ha. The Site is currently a historic quarry comprising the former quarry area, rough pasture, areas of naturally regenerated heathland, and some sparsely wooded areas on the western boundary.

2.2. Site Description

2.2.1. The Site is abutted to the:

- North by agriculture
- East by agriculture
- South by agriculture and Fishbeck Lane
- West by agriculture (equestrian and stables)

2.2.2. Site access would be from the south, via Fishbeck Lane and Brown Bank Lane.

2.3. Topography

2.3.1. The topography of The Site ranges from 232m AOD in the west of The Site, to 256m AOD in the northeast of The Site. The base of the historic quarry face is 241m AOD and the top of the current face is 248m AOD.

2.3.2. Existing levels are shown on drawings E454-001 and E454-002. Some of The Site's topography, particularly in the west, is comprised of made ground / mineral waste. Additionally, there is a vegetated screening bund on the west of The Site.

2.3.3. The proposed final excavation profile and proposed final restoration levels are shown on drawings E454-003, E454-004, E454-005 and E454-006.

2.4. Geology

2.4.1 The bedrock beneath The Site is the *Middleton Grit Unit* of the *Silsden Formation (Millstone Grit Group)*. The *Middleton Grit Unit* is described by the British Geological Survey (BGS) as a "*coarse-grained sandstone (grit)*" and in some areas has a thickness of "*circa 70m*". The *Middleton Grit Unit* was deposited in the Carboniferous period, between 324 and 328 million years ago.

2.5. Hydrology and Hydrogeology

2.5.1 There are no surface water courses within The Site.

2.5.2. The groundwater vulnerability[1] at The Site ranges from high in the north half of The Site, to medium in the south half. The bedrock beneath The Site is a *Secondary A* aquifer. However, the entirety of the *Millstone Grit Group*, appears to be designated as such by the BGS. A *Secondary A* aquifer is defined as being "*comprise*[d of] *permeable layers that can support local water supplies, and may form an important source of base flow to rivers*".

2.5.3. Exploratory borehole drilling was carried out to assess the quality and characteristic of the deposit and its suitability for dimension stone products. During the drilling process water strikes and resting water levels were recorded. The depth of the water table varies between 247m AOD in the east and 229m AOD in the west of The Site. It is unclear why there is such a sudden change in groundwater levels, however it is possible that this is due to small scale faulting within The Site. The Hydrogeological Impact Assessment (HIA) discusses this in greater detail in Chapter 8. There are springs in the southwest corner of The Site and in the west of The Site where the water table intercepts the surface, further details of this is also given in Chapter 8.

2.5.4. A spring-fed chamber is located on the western edge of The Site, but some 39m from the extraction boundary. The applicant is informed that this chamber

[1] Groundwater vulnerability is described by Defra as "*the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a single square kilometre*".

supplies drinking water to Fishbeck Farm, some 355m to the southwest of the chamber. It is proposed that a minimum standoff of 1m from the base of extraction to the water table would be maintained throughout the lifetime of The Site to ensure that no contamination or interruption of the water supply results from the proposed operations.

2.5.5. The hydrogeology of The Site has been considered in detail at Chapter 8 of this supporting document.

2.6. Rights of Way

2.6.1. Footpath *Silsden 18* is mapped as crossing through the centre of The Site in a north-south orientation (notably leading directly off, then back up the existing vertical quarry faces). Footpath *Silsden 19* abuts The Site to the south. The route of *Silsden 19* would remain largely unaffected, though a diversion is proposed to improve public safety where it crosses the access track. An application for an appropriate diversion of Footpaths *Silsden 18* and *Silsden 19* would be made prior to the commencement of any operations at The Site. Proposed diversions of Footpaths Silsden 18 and 19 are shown on drawing ref: *232/5 – 5*, which would include improved surfacing and dry stone wall crossing points to enhance the accessibility which would be clarified in the footpath diversion application.

2.7. Relevant Planning Approval History

2.7.1. The current planning application differs greatly from historic applications at The Site. Previous planning applications were for the extraction of crushed rock / aggregate, primarily for the construction of the *Airedale Route* Highway. An aggregate quarry would potentially involve permanent crushing, screening and washing of material taking place at The Site, as well as a resultant high number of HGVs.

2.7.2. This planning application is for a dimension stone quarry and would involve only a very limited amount of screening of historic mineral waste initially to make The Site operational. All processing of dimension stone would take place off-site at the applicant's processing yard. Additionally, a routing agreement is proposed

such that HGVs would not pass through the centre of Silsden which is understood to have occurred when The Site was run in the mid-late 1980s.

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Chapter 3: Operational Details

3.1 General

3.1.1 This proposal seeks to extract dimension stone from Horn Crag Quarry. It is estimated that a total of 520,000 tonnes of mineral would be released. The quarry design is shown with its proposed extraction depths on drawing ref: *E454-003*.

3.1.2. A restoration scheme has been produced for The Site (Chapter 7) and is represented in drawing ref: *232/5 – 7.*

3.2. Operations

3.2.1 The proposed mineral extraction would be phased. The proposed extraction boundary is shown on drawing ref: *232/5 – 2* and the intended working phasing is shown on drawing ref: *232/5 – 3*. Exact phasing boundaries may be subject to minor changes depending, for example, on variability of mineral encountered and rates of demand.

3.2.2. All topsoils and sub-soils would be stripped and stored separately for use in restoration. Soil stripping would only occur when the soil is dry and friable. All stripped soils will be stored in Phase 1 throughout the development. Storage of all soil on The Site simultaneously would not be necessary due to the phased restoration of The Site, however, there would be sufficient capacity in Phase 1 to store all soils on Site simultaneously.

Stage 1 – Preparation

3.2.3. Initially Phase 1 (shown on drawing ref: *232/5 - 3*) would need to be prepared to create an operational area / entrance, for turning and loading. Phase 1 would be stripped of any top and sub-soil. A short period of crushing and screening of historic mineral waste currently still on-site may be carried out to prepare the area.

3.2.4. Prior to any works commencing, relevant ecological surveys would be need to be carried out by a suitably qualified ecologist as outlined in the Ecological Impact Assessment (Chapter 24).

Stage 2 – Extraction

3.2.5. Extraction is proposed to commence from the west towards the east before working northwards, as shown on drawing ref: *232/5 – 3.* A migrating sump would be maintained for all phases of extraction to attenuate any excess surface water that does not percolate into the ground.

3.2.6. It is initially proposed that once a phase of extraction has been completed, the worked area is then used to stockpile the mineral waste of the next phase of extraction. This would mitigate The Site from becoming 'waste-bound'.

3.2.7. The working design of the Quarry would ensure that a minimum of 1m standoff would be maintained from the water table, the level of which varies across The Site from 229m AOD in the base of the historic quarry to 247m AOD in the northeast of The Site. All new faces would be engineered with respect to Quarry Regs. 1999 (as amended) standards. The proposed quarry benching design is shown in drawing ref: E454-001, and the proposed profiles are shown in drawing ref: E454-002.

3.2.8. No blasting would occur at The Site. An excavator would be used to pull block from quarry faces, exploiting natural fissures in the rock. Once rock has been released from the face it is sometimes too large to be transported from The Site on a flatbed HGV. In this situation the rock would be split into a more manageable size using hydraulic splitting.

Stage 3 – Restoration and After-use

3.2.9. A restoration scheme has been included in this application in Chapter 7 and is represented on Drawing ref *232/5 - 7*, however, a detailed restoration and aftercare scheme would be required by planning condition. The restoration of The Site would not involve the importation of waste, instead the restoration

scheme would utilise mineral 'waste'[1] and retained soils from The Site. The restoration scheme would restore The Site to an upland heathland environment whilst avoiding single species / landform dominance and providing a long-term net-gain in biodiversity.

3.2.10. The PEA (Chapter 13 of this application) carried out at The Site showed that Horn Crag Quarry is currently a mosaic of upland heathland, gorse scrub, upland acid grassland and agricultural land. The PEA included a calculation of The Site's baseline biodiversity score using the DEFRA biodiversity metric version 2.0[2]. The Site has a baseline biodiversity score of 58.42 Biodiversity Units.

3.2.11. It is proposed that some quarry faces would be retained (drawing ref: *E454-005*). The majority of the quarry floor would be tipped and spread with retained mineral waste and overburden to create 'random' and hummocky terrain, with microtopographic elevation changes (less than 1m). The mineral wastes and overburden would then be spread with retained subsoils and topsoils, before being seeded with an appropriate seed mix, or planted with scrub species. Gorse scrub and mixed scrub are proposed to increase the connectivity of the vegetated area along the western edge of The Site which is to be retained.

3.2.12. It has been calculated that a +21.42% net gain in biodiversity would be achieved by the end of the proposed aftercare scheme.

3.2.13. The final restoration topography, prior to surface works (such as the proposed pond and scrapes) is shown in drawings ref *E454-005* & *E454-006*.

3.3. Rate of Working

3.3.1. It is anticipated that block and mineral suitable for dimension stone would be exported from The Site at a rate of only 560 tonnes (approximately) per-week totalling, approximately, 29,120 tonnes per annum. The low rate of exportation of this traditional building material from The Site reflects the small-scale nature of Horn Crag Quarry.

[1] Unsaleable mineral, fines, and overburden / interburden
[2] The version available at the time of the survey

3.3.2. However, due to the nature of demand for high quality building stone, it is highly likely that there will be 'peaks and troughs' in demand for the products. Therefore, the proposed end-date is the 22nd February 2043.

3.4. Hours of working

3.4.1 The working hours are proposed to be as follows:

07:30 – 18:00 hours Mondays to Friday
08:00 – 13:00 hours Saturdays

3.4.2. No production work would be undertaken on Saturday afternoons, Sundays or Bank Holidays, when only emergency maintenance of plant and equipment would be carried out.

3.5. Site Access / Vehicle Movements

3.5.1 There would be no more than 10 two-way (5 in and 5 out) HGV movements on any single working day, as well as a maximum of 40 HGV two-way (20 in and 20 out) movements per week.

3.5.2. HGVs would adhere to the routing agreement proposed, shown on Drawing ref: *232/5 – 6*. HGVs would leave The Site to the south, turning left (southeast) onto Fishbeck Lane before turning right (south) onto Brown Bank Lane. HGVs would then turn right (north) onto Bolton Road. This routing agreement avoids roads unsuitable for HGVs and prevents HGVs from The Site travelling through the centre of Silsden.

3.5.3. It is proposed that HGVs accessing The Site would have a 'Euro rating' of 5 or higher.

3.6. Plant and Equipment

3.6.1 The following mobile plant and equipment types (or similar) are proposed to be used at Horn Crag Quarry:

- 1 x Volvo EC480EL Excavator

- 1 x Volvo L220H Wheel Loader
- 1x Hyundai HX220AL Year 2022

3.7. Mineral Quantities

3.7.1 Based on the exploratory boreholes drilled across The Site, the depth of the water table and the quarry design, the estimated tonnage of high-grade dimension stone (end product) to be produced from Horn Crag Quarry is approximately 210,000 tonnes[3]

3.7.2. Analysis of the cores of the exploratory boreholes showed some stone which could be suitable for 'walling stone'. This stone may be unsuitable for the highest-grade end uses (such as stone lintels, columns etc.) due to fractures or clay bands, but is highly suitable for general stone building applications such as walls. It is estimated that the tonnage of saleable material at The Site, including high-grade dimension stone and walling stone, is approximately 520,000 tonnes.

3.7.3. The above higher-grade products would be transported from The Site for processing. The remaining minerals and fines are considered mineral waste if they cannot be sold as a product. At the applicant's other dimension stone sites with similar lithologies, a ratio of 50% saleable material to 50% mineral waste is achieved. As there are no intentions to export aggregate from The Site, this mineral waste would be retained for use in restoration.

3.8. Water Management / Hydrology

3.8.1 Surface water run-off from The Site would not be increased above existing levels.

3.8.2. Surface water run-off would be managed principally by a migrating sump. The base of the sump would always have a minimum of a 1m standoff from the water table. A Flood Risk Assessment has been carried out and is included within this proposal as Chapter 5.

[3] Estimates are based on average thickness of sandstone in all boreholes, and a density of 2.4 tonnes per m^3.

3.8.3. Mitigations for potential impacts to groundwater were suggested by Yorkshire Water for the planning applications submitted for mineral extraction at The Site in the 1980's. The applications submitted in the 1980's were refused, however, the proposals within this current application differ substantially from the historic proposals. Blasting is not included in the current proposals at all, and the rate of extraction is significantly less than was previously proposed.

3.8.4. The maximum depth of extraction would be at least 1m above the water table. A Hydrogeological Impact Assessment (HIA) has been carried out (Chapter 8 of this application) which surmised that "*impacts to the existing groundwater flow regime or groundwater levels are not predicted*" provided that extractions stay above the water table.

3.9. Security

3.9.1. The Site's entrance would be gated and locked outside of approved operating hours. The welfare unit and tool storage unit would both be locked outside of operating hours. 24hr CCTV would be put in place, focused on the fuel storage unit, which would also be locked when not in use.

3.10. Exporting Materials

3.10.1. Only block and mineral suitable for dimension stone would be exported from The Site and transported to the operator's yard in Leyburn. Once at the operator's yard, rock from The Site would be processed into dimension stone. The dimension stone produced would then be used in locally distinctive buildings and their repairs. No processing of mineral would take place at The Site, only extraction and loading to HGVs.

3.10.2. It is anticipated that the majority of the dimension stone produced at Horn Crag Quarry would be utilised throughout Yorkshire, specifically in areas underlain by the Millstone Grit Unit and where the patina of local buildings matches or is similar to the stone extracted at Horn Crag.

3.11. Importing Materials

3.11.1 No waste materials shall be imported to The Site. Small volumes of clay may be required for the lining of ponds and scrapes during restoration. The quantities of clay required would be provided in the detailed restoration scheme (as would be required by condition).

3.12. Noise

3.12.1. A noise impact assessment has been carried out and is included within this proposal in Chapter 9. The noise impact assessment concluded that, for the worst-case scenario, *"the noise emissions from the quarry* [would] *be a minimum of 7.0 dB below the threshold value* […] *the impact is classed as 'Not Significant".*

3.12.2. The noise impact assessment nevertheless suggested the following mitigations as 'good practice' to reduce potential the noise impact from the proposed development:

- "*Stationary plant such as generators should be located as far as possible away from the closest Noise Sensitive Receptor and engines should be turned off whilst idling.*
- *Plant should be used in accordance with the manufacturers' recommendations.*
- *Plant which may be used intermittently should be shut down between work periods or throttled down to a minimum.*
- *Appropriate screens or enclosures should be provided where practicable.*
- *All plant and machinery should be regularly maintained to control noise emissions, with emphasis on lubrication of bearings and integrity of silencers.*
- *Use quiet reversing alarms/methods.*
- *Site staff should be aware that they are working adjacent to residential properties and avoid all unnecessary noise due to misuse of tools and equipment, shouting and radios.*
- *Adherence to any restrictions of operating hours or activities imposed by the Local Authority."*

3.13. Dust / Air Quality

3.13.1. It is considered unlikely that the proposed operations would cause nuisance due to dust. The main potential source of dust would be the movement of plant and HGVs. Due to the small-scale nature of The Site, there would few HGV movements. Dust mitigation measures for The Site would include the wetting down of the internal haul routes and stockpiles. A Dust Mitigation Strategy has been included within this application in Chapter 6.

3.14. Final Restoration

3.14.1. A schematic restoration scheme is included in this application (Chapter 7), however, a detailed restoration scheme (and aftercare scheme) would be required by condition should planning permission be granted. The detailed restoration scheme would include the final topography and species / seed mixes.

3.14.2. The Site would be restored to generate long-term, meaningful, biodiversity net-gains (Chapter 22), and to create an appropriate landscape feature befitting of the name Horn Crag. The restoration of The Site would include retained faces[4], acid grassland, heathland, mixed and gorse scrub, wetland areas / ponds and the retention of existing biodiversity features.

3.14.3. The restoration design is shown in drawings ref: *232/5 – 7, 232/5 – 8, 232/5 – 9, 232/5 – 10, E454-005 and E454-006.*

3.14.4. No waste materials would be imported for the restoration of The Site.

[4] Retained faces would have a maximum height of 5m

Chapter 4: Policy

4.1 Introduction

4.1.1 The provision of the Town and Country Planning Act (1990) as amended, indicates a presumption in favour of development proposals which are in accordance with the Development Plan.

4.2. The Development Plan

4.2.1 The Development Plan and National Policy for this proposal is a combination of the following adopted and emerging local plans so far as they are relevant:

- The National Planning Policy Framework (NPPF) 2021
- Bradford Metropolitan District Council (BMDC) Core Strategy Development Plan Document (DPD) 2017
    - oBMDC Site Allocations DPD – 2018
    - oMinerals Background Paper and Evidence Report - 2015
- BMDC Emerging Local Plan (consultation draft February 2021)

4.3. National Policy

4.3.1 The National Planning Policy Framework (NPPF) was adopted in March 2012, with the latest update occurring in July 2021. The NPPF sets out the Government's approach to Planning and Sustainability and replaces Planning Policy Statements (PPS) and Planning Policy Guidance (PPG), which previously set out the Government's National policies on land use planning.

4.3.2. Chapter 2 (paragraphs 7 - 14) of the NPPF outlines that "*the purpose of the planning system is to contribute to the achievement of sustainable development*" through three main objectives: economic, social and environmental. In all three of these objectives, the proposed re-opening of the historic Horn Crag Quarry can be considered to be sustainable development.

4.3.3. The majority of dimension stone used in the UK is imported from India and China[1], and as such, any domestically sourced dimension stone has a significantly lower carbon footprint than that of imported non-indigenous stone. The proposals can be, therefore, considered more environmentally sustainable. Additionally, sourcing materials from within the UK is more economically sustainable than importing them as it contributes to the National economy as opposed to that of other countries. The social element of Chapter 2 of the NPPF is considered to be achieved through the direct and indirect creation of jobs in the UK, as opposed to in other countries. The proposals are, therefore, in line with the objectives of the NPPF. These three objectives are fundamental to the policies assessed in this document and are further achieved when the proposals are considered against them.

4.3.4. Chapter 13 (paragraphs 137 - 151) of the NPPF discusses "*Protecting Green Belt Land*"

4.3.5. Paragraphs 137 and 138 state:

"*The Government attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence.*

Green Belt serves five purposes:

a) to check the unrestricted sprawl of large built-up areas;
b) to prevent neighbouring towns merging into one another;
c) to assist in safeguarding the countryside from encroachment;
d) to preserve the setting and special character of historic towns; and
e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land."

4.3.6. Paragraph 150 states:

[1] Bradford Local Plan Minerals Background Report & Evidence Report (2011)

"*Certain other forms of development are also not inappropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it. These are:*

a) mineral extraction; [. .]"

4.3.7. The proposed development is mineral extraction and so is classed as not inappropriate development in the Green Belt, on the provision that it preserves its openness and does not conflict with the purposes of including the land within it. These purposes are included in paragraph 138. The proposed development clearly would not contradict with points a), b) and e). Points c) and d) are considered below.

4.3.8. The 'countryside' in the context of this application includes the areas surrounding The Site, as well as The Site itself. Mineral extraction is an established part of this countryside setting, indeed quarrying at Horn Crag has been a part of this countryside since before 1853[2] (prior to the designation of the Liverpool, Manchester and West Yorkshire Green Belt in 1966) and, therefore, no new forms of development would be 'encroaching' upon or introduced to the countryside.

4.3.9. Furthermore, the proposed extraction of dimension stone is a temporary development and would be restored to a principally upland heath environment with carefully designed landscape features intended to assimilate The Site into its surroundings whilst generating net-gains in biodiversity (demonstrated in Chapter 22). The countryside would not be 'encroached' upon by the proposals, as the existing Site and proposed operations are well established within the countryside. The proposals would not, therefore, conflict with point c) of paragraph 138 of the NPPF.

4.3.10. With regards to preserving the setting and special character of historic towns, the LVA carried out as part of this application concluded that The Site "*and wider landscape is able to successfully accommodate the proposals, in landscape and visual terms, without having an unacceptable effect or loss of landscape character or visual amenity*." As discussed above, mineral extraction at The Site

[2] As shown on historic OS Maps

has been part of the setting of Silsden and the historic character of the area since at least 1853 and so no new form of industry would be introduced to the setting of Silsden or other surrounding settlements.

4.3.11. Photomontages have been produced for five viewpoints from the LVA where The Site would likely be most prominent for the 'worst-case scenario', taking into account the extraction phasing (drawing ref: *232/5 – 3*) and restoration phasing (drawing ref: *232/5 – 10*). In this case, the worst-case scenario refers to the point in time where the working and restoration of The Site is considered to have the greatest potential landscape impact (without prejudice to the overall conclusions of landscape impact included in the LVA), due to soil stripping, visible fresh quarry faces and part-restored areas. The choice of viewpoints has been based on a general assessment of the above factors. It should be noted that these photomontages represent a temporary view in the lifetime of The Site, which would be continuously evolving and working and restoration progresses. The photomontages are shown in drawings ref: *232/5-11, 232/5-12* and *232/5-13*.

4.3.12. In addition to the above, it is noted that the dimension stone that would be quarried at The Site would supply locally appropriate stone, which could be used for new construction and restoration projects to preserve and enhance the historic character of Silsden and surrounding settlements.

4.3.13. The HGV movements that would be necessary for the proposed development would strictly adhere to the HGV routing strategy included in this application, which would ensure that no HGV travel to or from The Site through the centre of Silsden. The above considerations of the effect on the setting and special character of historic towns show that the development is, therefore, not in conflict with point d).

4.3.14. The Court of Appeal has recently made it patently clear[3] that preserving the Openness of the Green Belt does not mean maintaining a 'state of things' but, instead, to keep it safe from 'harm'.

[3] In the Samuel Smith Old Brewery Vs North Yorkshire County Council Court of Appeal Case (2018)

4.3.15. The pre-application advice received from the Council stated the "*The proposal for quarrying of the remaining reserve is not considered inappropriate development in the Green Belt, as it is considered that it is possible to preserve the openness and not conflict with the purposes of land included within it*." The temporary nature of the development has been considered in relation to 'openness'. The LVA concluded that: "[the temporary nature of the quarry] *will maintain the openness of the Green Belt.*" It is considered both here and by the Council, that the openness of the Green Belt would, therefore, be kept safe from harm.

4.3.16. The diversion of Footpaths 18 and 19 would be necessary for the proposals. It is proposed to divert Footpath 19 to traverse the southern boundary (see plan *232/5 - 5*). It is proposed to divert Footpath 18 from running north-south through the centre of The Site, (off the current quarry face) to run along the eastern and northern boundaries. The diversions of Footpaths 18 and 19 could be seen to, effectively, increase the openness of the Green Belt as these footpaths, in particular Footpath 18 which currently cannot be safely used via its marked route, but would become a safe and viable route.

4.3.17. Paragraph 174 of the NPPF states:

"*Planning policies and decisions should contribute to and enhance the natural and local environment by:*

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

[…]

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

[…] "

4.3.18. In regards to point a) of paragraph 174 of the NPPF, a Landscape and Visual Appraisal (LVA) was carried out to accompany this planning application (Chapter 10). The LVA concluded that "*The application site and wider landscape is able to successfully accommodate the proposals, in landscape and visual terms, without having unacceptable effect or loss of landscape character or visual amenity.*", demonstrating that the proposals would protect the valued landscape[4] in which The Site is situated. As informed by the Preliminary Ecological Appraisal (PEA) (Chapter 13) and the Ecological Impact Assessment (EcIA) (Chapter 24), the (relatively) ecologically-rich western edge of The Site, would be protected throughout the operation of The Site. The restoration of The Site would also provide geological value as some retained quarry faces are proposed, permanently preserving the massive, channel-deposited, carboniferous sandstones found at The Site.

4.3.19. Concerning point b), the proposals recognise the intrinsic character and beauty of the countryside, whilst acknowledging that mineral extraction has historically been a part of the local countryside. The conclusions of the LVA, reproduced above are also relevant to point b). As stated above, the tree covered western edge of The Site would be retained during operation in recognition of the benefits of trees and woodland.

[4] Note that The Site does not have a specific statutory landscape designation

4.3.20. In relation to point d) the PEA included in this application (Chapter 13) informed the proposed extraction boundary and restoration scheme for The Site. Consequently, the impacts of the operation on biodiversity would be minimised and long-term enhancements for ecology and net-gains in biodiversity would be achieved upon restoration and aftercare of The Site. The restoration scheme proposed for The Site maximises the potential for ecological connectivity, both within The Site and with the wider area.

4.3.21. The biodiversity net-gain achieved through the proposed phased restoration and aftercare schemes is demonstrated in Chapter 22 of this Supporting Statement. In accordance with emerging guidance on the application of Defra's biodiversity metric to minerals development, a 'snapshot' approach has been taken to calculate the change in biodiversity units throughout the duration of the proposed development. In August 2022 Defra published a document inviting "*Technical consultation on the biodiversity metric*", section 2.4 of which stated:

"*We are aware of the difficulties faced by minerals projects in accurately measuring biodiversity net gain. This is due to the nature of their phased approaches, unusual substrates, and long timescales. We are planning to add specific guidance in the metric user guide to help accommodate these. This will allow for multiple stages of metric submissions for minerals developments. It could also provide greater scope for deciding appropriate multipliers with the local planning authority's agreement."* [Our bolding]

4.3.22. Whilst this mineral specific guidance has not yet been published, we have sought guidance from BSG Ecology, who are contributing advice to DEFRA (through the Minerals Planning Association) on the snapshot approach, on how to apply the snapshot method to The Sites' biodiversity net-gain calculation. The snapshot approach takes into account the restoration phasing at The Site as well as the aftercare period. Applying the snapshot approach, the proposals result in a +21.42% net-gain in biodiversity upon completion of the aftercare scheme.

4.3.23. The following paragraphs 4.3.21 to 4.3.24 address part e). It is not anticipated that the proposals would cause an unacceptable impact on air quality. Nevertheless, a Dust Management Plan is included in this application in Chapter

6 which states that a maximum speed limit of 10mph would be adhered to and surfaces would be wetted down (at the Site manager's discretion) in dry or windy weather.

4.3.24. The Hydrogeological Impact Assessment (HIA) (Chapter 8) concluded that the proposals would not impact groundwater quality as the base of extraction would be a minimum of 1m above the water table. Additionally, the Flood Risk Assessment (FRA) included in Chapter 5 of this application states that The Site would not be at risk of flooding and the proposals would not increase flood risk away from The Site. Regardless of this low flood risk, a migrating sump would be utilised to store excess surface water throughout extraction to account for extreme rainfall events.

4.3.25. The potential impact of the proposals on noise have been assessed in Chapter 9. The noise impact concluded that the proposed development would be in accordance with BS5228:2009 and, therefore, would not have an unacceptable impact.

4.3.26. Land stability is extremely unlikely to be impacted by the proposals given the hard rock nature of the bedrock at The Site. All working of the quarry would be carried out in accordance with the Quarry Regulations 1999.

4.3.27. Chapter 17 (paragraphs 209 – 217) of the NPPF is dedicated to: - "*Facilitating the sustainable use of minerals*".

4.3.28. Paragraph 209 states:

"It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods the country needs. Since minerals are a finite resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation."

4.3.29. The proposed extraction of dimension stone at Horn Crag Quarry supports the maintenance of a 'sufficient supply'. New developments, where conceived properly, are designed to be 'in-keeping' with their surroundings, which, in the local area, feature stone-built properties, using dimension stone extracted

predominantly from the Millstone Grit Group, which includes the Middleton Grit Unit underlying Horn Crag. A Heritage Stone Survey has been included with this planning application in Chapter 12, which exemplifies local buildings which utilise natural stone and highlights the importance of paragraph 209 of the NPPF.

4.3.30. Paragraph 210 states:

"*Planning policies should:*

a) provide for the extraction of mineral resources of local and national importance, but not identify new sites or extensions to existing sites for peat extraction;

b) so far as practicable, take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials, whilst aiming to source minerals supplies indigenously;

g) when developing noise limits, recognise that some noisy short-term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction; and

h) ensure that worked land is reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites takes place." [Our bolding]

4.3.31. The proposed Site would be of local importance as dimension stone is required for the maintenance of historic assets in the area and for new development to maintain the local landscape character. A Heritage Stone Survey has been produced to accompany this application (Chapter 12), which shows local stone-built buildings. Not only is it important that materials used in restoration projects visually match the existing stone, it is important that materials are also chemically similar to the existing materials of the building or monument to ensure that future weathering patinas are analogous; this would reduce the amount of maintenance required in the future and, therefore, the amount of materials required, making

local dimension stone the most sustainable material to use in local restoration projects.

4.3.32. As discussed in paragraph 4.3.3 of this application, the proposed dimension stone extraction would provide an indigenous source of a material whose market is dominated by international imports. Importing stone is substantially less sustainable compared to indigenously sourced materials in an economic, social and in particular, an environmental way.

4.3.33. The noise survey carried out for this application (Chapter 9 of this application) concluded that the proposals are in accordance with BS5228:2009. The operations would involve some short-term activities that could potentially cause a 'substantial' impact as acknowledged in part g) of paragraph 210 of the NPPF, however, these activities are temporary and so the proposals are deemed "*acceptable in accordance with BS5228:2009*". Rolling restoration is proposed for The Site to ensure it is reclaimed at the earliest opportunity. The restoration scheme is informed by the PEA and further ecological studies carried out to accompany this application.

4.3.34. Paragraph 211 states:

"*When determining planning applications, great weight should be given to the benefits of mineral extraction, including to the economy. In considering proposals for mineral extraction, mineral planning authorities should:*

a) as far as is practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks, the Broads, Areas of Outstanding Natural Beauty and World Heritage Sites, scheduled monuments and conservation areas;

b) ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality;

c) ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source, and establish appropriate noise limits for extraction in proximity to noise sensitive properties;

d) not grant planning permission for peat extraction from new or extended sites;

e) provide for restoration and aftercare at the earliest opportunity, to be carried out to high environmental standards, through the application of appropriate conditions. Bonds or other financial guarantees to underpin planning conditions should only be sought in exceptional circumstances;

f) consider how to meet any demand for the extraction of building stone needed for the repair of heritage assets, taking account of the need to protect designated sites; and

g) recognise the small-scale nature and impact of building and roofing stone quarries, and the need for a flexible approach to the duration of planning permissions reflecting the intermittent or low rate of working at many sites." [Our bolding]

4.3.35. The following paragraphs 4.3.33 – 4.3.48 of this supporting statement demonstrate that the proposals would be in accordance with NPPF paragraph 211.

4.3.36. With regards to point a), whilst the proposals would not contribute towards a landbank, consideration of the effect on the SAC have been made. The Site is not within a National Park, the Broads an AONB, World Heritage Site, scheduled monument or conservation area. The Site is a historic quarry. Historic OS maps show that quarrying started at The Site before 1853, well before the designation of the South Pennine Moors SSSI & SAC. The Preliminary Ecological Appraisal (PEA) (Chapter 13) carried out as part of this application summarised that the proposed operation of Horn Crag would not unacceptably impact on the South Pennine Moors SSSI & SAC which is 1.2km to the west of The Site.

4.3.37. The following paragraphs, 4.3.37 to 4.3.47, address parts b) and c) of paragraph 211. The proposed development would not cause unacceptable adverse impacts on the natural and historic environment or human health, including from noise and dust emissions. However, mitigation measures are nevertheless proposed within this application which have been informed by studies included in Chapters 5 to 19, and are briefly described below.

4.3.38. The HIA (Chapter 8 of this application) stated "*the proposed works will not impact adversely upon the wider water environment*" if extraction maintained a 1m standoff from the groundwater.

4.3.39. The noise impact assessment (NIA) (Chapter 9 of this application) concluded that the potential impact of the proposals would be 'Not Significant' if good practice is followed, as it would be at The Site[5].

4.3.40. Blasting is not proposed at The Site. Block would be released from quarry faces by an excavator utilising natural weakness in the rock. If a 'block' of rock brought away from the face is too large to be manageable, or will not release from the face, hydraulic splitting could be used to carefully split it into smaller blocks / release it.

4.3.41. The LVA (Chapter 10 of this application) stated that dimension stone extraction at The Site would be successfully accommodated by the wider landscape if the western trees and the dry-stone walls on the perimeter of The Site are conserved throughout the operation of The Site.

4.3.42. The Transport Statement (Chapter 11 of this application) concluded that the proposed HGV movements '*would not have a material impact on the operation of the local highway network*' providing that the HGV routing strategy is adhered to, avoiding driving through Silsden town centre.

4.3.43. The PEA, ecological studies and EcIA (Chapters 13 – 21 & 24) conclude that if a sufficient standoff from the vegetation along the western edge of The Site is maintained throughout operation and a Construction Environment Management

[5] The applicant runs similar dimensions stone sites, following good practices.

Plan (CEMP) and Biodiversity Management Plan (BMP) are produced and followed, the proposals would "*comply with relevant policy and legislation relating to wildlife and ecology*".

4.3.44. The Flood Risk Assessment (FRA) included in this application in Chapters 5 suggests that whilst the flood risk at The Site as a result of the proposals is low, a migrating sump would nevertheless be utilised throughout operations to account for extreme rainfall events.

4.3.45. The Dust Management Plan produced for the proposals (Chapter 6 of this application) states that should the Site Manager deem it necessary, the following mitigation measures would be actioned to prevent potential unacceptable emission of dust; 10mph speed limit, wetting-down internal haul roads, wetting-down stockpiles and working areas or suspension of operations.

4.3.46. There are no other mineral extraction sites, or, activities that may generate additional HGV movements in the near vicinity of The Site. Therefore, cumulative effects are not anticipated as a result of the operations.

4.3.47. The Site is proposed to be worked on a campaign basis, meaning there will be periods of time with no or very low-level operation when limited potential impact on amenity would be caused at all.

4.3.48. Concerning point d), the proposals do not include any peat extraction.

4.3.49. In regard to point e), a schematic restoration scheme is included in this application (Chapter 7), informed by ecological studies to create a long-term net-gain in biodiversity (Chapter 22). As previously discussed, a detailed restoration scheme for The Site should be required by condition. Restoration would be started at the earliest opportunity, some 10 years prior to cessation of mineral extraction, to the highest standards with a suitable aftercare scheme (which should also be required by condition). The subsequent submission of the detailed restoration and aftercare scheme would include additional information such as, for example, species mix and confirmation of restoration contours. It is not considered that the proposals would constitute exceptional circumstances, therefore seeking bonds or financial guarantees would not be necessary.

4.3.50. The proposals directly relate to part f) of para 211 of the NPPF. The extraction of local dimension stone at Horn Crag would facilitate the repair of heritage assets. Discussion in paragraph 4.3.33 of this application highlights that designated sites would be protected throughout the proposed operations.

4.3.51 As stated in part g) of paragraph 211 of the NPPF, dimension stone quarries, like the proposed Horn Crag Quarry, are small-scale and have a low impact compared to the quarrying of other materials, for example, aggregates. Dimension stone extraction at Horn Crag is proposed to be carried out on a campaign basis and this has been reflected in the proposed end date for the operations.

4.3.52. Paragraph 211 is reinforced by National Planning Policy Guidance (Minerals) Paragraph: 016 Reference ID: 27-016-20140306, which states that, "*Mineral planning authorities should recognise that, compared to other types of mineral extraction, most building stone quarries are small-scale and have a far lower rate of extraction when compared to other quarries. This means that their local environmental impacts may be significantly less. Such quarries often continue in operation for a very long period and may be worked intermittently but intensively ('campaign working'), involving stockpiling of stone."*

4.4. Regional Policy – Core Strategy DPD (2017)

4.4.1 The Core Strategy Development Plan Document (DPD) was formally adopted in July 2017. This is the key adopted policy document for the BMDC area.

4.4.2. Paragraph 5.5.1 of the DPD states, "*Maintaining a steady and adequate supply of minerals is essential to the economy.*"

4.4.3. Paragraph 5.5.2 states, "*Supporting new investment in minerals extraction is both a responsibility, in terms of Bradford playing its part in supplying the raw materials necessary for economic growth, but is also an opportunity, in terms of enhancing Bradford's reputation as a supplier of high quality building materials and increasing skilled employment particularly in rural areas…*"

4.4.4. Paragraph 5.5.2 goes on to say:

" *The secondary objective of* [policy EN9] *is to reduce the need for minerals development to take place on new Greenfield sites by encouraging developers to consider any options they may have to fully exhaust remaining reserves within existing workings, or to extend those workings, before looking at opening up new sites*."

4.4.5. The Site does not have an active planning permission and has no restoration scheme. Consequently, it would constitute previously developed land (or 'brownfield land') as defined in the NPPF[6]. Therefore, it is more sustainable to re-open such a disused site, than to locate an entirely new greenfield site.

4.4.6. Policy EN9: New and Extended Minerals Extraction Sites:-

4.4.7. ""*..B. Proposals to open up a new minerals extraction site on previously developed land, re-open a disused minerals extraction site, or..extend an existing minerals extraction site, will be supported in principle provided that all of the following criteria are met:*

1 *The proposal accords with the policy for the specific mineral proposed to be extracted, as set out in policies EN10 and EN11, and;*

2. *The development would not result in unacceptable adverse impacts on people or the environment in terms of pollution, flooding or land stability risks, or harm to amenity, the setting of heritage assets or the character of the landscape, taking into account the cumulative effects associated with all existing or approved developments affecting the area and the environmental criteria set out in other Local Development Plan Policies, and;*

3. *The development would not lead to a long-term net loss of biodiversity, to the loss or significant deterioration of any irreplaceable habitats, or to the permanent disruption of a significant ecological network, and;*

4. *If the proposal is to extend an existing minerals extraction site: existing permitted reserves are close to exhaustion and those parts of the existing site*

[6] Permitted mineral extraction, that has a viable restoration scheme is not classed as previously developed land in the NPPF.

which it is practicable to restore, without unreasonably constraining future minerals extraction activity, have been restored."

4.4.8. As discussed, above in section 4.4.5, The Site is classed as previously developed land as it does not have any form of restoration scheme afforded through development management procedures.

4.4.9. In regard to part 1 of EN9, policy EN10 is discussed in paragraphs 4.4.22 and 4.4.23 of this document. EN11 concerns "*Sand, Gravel, Fireclay, Coal and Hydrocarbons (oil and gas)*" and as Horn Crag would be a dimension stone quarry, EN11 would not be relevant to the proposals and so has not been considered in this application.

4.4.10. Concerning part 2 of policy EN9, the proposals would not result in an unacceptable impact on groundwater, surface water or air quality. This application includes a HIA in Chapter 8 which states that groundwater would not be affected as a 1m standoff from the water table would be maintained throughout the operation of The Site. It is not anticipated that oils or hydrocarbons would pollute surface water as a result of the proposals; any oils or hydrocarbons stored on-site would be kept in double bunded storage with a capacity of 110% of the volume being stored, and plant and vehicles would be maintained to manufacturer standards reducing the likelihood of leaks. Chapter 6 of this application is a Dust Management Plan, which includes mitigation measures such as a speed limit of 10mph and wetting-down haul roads and stockpiles in windy or dry weather at The Site Manager's discretion. It is not considered that the proposals would produce an unacceptable level of dust.

4.4.11. An FRA is included in Chapter 5 of this application which concludes that the proposals would not result in an increased flood risk at or away from The Site. Extreme rainfall events could be accommodated by the proposed migrating sump and if needed, the quarry floor would be sacrificed for additional capacity.

4.4.12. It is not anticipated that the proposals would cause a land stability issue. All working would be carried out in accordance with the Quarry Regulations 1999.

4.4.13. Amenity has been considered within this application in regards to noise, vibration and visual impact (dust / air quality have been discussed in paragraph 4.4.10 above). A noise impact assessment is included in Chapter 9, which concludes that the proposals would not cause an unacceptable level of noise. As no blasting would occur at The Site, it is concluded that unacceptable impacts from vibrations would not result from the operations. The LVA (Chapter 10) carried out for this application concludes that the proposals could be successfully accommodated within The Site and the wider landscape.

4.4.14. Horn Crag, according to historic OS maps, has been quarried since at least 1853. As such, it is not considered that the proposed quarrying would harm the setting of any Listed Buildings[7] in the vicinity of The Site. In addition, mineral extraction at The Site would have already been part of the setting of such heritage assets when they were designated.

4.4.15. The LVA concluded that the proposals would not harm the landscape character of the area. The proposals would provide a source of local dimension stone which would be visually and chemically appropriate for the restoration of heritage assets or for use in new development to retain the traditional built character of the area.

4.4.16. It is not anticipated that there would be cumulative effects as a result of the proposals as there are no other extraction sites in the near vicinity of The Site.

4.4.17. The environmental criteria set out in the other development plan policies have been suitably addressed in this policy assessment and it is considered that they would be met by the proposals.

4.4.18. In regard to point 3 of policy EN9, a schematic restoration scheme informed by the ecological surveys carried out is included within this application in Chapter 7, which is designed to achieve long-term benefits to ecology and biodiversity net gains (Chapter 22). As such, the proposals would not result in the long-term net

[7] There are no Scheduled Monuments or World Heritage Sites near The Site

loss in biodiversity, loss or significant deterioration of any irreplaceable habitats, or the permanent disruption of a significant ecological network.

4.4.19. Therefore, the proposed operations would not contradict the conditions imposed by Policy EN9 Part B and the council is encouraged by its own polices to adopt a supportive stance towards the proposed development of Horn Crag Quarry.

4.4.20. Paragraph 5.5.10 states, "*These materials* [high quality building stone] *are used in both new build development projects, public realm paving schemes, and for the repair and extension of traditional buildings. The market for stone products from the District extends throughout the Region and beyond, with a demand for bespoke natural 'York Stone' masonry for quality development projects throughout the country*". Paragraph 5.5.10 highlights the regional (and national) importance of maintaining a supply of high-quality building stones such as those that would be produced from Horn Crag Quarry.

4.4.21. Para. 5.5.12 states "*Stone extraction is currently concentrated in the Elland Flag, Rough Rock and Woodhouse Grit rock units; however a number of other distinct sandstone types occur within the District and there is therefore the potential to further diversify the supply of building stones*" [our bolding]. High quality building stone resources are rare, therefore, it is inappropriate to limit new applications for building stone quarries to the geological units listed in Paragraph 5.5.12 of the DPD, as acknowledged by the paragraph's final sentence (in bold above). Horn Crag Quarry would extract from the Middleton Grit Unit, part of the Millstone Grit Group. Middleton Grit (or Horn Crag stone as it is sometimes referenced) is recognised in the British Geological Survey Building Stone Atlas[8] as being used for "*kerb, flag and building stone*".

4.4.22. Policy EN10, part B states, "*When considering the merits of proposals for new or extended building, roofing and paving stone quarries, any evidence that the proposal would result in an increased supply of particularly scarce building, roofing or paving stones, such as stone slates, riven flags, or matching stones*

[8] https://www2.bgs.ac.uk/mineralsuk/buildingStones/StrategicStoneStudy/EH_atlases.html

needed for the repair of historic buildings or monuments, will be accorded significant weight".

4.4.23. In addition to policy EN10, paragraph 5.5.17 of the DPD further highlights the importance of a continued supply of high-quality building stones such as those that would be extracted at Horn Crag Quarry, *"Particularly strong support is offered to minerals development which would result in an increased supply of scarce building, roofing or paving stones, such as stone slates, riven flags, or matching stones needed for the repair of historic buildings or monuments."* The Site would be the only quarry working the Middleton Grit Unit in the local area. The proposals would provide a source of building stones which would be visually and chemically similar to heritage buildings local to the Site, for example, in Silsden, Keighley and Ilkley. A visual assessment of such buildings has been made in Chapter 12 of this supporting document. Calverts are renowned for producing bespoke stone products, which would be particularly applicable in regard to the restoration of heritage assets.

4.5. Regional Policy – Minerals Background Paper and Evidence Report (October 2011)

4.5.1. The Minerals Background Paper and Evidence Report (Evidence Report) was published in October 2011 to inform the Council when writing the mineral policies in the extant Local Plan. The following quotes highlight the current and future need for proposed development.

4.5.2. Para 5.1.9 of the Evidence Report states, " *The Symonds Report (2004) concludes that the widespread use of artificial and imported materials, where local sources of building or roofing stones are either no longer available or unable to win competitive contracts, provides evidence that demand for building and roofing stone in England and Wales is "potentially somewhat greater than the current supply from indigenous sources". However, it is acknowledged that the 'unfulfilled' element of demand cannot easily be quantified."* [our bolding]

4.5.3. Para 5.2.2 of the Evidence Report " *The report notes that the character of the settlements within Bradford and the 'sense of place' of the inhabitants is*

primarily derived from the use of local building stone materials and that the use of artificial stone, brick or contrasting materials can dilute local character and result in the loss of a sense of place." [our bolding]. Para 5.2.3 then states "*The report goes on to note that there are only a limited number of operational quarries supplying building stone with appropriate aesthetic characteristics for use within the District. The scarcity of supply of coarse grained 'gritstone' walling, suitable for use in settlements to the north of the district, and stone slate roofing are particularly highlighted. Concerns are raised that the natural stone materials currently imported from outside the district can have subtly different aesthetic characteristics to local stone, in terms of colour, texture and course thickness. The report concludes that there is a clear need for greater availability of local stone for local use, and that particular emphasis should be placed on increasing supplies of roofing stone."*[our bolding]

4.5.4. Para 5.6.2 of the Evidence Report concludes "[..]. *It is difficult to quantify this need for stone to deliver other policies within the LDF. However, it is evident that the sustainable delivery of housing, design and public realm policies is linked to the maintenance of sufficient supplies of local natural stone building materials over the plan period. The consequence of a failure to supply demand for building, roofing and paving sone from local sandstone resources could be the haulage of natural stone building materials over long distances, with a consequent increase in environmental costs, or compromising design objectives through the use of inappropriate materials*" [our bolding].

4.5.5. The evidence report therefore demonstrates that the Council's policies are based on the notion that there is a distinct and strong need for additional sources of dimension stone, and that the significantly higher sustainability of utilising indigenous supplies of dimension stone as opposed to international sources (as discussed in this document) is fundamental to sustainability of the Council's policies.

4.6. Regional Policy – Emerging Local Plan (consultation draft February 2021)

4.6.1 Bradford is producing an Emerging Local Plan to replace the Core Strategy DPD. As this document is not yet adopted, the proposals laid out in this application

would not be considered against its policies at this time. Nevertheless, the policies may still constitute a material consideration during the lifetime of The Site, and those directly related to the proposed minerals development have been considered in the following paragraphs, whilst acknowledging that they are at draft stage.

4.6.2. Strategic Policy 9: Climate Change, Environmental Sustainability and Resource Use.

"*A. In response to the climate emergency the District should aim to:*

[..]

2. Ensure that all planning decisions as well as plans, strategies, investment decisions and programmes take account of their potential impacts on climate change and ensure that they put in place adequate mitigation and adaptation measures to address any likely effects.

[..]

D . Resource Use

Development proposals should use resources sustainably and reduce their environmental impact, by:

[..]

5. Ensuring the use of sustainable building materials."

4.6.3. As previously stated in paragraph 4.3.3 of this document, domestically sourced dimension stone has a lower carbon footprint than imported dimension stone. Dimension stone is more sustainable than many building materials (e.g. concrete and brick) because its processing does not require large amounts of heat and energy as opposed to other production processes. Additionally, dimension stone is easier to re-use compared to most building materials and so can also be considered more sustainable in this regard.

4.6.4. Strategic Policy 11: Protecting the South Pennine Moors SPA / SAC and their zone of influence. The Site falls within Zone B.

"*A. In this Policy*

1 *Zone A – is land up to 400m from the South Pennine Moors Special Protection Area (SPA) and South Pennine Moors Special Area of Conservation (SAC) boundary.*

2. *Zone B– is land up to 2.5km from the SPA and SAC boundary.*

3. *Zone C– is land up to 7km from the SPA and SAC boundary.*

B. Subject to the derogation tests of regulations 64 and 68 of the Habitats Regulations, in all Zones development will not be permitted where it would be likely to lead, directly or indirectly, to an adverse effect (either alone or in combination with other plans or projects), which cannot be effectively mitigated, upon the integrity of the SPA or the SAC.

C. In conducting the above assessment, the following approach will apply:

[…]

2. *In Zone B it will be considered, based on such evidence as may be reasonably required, whether land proposed for development affects foraging habitat for qualifying species of the SPA. Further guidance can be found in the South Pennine Moors SPD.*

[…]

D. The South Pennine Moors SPD sets out a strategic mitigation scheme and a mechanism for the calculation of the financial contributions to mitigate recreational impacts on the SPA and SAC as a consequence of housing growth and subsequent population increases."

4.6.5. The Site would be in Zone B in relation to the South Pennine Moors SPC / SAC (SPM). The SPA Bird Foraging Survey (Chapter 15 of this application) concluded that "[based on a] *lack of active foraging seen within the ecological zone of*

influence of the site it is possible to conclude that recommencement of quarrying would not lead to any noticeable effect on curlews specifically or the North and South Pennine Moors qualifying interests". Nevertheless, it is recommended in the PEA, Breeding Bird Survey, SPA Bird Foraging Survey and EcIA (Chapters 13, 14,15 & 24) of this application respectively) that a CEMP and BMP is included in the permission through a condition precedent, to ensure required mitigation are in place before the development commences.

4.6.6. Strategic Policy 12: strategic planning for minerals

"A. In planning for minerals, the Council will:

1. Seek to maintain a steady and adequate supply of minerals to meet local, regional and national requirements,

[..]

6. Support the high quality restoration and aftercare of mineral sites at the earliest stage after working and operations ceases. Beneficial after uses that improve the quality of environment (see Policy EN16[9])."

4.6.7. Paragraph 3.12.2 states "*In planning for minerals development, it is important to recognise that they have several characteristics that make minerals different:*

- *They can only be worked (extracted) where they naturally occur, so location options for the economically viable and environmentally acceptable extraction of minerals may be limited. This means that it is necessary to consider protecting minerals from non-minerals development and has implications for the preparation of minerals plans and approving non-mineral development in defined mineral safeguarding areas.*
- *Working is a temporary use of land, although it often takes place over a long period of time.*

[9] This policy is from the Thematic Policies of the Emerging Local Plan

- *Working may have adverse and positive environmental effects, but some adverse effects can be effectively mitigated.*
- *Since extraction of minerals is a continuous process of development, there is a requirement for routine monitoring, and if necessary, enforcement to secure compliance with conditions that are necessary to mitigate impacts of minerals working operations.*
- *Following working, land should be restored to make it suitable for beneficial after-use."*

4.6.8. Paragraph 3.12.3 then goes on to say "*Minerals are also a finite resource and therefore it is important to make the best use of them and to secure their long-term conservation*."

4.6.9. Paragraph 3.12.4 states " *There are a number of mineral resources present within the district including sandstone, sand and gravel, coal and clay. Sandstone is the most prevalent and most important to the local economy. Due to its quality and properties, it is in demand as a resource for building, roofing and paving stone*." [our bolding]

4.6.10. The emerging local plan's mineral policies therefore are similar to those in the currently adopted Core Strategy. The policy discussions for the Core Strategy in this document can also be considered in the context of the emerging local plan.

4.7. Need

4.7.1. As highlighted in the currently adopted and emerging Policy documents, including the Minerals Background Paper and Evidence Report, and discussed in detail throughout this policy assessment there is a 'need' for locally sourced building stone to maintain the character of the region and as a more environmentally sustainable alternative to importing building stone from other countries. There is, therefore, a demonstrable 'need' for the proposed dimension stone quarry at Horn Crag.

4.7.2. Building stone is essential to the operator's operation and can only be worked where it is found. There is an economic 'need' for the proposed development as it would enable the operator to continue to employ people throughout the

Yorkshire Region through the ongoing extraction, processing, and supply of building stone.

4.8. Alternatives

4.8.1 An alternative to the proposals would be to find a new, green-field site to develop. The Site currently does not have planning permission and does not benefit from any restoration scheme, and therefore, is classed as previously developed land. The studies attached to this supporting statement have shown that Horn Crag Quarry would be a sustainable development. Finding a further, equally sustainable development may not be viable either physically, economically, or environmentally, and would delay the acquisition of this locally distinctive and important traditional building material.

4.8.2. One alternative would be for Calverts to import the dimension stone required for their clients' building developments from other countries (the main markets are India or China[10]). However, importing a material which can be sourced and processed locally would be environmentally unsustainable and against National policy Para 204 part b. Locally sourced building stone would have a significantly lower carbon footprint comparative to any internationally sourced counterpart, simply based on transportation distances. Additionally, the physical and chemical properties of internationally sourced building stone would be unlikely to suitably match those of the heritage asset it is being used to restore compared to a locally sourced building stone.

5. Conclusion

5.1 The proposed dimension stone quarry at Horn Crag is supported by both National and local policies. The proposals are supported by studies assessing the potential impacts of operating The Site in terms of noise, visual impact, air quality, flood risk, hydrogeology, ecology, and traffic; all of which concluded that the proposals would not cause an unacceptable impact. The proposals include a thematic restoration scheme which demonstrates that a net-gain in biodiversity upon restoration and completion of the aftercare period would be achieved. The

[10] Bradford Local Plan Minerals Background Report & Evidence Report (2011)

proposed development constitutes temporary development. Quarrying at Horn Crag has occurred since at least 1853. The proposals are classed as not unacceptable development in the Green Belt because the 'openness' of the Green Belt would be preserved, and the proposals would not conflict with the purposes of including the land within it.

5.2. There is a demonstrable need for local dimension stone both for the restoration of heritage assets and construction in-keeping with the character of the area, as well as the economic benefits of continued and increased employment and the wider supply chain.

5.3. The proposals are the most socially, economically and environmentally sustainable option in comparison to the alternatives of importing the required dimension stone or opening an entirely new, greenfield site.