

Planning Statement

Section 73 Planning Application for the proposed deepening of the existing quarry and an extension of time for mineral extraction and restoration operations through the variation of conditions 1 (timescales), 2 (approved plans), 4 (depth of mineral extraction), 6 (phasing plans), 40 (final restoration scheme) and 41 (water level timescales) of permission 01/03/1185 (original planning permission ref 1/86/760)

at

**Leapers Wood Quarry,
Kellet Road, Carnforth, LA6 1BP**

on behalf of



by

H e a t o n s
Planning Environment Design

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Heaton's Document Management

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1 INTRODUCTION

1.1 Purpose of this report

- 1.1.1 This document is a Planning Statement (PS) prepared by Heaton's on behalf of Tarmac Trading Limited (the Applicant) to support a planning application at Leapers Wood Quarry, Kellet Road, Carnforth, Lancashire (the site).
- 1.1.2 Planning permission is being sought for the deepening of existing quarry operations and an extension of time for the quarrying operations until 31 December 2064, with interim restoration being completed a year later, by 31 December 2065 and final restoration being undertaken by 31 December 2078 in conjunction with the adjacent Back Lane Quarry.
- 1.1.3 This planning application is submitted under Section 73 of the Town and Country Planning Act 1990 and proposes to vary conditions 1 (timescales), 2 (approved plans), 4 (depth of mineral extraction), 6 (phasing plans), 40 (final restoration scheme) and 41 (water level timescales) of planning permission 01/03/1185 (original planning permission ref 1/86/760).
- 1.1.4 This PS accompanies the planning application and sets out the relevant planning policies to be considered as part of the application determination. The PS also sets out why the application is being submitted and relevant socio-economic considerations. The planning application is accompanied by an Environmental Statement (ES) and Non-Technical Summary (NTS).
- 1.1.5 Leapers Wood Quarry has been operating for many years and is one of a very limited number of quarries able to meet the carboniferous limestone aggregate demand of the north-west England market. The site is a strategic supplier of high-grade aggregate, the long-term security of which is essential to ensure that large scale schemes in the region have a reliable local source of quality aggregate into the future. It is therefore essential that the long-term plans for the site are considered at an early stage to ensure that the resource available is not unnecessarily sterilised or compromised.
- 1.1.6 Details of the proposed development and a site description are outlined within this ES, along with a broad assessment of any potential environmental effects and their significance. Comprehensive assessments and other background information are contained within the accompanying technical assessments. Greater detail of the potential environmental impacts as a result of the

proposed development is contained within the accompanying ES. In addition to environmental matters, other considerations material to the preparation and consideration of the planning application are also set out below.

1.1.7 This PS should be read in conjunction with the following documents and plans:

- Environmental Statement;
- Environmental Statement Non-Technical Summary;
- Environmental Statement Technical Appendices.

1.1.8 In addition to the above supporting documentation the following plans are also submitted as part of the application:

- Location Plan D.004
- Current Situation D.009
- Phase 1 D.019
- Phase 2 D.020
- Phase 3 D.021
- Phase 4 D.022
- Phase 5 D.023
- Proposed Concept Restoration D.024

1.2 The Applicant

1.2.1 Tarmac is one of the UK's leading sustainable building materials companies. Its innovative products, solutions and services not only deliver infrastructure needed to grow the UK economy today but also enable a more sustainable built environment for the country's long-term future.

1.2.2 Tarmac currently employs almost 7,000 people across the UK and manages a wide range of sites across the country. Tarmac resources include 120 quarries, 74 asphalt plants, 100 ready-mix concrete plants, 22 contracting offices, and 3 cement and lime plants. The company also manage 330 strategically located sites across the UK.

1.2.3 Each of the sites has a Biodiversity Action Plan (BAP), to identify targets, manage existing biodiversity and create new areas through on-going quarry restoration and ecological management. As a national minerals operator, the site BAPs help to monitor progress and make a significant contribution towards local and national biodiversity targets. These, in turn, contribute to global action for biodiversity.

- 1.2.4 The Company is also working with the Wildlife Trust in relation to their Biodiversity Benchmark Award which recognises a business's ongoing commitment to improving biodiversity on their sites. The award is one that requires the Company to be able to demonstrate that continuous improvement is being made and is the subject of annual reviews. The company operates fifteen quarries which have been awarded Benchmark status.
- 1.2.5 Further information on the Company can be obtained via their website www.tarmac.com

1.3 Community Involvement

- 1.3.1 In accordance with good practice and the advice within the National Planning Policy Framework (NPPF), all developers proposing to submit planning applications for major development are encouraged to undertake an element of community involvement prior to submitting their application. Community involvement is an important part of the planning process and ensures that the views of the local community are considered by the Applicant. Public Exhibitions have been held at Over Kellet, Nether Kellet and Carnforth.

2 SITE APPRAISAL

2.1 Site Location

- 2.1.1 Leapers Wood Quarry is located within Lancaster City Council authority area, lying to the south-east of Carnforth in Lancashire. The site lies immediately adjacent (to the north) of Back Lane Quarry operated by Aggregate Industries (AI). The site is otherwise bounded to the north, east and west by an extensive woodland belt. The M6 motorway lies nearby to the west of the site.
- 2.1.2 Carnforth is the nearest major settlement to the site, the town centre of which lies around 1.5km west of the site. Further afield, Lancaster city centre lies 8.5km to the south of the site.
- 2.1.3 Access to Leapers Wood Quarry is via Kellet Road to the north of the quarry. The dedicated site access road provides immediate access to the A601(M), some 70m to the west of the quarry access, which then provides onward access to the M6 and A6.
- 2.1.4 The site location is shown on drawing D.004. The current situation at the site is shown on drawing D.09 and the proposed extraction depths and consented extraction area are shown on drawings D.019 to D.023.

2.2 Site Description

- 2.2.1 The site lies immediately adjacent to the north of Back Lane Quarry. The sites are operated independently but their phased working and subsequent restoration are interrelated. The dedicated site entrance lies to the north of the site on Kellet Road.
- 2.2.2 The site extends to approximately 48 hectares (ha) in size and comprises an operational limestone quarry across the majority of the application area, site offices and a weighbridge in the north of the site and a naturally regenerating overburden tip in the west of the site. Perimeter areas comprise lowland mixed deciduous woodland, mixed plantation woodland, hedgerows, dense scrub, calcareous grassland, improved pasture, open mosaic habitat and inland rock and scree.

2.3 Site Context

- 2.3.1 The northern boundary of the site consists of a woodland belt made up of Leapers Wood, Bowman Stout Wood and Slacks Wood (around 100m wide) beyond which are agricultural fields separating the quarry area from the settlement of Over Kellet (around 500m away). Leapers Wood is classified as Ancient & Semi – Natural Woodland, Bowman Stout Wood is Ancient Replanted Woodland and Slacks Wood is also Ancient & Semi – Natural Woodland.

- 2.3.2 To the south of the site, beyond Back Lane Quarry, there are agricultural fields leading down to Back Lane, Main Road and the village of Nether Kellet. Hawthorns Caravan Park lies approximately 700m to the south of the quarry.
- 2.3.3 To the west of the site is a belt of woodland screening the site from the M6 which runs in a north / south direction past the site. To the east of the quarry is Kit Bill Wood, an Ancient and Semi-Natural Woodland covering around 4.9 ha.
- 2.3.4 The nearest residential areas to the extraction area lie around 400m to the north-west on the edge of Carnforth, beyond the M6. Over Kellet village lies around 500m to the north-east and Nether Kellet village lies around 900m to the south of the quarry at its nearest point.
- 2.3.5 There are a number of Listed Buildings within 2km of the site, the closest of which is Grade II* listed 'Church of St Cuthbert' approximately 500m to the east. The nearest cluster of listed buildings are within the village of Over Kellet around 800m north-east of the site.
- 2.3.6 A Public Footpath (PROW ref: 1-24-FP 7) runs north to south along the eastern side of Kit Bill Wood (to the east of the quarry), reaching Main Road. Here it runs parallel with Main Road before heading east to west (PROW ref: 1-22-FP 5) across the agricultural fields to the south of Back Lane Quarry.
- 2.3.7 There are two Sites of Special Scientific Interest (SSSI) within 2km of the site. Crag Bank SSSI is a 3.7ha biological designation located around 1.5km to the west of the site. Thwaite House Moss SSSI is a 7.25ha biological designation approximately 1km to the south-west of the site.
- 2.3.8 The Forest of Bowland National Landscape and the Arnside and Silverdale National Landscape lie around 1.7km to the east and 1.8km to the west respectively.

2.4 Background and Planning History

- 2.4.1 Leapers Wood Quarry is a long-established limestone quarry supplying high grade limestone aggregate throughout the region. Planning permission for mineral extraction at Leapers Wood Quarry was granted in 1988 (ref. 1/86/760). The permission was subject to an Environment Act Mineral Review in 2003 (Application reference: 1/03/1185).
- 2.4.2 Planning permission was granted for the construction of a western embankment at Leapers Wood Quarry in 1995 (ref 1/94/582). The embankment provided a location for the tipping of overburden and waste material from the adjacent quarry and

improved the screening of the quarry when seen from Carnforth and surrounding areas to the west. Condition 1 of the planning permission required the embankment to be completed by 30th June 2012 with restoration completed within a further year.

- 2.4.3 Planning permission to vary condition 1 of planning permission 01/94/0582 to extend the time period for the completion of the western embankment to 30 June 2022 was permitted on 28th September 2012 (ref. 01/12/0662).

3 DESCRIPTION OF THE PROPOSED DEVELOPMENT

3.1 Introduction

3.1.1 The proposed development comprises a deepening of the currently permitted mineral extraction operations and an extension of time to allow the mineral reserves to be fully worked and the site restored.

3.2 Existing Operations

3.2.1 Leapers Wood Quarry comprises an operational limestone quarry, areas of stockpiling, site offices and associated car parking.

3.2.2 The site is accessed off Kellet Road to the north and currently produces approximately 800,000 tonnes of limestone aggregate per annum. This is an average figure which will fluctuate depending upon demand and the wider economy.

3.2.3 The current permission for the site restricts working to a maximum depth of 38mAOD via planning condition.

3.2.4 The existing permission also limits the timescales for extraction and restoration of the site to 19 September 2048 and 19 September 2049 respectively.

3.2.5 The existing theoretical reserve remaining on site has been calculated to be approximately 6.5 million tonnes (mt) although some of these reserves are constrained by plant, machinery, site buildings and a mineral waste tip and are not therefore able to be worked.

3.3 Description of Proposed Development

3.3.1 This planning application is submitted under Section 73 of the Town and Country Planning Act 1990 and proposes to vary conditions 1 (timescales), 2 (approved plans), 4 (depth of mineral extraction), 6 (phasing plans), 40 (final restoration scheme) and 41 (water level timescales) of planning permission 01/03/1185 (original planning permission ref 1/86/760).

Reserves and output

3.3.2 Leapers Wood Quarry extracts a high-grade limestone aggregate, the supply of which is critical in facilitating the construction of strategic projects throughout the region.

3.3.3 It is proposed to seek permission for the deepening of the current quarrying operations in order to extract the limestone reserves to a depth of -37mAOD (i.e. an additional depth of 75m). The proposed deepening would release a further 26 million tonnes (mt) of limestone, assuming the joint working of the boundary between Back Lane Quarry and Leapers Wood Quarry. This would result in an overall

resource of around 33mt, including the existing workable reserves and those reserves currently constrained.

- 3.3.4 The existing annual sales from the site of approximately 800,000tpa would remain unchanged.

Phasing

- 3.3.5 The mineral would be extracted in 5 Phases (phases 1 – 5).

Phase 1

- 3.3.6 Phase 1 would comprise the strengthening and species diversification for site peripheral hedgerows and the production of a long term Woodland and Hedgerow Management Plan.

- 3.3.7 Mineral extraction would continue within the permitted limit of extraction, working southwards to extract rock down to the permitted level of 38mAOD, with subsequent deepening to 33mAOD and 23mAOD.

- 3.3.8 Extracted mineral would be processed on site at the Leapers Wood processing plant site, temporarily stocked and transported off-site by HGV to its point of sale.

- 3.3.9 Phase 1 would release approximately 9.103mt of mineral.

Phase 2

- 3.3.10 Mineral extraction would continue within the permitted limit of extraction, with deepening to a depth of 7mAOD.

- 3.3.11 Extracted mineral would be processed on site at the processing plant, temporarily stocked and transported off site by HGV to its point of sale.

- 3.3.12 Phase 2 would release approximately 5.338mt of mineral.

Phase 3

- 3.3.13 Phase 3 mineral extraction would continue within the permitted limit of extraction, with deepening to a depth of -37mAOD.

- 3.3.14 Extracted mineral would be processed on site at the processing plant, temporarily stocked and transported off site by HGV to its point of sale.

- 3.3.15 Phase 3 would release approximately 4.894mt of mineral.

Phase 4

- 3.3.16 During Phase 4 the Leapers Wood processing plant would be decommissioned and removed from the site. During and following its removal a temporary mobile processing plant would be used within the quarry void, to facilitate the processing of rock and to avoid the sterilization of the mineral resource.
- 3.3.17 The quarry weighbridge and offices would also be relocated.
- 3.3.18 Mineral extraction would continue within the permitted limit of extraction, with deepening to a depth of -37mAOD, together with the extraction of rock beneath the existing stockyard and processing plant site areas.
- 3.3.19 Extracted mineral would be processed on site using mobile plant, to be located adjacent to the quarry face. Material would be temporarily stocked within the quarry void and transported off-site by HGV to its point of sale.
- 3.3.20 Phase 4 would release approximately 12.125mt of mineral.

Phase 5

- 3.3.21 Mineral extraction would continue in Phase 5 with the removal of the internal eastern ramps / access infrastructure.
- 3.3.22 Extracted mineral would be processed on site using mobile plant, to be located adjacent to the extraction face.
- 3.3.23 Material would be temporarily stocked within the quarry void and transported off site by HGV to its point of sale, via the Back Lane internal ramp/access infrastructure.
- 3.3.24 Following the cessation of mineral extraction, processing and sale of all mineral stocks, all quarry plant and machinery would be decommissioned and removed from the site.
- 3.3.25 Phase 5 would release approximately 1.978mt of mineral.

Timescales

- 3.3.26 In order to fully extract the additional reserves within the site, it would be necessary to extend the currently permitted timescales. Assuming the existing extraction rates are maintained, this would require an extension of time from 19 September 2048 to 31 December 2064 for mineral extraction and from 19 September 2049 to 31 December 2065 for interim restoration, with final restoration being undertaken by 31 December 2078.

Employment

- 3.3.27 The site currently employs 11 full time equivalent staff. No changes are proposed to the number of staff employed on the site.

Hours of Operation

- 3.3.28 Condition 13 and 14 of the site's extant planning permission (ref:01/03/1185) specify the operating hours for the site, as follows:

Condition 13

'The use of explosives shall only take place between the hours of 1000 and 1700 Mondays to Fridays (except Public Holidays) and between 0830 and 1200 on Saturdays and at no other times, except in emergency situations. In such emergency situations the operator shall inform the County Planning Authority prior to blasting or within 48 hours of a blast having taken place.'

Condition 14

'Notwithstanding the hours of working contained in condition 13 above, no soils or overburden shall be stripped or re spread from any part of the site nor shall construction of storage, landscape or baffle mounds take place on any part of the site before 0730 hours or after 1800 hours on Monday to Fridays (except Public Holidays) or before 0730 hours or after 1300 on Saturdays or at any time on Sundays or Public Holidays.'

- 3.3.29 Due to the critical need for flexible working to service specific overnight road construction projects, no restrictions are placed on hours of operation of the mineral extraction activities within the quarry.
- 3.3.30 No changes are proposed to the above operating hours.

Traffic & Access

- 3.3.31 The site access is from Kellet Road to the north of the site along a purpose built access road with a junction onto the B6254 Kellet Road.

Lighting

- 3.3.32 No changes are proposed to the current lighting arrangements within the site.

Restoration

- 3.3.33 The restoration of Leapers Wood Quarry would be undertaken as a combined restoration scheme which would be achieved through the restoration and after-use

for both Leapers Wood Quarry and the adjacent Back Lane Quarry. An approved restoration scheme exists for the restoration of these sites, as shown on Drawing Number L13/08a 'Combined Conceptual Restoration Scheme'. The scheme is based on the mineral reserves being worked to a depth of 38mAOD. This planning application seeks permission to extract mineral to -37mAOD and therefore, a revised restoration scheme has been prepared.

- 3.3.34 Given its location close to two National Landscapes, the Lake District National Park and attractive rural parts of the north-west of England, as well as its proximity to the M6 motorway network, the resultant void at the two quarries would be well situated for recreational and amenity after-uses. As with the approved restoration scheme, the proposed restoration scheme recognises the potential for a multi-purpose after-use consisting of water and land-based recreational activities centered on and around a central lake, supplemented by discrete areas of nature conservation habitat, generally located on the quieter outer fringes.

4 PLANNING POLICY CONSIDERATIONS

4.1 Introduction

4.1.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that determination by the relevant MPA, in this instance, Lancashire County Council, must be made in accordance with the Development Plan unless material considerations indicate otherwise.

4.1.2 In reaching a decision on this application, the first consideration is therefore whether the proposals accord with the Development Plan. Having done this, it is then necessary to have regard to all other material considerations, which include all relevant policy considerations contained in the emerging development plan as well as National Planning Policy and guidance.

4.2 The Development Plan

4.2.1 The Development Plan in this case includes:

- Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD (Adopted February 2009);
- Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies (Adopted September 2013);
- Lancaster Local Plan Part One: Strategic Policies & Land Allocations DPD (Adopted July 2020); and
- Lancaster Local Plan Part Two: Development Management DPD (Adopted July 2020).

4.2.2 Material considerations include:

- National Planning Policy Framework (last amended 2023);
- Planning Practice Guidance; and
- Review of the Minerals and Waste Local Plan (Emerging).

Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD (February 2009)

4.2.3 The Core Strategy was adopted in February 2009 as part of the Local Development Framework for Lancashire. The document sets out the future for minerals and waste development in Lancashire until 2021 and outlines the strategic policies required to deliver the vision. However, it should be noted that the DPD is now considered out of date and therefore proposals now fall to be considered against national policy.

Notwithstanding this, policies of relevance within the Core Strategy are set out below.

4.2.4 The Core Strategy has the following objectives:

- To identify and safeguard mineral resources for specific purposes which meet a proven and sustainable need, recognising their environmental, cultural and landscape value and their potential for future working;
- To provide a sustainable supply of locally sourced minerals, sufficient to meet our local, regional, and national needs;
- To provide certainty for businesses, operators, and the public by identifying sites and areas for new mineral extraction, whilst seeking to conserve and enhance Lancashire's environmental assets and ensure a high quality of life for all;
- To support high standards of working practices and environmental protection and take an integrated and innovative approach to enhancing the quality of land and our landscapes during extraction and in restoration for beneficial after-use, including potential benefits to biodiversity, amenity, and access to the countryside; and
- To encourage and enable local communities, businesses, and local authorities to work together in coming to decisions and delivering solutions for sustainable resource management.

4.2.5 Policy CS1 (Safeguarding Lancashire's Mineral Resources) states that minerals will only be extracted where they meet a proven need for materials with those particular specifications. Mineral resources are to be conserved where they have an economic, environmental or heritage value. Mineral Safeguarding Areas will be used to identify mineral resources with the potential for extraction. The site is identified as a limestone site with 'Long-Term Strategic Provision' on the Key Diagram, situated within a 'Limestone Resource Area'.

4.2.6 Policy CS2 (Minimising the Need for Mineral Extraction) requires new developments to maximise the use of recycled and secondary materials.

4.2.7 Policy CS3 (Meeting the Demand for New Minerals) sets out the provision of 57.8 million tonnes of limestone between 2001 – 2021 to be met through a combination of rolling forward and identifying a minimal range of new sites and relying on secondary and recycled aggregates. No additional land was allocated for limestone extraction for aggregate use before 2021.

4.2.8 Policy CS5 (Achieving Sustainable Minerals Production) encourages alternatives to the bulk transportation of minerals by road. Criteria for site identification will be developed in order to ensure new sites identified for minerals development are sustainable. Concurrent mineral working is encouraged where it will maximise the recovery of materials worked.

Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part 1 (2013)

4.2.9 The Site Allocation and Development Management Policies Local Plan (Part 1) provides site specific policies and allocations, and detailed development management policies for minerals and waste planning in the areas covered by the Councils of Lancashire, Blackpool and Blackburn with Darwen. Policies of relevance within the Core Strategy are set out below.

4.2.10 Policy NPPF 1 (Presumption in Favour of Sustainable Development) states that when a planning application accords with the policies in the Local Plan, it will be approved without delay, unless material considerations indicate otherwise.

4.2.11 Policy DM1 (Management of Waste and Extraction of Minerals) supports the extraction of mineral provision as set out in the Core Strategy and management of waste capacity as set out in Policy WM1.

4.2.12 Policy DM2 (Development Management) sets out the parameters for minerals and waste management operations. Minerals and waste developments will be supported that can demonstrate a positive contribution to the:

- Local and wider economy;
- Historic environment;
- Biodiversity, geodiversity and landscape character;
- Residential amenity of those living nearby;
- Reduction of carbon emissions; and
- Reduction in the length and number of journeys made.

4.2.13 Policy DM3 (Planning Obligations) states that where planning obligations are required to make a development acceptable in terms of its social, economic and environmental impacts, the MPA / WPA will seek to ensure the provision of, where appropriate:

- Access or road improvements;
- Long term aftercare or management;
- Provision of new or diverted footpaths;
- Public access to restored sites;
- Compensatory provision elsewhere for ecological mitigation;
- Wider transport improvements highlighted in the development's travel plans;
- District heating infrastructure sought under Policy DM4;
- Time limiting the development; and
- Ensuring full site restoration by a fixed date.

4.2.14 Policy SA2 (Safeguarding of Land for Access Improvements) safeguards land for the 'haulage route through Back Lane and Leapers Wood Quarries', identified as route 'MRT14' on the policies map.

4.2.15 Policy M1 (Managing Mineral Production) states that development will not be supported for any new extraction of sand and gravel, limestone, gritstone or brickshale. If permitted reserves are unable to maintain the required production levels (identified in the latest sub-regional apportionments), increasing the working depth at existing limestone quarries and extraction at Dunald Mill Quarry will be supported.

4.2.16 Policy M2 (Safeguarding Minerals) states that development within Minerals Safeguarding Areas as outlined on the Policies Map will not be supported if it is incompatible by reason of scale, proximity and permanence with working the minerals. The policy also sets out exemptions to this, such as in areas where mineral has no value or where prior extraction can take place.

Lancaster District Council Local Plan Part One: Strategic Policies & Land Allocations DPD (Adopted July 2020)

4.2.17 The Strategic Policies & Land Allocations DPD was adopted on 29th July 2020 and allocates land for housing, employment, services and new investments within Lancaster District.

4.2.18 Policy SP1 (Presumption in Favour of Sustainable Development) echoes guidance contained within the NPPF. The Council are required to take a positive approach

when considering development proposals. Planning applications that accord with the Development Plan should be approved without delay.

- 4.2.19 Policy SP8 (Protecting the Natural Environment) seeks to ensure that the natural environment is protected, in particular biodiversity and geodiversity. Development should address any potential flood risk issues, taking into consideration the effects of climate change. The district's biodiversity and geodiversity should be maintained and enhanced through the appropriate location of uses, sympathetic design, sustainable construction techniques and appropriate mitigation measures.
- 4.2.20 Policy SP10 (Improving Transport Connectivity) states that, where appropriate, development proposals will be expected to contribute to the delivery of important transport infrastructure.
- 4.2.21 Policy EN3 (Open Countryside) requires development proposals in the open countryside to have due regard to the relevant policies contained within the Local Plan, in particular the Development Management DPD. The site is located within the open countryside.
- 4.2.22 Policy EN7 (Environmentally Important Areas) requires development proposals which may impact upon regionally designated sites to have due regard to Policy DM44 of the Development Management DPD. Part of the site is designated as a regionally important area.

Lancaster District Council Local Plan Part Two: Development Management DPD
(Adopted July 2020)

- 4.2.23 Policy DM29 (Key Design Principles) seeks to ensure that development responds to its environment, having regard to the existing character and quality of the area. The Council will expect development to, inter alia:
- Contribute positively to the identity and character of the area through good design, having regard to local distinctiveness, appropriate siting, layout, palette of materials, separation distances, orientation and scale;
 - Ensure there is no significant detrimental impact to amenity in relation to overshadowing, visual amenity, privacy, overlooking, massing and pollution;
 - Create buildings and spaces that are adaptable to changing social, environmental, technological and economic conditions.
- 4.2.24 Suitable and safe access to the existing highway network should be provided to ensure highway safety. Landscaping should be provided to protect adjoining

sensitive users and the open countryside. Potential sources of air quality, noise and light pollution should be minimised.

- 4.2.25 Policy DM31 (Air Quality Management and Pollution) seeks to ensure that development proposals do not negatively impact upon air quality in the district. Proposals must demonstrate how they have sought to minimise polluting emissions and, where necessary, incorporate on-site and/or off-site mitigation measures. Air Quality Assessments may be required for relevant development proposals.
- 4.2.26 Policy DM33 (Development and Flood Risk) requires development proposals to take a sequential approach which directs development to the areas of lowest risk of flooding.
- 4.2.27 Policy DM34 (Surface Water Run-off and Sustainable Drainage) requires surface water to be managed sustainably. Sustainable drainage systems should be implemented unless it is inappropriate or impractical. A drainage strategy is required for all major development proposals.
- 4.2.28 Policy DM35 (Water Supply and Waste Water) seeks to ensure that new development does not have a detrimental impact on surface water and groundwater quantity and quality and the quality and standard of bathing water in the locality. Waste-water must be disposed of efficiently and effectively. Proposals should seek to increase water availability and protect and improve the quality of rivers or groundwater where possible.
- 4.2.29 Policy DM44 (The Protection and Enhancement of Biodiversity) requires proposals to protect and enhance biodiversity and/or geodiversity and minimise both direct and indirect impacts. Where possible, a net gain of biodiversity assets should be delivered. Where harm is identified, developers must demonstrate how the harm will be mitigated or compensated for in line with the mitigation hierarchy.
- 4.2.30 Developments affecting environmentally sensitive sites and species will not be permitted where there is an adverse effect, unless the benefits of the proposal outweigh the potential adverse effects. If the adverse effects are unavoidable a development proposal will be required to demonstrate that:
- Adverse effects are minimised;
 - Provision is made for mitigation and compensation measures, such as on-site landscape works, off-site habitat creation, species relocation and ongoing

management as appropriate, such that there is a clear net gain for biodiversity; and

- The biodiversity value of the site is not compromised, both on its own and as part of the wider network of sites.

- 4.2.31 Development should protect and enhance the district's soil resource and avoid the use of best and most versatile agricultural land.
- 4.2.32 Policy DM45 (The Protection of Trees, Hedgerows and Woodland) states that the Council will protect ancient trees and ancient woodland. New development should positively incorporate trees and hedgerows, unless justification is provided as part of an Arboricultural Implications Assessment (AIA). Replacement trees will be sought where there are losses. Opportunities to plant new trees, hedgerows and woodland will be supported.
- 4.2.33 Policy DM46 (Development and Landscape Impact) requires a Landscape and Visual Impact Assessment to be prepared for development that has the potential for significant landscape or visual impact. Development proposals should be designed to avoid negative landscape and visual effects and, where unavoidable, mitigation measures and compensatory measures should be implemented.
- 4.2.34 Policy DM47 (Economic Development in Rural Areas) supports economic development in rural areas, providing the rural vitality and character of the area is maintained. Proposals will need to demonstrate the community benefits of the scheme. Sites in rural areas which are allocated for particular purposes through the Development Plan will be supported in principle.
- 4.2.35 Policy DM57 (Health and Well-being) requires development in the district to promote health and well-being and contribute to addressing health inequalities. Measures to achieve this include, inter alia, ensuring that development does not have an adverse impact on the environment through air, noise and water pollution.
- 4.2.36 Policy DM60 (Enhancing Accessibility and Transport Linkages) seeks to ensure that development generating significant footfall and / or motorised vehicle journeys is located where sustainable travel patterns can be achieved. Development proposals should, inter alia, include measures that address matters of highway safety to the satisfaction of the local highway authority and ensure that the proposal site can be accessed safely both during the construction and occupation phases of development. Any significant impacts must be addressed through the preparation of a Travel Plan.

Where highway capacity is insufficient, provision of new transport and highway infrastructure will be sought.

- 4.2.37 Policy DM62 (Vehicle Parking Provision) requires development proposals to provide car and cycle parking in accordance with the levels and layout requirements set out in Appendix E of the DM DPD.
- 4.2.38 Policy DM63 (Transport Efficiency and Travel Plans) supports proposals that maximise sustainable modes of transport. Appropriate contributions should be made via development proposals to improve transport infrastructure. A Transport Assessment may be required to assess the likely impacts of a development proposal on the local highway network.

Draft Climate Emergency review of the Strategic Policies & Land Allocation Development Plan Document (March 2022) – Submission Version

- 4.2.39 In light of Lancaster declaring a climate emergency in 2019, the City Council made the decision to review the Local Plan to seek better environmental outcomes for the district and assist in achieving net zero carbon ambition of the Council.
- 4.2.40 Policy SP8 is updated to include for proposals considering the resilience of development against climate change.

4.3 Material Considerations

National Planning Policy Framework

- 4.3.1 The National Planning Policy Framework (NPPF) has been subject to several amendments since it was first published in 2012, the latest being in December 2023. The NPPF sets out the principle of a presumption in favour of sustainable development. Where a proposal satisfies the requirement of NPPF i.e. being sustainable and in accordance with the Development Plan, planning authorities are directed to grant planning permission without delay unless material considerations indicate otherwise.
- 4.3.2 Paragraph 7 of the NPPF defines the objective of sustainable development, which can be summarised as meeting the needs of the present without compromising the ability of future generations to meet theirs.
- 4.3.3 Paragraph 8 states that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways. These are:
- An economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the

right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

- A social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being; and
- An environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy’.

4.3.4 So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development (paragraph 10). Paragraph 11 sets out that decision taking should apply the presumption in favour of sustainable development which means that development proposals that accord with an up-to-date development plan should be approved without delay, and in instances where there are no relevant development plan policies, or policies important for decision making are out of date, permission should be granted unless:

- the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or
- any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

4.3.5 Paragraph 38 states that decision-makers at every level should seek to approve applications for sustainable development where possible.

4.3.6 The bulk of the Framework contributes to the definition of sustainable development and includes the following paragraphs which are of particular relevance to this development, following the order of the NPPF document.

A Strong, Competitive Economy

- 4.3.7 In terms of building a strong, competitive economy, paragraphs 85-89 state that the planning system should operate to create conditions in which businesses can invest, expand and adapt, with significant weight placed on the need to support economic growth and productivity.

Sustainable Transport

- 4.3.8 Paragraphs 114-117 relate to the approach taken towards considering development proposals in a transport context. Proposals should ensure that safe and suitable access to an application site can be achieved for all users and that significant impacts on the transport network (including highway safety) can be cost effectively mitigated to an acceptable degree.
- 4.3.9 Paragraph 115 states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Conserving and Enhancing the Natural Environment

- 4.3.10 Paragraph 180 states that determining planning applications should contribute to and enhance the natural and local environment. Measures to achieve this include, inter alia:
- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
 - minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; and
 - preventing new and existing development contributing to unacceptable levels of soil, air, water, or noise pollution or land instability.
- 4.3.11 Paragraph 186 advises that in decision making, refusal of permission should be issued only if adequate mitigation for proposals where significant harm to biodiversity cannot be avoided, cannot be achieved, or, as a last resort, compensated for.
- 4.3.12 Paragraph 188 advises that *'the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an*

appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site’.

Conserving and Enhancing the Historic Environment

- 4.3.13 Paragraphs 195-214 outline the approach to the conservation and enhancement of the historic environment. The NPPF seeks to ensure that in decision making, local planning authorities aim to avoid or minimise any conflict between the conservation of a heritage asset and a development proposal.
- 4.3.14 Paragraph 200 advises that: ‘In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance’.

Facilitating the sustainable use of minerals

- 4.3.15 Chapter 17 of the NPPF relates specifically to minerals and facilitating the sustainable use of mineral assets. Minerals are stated as being essential to supporting sustainable economic growth and the Framework prioritises their long-term conservation.
- 4.3.16 Paragraph 215 makes it clear that, *‘it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation.’.*
- 4.3.17 Paragraph 216 of the NPPF states that mineral resources should be safeguarded by defining Mineral Safeguarding Areas; and adopting appropriate policies so that known locations of specific minerals resources of local and national importance (such as aggregates) are not sterilised by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked).
- 4.3.18 Paragraph 217 emphasises that *‘great weight should be given to the benefits of mineral extraction, including to the economy’* and that when determining planning applications for mineral extraction, local planning authorities should:

- As far as practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks, the Broads, National Landscapes and World Heritage Sites, scheduled monuments and conservation areas;
- 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 nearby sites;
- Ensure that any unavoidable noise, dust and particle emissions are controlled, mitigated or removed at source and noise limits are established where appropriate;
- Provide for restoration and aftercare at the earliest opportunity to be carried out to high environmental standards through appropriate conditions. Bonds or other financial guarantees should only be sought in exceptional circumstances.

4.3.19 NPPF Paragraph 219 sets out Government planning policy on the provision of construction aggregates in England and advises on a minimum landbank for crushed rock of 10 years in each Mineral Planning Authority area.

Planning Practice Guidance

4.3.20 The National Planning Practice Guidance (NPPG) is a web-based resource which brings together planning guidance on various topics into one place. It was launched in March 2014 and gives guidance on many aspects of planning. The PPG has been reviewed and the topics of particular relevance are as follows:

- Design;
- Noise;
- Travel Plans, Transport Assessments and Statements;
- Minerals;
- Natural Environment;
- Flood risk and Coastal change;
- Open spaces, sports and recreation facilities, public rights of way and local green space;
- Planning Obligations;
- Use of Planning Conditions;
- Water Supply, Wastewater and Water Quality.

Joint Lancashire Local Aggregate Assessment (LAA) (2023 with 2022 data)

- 4.3.21 The LAA (2023) provides an overview of the sand and gravel, limestone and gritstone reserve position for the joint councils of Lancashire, Blackpool and Blackburn with Darwen.
- 4.3.22 The latest sub-regional apportionment figure for crushed rock set by the North West Aggregate Working Party was in 2011 and equates to 2.54 mt per annum. The rolling 10 year sales average is 2.25 mt (2013 – 2022) whereas the rolling 3 year sales average is 2.52 mt per annum (2020 – 2022).
- 4.3.23 The LAA includes housing delivery forecasts for the District which have been calculated using Lancaster City Council's Local Plan forecast. This figure, 3mt, indicates that although permitted reserves and annual outputs are sufficient at present, there may be a need to consider the permitted reserves' ability to meet the forecast demand.
- 4.3.24 The LAA concludes that the assessment of supply and demand for crushed rock, together with a consideration of the economic and local circumstances, indicates that there is potential for a shortfall towards the end of the forecast demand period of 15 years (i.e. 2021-2036).

North West Aggregates Working Party (NWAWP) Annual Monitoring Report 2021 (including data from 2019 and 2020)

- 4.3.25 The NWAWP Annual Monitoring Report (AMR) provides sales and reserve data for the period 1st January to 31st December 2020. The report also contains data for 1st January to 31st December 2019, which has been taken from the Government's Aggregate Minerals Survey 2019 (AM2019) undertaken by the BGS.
- 4.3.26 The AMR provides information on aggregates in the North West of England so that the NWAWP can contribute to the monitoring of the Managed Aggregate Supply System (MASS) and assess whether the North West of England is making a full contribution towards meeting both national and local aggregate needs.
- 4.3.27 Further information regarding the information contained in the AMR is provided in Section 5 'Need Assessment and Sustainability'.

Review of the Minerals and Waste Local Plan

- 4.3.28 A review of the adopted Minerals and Waste Local Plan (MWLP) is currently in preparation. A Scoping consultation was carried out in November 2014 and the responses were published in May 2018. Consultation on the Publication version of

the emerging MWLP was anticipated in Summer 2019 as per the latest Local Development Scheme (LDS) (August 2018). A revised LDS is anticipated to be published which will provide an updated timetable for preparation of the emerging MWLP.

4.4 Planning Policy Conclusions

- 4.4.1 Minerals and Waste Core Strategy Policy CS1 (Safeguarding Lancashire's Mineral Resources) safeguards minerals of economic, environmental or heritage value from permanent sterilisation through designating Mineral Safeguarding Areas (MSAs). Policy M2 (Safeguarding Minerals) of the Minerals and Waste Local Plan (Site Allocation and Development Management Policies) (MWLP) states that development within Minerals Safeguarding Areas as outlined on the Policies Map will not be supported if it is incompatible by reason of scale, proximity and permanence with working the minerals. The site is identified within a MSA on 'Policies Map 2' of the MWLP (2009). The site is also identified as a limestone site with 'Long-Term Strategic Provision' on the Key Diagram, situated within a 'Limestone Resource Area'.
- 4.4.2 MWLP Policy M1 (Managing Mineral Production) states that development will not be supported for any new extraction of sand and gravel, limestone, gritstone or brickshale. The proposals seek to deepen and extend the timescales of an existing permitted limestone quarry. Therefore, the site should not be considered as new extraction.
- 4.4.3 MWLP Policy DM2 (Development Management) supports mineral operations that can demonstrate a positive contribution to, inter alia, the economy, biodiversity and geodiversity, landscape character and the reduction of carbon emissions. The site currently operates under a Biodiversity Management Plan and best practice measures which will be continued. The approved restoration scheme is shown on Drawing Number BLQ 5/1 'Combined Conceptual Restoration Scheme'. The approved restoration scheme combines economic and biodiversity gains through development of a 42 hectare lake for water and land-based recreational activities with designated areas of nature conservation habitat.
- 4.4.4 MWLP Policy NPPF 1 (Presumption in Favour of Sustainable Development) states that when a planning application accords with the policies in the Local Plan, it will be approved without delay, unless material considerations indicate otherwise. The proposals are considered to accord with the Development Plan and other material considerations.

5 NEED ASSESSMENT AND SUSTAINABILITY

5.1 Introduction

5.1.1 The proposed development comprises the deepening of the extraction area at Leapers Wood Quarry to include land which currently accommodates site infrastructure, buildings and mining waste stockpiles, as well as an extension of time for mineral extraction and restoration. With regards to the proposed development, the following considerations are of particular relevance and are discussed below:

- The demand for and supply of limestone;
- The role of Leapers Wood Quarry in future limestone supply;
- Sub regional apportionment and landbank implications; and
- Operational need for the proposed deepening of the working area.

5.1.2 In addition, the issues relating to sustainability are considered within this section, including the sustainable benefits of relevance to the planning application.

5.1.3 The site currently has planning permission to extract limestone until 19 September 2048. The existing theoretical reserve remaining on site has been calculated to be 6.5 million tonnes (mt) as at January 2024. However, not all of this reserve is currently accessible due to reserves being constrained by plant and machinery, buildings and mineral waste tips.

5.1.4 Permission is being sought for the deepening of the current quarrying operations in order to extract the limestone reserves to a depth of -37mAOD (an additional depth of 75m). The proposed change would release a further 26 million tonnes (mt) of limestone, assuming the joint working of the boundary between Back Lane Quarry and Leapers Wood Quarry.

5.1.5 The existing annual sales from the site of approximately 800,000t are anticipated to continue for the foreseeable future.

5.2 Planning Policy Context

5.2.1 The NPPF acknowledges the importance of minerals and states:

'It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that 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.'

5.2.2 The NPPF requires Mineral Planning Authorities to plan for a steady and adequate supply of aggregates by:

- Preparing an annual Local Aggregate Assessment (LAA), either individually or jointly, to forecast future demand;
- Participating in an Aggregate Working Party;
- Making provision for the requirements of the LAA, including identifying specific aggregate supply sites; and
- Securing aggregate supply by maintaining a sufficient landbank of permitted aggregate reserves (at least 10 years for crushed rock).

5.2.3 The site is located within a Mineral Safeguarding Area as identified within the Joint Lancashire Minerals and Waste Local Plan Policies Map¹. Policy CS1 (Safeguarding Lancashire's Mineral Resources) of Lancashire's Minerals and Waste Development Framework Core Strategy states that mineral will only be extracted where there is a proven need for that particular resource. Mineral resources are to be conserved, where they have an economic, environmental or heritage value. Mineral Safeguarding Areas will be used to identify mineral resources with the potential for extraction.

5.2.4 Core Strategy Policy CS3 (Meeting the demand for new minerals) sets out the provision of 57.8 million tonnes of limestone for aggregate use between 2001 and 2021. No additional land was to be made available for the extraction of limestone for aggregate use before 2021.

5.3 The Need and Supply of Mineral

The Importance of Limestone

5.3.1 The Mineral Products Association (MPA) report 'Make The Link To Mineral Products' (2022) highlights the essential nature of minerals stating that '*everything we use in daily life – from our homes to our mobile phones – is made with minerals that are quarried or mined.*' It calculates that 400mt of mineral products are used every year (in Great Britain), that 90% of UK mineral products are made and consumed in the UK and that the industry generates almost £6 billion in Gross Value Added, a measure of contribution to the economy. The industries that directly depend on mineral products turn over nearly £600 billion and 3.5 million jobs are supported through the

¹ Note that the Joint Lancashire Minerals and Waste Local Plan expired at the end of 2021

supply chain with 81,000 people being directly employed by the minerals products industry.

5.3.2 Limestone is a versatile mineral. It is an essential component of cement and concrete and crushed rock (aggregate) is used throughout construction schemes for foundations and in applications including asphalt production.

5.3.3 The MPA report acknowledges that the scale and complexity of turning raw materials into essential products for construction and manufacturing requires long term thinking and major investment. It goes on to state that *'like all businesses, mineral products companies need the right economic, political and regulatory conditions to ensure their businesses remain viable and can meet the needs of other sectors and society'*. Here are just some of the areas where long-term commitment is required:

- Researching locations and working with landowners;
- Carrying out environmental reviews and assessments;
- Working with stakeholders to gain workable permissions;
- Recruiting people and developing their competencies;
- Designing, sourcing and building plant and machinery;
- Developing products to meet market demands;
- Organising efficient transport; and
- Restoring quarries to achieve a positive long-term legacy.

5.3.4 The Joint Lancashire Local Aggregate Assessment (LAA) (2023 with 2022 data) states that:

'The surface geology of Lancashire, Blackpool and Blackburn with Darwen (the Plan area) is dominated by Triassic sandstones in the west and Carboniferous sandstones in the east, with small areas of limestone in the north, and significant areas of glacial till. It contains extensive mineral resources (natural concentrations of rocks that are, or may become, of potential interest for economic extraction). They are significant in the region given the extent of urbanisation in Merseyside and Manchester, and the limited availability of hard rock in the south of the North West, and limestone throughout the North West.'

5.3.5 With respect to limestone, the LAA states:

‘Carboniferous limestone outcrops suitable for extraction are limited in the area, with quarrying operations confined to two locations in the north; a compact area east of Carnforth, and a complex of quarries east of Clitheroe. The limestone extracted is used as aggregate, though two quarries also provided feedstock for the cement works in Clitheroe.’

Aggregate Demand

Lancashire

- 5.3.6 The Lancashire LAA (2023) states that in 2021, limestone sales represented approximately 69% of the total aggregate sales in the region. In assessing the demand for limestone, the total sales of crushed rock (limestone) have been considered. According to the 2023 LAA, the rolling 10 year average of limestone sales was 2.25mt and the 3 year average being 2.52mt. In 2020, 2021 and 2022, sales of limestone were 2.26, 2.93 and 2.38mt respectively.
- 5.3.7 The LAA states that both the 10 year average of sales and the 3 year average continues to rise slowly, which may indicate a more stable economic environment. Table 5.1 below details forecasts of demand, based on the figures described above (i.e. the 3 year and 10 year sales averages), projected over a 15 year period as well as the Core Strategy apportionment and the forecast demand set out in the National and Sub-national Guidelines (2001 – 2016) which were converted into an apportionment by the North West Regional Aggregate Working Party in 2011.

Limestone (mt)	Basis for forecast demand	Forecast demand (over 15 year demand period)
Average of 10 years land won sales data (2021)	2.25	33.7
Average of 3 years sales data (2021)	3.09	37.9
Core Strategy Apportionment (2006)	2.75	41.25
NWRASP Sub Regional Apportionment (2011)	2.54	38.1
Housing Delivery/Forecast Inferred Demand using Local Plan Forecast (2021)	3.0	45.0

Table 5.1: Forecast demand in limestone sales (mt)

- 5.3.8 The LAA states that, 'In 2022 there were 43.59 million tonnes of limestone reserves with planning permission. These permitted reserves are held in 4 quarries. Based on the 10 year average of sales the permitted reserves represent a landbank of 19 years, and the landbank of at least 10 years is expected to begin to be eroded in 2031 (17 years if using the 3 year average, bringing this down to 2029).'
- 5.3.9 It is also suggested that there are indications that economic activity can be expected to increase during the forecast demand period, though it was acknowledged that this was subject to significant uncertainty. The assumptions made however, showed that there is a moderate to high correlation between past housing completions and total aggregate sales. As a result, future housing projections are also used to infer an indication of future demand for aggregates.
- 5.3.10 The LAA describes the delivery of houses, as reported by the former Department for Communities and Local Government (now Department for Levelling Up, Housing and Communities) and the projected annual demand for housing as described in district Local Plan policy. This is illustrated below within Figure 5.1.

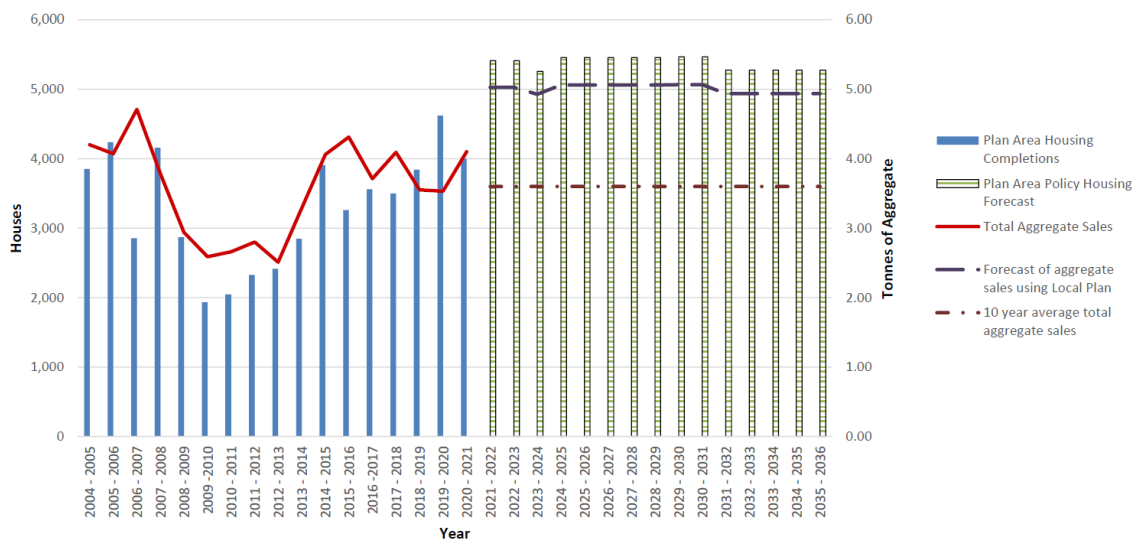


Figure 5.1: Housing Delivery and Projections

- 5.3.11 Figure 5.1 illustrates a period of significantly depressed housing completions caused by the global financial crisis, recession and subsequent restrictions on bank lending, relative to a Local Plan forecast of housebuilding and other development activities. The figure shows the delivery of housing relative to the sales of total aggregate,

which have shown a similar pattern over the last 10 years. An attempt has been made to forecast future aggregate sales using the correlation between past housing completions and past aggregate sales and applying this to the future housing need figures identified in district Local Plans (used as a proxy for general economic activity and therefore aggregate demand).

- 5.3.12 This forecasting exercise produces an average aggregate sales figure of 4.9mtpa during the forecast demand period and using the proportions of total sales from the most up to date 10 year average sales figures, this equates to 3mtpa for limestone. The LAA acknowledges that there is considerable uncertainty over some of the figures for the projected annualised housing completions, given past rates of under delivery relative to Local Plan targets in much of the Plan Area. However, it is expected that housing completions (and wider economic activity) will increase, and that this could reasonably be considered to lead to an increase in demand for aggregates.
- 5.3.13 In terms of planned infrastructure projects, there is a significant level of investment in Lancashire's transport network through the Lancashire City Deal, enabling the delivery of several items of infrastructure set out in the Central Lancashire Highways and Transport Masterplan, including the Preston Western Distributor, the Fylde Heyhouses/M55 Link, and the East-West Link Road. This in turn will unlock sites for the delivery of housing and commercial developments as part of the Central Lancashire Core Strategy.
- 5.3.14 The LAA states that other sites coming forwards through the City Deal and the Lancashire Enterprise Partnership's growth agenda will result in an increased demand for aggregates, including the Cuerden Strategic Site and the large number of housing developments proposed.

Wider North West Region

- 5.3.15 The NWRAWP Annual Monitoring Report (AMR) (2021) provides sales data for the year 2020 for the North West region (i.e. Cheshire East, Cheshire West and Chester, Cumbria, Lancashire, Greater Manchester, Merseyside, Halton and Warrington). The AMR notes that operator returns were poor in 2021 and that, other than Cheshire West and Chester Council, all MPAs had to make sales estimates.
- 5.3.16 The AMR 2021 states that the total crushed rock sales in 2020 were 6.61mt, which represents a decrease from 2019 sales figures which were 7.33mt. Compared with 2019 sales figures, sales in Lancashire increased in 2020, whilst they decreased in

Greater Manchester, Cumbria, Merseyside, Halton and Warrington. The 10 year average sales figure for the North West region is 6.7mt and the 3 year average sales figure is 7.1mt.

- 5.3.17 Neighbouring areas are also experiencing similar investments as part of their growth deals, and similar future aspirations for growth such as contained in the Northern Powerhouse aspirations and the Greater Manchester Joint Development Plan. In Merseyside large scale, long-term regeneration projects at Liverpool Waters and Wirral Waters are progressing as well as significant commercial/research construction at Liverpool University. Whilst inherent in the Waste Strategies of these schemes is the requirement to reuse and recycle construction and demolition waste on site to minimise the requirement for primary aggregate, it is considered that these projects will require a significant volume of aggregate on a long term basis.
- 5.3.18 In Greater Manchester there are a number of significant highway improvements schemes, including the M60 and M62 upgrade works. Greater Manchester's 'Places for Everyone' Plan (Publication Stage, August 2021) identifies a number of significant development schemes for the Plan period (2021 - 2037) and, in terms of land planned for residential and commercial development, the Plan states that *'several of the sites are large in scale and will be partially delivered beyond 2037'*. A key objective of the Places for Everyone Plan is to meet the Plan Area's Local Housing Need and, using the Government's standard methodology for housing, this equates to almost 165,000 homes over the period 2021 to 2037. This level of planned development will create significant demand for aggregate and concrete, a proportion of which is likely to be supplied from Lancashire.
- 5.3.19 Whilst it is acknowledged that there is level of uncertainty associated with the delivery of such infrastructure and construction schemes, it is considered reasonable to take such schemes into account when considering projections of demand, as they represent a significant future demand for aggregates that is not necessarily reflected in past supply.

Current Aggregate Supply

Lancashire

- 5.3.20 The Lancashire 2023 LAA addresses the supply of aggregate within the Plan Area and the ability of the existing and permitted sites to deliver the required volumes of material. It states that in 2022 there were 43.59 million tonnes of limestone reserves with planning permission. These permitted reserves were held in 4 quarries. Based

on the 10 year average of sales, the permitted reserves represents a landbank of 19 years, and the landbank of at least 10 years is expected to be eroded in 2031 (17 years if using the 3 year average, bringing this down to 2029).

- 5.3.21 In order to ensure the continued steady and adequate provision of aggregate to market, the LAA also considers the permitted quarries' ability to meet the forecast annualised demand. In order to do this, it sets out the expiration dates of the permitted sites within the Plan Area. The number of quarries which have current planning permissions will reduce in 2023 and 2028. Dunald Mill Quarry continues to be mothballed but a planning application was submitted in September 2021 to extend the life of mineral extraction from February 2022 until February 2034. This application is yet to be determined. Ribblesdale Lanehead Quarry and Ribblesdale Cement Bellman Quarry, operated by Hanson UK, primarily supply cement raw materials but a proportion of the reserve is not suitable for this and is sold as aggregate. The sites have permission until 2027. Back Lane Quarry, adjacent to Leapers Wood Quarry, which is operated by Aggregate Industries, has permission until April 2048 but if the shared boundary with Leapers Wood Quarry is not able to be worked, the remaining accessible reserves of less than 6.5mt would be exhausted before 2033. A planning application is being submitted by Aggregate Industries to extend the operational life of the quarry until 2077 to allow for the deepening of the mineral extraction within the site and to allow the extraction of mineral within the joint boundary with Leapers Wood Quarry. As with Leapers Wood Quarry, there are significant mineral resources available at depth within Back Lane Quarry, as well as within the shared boundary between these sites, which can be worked without the need for extensions onto green field land.

Wider North West region

- 5.3.22 The NWRAWP AMR states that the permitted reserves of crushed rock in the North West region at 31st December 2020 amounted to 247.89mt (this includes both limestone and gritstone). This is a decrease in permitted reserves from 2019 at a figure of 282.51mt. Whilst there were increases in permitted crushed rock reserves in both Cumbria and Greater Manchester, Merseyside and Halton and Warrington, there was a significant decrease in crushed rock permitted reserves in Lancashire by 34.49mt in comparison to 2019. The AMR notes that there has been a general decline in the total permitted reserves since 2015 which demonstrates that sales have been at a greater rate than new planning permissions for aggregates.

- 5.3.23 The NWRAWP AMR states that the overall landbank of permitted reserves in the North West region is 35.99 years, which is substantially above the minimum 10 year requirement. However, it acknowledges that the North West region is *'significantly reliant particularly upon Cumbria and Lancashire to maintain an adequate and steady supply of crushed rock..... There has been a clear decline in replenishment rates over the past 10 years, due to not enough planning applications for primary aggregate extraction coming forwards in the North West region. In the past 10 year there has been a fall in sand and gravel reserves by 39% and a fall in crushed rock reserves by 39%.'*
- 5.3.24 Beyond the Plan Area, there are a number of limestone quarries within Cumbria, including the Lake District National Park (LDNP), although five crushed rock quarry permissions within the Plan Area will expire before 2030 and none have permission beyond 2043. The Cumbria County Council LAA and NWRAWP AMR identify sites with permission for limestone extraction. Moota Quarry has permission until 2024 and Sandside Quarry has permission until 2029. Eskett and Rowrah Quarries (two parts of quarry now combined into one planning permission) have permission until 2034. However, the Cumbria LAA states that there is a substantial amount of water in Rowrah Quarry and if an environmentally acceptable solution for its dewatering is not found then the reserves could be lost. Goldmire Quarry, Hartley Quarry, Helbeck Quarry, Shap Beck and Shap Blue Quarries (which lie entirely within the LDNP), Silvertop Quarry and Stainton Quarry have permission until 2042. Holme Park Quarry has permission until 2043. Permission at Shapfell Quarry has now expired.
- 5.3.25 The Cumbria 2022 LAA states that within Cumbria and the Lake District National Park (LDNP), looking at limestone alone which is used only for general aggregate use and not as high specification roadstone, based on 2021 sales and remaining reserves (78.72mt), the 10 year average sales figure (1.99mt) gives a landbank of 39.6 years, which would last until 2061 (these figures exclude limestone reserves for non-aggregate use which are generally the high purity limestone that is used for industrial purposes). In order to maintain a landbank of at least 10 years, new limestone reserves would need to come on stream by no later than 2051.
- 5.3.26 Swinden Quarry and Horton Quarry, within the Yorkshire Dales National Park, have permission until 2039 and 2042 respectively. However, most of the output from Horton Quarry is likely to comprise high Polished Stone Value (PSV) aggregate and would therefore serve a different market to that of Leapers Wood Quarry. The Peak District National Park Authority (PDNPA) have an ambition not to extend planning

consents within the National Park beyond 2042 and Topley Pike Quarry within the PDNPA has recently reduced its operational life to require limestone extraction to cease by 2025.

- 5.3.27 In terms of imports to and exports from Lancashire, data is available from 2019 (the most recently available information on movements) although the split between limestone and gritstone is not available. The data shows that approximately 48% (or 1,545,000t) of the total sales of crushed rock (3,173,000t) was imported to the Plan Area with around 20% being imported from Derbyshire, 10% from Cumbria, 10% from the YDNP and the remainder being imported from the East Midlands, Wales and the North East. Approximately 36% (or 1,154,000t) of the total sales of crushed rock was exported from the Plan Area to the rest of the North West. Overall Lancashire's net imports equate to 368,000t. In considering these figures, the Lancashire LAA states:

'It is assumed that the movements identified above will continue. However, if particular quarries in neighbouring authorities were to cease production it could have an impact on the market in the Plan area and affect the rate of consumption of permitted reserves at particular quarries. This is particularly relevant when considering national NPPF policy, and local aspirations, to limit mineral working in national parks, and the effect this could have on supply when extant planning permissions in the Lake District, Peak District and Yorkshire Dales reach the end of their operational or conditioned life span. 2042 in particular is a date many planning permissions will cease and there can be a relatively high degree of certainty that supply will be affected both in the Plan area and its current market area (this could include changes to the extent of the market area if businesses in areas such as West Yorkshire, which currently source a large proportion of the aggregates used from the Yorkshire Dales National Park, find the quarries in Lancashire to be an economic alternative market).

Current exports are included in the forecast of demand; current imports will be reflected in neighbouring mineral planning authorities' average of 10 years sales data. Should the industry be unable to maintain these outputs then these assumptions, and the forecast demand, may need to be revisited.'

Meeting Forecast Demand for Limestone

Lancashire

5.3.28 The forecast demand for limestone and the permitted reserves have been compared within Table 5.2 below. This indicates that there is sufficient limestone available through the supply options identified above to meet estimated need during a 15 year time horizon. The LAA considered that the landbank will be reduced to below that prescribed by national policy towards the end of the monitoring period (2036), under most of the scenarios.

Forecast Demand Period of 15 Years (2021 – 2036)	Sub Regional Forecast (mt)	10 year Average Sales Forecast (mt)	3 year Average Sales Forecast (mt)	Housing Delivery Forecast Inferred Demand Using Local Plan Forecast (mt)
Demand	2.54	2.25	2.52	3.0
Forecast demand	38.1	33.7	37.9	45.0
Permitted reserves	45.39	45.39	45.39	45.39
Shortfall in supply during forecast demand period	-	-	-	-1.4
Surplus in supply during forecast demand period	5.5	9.9	5.7	-
Surplus represents a landbank of x years	2.2	4.4	2.3	-

Table 5.2: Comparison of Forecast Demand and Permitted Reserves

5.3.29 In conclusion, the assessment of the balance between supply and demand, together with consideration of the economic and local circumstances, indicates that there is potential for a shortfall in supply before the end of the forecast demand period (around 2034).

5.3.30 There are also significant movements of crushed rock both ways across the Plan Area’s boundary; the balance represents a slight net import (though this is based on figures collected every 4 years, lastly in 2019). These movements are likely to be influenced by economic activity and growth projections set out in those areas and, at the time of preparing the LAA, this had not been incorporated into the assessment. If growth in these areas is above that forecast in the Plan Area’s district housing projections, then the correlation between aggregate sales and housing completions may be affected, and the forecast demand may be an underestimate.

- 5.3.31 Likewise, if imports are constrained by a reduced supply in neighbouring areas this may affect demand within the Plan Area.
- 5.3.32 The medium / long term limestone aggregate supply situation in Lancashire is of some concern. Taking into account current reserves, extraction rates and permissions within Lancashire, limestone extraction would most likely cease within the county by the end of 2030. Bankfield Quarry and Dunald Mill Quarry both have current applications seeking to extend their permissions until 2033 but remain undetermined. If the reserve of limestone between the Back Lane and Leapers Wood sites is able to be worked, then this would also extend the life of these sites until the early 2030s. However, beyond 2033 there would be no remaining active sites within Lancashire under the current scenario.
- 5.3.33 Outside Lancashire, it is possible that aggregate supply could be gained further afield from the Yorkshire Dales National Park, Peak District National Park, south Cumbria and possibly northern Staffordshire. Beyond these geographical areas, the distances are likely to make it economically and physically unviable to transport aggregates by road to Lancashire. However, there are a very limited number of limestone sites within the Yorkshire Dales National Park, Peak District National Park, south Cumbria and northern Staffordshire.

Yorkshire Dales National Park

- 5.3.34 Horton Quarry has permission until 2042. However, the site is likely to supply the high PSV market rather than meet general aggregate demand. Swinden Quarry has recently secured permission to deepen the workings by 50m and extend the life of the site until 2039. However, the majority of material from Swinden Quarry is taken to Leeds and Yorkshire via the quarry's railhead and so it would be unlikely to be in a position to contribute supply to meet demand in Lancashire.

Derbyshire and Peak District National Park

- 5.3.35 There are a number of large limestone quarries centred around the Buxton area. Several have permission until 2042 but Topley Pike Quarry (2025) and Ballidon Quarry (2035) are due to close sooner. The location of these quarries means that supply into the general Lancashire market is likely to be limited due to the haulage distances involved and the fact that the majority of the quarries serve customers in Manchester and the Midlands. However, it is reasonable to expect these quarries to serve at least a proportion of the supply to the southern part of Lancashire.

South Cumbria

- 5.3.36 The main sites in south Cumbria producing limestone are Holme Park Quarry and Sandside Quarry. Holme Park Quarry has permission to extract mineral until the end of 2043 but it is most unlikely to be able to secure any reserve extensions beyond that time due to various designations within and surrounding the site. Sandside Quarry has permission until 2029 but given its location and constrained aspect, it is likely to close in or before 2029.
- 5.3.37 Other sites in Cumbria are some distance further north and a number of the sites tend to serve markets in Cumbria, the north-east or southern Scotland rather than Lancashire. The highway network and distances involved to Lancashire mean that supplies from these sites are unlikely to be able to be relied upon to help meet demand in Lancashire.

North Staffordshire

- 5.3.38 The only limestone site in Staffordshire that could potentially supply Lancashire with limestone longer term is Cauldon Low Quarry. However, Cauldon Low Quarry in general sends the vast majority of its output to the Midlands and this is unlikely to change in the future. The haulage distances involved in transporting limestone from Staffordshire to Lancashire are also unlikely to be feasible in the long term.

Operational Need for the Proposed Development

- 5.3.39 The Lancashire LAA identifies that there may be a shortfall in supply towards the end of the Plan period, but that in the short term, the permitted reserves within the Plan Area are sufficient to meet the current demand. This situation has been acknowledged within this chapter of the Planning Statement. However, there is an operational need to deepen the current quarry workings to ensure that the valuable underlying reserves are not sterilised in the future.
- 5.3.40 Leapers Wood Quarry has an estimated 6.5mt of permitted limestone reserves remaining within the site (January 2024) which is not all readily accessible for extraction. The remaining reserves are currently constrained by plant, machinery, infrastructure, buildings and mineral waste stockpiles. Based on the current output of approximately 0.8mtpa, the site would be worked out in just over 8 years (January 2033). This would result in the cessation of all mineral extraction activities at Leapers Wood Quarry and the eventual closure of the site once the site has been restored. Furthermore, by removing the higher working levels and connecting haul roads, there would be no potential to extract the underlying mineral resources including the shared boundary between Leapers Wood Quarry and Back Lane Quarry.

- 5.3.41 Leapers Wood Quarry extracts the limestone below the natural water table which necessitates continuous groundwater pumping. At times of heavy rainfall, the lower levels of the quarry are often flooded and the site operations therefore rely on the ability to work the higher levels which are dry. If permission is not granted for the proposed deepening of the quarry void, it would be necessary to extract the mineral from these higher dry levels. However, without them, mineral extraction would need to temporarily cease during periods of heavy rainfall until the lower levels of the quarry are no longer flooded. This would result in periods of inactivity and a reduced annual output of limestone as the site would only be worked for part of the year.
- 5.3.42 In order for Leapers Wood Quarry to provide a range of mineral products, it is necessary to have stocking areas of an appropriate size which are located on the higher levels of the quarry to prevent the products becoming saturated through flooding. It is therefore essential to retain suitable areas within the higher parts of the site for this purpose. The extraction of all the mineral within the higher parts of the quarry would therefore pose operational difficulties for the applicant and potentially affect the quality of the products produced from the site. It is therefore critical that the applicant has the ability to extract mineral from deeper levels within the quarry to enable the higher levels of the quarry to be retained for essential operational uses, including dry working and product stockpiling.

Conclusion

- 5.3.43 Lancashire's 2023 LAA compared the balance between supply and demand within the Plan Area over the period until 2036. Demand for limestone is anticipated to continue to increase over the forecast demand period, although there is uncertainty relating to the level of this increase. Forecasting exercises result in an average aggregate sales figure of 3mtpa for limestone. The LAA acknowledges that there is considerable uncertainty over some of the figures for the projected annualised housing completions, given past rates of under delivery relative to Local Plan targets in much of the Plan Area. None the less, it is expected that housing completions (and wider economic activity) will increase, and that this could reasonably be assumed to lead to an increase in demand for aggregates.
- 5.3.44 Based on the 10 year average of sales, the permitted limestone reserves represents a landbank of 19 years, and the landbank of at least 10 years is expected to be eroded in 2031 (17 years if using the 3 year average, bringing this down to 2029).

5.3.45 There are a number of operational justifications for seeking permission to allow the deepening of the quarry void. If permission is not granted, it would be necessary to work the higher quarry levels and remove the remaining haul roads. This would not only sterilise the remaining permitted limestone reserves but would remove the ability of the site to be worked all year round, including during periods of heavy rainfall, and would mean that mineral products would have to be stockpiled within parts of the site which are affected by seasonal flooding and waterlogging. The loss of more than 40mt of quality limestone from the site is considered to be significant in the context of the long term supply of limestone within Lancashire and the wider North West region.

5.3.46 Critically, the quarry only has less than 6.5mt of reserves remaining for extraction. Based on the current output of approximately 0.8mtpa, the site would be worked out in just over 8 years (January 2033).

5.4 Sustainability

5.4.1 Paragraph 7 of the NPPF defines the objective of sustainable development, which can be summarised as meeting the needs of the present without comprising the ability of future generations to meet their own needs. So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development (paragraph 10). Paragraph 11 states that decision taking should apply a presumption in favour of sustainable development which means that development proposals that accord with an up-to-date Development Plan should be approved without delay.

5.4.2 Section 17 of the NPPF relates specifically to minerals and facilitating the sustainable use of mineral assets. Minerals are stated as being essential to supporting sustainable economic growth and the Framework prioritises their long-term conservation.

5.4.3 The Applicants propose to continue undertaking best practice measures with regards to promoting sustainability and managing the effects of climate change and are committed to ensuring that site operations at Leapers Wood Quarry are as sustainable and energy efficient as possible.

5.4.4 As a major supplier to the UK construction industry, the company are being challenged by its customers, to support their commitment to deliver greener solutions. The company has committed to innovate and be the leading supplier of green construction solutions in the UK.

5.4.5 In conclusion, the proposed development would meet the sustainability objectives of national planning policy, as set out within the NPPF, as well as the sustainability related policies of the Development Plan.

6 ENVIRONMENTAL AND TECHNICAL CONSIDERATIONS

6.1 Landscape and Visual Impact

- 6.1.1 A full Landscape and Visual Impact Assessment was undertaken and is included within the accompanying Environmental Statement.
- 6.1.2 The nature of the application is principally for deepening the existing operational disturbance / effects of quarrying activities which are already present in the landscape. The main change is the time element with development taking a further 16 years in addition to the period already permitted. The effects of this have been considered along with the potential for resulting cumulative impacts.
- 6.1.3 The site is not located within a designated landscape e.g National Park or National Landscape. It is however, located approximately 1.8km to the south and east of Arnsdale / Silverdale National Landscape, and 1.7km to the west of the Forest of Bowland National Landscape. Given a combination of positioning and elevation there is opportunity for intervisibility between these designated areas and the site. Given the proposed deepening nature of the application together with intervening landform and vegetation structure it is assessed that the proposed development will not harm the setting of these National Landscapes.
- 6.1.4 The quarry is located within the Landscape Strategy for Lancashire – Landscape Character Assessment Character Area – 12a: Low Coastal Drumlins; Carnforth – Galgate – Cockerham, and partially within adjacent 13c: Drumlin Fields; Docker – Kellet – Lancaster LCA. Both the character areas are assessed as medium sensitivity to the type of proposed development (including existing quarry activities). It is assessed that during the extended operational period of the proposed development that the magnitude of effect will be medium. When combining the judgements on sensitivity and magnitude the resulting level of significance of effect is assessed as Moderate Adverse. This is not a significant level of effect.
- 6.1.5 At Post Restoration the proposed development will result in a landscape character the same / very similar to the permitted scheme. This will comprise a waterbody, quarried faces and benches, retention of strong western, northern and eastern vegetation structure with products of calcareous grassland and minor areas of shallows. Approximately 4.8Ha of additional native woodland will be established. We therefore assess that at Post Restoration the proposed development will result in a Neutral Effect on landscape character compared to the permitted scheme.

- 6.1.6 Visually, the site is generally very discrete and not observed apart from upper quarry faces as a result of localised landform and topography and adjacent local woods / vegetation structure. The visual nature of the development will principally be deepening the existing quarry void.
- 6.1.7 It is assessed that no representative visual receptors will receive a Significant Adverse level of visual effects (i.e. a Severe, Major or Notable Effect) from the proposed development during its operational period. It is assessed that receptors using a short section of PROW FP0122005 will receive a Moderate Adverse Effect from existing Leapers Wood Quarry benches and faces. Views will be transitional as receptors pass by.
- 6.1.8 During the operational stage it is assessed that 5 receptors will receive a Slight Adverse Effect, 4 receptors will receive a Minimal Adverse Effect and 20 receptors will receive a Neutral Effect. 1 receptor will receive a Moderate Beneficial Effect. This Beneficial effect being to users of the specifically designed and positioned permissive Back Lane and Leapers Wood Quarry viewpoint.
- 6.1.9 The main sources of the effects are the previously quarried northern faces and benches of Leapers Wood Quarry. It is noted that potential receptors of these elements are generally from mid to longer distances. Views being panoramic of which the elements of Back Lane Quarry occupy a small visual proportion.
- 6.1.10 The potential for cumulative adverse effect has been considered in respect of the Proposed Development and other similar local quarries and large scale developments. Taking the above into consideration, and in accordance with statutory receptors and good practice guidance, we assess that there will be no likely cumulative significant effects on Landscape Character or visual receptors.
- 6.1.11 Baseline and assessment works have been carried out to provide information to address and comply with national and Lancashire planning policies and in conclusion, based upon landscape and visual grounds, the site is a good location for continued mineral extraction and will not result in any significant adverse impacts on landscape or visual receptors during the operational period. At final restoration and post restoration the scheme is considered to have a Neutral effect compared to the permitted scheme baseline.
- 6.1.12 In conclusion, no changes are proposed that would give rise to any unacceptable impacts on the landscape character of the locality or on the visual amenity of nearby

receptors. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.2 Ecology and Biodiversity

6.2.1 A full Preliminary Ecological Appraisal (PEA) has been undertaken.

6.2.2 The site supports suitable habitats, including grassland and quarry (rocky areas) which favour the qualifying bird species for Morecambe Bay (SAC, SPA, RAMSAR and SSSI).

6.2.3 The operational impacts of the proposed works only result in a loss of existing quarry habitat. Table 6.1 details the impacts on the habitats outside the mineral extraction boundary as part of the proposed works.

Ecological Feature	Direct Impact	Indirect Impact	Proposed Restoration
Lowland Mixed Deciduous Woodland	No direct impact	Any indirect impacts noted will be managed through the implementation of a BMAP. Therefore, an adverse impact is not anticipated	Retained and managed as Lowland Mixed Deciduous Woodland
Mixed Plantation Woodland	No direct impact		Retained and managed as mixed Plantation Woodland
Dense Scrub	No direct impact		Retained and enhanced to Woodland
Calcareous Grassland	No direct impact		Retained, further creation of naturally regenerated grassland on exposed rock benches
Open Mosaic Habitat	No direct impact		Retained and managed as open mosaic habitat
Hedgerows	No direct impact		Retained and managed as hedgerows
Active worked quarry	Direct impact	N/A	Replaced by Marl Lake

Table 6.1: Summary of the impacts of proposed works on the habitats noted within the site boundary

6.2.4 Table 6.2 below summarises the assessment of the potential impacts on each important ecological feature, proposed mitigation and assessed residual effects.

Important Ecological Feature	Potential Impacts	Initial Classification of Effect (with embedded mitigation)	Additional Mitigation	Residual Effect Significance
International Statutory Designated Sites	No direct impact. Potential for indirect impact due to changes in air quality (dust)	Negligible. Implementation of BMAP	No additional mitigation required	Negligible
Statutory Designated Sites	No direct effects Potential for indirect effects due to changes air quality (dust)	Negligible Implementation of a BMAP	No additional mitigation required	Negligible
Non statutory designated sites	No direct effects Potential for indirect effects due to changes in air quality (dust)	Negligible Implementation of a BMAP	No additional mitigation required	Negligible
Priority Habitats	No direct effect Potential for indirect effects due to changes in air quality (dust)	Negligible Creation of naturally regenerated benches and faces as well as enhancement of woodland and open mosaic habitat as part of the proposed restoration scheme. Implementation of a BMAP.	No additional mitigation required	Beneficial effect
Lowland Mixed Deciduous Woodland	No direct effect Potential for indirect effects due to changes in air quality (dust)	Negligible Enhancement of woodland as part of the proposed restoration scheme. Implementation of a BMAP.	No additional mitigation required	Beneficial effect
Mixed Plantation Woodland	No direct effect Potential for indirect effects due to changes in air quality (dust)	Negligible Enhancement of woodland as part of the proposed restoration scheme. Implementation of a BMAP	No additional mitigation required	Beneficial effect
Dense Scrub	No direct effect Potential for indirect effects due to changes in air quality (dust)	Negligible Implementation of a BMAP	No additional mitigation required	Negligible
Calcareous Grassland	No direct effect Potential for indirect effects due to changes in air quality (dust)	Negligible Creation of naturally regenerated benches and faces as part of the proposed restoration scheme. Implementation of a BMAP	No additional mitigation required	Beneficial effect

Important Ecological Feature	Potential Impacts	Initial Classification of Effect (with embedded mitigation)	Additional Mitigation	Residual Effect Significance
Open Mosaic Habitat	No direct effect Potential for indirect effects due to changes in air quality (dust)	Negligible Creation of naturally regenerated benches and faces as well as enhancement of open mosaic habitat as part of the proposed restoration scheme. Implementation of a BMAP	No additional mitigation required	Beneficial effect
Hedgerows	No direct effect Potential for indirect effects due to changes in air quality (dust)	Negligible Implementation of a BMAP	No additional mitigation required	Negligible
Inland Rock and Scree (Active Quarry)	Loss of existing quarry habitat through deepening	Beneficial impact Creation of wetland habitat and naturally generated benches and faces as well as enhancement of open mosaic habitat as part of restoration proposals	No additional mitigation required	Beneficial impact
Bats	Loss of suitable habitat. Potential for direct and indirect impacts from blasting, dust, light, vibration and noise	Negligible. Mosaic of suitable habitat habitats created and retained areas enhanced as part of the restoration proposals (woodland, wetland, open mosaic habitat and naturally generated benches and faces). Implementation of BMAP.	Further surveys and mitigation if required.	Beneficial effect.
Badger	No direct effects Indirect effects through general quarrying processes	Negligible Implementation of a BMAP	No additional mitigation required	Negligible
Birds	Loss of nesting habitat / disturbance during nesting season	Negligible Implementation of a BMAP and suitable habitats incorporated into restoration proposals	No additional mitigation required	Negligible

Table 6.2: Assessment of potential impacts on each important feature

6.2.5 The operational phase would be subject to measures and procedures as set out within a Biodiversity Management and Action Plan (BMAP). The BMAP will include a range of measures to mitigate potential impacts on ecological habitats, protected species and the water environment, which accord with legal compliance and good practice guidance. The BMAP would include measures to minimise dust, deposition, air pollution, pollution incident, light spillage, and noise and vibration which would all assist in minimising impacts upon biodiversity receptors, in particular priority and notable habitats within the zone of influence.

Biodiversity Net Gain

6.2.6 Enhancements have been incorporated within the restoration proposals to ensure that a net gain is achieved.

6.2.7 The proposed enhancements include incorporating:

- Open Mosaic Habitat - an area of partially restored land was located to the west of the current mineral extraction area. However, due to the area being previously worked, and the substrate beneath, an area of open mosaic habitat has formed. Due to this providing a mosaic of periphery habitat types, in an area dominated by woodland habitat, it is considered to enhance the site by providing various different habitat types and ecotones;
- Mixed Plantation Woodland – an area of mixed plantation woodland was located to the west of the site. Enhancements to this woodland will include the creation of dead wood, removal of trees with ash dieback and the removal of non-native invasive species;
- Dense Scrub – a small patch of dense scrub was located towards the south-west of the site boundary. This patch of scrub will be left to naturally regenerate into broadleaved woodland and managed to achieve good condition;
- Standing open water – an area of open water is located to the west of the current mineral extraction area. As part of the proposed restoration the area is set to be enhanced from poor condition to good condition, providing opportunities for a variety of species, such as foraging bats, amphibians and invertebrates;
- Woodland – an area of woodland is located to the south of the current mineral extraction area (Long Riddings Wood). As part of the proposed restoration plan the area is set to be enhanced to woodland, providing

opportunities for a variety of species, such as roosting bats, nesting birds, badgers and invertebrates; and

- Open Mosaic Habitat - An area of partially restored land is located to the south of the current mineral extraction area. However, due to the area being previously worked, and the presence of the substrate beneath, an area of open mosaic habitat has formed. Due to this providing a mosaic of periphery habitat types, in an area dominated by woodland habitat, it is considered to enhance the site by providing various different habitat types and ecotones.

6.2.8 In addition to the enhancements above, there will be the creation of the following habitats:

- Marl lake – upon completion of mineral extraction, a waterbody will form within the quarry void due to ingress from rainfall, groundwater and fissure / cave systems;
- Reedbeds – upon completion of mineral extraction, small areas of reedbed will be created around the peripheries of the lake; and
- Other inland rock and scree – upon completion of mineral extraction, exposed quarry benches will be retained and left to naturally regenerate.

6.2.9 New habitat creation will provide opportunities for species within the site. In addition to these enhancements which were embedded into the proposed quarry design, a range of additional ecological enhancement measures will be delivered as part of the proposed development, as identified below. Further details will be set out in a Biodiversity Action Plan (BAP). However as an indicative guide these would comprise:

- Inclusion of plant species of known wildlife value within the landscaping scheme, including night-scented varieties to benefit bats, fruit bearing varieties to benefit birds and nectar-rich varieties for invertebrates;
- Provision of new bat roosting opportunities (i.e. bat boxes). These will be a purpose built, durable and long-lasting variety such as those available from Schwegler or 'Habibat' or equivalent;
- Provision of new bird nesting opportunities (i.e. nesting boxes). These will be a purpose built, durable and long-lasting variety such as those available from Schwegler or 'Habibat' or equivalent; and

- Creation of log piles and / or brush piles to provide hibernacula for reptiles and amphibians.

Conclusions

- 6.2.10 No significant residual negative effects on important ecological features were anticipated to result from the proposed works, following the inclusion of impact, avoidance and mitigation measures described above.
- 6.2.11 The proposed deepening of the site and extension of time would not give rise to any significant impacts in terms of ecology.
- 6.2.12 In conclusion, no changes are proposed that would give rise to any unacceptable impacts upon ecology or biodiversity and the restoration scheme being proposed would provide a net gain as required by the NPPF. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.3 Transport

- 6.3.1 The accompanying Transport Assessment (TA) sets out the detailed appraisal of the potential for operational impacts on the highway network.
- 6.3.2 The proposed development will not increase the output of material and would not generate any new or additional trips. The proposed development will include the deepening of the existing working and will not result in an increased rate of mineral output. Although the quarry will not generate any new or additional trips, at present the quarry is not operating at its maximum capacity. The existing trip generation (recorded as part of the June 2022 traffic survey) has therefore been 'growthed' in order to reflect the trip generation associated with the quarry operating at its maximum capacity (in line with the average yearly output of around 800,000 tpa).
- 6.3.3 Leapers Wood Quarry currently generates 168 HGV movements per day (84 two-way trips). As a worst-case scenario, it is assumed that HGV movements typically take place over a 5-day week. The majority of HGV movements occur between 06:00 and 16:00 with the most HGV trips per hour recorded between 07:00 and 08:00.
- 6.3.4 Capacity assessments have been undertaken for the morning and evening peak hours at the B6601 / Kellet Road junction and the Kellet Road / Site Access junction. Both junctions have been assessed in the '2028 Background', '2050 Background', '2028 Background plus Proposed Development' and 2050 Background plus Proposed Development traffic flow scenarios. The B6601 / Kellet Road junction has also been assessed in the '2023 Background' traffic flow scenario.

- 6.3.5 The assessments have been undertaken using the Junctions 9 computer programme, which is the 'industry standard' traffic modelling computer software package used for assessing the capacity of priority junctions and roundabouts.
- 6.3.6 A Ratio of Flow to Capacity (RFC) value below 0.85 indicates that a junction operates 'within' capacity. An RFC value between 0.85 and 1.00 indicates that there may be occasions during the period modelled when queues will develop, and delays occur. An RFC value greater than 1.00 indicates that a junction operates 'above' capacity.
- 6.3.7 The results show that the Kellet Road / Site Access junction will operate with spare capacity in 2028 and 2050, inclusive of background traffic growth, committed development and with the addition of the proposed development traffic.
- 6.3.8 The B6601 / Kellet Road junction is shown to operate above capacity in the 2023 PM Peak prior to the addition of the proposed development traffic. The B6601 arm of the junction is shown to have RFC of 1.10 and a maximum queue length of 33.1 in the '2023 Base' PM peak scenario. With the addition of the development traffic, the B6601 arm of the junction is shown to have an RFC of 1.11 and a maximum queue length of 35.7. The worsening of junction performance as a result of the proposed development is considered minimal with RFC values only increasing by a small amount (RFC values increase by 0.01 and maximum queue lengths increase by 2.6). The impact of the development at this location is therefore not considered severe and no mitigation is proposed.
- 6.3.9 Furthermore, the extension of time for quarrying at Leapers Wood Quarry will not result in an increased rate of mineral output and no additional HGV trips are proposed (when the quarry is operating at its maximum capacity).
- 6.3.10 Generally, the site will therefore fall below the threshold for requiring any further assessments of the environmental impacts of traffic and the development will have no demonstrable impact on severance, driver delay, pedestrian delay, amenity, fear and intimidation. In any event, there are no limited receptors in terms of schools, housing etc. which might be affected. On this basis it is concluded that the proposals will have no material impact in this regard.

Conclusions

- 6.3.11 The proposed development would not have a severe impact on the highway network and is in accordance with relevant policy and design guidance. Given the findings of the TA, it is considered that the proposed development is acceptable in transport terms and in terms of road safety and amenity.

6.4 Noise

- 6.4.1 The proposals are for the deepening of existing quarry operations and an extension of time for the quarrying operations to continue until 31 December 2064, with interim restoration being completed a year later, by 31 December 2065.
- 6.4.2 The application boundary would not increase from the area already permitted under the extant planning permission for the site (ref: 01/03/1185 - original planning permission ref 1/86/760) and therefore the workings will be no closer to the nearest dwellings.
- 6.4.3 As the operations are to continue in the existing extraction area, but to a greater depth, there will be no requirement for soil stripping or bund formation operations that are considered temporary operations (with a higher site noise limit) in Planning Practice Guidance (Minerals).
- 6.4.4 The mineral extraction and processing operations will not change from the current situation.
- 6.4.5 Following completion of the mineral extraction works, the void will be restored as per the proposed revised restoration scheme.
- 6.4.6 The purpose of the Noise Assessment was to consider the potential for significant noise effects associated with the proposed extension of time and deeper working within the quarry. The assessment considered the potential for the proposed development to result in existing site noise limits at nearby properties, as required by extant planning permission conditions, to be exceeded.
- 6.4.7 Site noise monitoring data at the nearest residential location where monitoring has been undertaken has been reviewed to establish the ongoing compliance of noise from both sites with the extant site noise limit.
- 6.4.8 Consideration of the site plans and the topography to explain why there is a potential increase in noise attenuation due to the greater depth of workings has been included in the assessment to demonstrate that site noise levels will not increase.
- 6.4.9 Site noise monitoring over the last twenty years has indicated that site noise (even at the top of the mineral) has complied with the site noise limits throughout the life of the site. Allied to this, working at greater depth will result in potentially greater barrier attenuation for the nearest dwellings to the site and therefore the proposed deepening and continued mineral extraction operations should not constitute an increase in site noise levels or an adverse impact on the dwellings.

- 6.4.10 The site can therefore continue to be worked within environmentally acceptable noise levels.
- 6.4.11 The cumulative impact of the continuing operations at Leapers Wood Quarry with the operations at the adjacent Back Lane Quarry has also been examined and also shown to be of low impact.
- 6.4.12 In conclusion, no changes are proposed that would give rise to any unacceptable impacts upon receptors from noise. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.5 Air Quality and Dust

- 6.5.1 An Air Quality and Dust Assessment was undertaken to support the proposals for the deepening of the existing Leapers Wood Quarry and an extension of time for mineral extraction and restoration operations. Both the footprint of the quarry and the output of material will be unchanged by this application. The application is made in conjunction with Back Lane Quarry, to the south, which is operated by Aggregate Industries. The extraction areas of the two operations are connected and form a single quarry void but will continue to operate as two entities.
- 6.5.2 Mineral extraction will continue within the current permitted limit of extraction. The period of baseline measurements for dust deposition and PM₁₀ concentrations suggested a minimal impact from the quarry at the monitoring locations. As the stand-off distances between mineral extraction and receptors will be unchanged by the development, it may be assumed that the impact from dust will not change. Indeed, the site will benefit from the extraction of mineral being undertaken at increased depth, which will afford a degree of natural dust mitigation. Therefore, providing correct dust management procedures are enforced, the extraction, processing, stocking, restoration and movement of material on the application site will not generate excessive levels of fugitive dust. Nevertheless, to ensure effective adherence of mitigation, it is recommended that a detailed scheme of dust management and monitoring be prepared pursuant of planning approval. This will be prepared by the Applicant and will set out in further detail the procedures to be employed which will, as a minimum, contain all the measures recommended in the Air Quality and Dust Assessment.
- 6.5.3 The scheme will recommend the implementation of a proactive monitoring strategy for nuisance dust and the measurement of PM₁₀ / PM_{2.5} concentrations in order to demonstrate compliance with appropriate air quality standards and dust deposition

criterion. Monitoring would be undertaken at the nearest / most sensitive receptors to the quarry with the resultant data disseminated to the Regulatory Authorities. Particulate matter measurements will utilise equipment that complies with the requirements of the Air Quality Strategy.

6.5.4 The amount of mineral exported from the quarry will also remain unchanged from current volumes. As such there will be no undue impact on air quality along the public highway associated with vehicle exhaust emissions.

6.5.5 In conclusion, no changes are proposed that would give rise to any unacceptable impacts upon receptors from air quality or dust. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.6 Groundborne Vibration and Air Overpressure

6.6.1 An assessment has been undertaken of the potential impacts associated with groundborne vibration and air overpressure from blasting operations within the quarry.

6.6.2 In order to regularise a criterion for restricting vibration levels from production blasting whilst addressing the need to protect amenity for nearby residents, it is recommended that the current criterion of 6.0 mm per second (mms^{-1}) for 95% of events is considered a satisfactory magnitude for vibration from blasting at Back Lane Quarry.

6.6.3 All blasts shall be designed to ensure that ground vibration levels arising from blasting shall not exceed a peak particle velocity of 6mms^{-1} in any mutually perpendicular plane and calculated with a 95% confidence limit. No individual blast shall exceed a peak particle velocity of 9mms^{-1} as measured at any vibration sensitive property which is not under the direct control of the Applicant / operator.

6.6.4 All vibration will be of a relatively low order of magnitude and would be entirely safe with respect to the possibility of the most cosmetic of plaster cracks.

6.6.5 All vibration will also be well below those levels recommended for blast induced vibration as being satisfactory within British Standard Guide BS 6472-2: 2008.

6.6.6 With such low ground vibration levels, accompanying air overpressure would also be of a very low and hence a safe level, although will be perceptible on occasions at the closest properties.

6.6.7 If the Applicant / operator accords with the recommendations given, there is no reason for blasting operations resulting from the proposed deepening of Leapers

Wood Quarry to give rise to any adverse or significant impacts due to increased vibration at any of the dwellings or structures in the vicinity of the site. In fact, for blasting operations in the current void, any resultant effects should be lower due to the greater depth of working.

- 6.6.8 In conclusion, no changes are proposed that would give rise to any unacceptable impacts upon receptors from vibration or air overpressure. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.7 Water Environment

- 6.7.1 A full Flood Risk Assessment and Hydrogeological Impact Assessment have been undertaken. Pre-application liaison with the Environment Agency has also taken place.
- 6.7.2 The proposal involves the deepening of the quarry workings to -37 mAOD within a single quarry void. The volume of water entering the quarry void will increase with depth and be derived from three sources: direct rainfall, diffuse flow from the mass of the limestone and conduit flow from truncated karst features. The maximum theoretical volume of water that could occur within the karst system, and that could potentially enter the quarry void, has been calculated. The ingress would be managed via dewatering, with discharge to ground via the Leapers Wood sinkhole, the Back Lane lagoon sinkhole and the Back Lane French Drain, either individually or in combination.
- 6.7.3 The characteristics of the local groundwater regime within the limestone are influenced principally by topography, geological structure and the hydrogeological characteristics of the different rock types present, including karst features. The overall groundwater flow direction in the immediate vicinity of the quarries is west-northwestwards. The majority of groundwater within the limestone is discharged to a spring located 1.5 km to the north of the site. The resultant water discharges to a tributary of the River Keer.
- 6.7.4 Dewatering of the quarry void will continue, to permit safe and efficient mineral extraction by working the site dry. This will cause temporary lowering of the groundwater table in the vicinity of the site. By returning the majority of water to the aquifer, down-gradient of the site, any reduction in groundwater levels or baseflow to the north and northwest of the site will be mitigated.

- 6.7.5 Upon cessation of mineral extraction active water management will cease and the quarry void will start to fill with water. Passive outfall structures will be constructed to convey water to the existing discharge points. The design water level of the restoration waterbody is 45mAOD.
- 6.7.6 Based upon the proposed water management and the characteristics of the structural geology, it is considered that there will be no discernible impacts to any of the identified environmentally sensitive sites or groundwater-supported surface water features or groundwater abstractions. Continuation of the existing groundwater level monitoring regime is proposed.
- 6.7.7 The implications for flood risk associated with the proposed development have been assessed. The current discharge routes will continue to be used for the duration of mineral extraction. Volume calculations, including allowance for climate change effects, indicate that the total discharge can be restricted to the greenfield run-off rate throughout the proposed development. During storm events water would be stored temporarily within the quarry void. The latter provides massive flow balancing capacity, thereby allowing subsequent discharge to be undertaken at a controlled, appropriate flow rate.
- 6.7.8 During the extraction phase, sumps within the quarry will ensure that there is sufficient settlement provision to remove suspended solids from the discharge. Adherence to pollution control and best practice measures are such that there will be no risk of pollution from the accidental release of contaminants. With the proposed controls and mitigation in place, there is not anticipated to be discernible impacts to water quality as a result of the proposals.
- 6.7.9 Future mineral extraction and dewatering may occur at Dunald Mill Quarry but it is not anticipated that this would be concurrent with the proposed development at Leapers Wood and Back Lane Quarries. Consequently, dewatering would not occur simultaneously at both sites and cumulative impacts would not arise.
- 6.7.10 In conclusion, no changes are proposed that would give rise to any unacceptable impacts upon the water environment. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.8 Climate Change

- 6.8.1 Whilst national planning policy states that new development should be located so as to reduce greenhouse gas emissions, minerals are a finite resource that can only be worked where they are found (NPPF).

- 6.8.2 The proposed development comprises the deepening of the existing mineral extraction operations as well as an extension to the life of the site to allow for the additional extraction activities to be completed.
- 6.8.3 In terms of carbon emissions and potential effects on climate change, it would be necessary to continue the use of mobile plant to extract the mineral and transport it to the on-site processing facility located in the west of the site. Whilst the proposed development would result in the site being operational for an extended period of time, it would not intensify in the number of mobile plant movements. Technology relating to electric mobile plant is rapidly developing and it is considered likely that in the medium to long term the site's diesel powered mobile plant would be replaced by electric equivalents. This would significantly reduce the carbon footprint associated with the extraction of mineral at the site.
- 6.8.4 Limestone is currently processed on site using aggregate wash plants and screens which are powered by diesel generators. The proposed development would extend the period of time over which the plant and machinery are used but would not result in any significant changes to the use of the processing plant. As with the mobile plant and machinery described above, it is considered reasonable to assume that during the extended operational period, electric static plant and machinery would be introduced and eventually be procured as the industry standard. This would significantly reduce the carbon footprint associated with the processing of limestone on site.
- 6.8.5 In terms of the transportation of limestone from the site, it is not possible to transport materials to or from the site using sustainable modes of transport, for example rail or water. However, it is proposed that the output rate would continue at approximately 0.8mtpa. Therefore, the proposed development would only extend the period of time for the mineral extraction activities and would not result in an intensification in the number of HGVs entering and leaving the site. As discussed above, given both the currently permitted and proposed timescales for mineral extraction, it is considered reasonable to assume that technology will be developed to enable electric HGVs to be logistically and commercially viable for the Applicant's vehicle fleet. The Applicant is already committed to upgrading its commercial fleet of HGVs to minimise the company's carbon footprint and the use of an electric fleet of vehicles in the future would significantly reduce the carbon emissions associated with the transportation of mineral from Leapers Wood Quarry.

- 6.8.6 As the proposals would result in the joint boundary between Leapers Wood Quarry and Back Lane Quarry being worked to a depth of -37mAOD, it has been necessary to prepare a revised restoration scheme which encompasses both quarries. However, the revised scheme would not result in a requirement to import restoration materials and would not result in any significant change to the carbon emissions associated with the restoration of the site. Whilst there would be no specific requirement for restoration materials to be imported to the site, the proposed planting and landscaping would result in a relatively small number of vehicles delivering landscaping materials and planting specimens to the quarry. However, these vehicles would also be required to deliver materials for the currently approved restoration scheme and would not therefore represent a significant change in the number of vehicles. As far as possible, the use of larger bulk haulage vehicles would be encouraged to deliver restoration materials to the site, in order to minimise the number of vehicle movements and wherever possible, material would be sourced from local projects in order to minimise vehicle mileage. Furthermore, given the proposed timescale for the (interim) restoration of the site (i.e by 2065) it is reasonable to assume that electric vehicles would be in commercial use, as standard. This would significantly reduce the carbon emissions associated with the restoration of the site.
- 6.8.7 In order to minimise emissions associated with their use, all mobile plant and machinery would be regularly serviced and maintained and would be switched off when not in use.
- 6.8.8 The effects of climate change and the vulnerability of the development proposal to these changes has been considered as part of the preparation of the EIA, particularly in terms of hydrology/ flood risk and ecology (i.e. the impacts of climate change on habitats and species).
- 6.8.9 The development proposal would not result in any significant impacts with respect to hydrology, hydrogeology or flood risk even when taking account of the predicted likely effects of climate change.
- 6.8.10 The proposed development would result in the creation of a lake feature with areas of shallows and reedbeds around the periphery. The proposed restoration would provide enhancements to the ecological value of the site, creating new habitats which would be sustainably managed and maintained throughout the aftercare period. As the lake's aquatic vegetation would benefit from occasional inundation by flood water, it is considered that the effects of climate change, for example increased

rainfall, an increased risk of flooding or higher ambient temperatures, would not have any significant direct or indirect environmental effects on the restored site which is classed as 'water compatible development' within the NPPF/PPG.

- 6.8.11 Back Lane Quarry lies immediately adjacent to the application site. Given the nature and scale of the mineral extraction activities within Back Lane Quarry, and its proximity to Leapers Wood Quarry, the potential for cumulative and in-combination effects has been considered.
- 6.8.12 Back Lane Quarry currently has permission to extract limestone to a depth of 38mAOD, with a permitted end date of 29 April 2048 for mineral extraction and of 29 April 2049 for restoration. A planning application has been prepared, and is due to be submitted to the MPA, which seeks permission for the deepening of mineral extraction operations to a depth of -37mAOD with an extension of time for mineral extraction until December 2077 and restoration until December 2078. The current activities and proposed development at Back Lane Quarry are therefore similar to those at Leapers Wood Quarry.
- 6.8.13 As with the proposals at Leapers Wood Quarry, the operations at Back Lane Quarry require the use of mobile plant and machinery to excavate limestone and transport it to its on-site processing plant. HGVs transport the processed mineral from the site. Currently the majority of HGVs and mobile plant and machinery (including the processing plant) are diesel operated. The proposed development at Back Lane Quarry would result in a deepening of mineral extraction operations and an extension of time over which the quarry would be worked and restored. However, it would not result in any changes to the extraction rate and therefore there would not be an intensification in the use of mobile plant or HGV movements.
- 6.8.14 It is considered realistic to assume that, in the medium to long term, both Leapers Wood Quarry and Back Lane Quarry will be operated using electric mobile plant and machinery as diesel generated plant is phased out. Furthermore, whilst HGVs associated with the sites are currently diesel operated, it is also considered reasonable to assume that electric HGVs will be used as standard in the future. The cumulative and in-combination effects on climate change associated with the operation of plant and machinery and transporting mineral using HGVs in order to deepen the quarries and operate both sites beyond the currently permitted end dates, are not therefore considered to be significant.

- 6.8.15 Back Lane Quarry also lies within Flood Zone 1 and the quarry is also worked dry through dewatering of the quarry void. The current and proposed site activities within Back Lane Quarry would not have any cumulative effects in terms of the risk of flooding at Leapers Wood Quarry, or off site within the surrounding area.
- 6.8.16 Taking into consideration the extensive mitigation measures which are integrated into both the current and proposed site operations at Leapers Wood Quarry, it is considered that the proposed development would not have any significant environmental effects in terms of climate change.

Conclusions

- 6.8.17 In terms of the effects on climate change, taking the above considerations into account, it is evident that the proposed development represents an appropriate continued use of the site whilst avoiding increased vulnerability to the range of impacts arising from climate change. No changes are proposed that would give rise to any unacceptable impacts upon climate change. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.9 Land Stability

- 6.9.1 The results of the stability analyses undertaken as part of the assessment indicate that the tip is overall stable and historical observations confirm this finding. A Factor of Safety value of c.1.50 is usually considered appropriate in such circumstances.
- 6.9.2 Given the ground conditions encountered at the site it is considered that the calculated Factor of Safety values are adequate for the as-built tip structure and that there should be no adverse effect on the nearby M6 motorway, which is a National Highways asset.

Monitoring

- 6.9.3 Daily visual inspections of excavations by Tarmac / Aggregate Industries personnel, as required by The Quarries Regulations 1999, would be undertaken to identify any evidence of instability or variation in expected ground conditions.
- 6.9.4 Geotechnical Assessments by a geotechnical specialist will be continued throughout the life of extraction at both sites.
- 6.9.5 In conclusion, no changes are proposed that would give rise to any unacceptable impacts in terms of land stability. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

6.10 Human Health

- 6.10.1 An Air Quality and Health Impact Briefing Note has been prepared by Savills and accompanies the application.
- 6.10.2 In summary, public health statistics show that respiratory health in the area is good and there is no evidence of any impact from current operations.
- 6.10.3 There are a range of mitigation measures which are currently being implemented at Leapers Wood Quarry and contribute to baseline air quality in the local area remaining well within AQS objective thresholds which are set to protect the environment and human health.
- 6.10.4 Provided that appropriate mitigation measures continue to be implemented, dust generation from the continuation of activities would be negligible and there would be no change in health risk. It is considered that the proposals are therefore in accordance with the relevant policies of the Development Plan.

7 CONCLUSIONS

7.1 Summary

- 7.1.1 This PS has been prepared to support an application at Leapers Wood Quarry for the deepening of the existing quarry operations and an extension of time for the quarrying operations to continue until 31 December 2064, with interim restoration being completed a year later, by 31 December 2065 and final restoration being undertaken by 31 December 2078 in conjunction with the adjacent Back Lane Quarry.
- 7.1.2 This planning application is submitted under Section 73 of the Town and Country Planning Act 1990 and proposes to vary conditions 1 (timescales), 2 (approved plans), 4 (depth of mineral extraction), 6 (phasing plans), 40 (final restoration scheme) and 41 (water level timescales) of planning permission 01/03/1185 (original planning permission ref 1/86/760).
- 7.1.3 This PS accompanies the planning application and sets out the relevant planning policies to be considered as part of the application determination. The PS also sets out why the application is being submitted and relevant socio-economic considerations. The planning application is accompanied by an Environmental Statement (ES) and Non-Technical Summary (NTS).
- 7.1.4 This PS sets out baseline and background information and also sets out the details of the development having regard to the location, scale and nature of the proposals.
- 7.1.5 This PS identifies the relevant national and Development Plan policies that will be used in the determination of the application. In this regard the proposal is considered to be compliant with the main planning policy tests set out in the Development Plan and advice set out in national planning policy.
- 7.1.6 Based on the 10 year average of sales, the permitted limestone reserves represents a landbank of 19 years, and the landbank of at least 10 years is expected to be eroded in 2031 (17 years if using the 3 year average, bringing this down to 2029). Critically, the quarry only has less than 6.5mt of reserves remaining for extraction. Based on the current output of approximately 0.8mtpa, the site would be worked out in just over 8 years (January 2033).
- 7.1.7 Furthermore, there are a number of operational justifications for seeking permission to allow the deepening of the quarry void. If permission is not granted, it would be necessary to work the higher quarry levels and remove the remaining haul roads. This would not only sterilise the remaining permitted limestone reserves but would

remove the ability of the site to be worked all year round, including during periods of heavy rainfall, and would mean that mineral products would have to be stockpiled within parts of the site which are affected by seasonal flooding and waterlogging. The loss of more than 26mt of quality limestone from the site is considered to be significant in the context of the long term supply of limestone within Lancashire and the wider North West region.

- 7.1.8 The NPPF makes it clear that *'great weight should be given to the benefits of mineral extraction, including to the economy'* and that *'it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation'*. The proposals clearly accord with this national policy.
- 7.1.9 In overall conclusion, it is considered that the proposals are environmentally acceptable and support the economic, social and environmental roles of sustainable development required in NPPF. Where it is considered that adverse impacts would arise from the proposed development, appropriate mitigation has been proposed that would ensure there would be no unacceptable effects. Any mitigation can be formalised as appropriate through the imposition of planning conditions and other development control mechanisms. The potential environmental and local amenity impacts are therefore considered acceptable and the proposal accords with the Development Plan.
- 7.1.10 At the heart of the NPPF is the presumption in favour of sustainable development for proposals which are in accordance with the Development Plan. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that applications for planning permission should be determined in accordance with the provisions of the Development Plan unless material considerations indicate otherwise.
- 7.1.11 The Planning Statement and supporting assessments have demonstrated that the proposed development is, on balance, in accordance with the Development Plan and there are no material considerations which indicate otherwise.