

DATE ISSUED: October 2017
JOB NUMBER: NT12149
REPORT NUMBER: NTS

TARMAC

Review of Old Mineral Permissions, Hawthorn Quarry

Non-Technical Summary

October 2017

PREPARED BY:

Rachel Graham Environmental Scientist




Gillian Beauchamp Associate Director



APPROVED BY:

Helen Kennedy Technical Director



This report has been prepared by Wardell Armstrong LLP with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The report is confidential to the Client and Wardell Armstrong LLP accepts no responsibility of whatever nature to third parties to whom this report may be made known.

No part of this document may be reproduced without the prior written approval of Wardell Armstrong LLP.



Wardell Armstrong is the trading name of Wardell Armstrong LLP, Registered in England No. OC307138.

Registered office: Sir Henry Doulton House, Forge Lane, Etruria, Stoke-on-Trent, ST1 5BD, United Kingdom

UK Offices: Stoke-on-Trent, Birmingham, Cardiff, Carlisle, Croydon, Edinburgh, Glasgow, Greater Manchester, Central Manchester London, Newcastle upon Tyne, Sheffield, Taunton, Truro. International Offices: Almaty, Moscow

ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
LAND AND PROPERTY
MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT

CONTENTS

1	INTRODUCTION.....	1
1.2	Planning Background.....	1
2	SITE DESCRIPTION	2
2.1	Site Location and Setting.....	2
3	PROJECT DESCRIPTION.....	7
4	NEED FOR THE PROJECT.....	10
5	KEY ISSUES CONSIDERED IN THE ENVIRONMENTAL IMPACT ASSESSMENT	10
5.1	Scoping and Consultation.....	10
5.2	Landscape and Visual Impact Assessment.....	11
5.3	Ecology	11
5.4	Soils and Agriculture.....	13
5.5	Water Resources	13
5.6	Cultural Heritage	14
5.7	Noise.....	15
5.8	Vibration.....	15
5.9	Air Quality.....	16
5.10	Traffic and transport	16
5.11	Access and recreation	17
5.12	Report to inform Habitat Regulations Assessment.....	18
6	CONCLUSION.....	19

PLATES

- Plate 1 Site Location
- Plate 2 Site Boundary of Hawthorn Quarry on Oblique Aerial image
- Plate 3 Photograph of Quarry Void
- Plate 4 Designated Sites within 5km of the Site

1 INTRODUCTION

- 1.1.1 Hawthorn Quarry, located near Seaham in County Durham, is a dolomite (magnesian limestone) quarry, first operated in 1906. The current operator of the quarry is Tarmac (a CRH Company). Hawthorn Quarry is currently inactive with mineral extraction ceasing in 1993.
- 1.1.2 An Environmental Statement (ES) has been prepared to accompany the submission made to Durham County Council under legislation to replace existing planning conditions with a new set that meets modern standards. The ES provides details of Hawthorn Quarry and its surrounding area; the nature of operations being undertaken at the quarry (the project); and the environmental impact of the proposed development through a process known as Environmental Impact Assessment (EIA), which determines if potential impacts have significant effects.
- 1.1.3 This Non-Technical Summary (NTS) summarises the findings of the ES in non-technical language and examines issues such as ecology, landscape and visual amenity, water resources, air quality, noise, and transport. Additionally, the NTS provides a detailed description of the project and an overview of the Hawthorn Quarry site.

1.2 Planning Background

- 1.2.1 The site, historically, has a number of planning permissions attached to it. Legislation (The Environment Act 1995) requires that planning conditions attached to mineral sites are reviewed on a regular basis (Review of Old Mineral Permissions, or ROMP) and brought up to date as necessary, to ensure that sites are operated in accordance with current legislation and guidance.
- 1.2.2 The original submission to Durham County Council to review the mineral permissions at the Hawthorn site was made in December 1997. Subsequently it was agreed with the County Council that an Environmental Impact Assessment (EIA) would be carried out for the site and an Environmental Statement was submitted in May 2000. The Council then requested that further assessment be undertaken; the 1997 application remains unresolved, therefore.

2 SITE DESCRIPTION

2.1 Site Location and Setting

2.1.1 Hawthorn Quarry is located approximately 16.5km to the east of Durham, 2.6km south of Seaham and 1.3km east of Hawthorn Village. The site lies approximately 300m west of Durham's coastline, as shown on Plate 1 below.



Plate 1 Site Location¹

2.1.2 The red line boundary shown on Plate 2 shows the 'site', which is the current planning permission area and the subject of the EIA. The red, diagonally hatched area on the southern boundary of the site shows where, historically, mineral extraction has taken place outside the permission boundary. It is Tarmac's intention to restore this area as

¹ © Crown copyright and database rights 2016 Ordnance Survey 0100031673. This is Crown Copyright and is reproduced with the permission of Land & Property Services under delegated authority the Controller of Her Majesty's Stationery Office, © Crown Copyright and database right 2016 Licence Number 100,220-339663. © Crown Copyright. Department of Infrastructure, Isle of Man. Reproduced from Ordnance Survey Maps © Crown Copyright All Rights Reserved Wardell Armstrong Licence No. AL100019512

part of the Phase 2 activities at the site, using calcareous (magnesian limestone) grassland vegetation taken from the area of the existing overburden mounds.

- 2.1.3 The site area is approximately 38.3 hectares (ha), of which mineral extraction activities would take place within an approximate area of 13.5ha. Much of the remaining area would be used for storage of soils and overburden, rock or other material that cannot be processed for sale and that will be used in the restoration of the quarry, in the longer term.

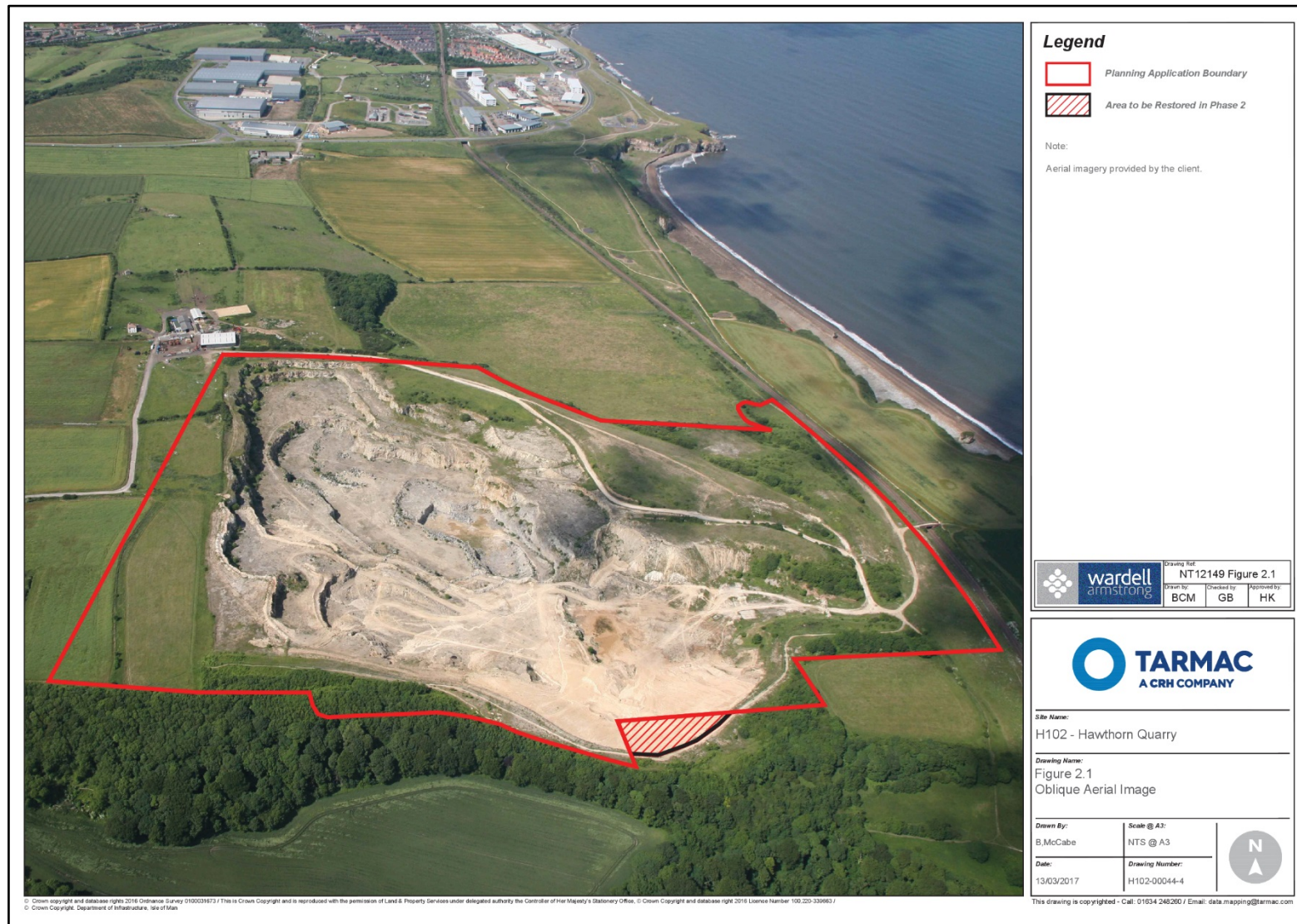


Plate 2 Site Boundary of Hawthorn Quarry on Oblique Aerial image



Plate 3 Photograph of Quarry Void

- 2.1.4 Due to the time lapse since the last working of the quarry in 1993, vegetation has naturally regenerated across much of the quarry void, as shown in Plate 3, above. In places this is of ecological value and will be used in the advance restoration on the southern boundary of the site (para. 2.1.2 above refers).
- 2.1.5 Hawthorn Quarry is located on the Durham Magnesian Limestone Escarpment. To the north and west of the quarry, the land is used primarily for agriculture: arable and pasture. To the immediate south of the site, the land comprises woodland, grassland (Hawthorn Dene Meadows) and the Hawthorn Burn, which form the Hawthorn Dene Special Site of Scientific Interest (SSSI).
- 2.1.6 There are ten designated sites within 5km of the site as shown on Plate 4, below:
- Hawthorn Quarry Geological SSSI, which is within the site boundary;
 - Hawthorn Quarry Local Wildlife Site, which is within the site boundary;
 - Hawthorn Dene Biological SSSI, partially within the southern area of the site;
 - Durham Coast Biological and Geological SSSI and Special Area of Conservation (SAC), approximately 130m east;
 - Noses Point Local Nature Reserve (LNR), approximately 250m north;
 - Stony Cut, Cold Hesledon Geological SSSI, 1.6km north-west;
 - Northumbria Coast Ramsar Site, Special Protection Area (SPA), 2.9km north;
 - Hesledon Moor East Biological SSSI, 3.1km west;
 - Yoden Village Quarry Geological SSSI, 4.3km south; and
 - Hesledon Moor West Biological SSSI, 4.4km south-west.

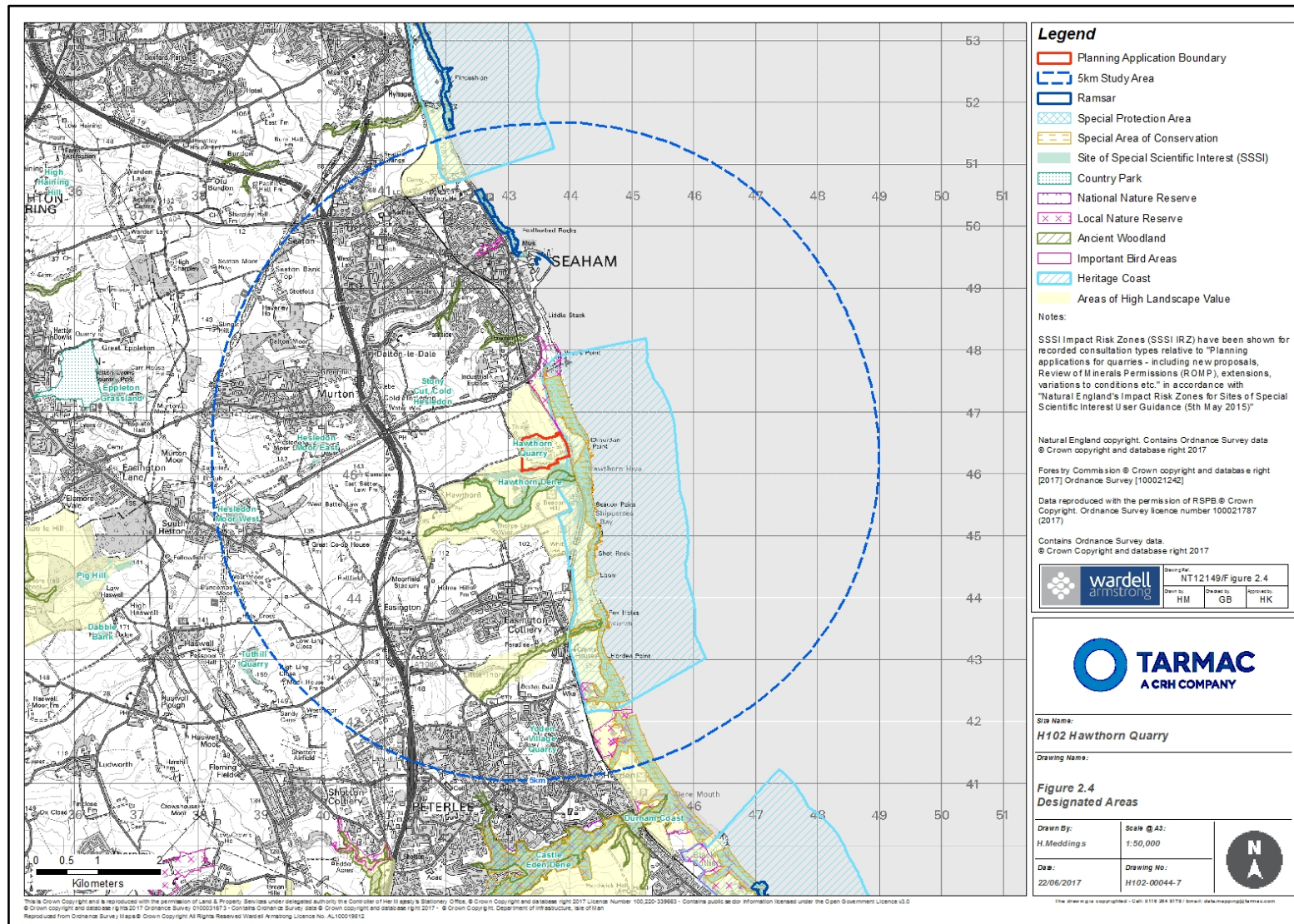


Plate 4 Designated Sites within 5km of the Site

3 PROJECT DESCRIPTION

3.1.1 As part of this ROMP application, a new working scheme is being proposed, together with a new site design, operational changes and a revised restoration scheme.

3.1.2 The site will continue to operate until 2042 (its currently permitted expiry date), with restoration taking place within 24 months thereafter, followed by a five-year aftercare management scheme.

3.1.3 Access to the site would continue to be from the existing, gated track which enters the site on its eastern boundary and runs north and then west, past Hawthorn village, before linking to the B1432 to the west. This connects with the A19, and via the A182, with Seaham harbour. Although a railway line passes the site to the east it is not considered economically or physically feasible to transport mineral from the quarry by rail. Quarry vehicles would pass through a wheel wash before reaching the public road.

3.1.4 The working hours for the quarry would be as follows:

Extraction and processing Monday to Friday 07:00 to 19:00

Saturday 07:00 to 12:00

Vehicle movements Monday to Friday 07:00 to 19:00

Saturday 07:00 to 12:00

Maximum five loads Monday to Friday 06:00 to 07:00

Blasting Monday to Friday 09:00 to 16:00

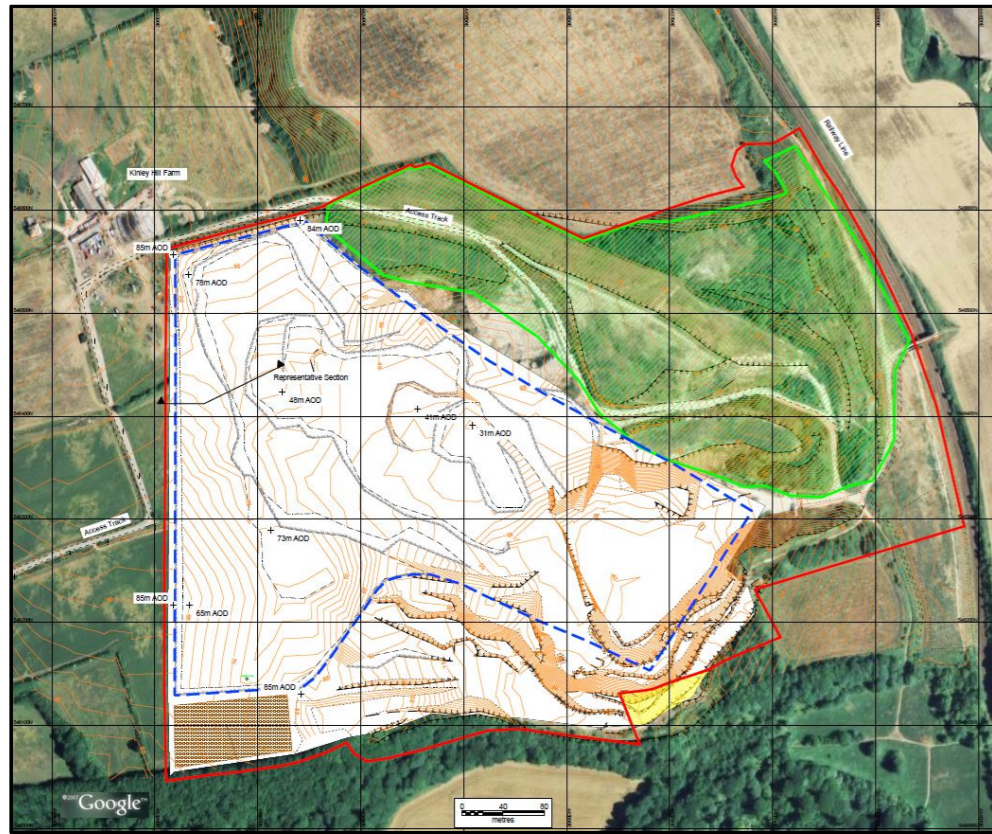
Saturday 10:00 to 12:00

3.1.5 There would be no working on Sundays or Bank Holidays, other than any repairs, maintenance and emergency works that have been agreed in advance with the Minerals Planning Authority.

3.1.6 The quarry will be dry worked with no requirement to dewater the quarry void. The maximum depth of extraction proposed at the present time is 5m Above Ordnance Datum (AOD), which is above the level of the local water table.

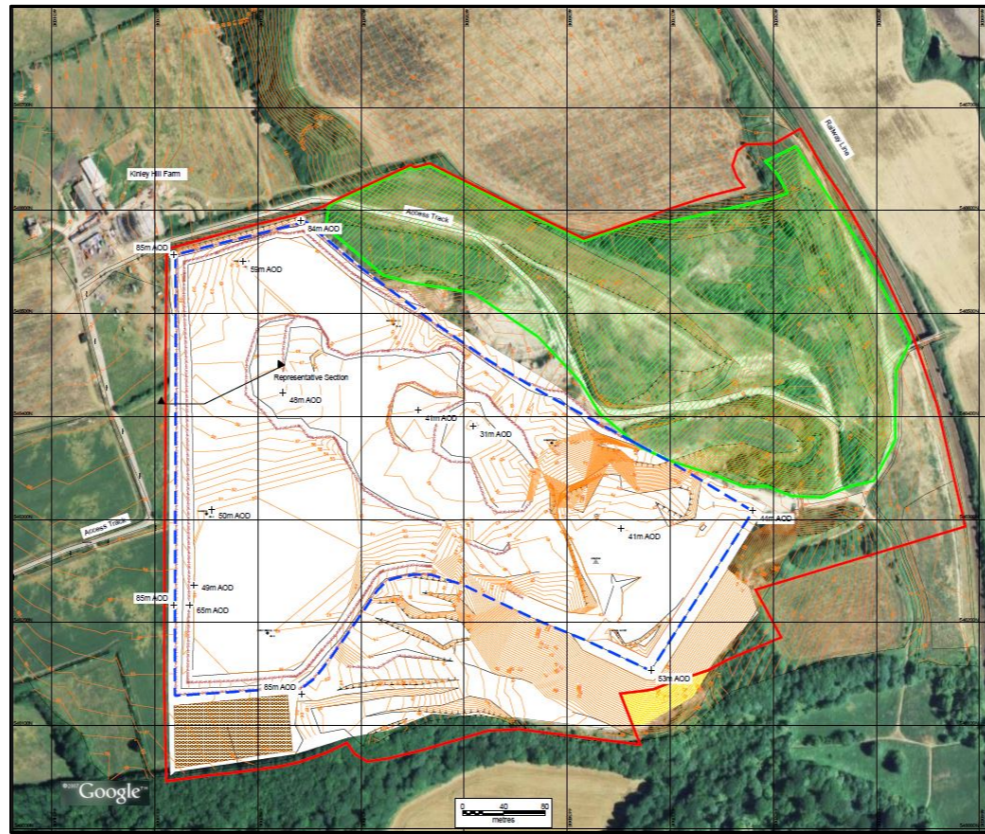
3.1.7 The quarry will employ between six and nine people and this number will increase when independent hauliers and suppliers are included. It is anticipated that the quarry workers and the majority of hauliers will be likely to live within the surrounding area.

- 3.1.8 Any lighting required at the quarry would mainly be located within the quarry void and would be restricted to downward directed lighting. As such it is expected that there would be no noticeable change to the effect of lighting on the surrounding area.
- 3.1.9 The restored site will form an important ecological, geological and cultural heritage asset to County Durham and will be achieved through a number of procedures:
- restoration blasting to achieve the desired shapes of headwalls, buttresses and screes;
 - preparation of a growing medium made from a mixture of finer limestone waste and soil, which would be applied to the scree blast piles and restored batters. Subject to availability, general quarry waste will be spread evenly by quarry machinery to quarry floor areas to promote re-vegetation; and
 - once the growing medium is in place (within the quarry void) it is proposed that the area be allowed to revegetate naturally and will in the long term produce a magnesian limestone (calcareous) grassland. The grasses, herbs and wild flowers that colonise will be typical of those found nearby in an adjacent restored area of species-rich grassland.
- 3.1.10 Advance restoration would take place along the southern boundary of the quarry, including the section that has historically been worked outside the permission boundary (see Plate 2), as well as an extended area further to the west. This would use vegetation material obtained from the existing site overburden storage area, in order to retain the more valuable habitat that has established during the time the quarry has remained inactive.
- 3.1.11 The figures below indicate the different phasing of the quarry for the period from the recommencement of extraction through to completion in 2042.



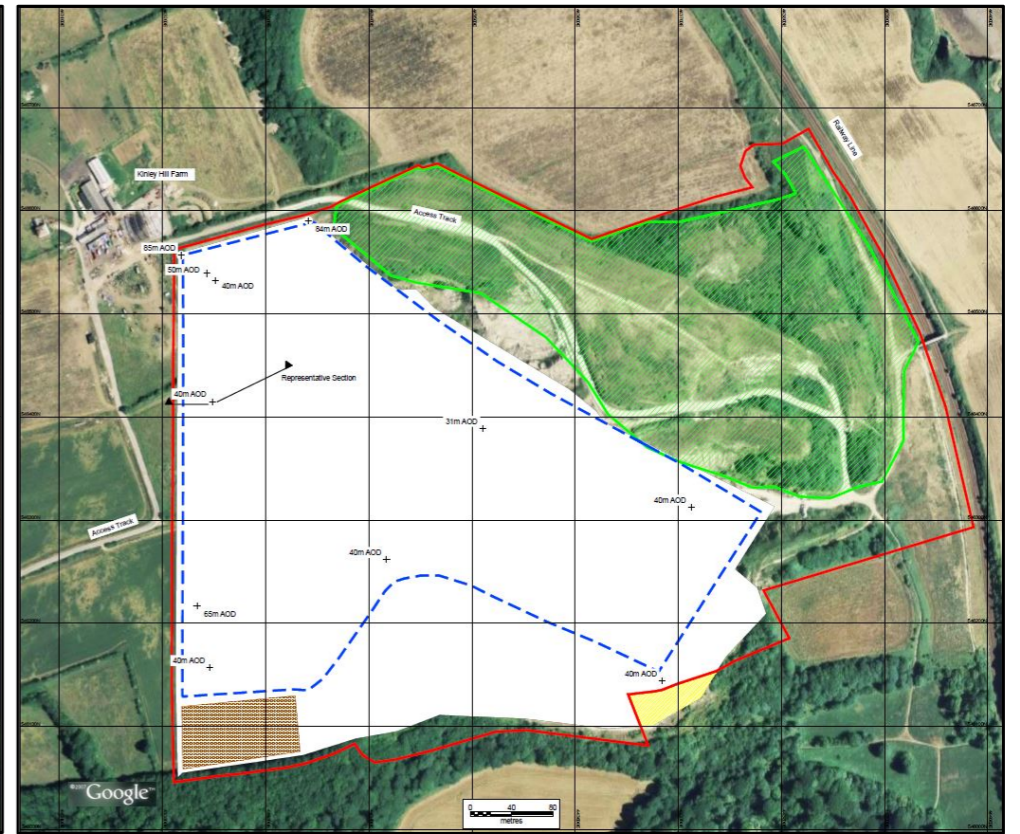
Phase 1

Working Scheme - Bench 1 – Approximately 90m AOD to 73m AOD



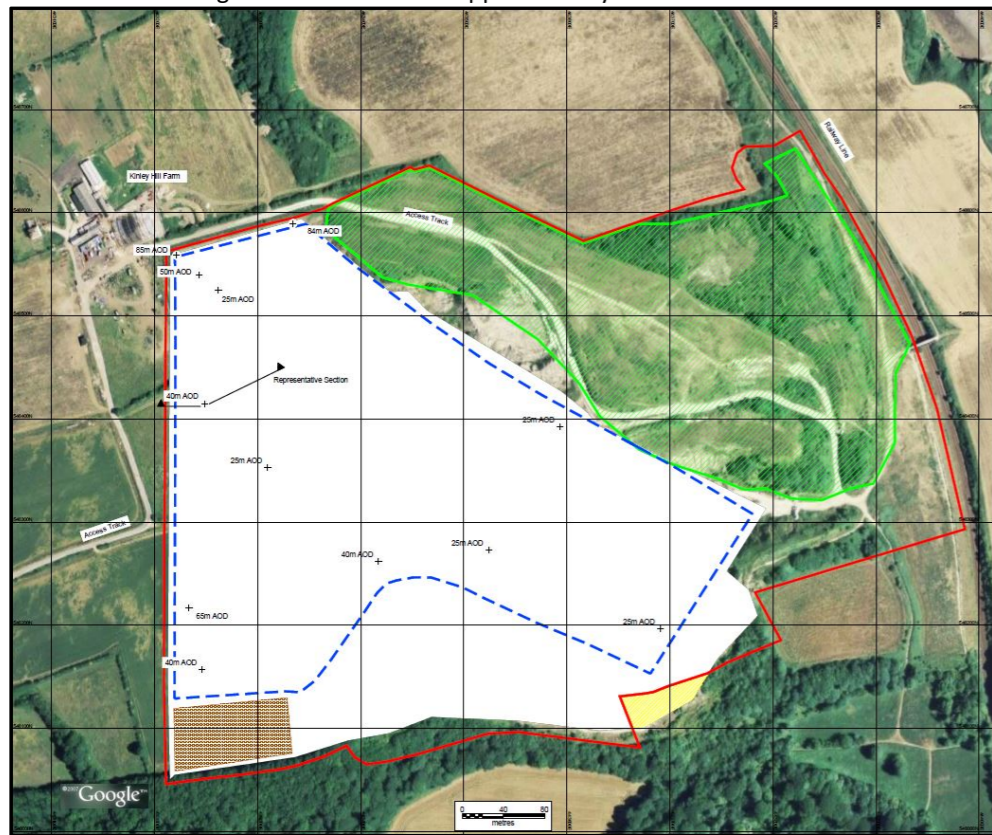
Phase 2

Working Scheme - Bench 2 - 73m AOD to 59m AOD



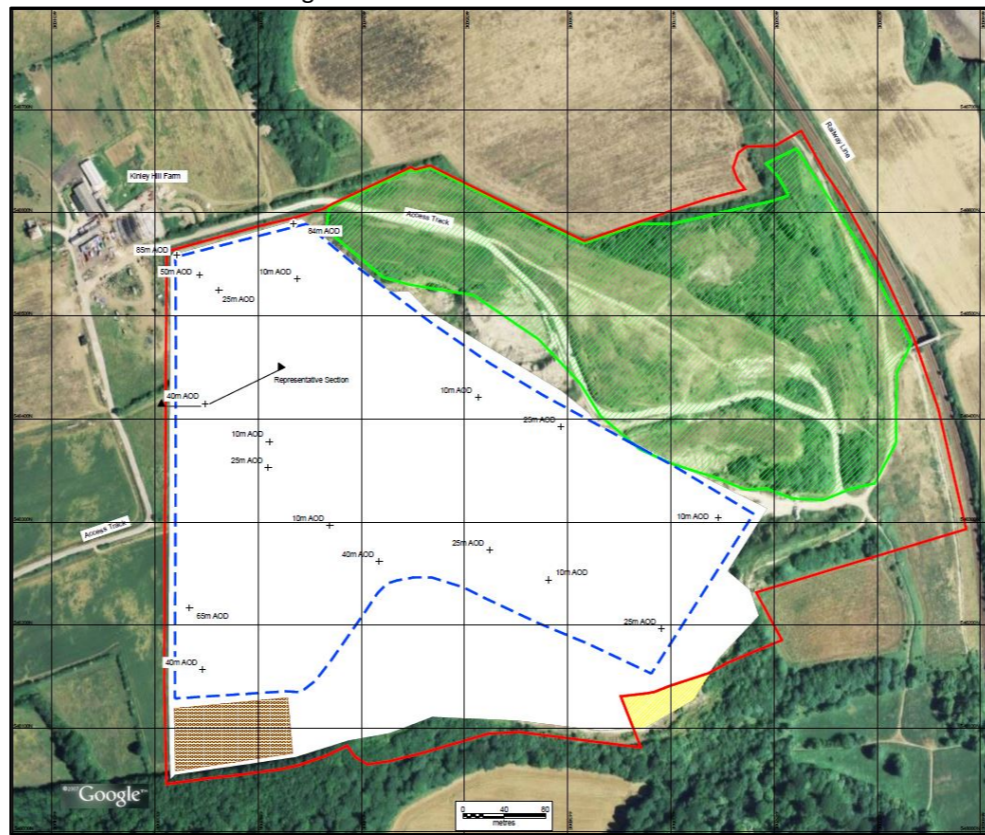
Phase 3

Working Scheme - Bench 3 – 59m AOD to 40m AOD



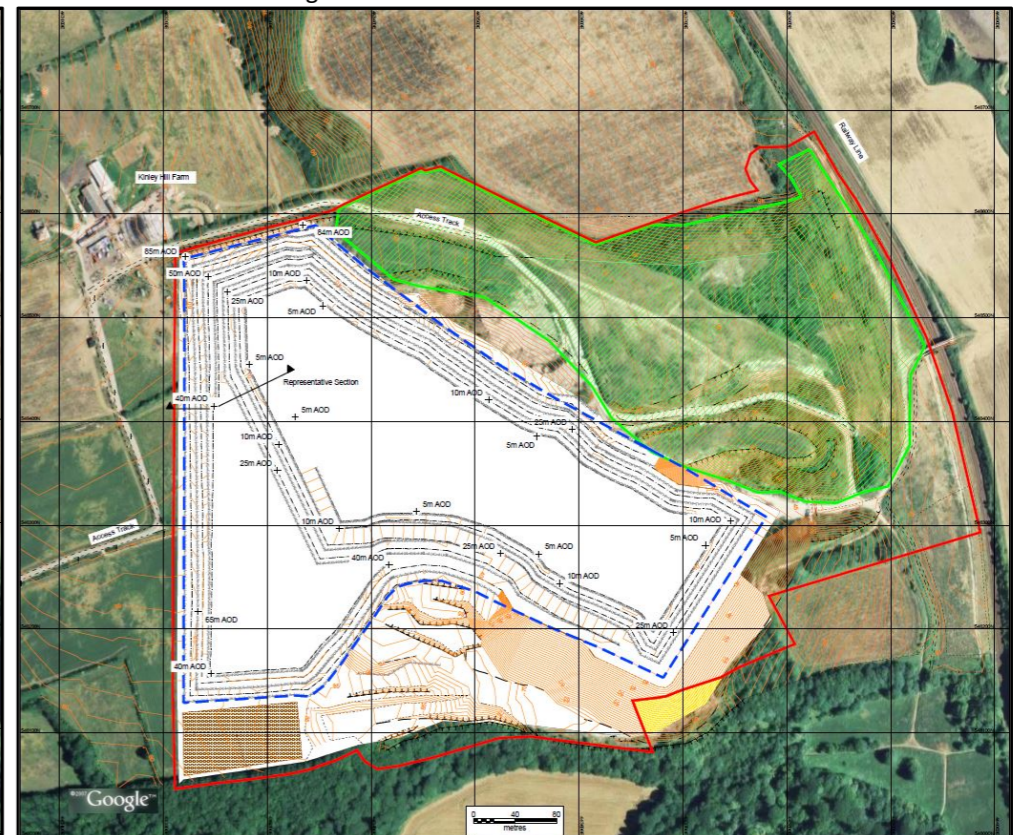
Phase 4

Working Scheme - Bench 4 - 40m AOD to 25m AOD



Phase 5

Working Scheme - Bench 5 - 25m AOD to 10m AOD



Phase 6

Working Scheme - Bench 6 - 10m AOD to 5m AOD

4 NEED FOR THE PROJECT

- 4.1.1 The project will accommodate employment for between six and nine people at the quarry and additional employment for independent hauliers and suppliers.
- 4.1.2 Extraction of magnesian limestone from the quarry will also allow DCC to meet its requirements in respect of the ongoing and adequate supply of crushed rock, sand and gravel for the local and wider economy.
- 4.1.3 The eventual restoration of the quarry will provide environmental, health and safety and amenity and recreation benefits to the local area. The areas of magnesian limestone grassland will contribute to the wider enhancement of the Durham Magnesian Limestone Escarpment, in line with the County's Biodiversity Action Plan. The exposed rock will provide habitat for peregrine and bats, while the natural revegetation will also add to the biodiversity of the local area in the longer term.

5 KEY ISSUES CONSIDERED IN THE ENVIRONMENTAL IMPACT ASSESSMENT

5.1 Scoping and Consultation

- 5.1.1 A scoping exercise was carried out in July 2015 in order to agree the remit for the Environmental Impact Assessment (EIA) with DCC and the statutory consultees, such as the Environment Agency, Natural England, the National Trust and the Durham Wildlife Trust. The Scoping Report (Appendix 1.4 of the ES) identified the new proposals for future recommencement of mineral extraction at Hawthorn Quarry. It also summarised the likely environmental impacts associated with each of the environmental disciplines to be considered as part of the EIA process.
- 5.1.2 The scoping response from DCC and from various statutory consultees identified various points requiring to be addressed within the ES and responses to these have been included in the relevant chapters of the ES.
- 5.1.3 On the advice of DCC, there were further pre-application discussions with the Environment Agency and meetings were held in 2016 to address the potential for quarrying to adversely affect water resources (including groundwater) in the vicinity of the quarry. The outcome of this was the decision, to be taken forward as part of this ROMP, to limit the extraction of mineral to a depth of 5m AOD, thereby remaining above the existing watertable.

5.2 Landscape and Visual Impact Assessment

- 5.2.1 The landscape of the immediate area of the quarry forms part of a designated Area of High Landscape Value, albeit that once the emerging Durham County Plan is approved, this will be replaced with character-led guidance and the designation will be removed.
- 5.2.2 The quarry lies close to the Durham coastline, which is also designated as Heritage Coast. The value of the landscape at the local level is assessed as high in those areas that are designated and medium elsewhere.
- 5.2.3 The quarry development would mainly be seen by users of the public rights of way to the immediate east, west and south of the quarry, as well as from elevated positions such as Kinley Hill and Beacon Hill. There would be no views from Hawthorn village or from the majority of Seaham. The small extension of the quarry westwards and the deepening of the void would not increase the extent of visibility of the site from within the adjacent areas.
- 5.2.4 In the longer term, with the restoration of the quarry to areas of calcareous grassland and natural regeneration, there would be some benefits to the character of the landscape, at the local level.

5.3 Ecology

- 5.3.1 There are various sites of national and local importance to nature conservation located within the area surrounding the quarry, as shown on Plate 4.
- 5.3.2 The absence of extraction over the past 24 years has allowed vegetation to re-establish within the quarry. This includes some areas where unimproved calcareous grassland is now present; it is intended that some of this vegetation will be translocated to the southern boundary of the site, where some advance restoration is proposed during Phase 2. A single waterbody will also be lost to the extraction works, with another lost as part of the works to the overburden storage area.
- 5.3.3 Hawthorn Quarry Site of Special Scientific Interest lies adjacent to the southern site boundary. No direct effects through quarrying works are anticipated. The proposed extraction area lies over 50m from the woodland boundary and, with the implementation of appropriate exclusion zones to protect tree roots and crowns during restoration works, no adverse effects are anticipated.
- 5.3.4 Durham Coast Site of Special Scientific Interest lies approximately 130m to the east. No direct effects are anticipated given the distance to the site and no indirect effects

on the breeding and wintering birds for which the site is partially designated are anticipated.

- 5.3.5 Part of the quarry site is currently designated as a Local Wildlife Site (Hawthorn Quarry LWS). The site is designated due to the presence of species rich-calcareous grassland. It is anticipated that following completion of extraction works and the proposed restoration works, the extent of this feature within the site will be increased and that, with the associated monitoring and maintenance programme, the quality of the grassland can be ensured such that the value of the site will be increased.
- 5.3.6 The site currently supports breeding and wintering bird species, primarily of up to Parish value, the exception being the presence of peregrine (a feature of County/Regional importance) nesting on the cliff face and remaining in the area during the winter. The site is of Local value to the local bat population, supporting small numbers of foraging bats with individual pipistrelle bats roosting within the cliff face and within a disused stone structure. The site is considered to be of Parish value to amphibians with breeding common toad, common frog and palmate newt all present.
- 5.3.7 The site is considered to be of County value for the invertebrate assemblage it supports and is also considered to form part of a matrix of habitats along this section of coastline which are of County value to reptiles. Badger are known to be present in the surrounding area; however, no setts have been identified either within the site or within a 100m buffer.
- 5.3.8 With appropriate mitigation, including undertaking checking surveys in relation to bats, badger and nesting birds, obtaining licences where appropriate and implementing precautionary working methods with respect to these species and with respect to reptiles, the risk of harming or disturbing protected species during works can be minimised. Restoration works will ensure the long-term conservation status of the local populations of these key species.
- 5.3.9 Once extraction is completed, restoration blasting will be undertaken and the quarry floor and other suitable areas treated with a suitable growing medium. These areas will then be allowed to revegetate naturally and will, in the long-term, form calcareous grassland. Restoration proposals will also include the creation of two small 'wildlife ponds' adjacent to areas of grassland and retained scrub. Ledges suitable for use by nesting peregrine and crevices suitable for use by roosting bats will be incorporated into the final cliff faces.

5.3.10 Overall, completion of extraction and restoration works at this site will have a beneficial effect on a number of key habitats and the fauna they support.

5.4 Soils and Agriculture

5.4.1 Only a small area of agricultural land on the western side of the site is outwith the existing extraction area and would be lost to the proposed recommencement of extraction (2.7ha). This has been assessed as only of moderate quality and would not fall within the classification of 'Best and Most Versatile' (BMV) agricultural land and the loss of this land would not result in any significant adverse effects on agriculture.

5.4.2 Soils from the area to the west of the existing quarry would be set aside for re-use in restoration. Any impacts on soil resources would be mitigated by the careful application of handling, storage and aftercare provisions and consequently the proposed recommencement of extraction will have only a minor adverse impact on the soil resource and therefore would be significant.

5.4.3 The renewed extraction would have no impact on agricultural drainage as no drainage systems have been identified onsite.

5.4.4 Overall, with mitigation measures in place, it is considered that there would be only negligible and minor (not significant) residual impacts from the renewed site working.

5.5 Water Resources

5.5.1 An assessment has been undertaken of the potential impact of the renewal of extraction at Hawthorn Quarry, on the water resources of the site and the surrounding area. The assessment has focussed on potential impacts on the water environment, which may change the hydrological and hydrogeological regime or cause pollution and a degradation in water quality.

5.5.2 Discussions with the Environment Agency have identified that limiting extraction to no lower than 5m Above Ordnance Datum, at this present time, will ensure that there is no risk to the groundwater of the area around the quarry.

5.5.3 A Flood Risk Assessment has been carried out for the site; this found that the risk of flooding to the site was no greater than low and that there would be no substantial change in flood risk to external areas as a result of the recommencement of mineral extraction.

5.5.4 With the appropriate mitigation in place, it is considered that the scale of potential impacts would be no greater than minor adverse. As such, there would be no

significant effects on the water environment as a result of the operation or restoration of Hawthorn Quarry.

5.6 Cultural Heritage

- 5.6.1 The archaeological and cultural heritage interest of the area enclosing Hawthorn Quarry has been assessed for any potential for adverse effects on these features as a result of the recommencement of extraction within the quarry. There have been no previous intrusive archaeological investigations at the site, although in 2002 a review of aerial photography was undertaken as part of the Aggregates Levy Sustainability Fund.
- 5.6.2 Previous quarrying activity at the site will have removed any remains within the majority of the site area, though extraction within the south-western part of the site may have the potential to disturb buried archaeological remains. There is also the potential that WWII remains recorded on the boundary of the site may remain undisturbed by historic mining activity. Any such effects are assessed as being no greater than slight adverse (not significant).
- 5.6.3 There is the potential for adverse effects on the setting of designated heritage assets within the vicinity of the site, as a result of the recommencement of extraction. However, given that the quarry is an existing feature within the landscape, it is considered that the proposed mineral extraction (the majority of which would take place at depth) and changes to spoil mounds on the perimeter of the site would result in no greater than slight adverse impacts (not significant) on the nearby Grade II listed buildings (Kinley Hill Tower and Hawthorn Dene Viaduct).
- 5.6.4 There is the potential for the presence of World War II structures within the site that may have remained undisturbed, or only partially affected by previous operation, in particular on the northern boundary of the site (where a pillbox is recorded). Any disturbance of such remains during extraction has been assessed as slight adverse (not significant).
- 5.6.5 A new planning condition is proposed to ensure that if any archaeological finds, or remains associated with ridge and furrow are discovered as part of the soil stripping of the new area of extraction, on the western edge of the quarry, these are appropriately addressed.

5.7 Noise

- 5.7.1 An assessment of the predicted levels of noise both during extraction and as a result of short-term, temporary operations (such as soil stripping) has been carried out for three sensitive receptors (residential properties) located close to the quarry, to the north-west and west.
- 5.7.2 This assessment has demonstrated that noise levels from short-term, temporary quarry operations can be maintained at below the limit for temporary operations recommended by the Planning Practice Guidance to the NPPF.
- 5.7.3 Long term extraction operations within the site would similarly conform to the proposed noise limits derived from the background noise levels measured at the existing sensitive receptors.
- 5.7.4 Although there are footpaths in close proximity to the quarry, the effect of noise on any PRow users would only be transient. As the elevation of the quarry floor decreases compared to the surrounding area, the new quarry faces will become important noise shields.
- 5.7.5 While footpaths to the west of the quarry will receive some protection from the prevailing wind, which is from the south-west, those on the eastern side of the quarry will be more susceptible to noise transmission.
- 5.7.6 The overall impact on the existing dwellings (sensitive receptors) will be negligible and not significant. Impacts on users of adjacent rights of way will similarly not be significant adverse
- 5.7.7 Various mitigation measures have been identified in order to ensure that noise from quarrying operations is minimised wherever possible and remains at acceptable limits; these include regular maintenance of plant and equipment and of the quarry access road; liaison with local residents; and annual monitoring of operational noise at the three sensitive receptor locations.
- 5.7.8 The assessment has concluded that the site can operate in accordance with the guidance on noise as set out in the Planning Policy Guidance to the National Planning Policy Framework.

5.8 Vibration

- 5.8.1 Blasting is proposed at the quarry in order to extract rock for processing and sale. A criterion for restricting vibration levels resulting from production blasting has been

recommended, in order to address the need to minimise any disturbance to nearby residents.

- 5.8.2 As a result of the imposition of this limit, vibration is predicted to be of a low order of magnitude and would be entirely safe with respect to the possibility of the most cosmetic of plaster cracks. As a result, accompanying air overpressure (the shockwave resulting from blasting) would also be of a very low and hence safe level, although this may be perceptible on occasions at the closest of the properties to the site.

5.9 Air Quality

- 5.9.1 An assessment of the effects of quarrying on air quality has been carried out. This has considered effects from vehicle emissions (nitrogen dioxide, NO₂ and particulate matter), as well as the potential impacts of dust, associated with quarrying of mineral at the site.
- 5.9.2 Effects on air quality as a result of vehicle emissions are not predicted to be significant adverse and are predicted to remain well below national target levels.
- 5.9.3 The assessment of dust effects has considered effects on people as well as on the natural environment (flora and fauna) of the local area. For the majority of locations around the site, no significant effects of dust have been identified. One sensitive receptor, the Site of Special Scientific Interest at Hawthorn Dene, to the immediate south of the site, has been predicted as experiencing a slight adverse effect (not significant), when assessed as a worst case, i.e. with no mitigation measures in place.
- 5.9.4 A Dust Management Plan is proposed for the quarry. This will include a range of measures to ensure that dust is controlled at source, as far as possible, including during blasting, from the operation of machinery, during the movement and processing of mineral, through keeping roads clean, and so on. Monitoring will be put in place to measure the effectiveness of the Plan.

5.10 Traffic and transport

- 5.10.1 An assessment has been undertaken of the potential effects of the recommencement of mineral extraction at Hawthorn Quarry on the transport network of the surrounding area.
- 5.10.2 This has considered the potential for HGV traffic associated with the export of aggregate from the quarry to give rise to adverse effects on the local road network. The assessment has considered the capacity of the road network to accommodate the quarry traffic, as well as any potential effects of this HGV traffic on other road users

(in terms of congestion and driver delay, accidents and safety, and pedestrian amenity, fear and intimidation).

5.10.3 Mineral extraction is expected to result in a maximum of 99 laden vehicles leaving the quarry daily (198 vehicle movements), equating to 16 vehicle movements per hour, 2-way, via the existing quarry access road that passes to the north of Hawthorn village and joins the B1432. From here vehicles will disperse over the various potential routes within the surrounding highway network, either to Seaham harbour (for onward transportation by sea) or to the A19 (northbound and southbound).

5.10.4 No significant adverse effects have been identified. Mitigation is proposed, to limit quarry vehicle speeds on the section of local access road between the quarry and the B1432 Stockton Road to 20mph, and to control the growth of vegetation along this route to ensure good forward visibility. This will ensure that the amenity of pedestrians using the shared right of way along this route is not adversely affected by quarry traffic.

5.11 Access and recreation

5.11.1 The public rights of way in the vicinity of the quarry have been identified and assessed for any adverse effects on the amenity of users of this route, from the recommencement of extraction at the quarry.

5.11.2 There are nine public rights of way within 500m of the quarry; the closest of these to the site are the footpaths to the east, west and south of the site, all of which are within 20-40m of the site boundary. The England Coast Path (long distance route) follows the footpath to the immediate east of the quarry before crossing over the railway line and continuing northwards to Seaham, along the coast. The area of coast to the east is designated as Heritage Coast.

5.11.3 There would be no requirement for any diversion or closure of any of the rights of way in the immediate area of the quarry, as a result of the recommencement of extraction.

5.11.4 In considering effects on the amenity of the users of these routes and on recreation within the local area, the assessment has considered the potential for adverse effects from noise and air quality (dust) as well as from the potential conflict with quarry vehicles, over the section of access road that is shared with Footpaths 3 and 6 (see Plate 5, below). Mitigation measures are proposed within the relevant technical chapters of the ES to ensure that effects are maintained at below significant levels.



Plate 5 Footpaths in close proximity to Hawthorn Quarry

5.11.5 Effects on the amenity of users of these paths would be transient and short term, and are assessed as minor-moderate adverse and not significant. Effects on users of the Heritage Coast are assessed as minor adverse (not significant).

5.11.6 In the longer term, post-restoration, there would be beneficial effects on the recreation amenity of the area.

5.12 Report to inform Habitat Regulations Assessment

5.12.1 The presence of internationally designated sites of importance to nature conservation in proximity to Hawthorn Quarry requires a report to be prepared, to inform a Habitat Regulations Assessment of the site, to examine whether the proposed development would result in any significant adverse impacts on the habitats and species that comprise the qualifying features and interests of the internationally designated areas, and on the conservation objectives of those qualifying features and interests. If any such effects are identified, an Appropriate Assessment would be required, so that the competent authority (planning authority or statutory body) can determine whether the proposed development will adversely affect the integrity of the protected area.

5.12.2 The internationally designated areas comprise:

- The Durham Coast Special Area of Conservation (SAC) – designated for its vegetated sea cliffs on magnesian limestone exposures, which are the only example of this in the UK.
- The Northumbria Coast Special Protection Area (SPA) – designated as a result of the populations of little tern and Arctic tern, purple sandpiper and turnstone, sanderling, ringed plover and redshank. The SPA also supports golden plover.

5.12.3 The site does not lie within either of the designated areas. The closest point of the SAC to the site is approximately 0.2km to the east; the closest point of the SPA to the site is approximately 2.8km to the north of the quarry.

5.12.4 The detailed assessment is set out within chapter 16 of the ES. This has considered direct and indirect effects on the Natura 2000 sites. The chapter has concluded that, as no likely significant effect has been identified for either of the Natura 2000 sites in the areas of coastline adjacent to Hawthorn Quarry, it is considered that an Appropriate Assessment is not required.

6 CONCLUSION

6.1.1 Recommencement of extraction at Hawthorn Quarry will give rise to a small number of significant adverse effects, in particular in relation to effects on visual amenity (for occupants of Kinley Hill farmhouse and for users of rights of way close to the site), on the landscape character of the coastal strip immediately east of the site, from the loss of two small waterbodies within the site, disturbance to peregrine nesting within the site, and from the loss of areas of unimproved calcareous grassland that has established on the overburden mounds, during recent years when the quarry has been inactive.

6.1.2 Mitigation measures are proposed in order to reduce the level of adverse effects and these will generally be to below significant levels of effect.

6.1.3 Planning conditions are also proposed to ensure that the quarry can operate in accordance with current legislation, guidance and best practice, and to have a minimal effect on the local area, the local residents and visitors to the surrounding area.

6.1.4 Regular monitoring of the air quality, noise, vibration from blasting and water environment (groundwater levels and water quality) will ensure that quarry operations do not contribute to a significant reduction in the quality of these aspects of the environment.

wardell-armstrong.com

STOKE-ON-TRENT
Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)178 227 6700

BIRMINGHAM
Two Devon Way
Longbridge Technology Park
Longbridge
Birmingham
B31 2TS
Tel: +44 (0)121 580 0909

CARDIFF
22 Windsor Place
Cardiff
CF10 3BY
Tel: +44 (0)292 072 9191

CROYDON
Melrose House
42 Dingwall Road
Croydon
Surrey
CRO 2NE
Tel: +44 (0)20 8680 7600

CUMBRIA
Cocklakes Yard
Carlisle
Cumbria
CA4 0BQ
Tel: +44 (0)122 856 4820

EDINBURGH
Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GLASGOW
2 West Regent Street
Glasgow
G2 1RW
Tel: +44 (0)141 433 7210

LONDON
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)207 242 3243

MANCHESTER (City Centre)
76 King Street
Manchester
M2 4NH
Tel: +44 (0)161 817 5038

MANCHESTER (Greater)
2 The Avenue
Leigh
Greater Manchester
WN7 1ES
Tel: +44 (0)194 226 0101

SHEFFIELD
Unit 5 Newton
Business Centre Newton
Chambers Road Thorncliffe
Park Chapeltown
Sheffield
S35 2PH
Tel: +44 (0)114 245 6244

TAUNTON
Victoria House
Victoria Street
Taunton
Somerset
TA1 3JA
Tel: +44 (0)182 370 3100

TRURO
Baldhu House
Wheal Jane Earth Science Park
Baldhu
Truro
TR3 6EH
Tel: +44 (0)187 256 0738

International offices:
ALMATY
29/6 Satpaev Avenue
Regency Hotel Office
Tower Almaty
Kazakhstan
050040
Tel: +7(727) 334 1310

MOSCOW
21/5 Kuznetskiy Most St.
Moscow
Russia
Tel: +7(495) 626 07 67

your earth our world

