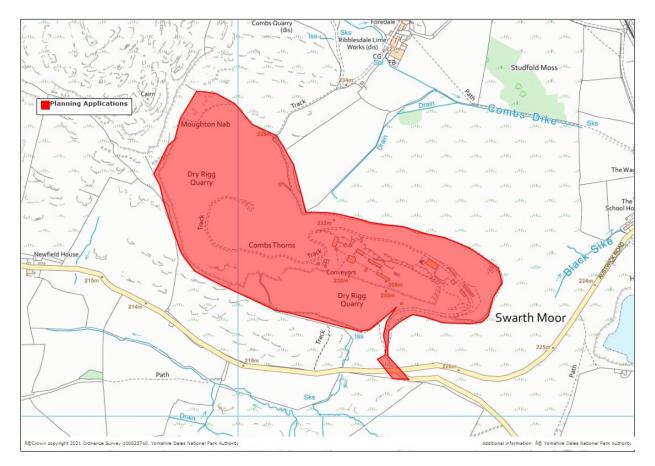
YORKSHIRE DALES NATIONAL PARK AUTHORITY

Committee:	Planning	Parish:	Austwick
Date:	15 June 2021	Officer:	David Parrish
Applicant:	Tarmac Aggregates Ltd	Application	C/04/609B
Site Address:	Dry Rigg Quarry, Helwith Bridge, Horton-in-Ribblesdale		
Proposal:	Full planning permission for the proposed continuation of the winning and working of mineral until 31 December 2034, with a lateral and deepening extension of the extraction area down to 127 metres above Ordnance Datum within the existing site and revised restoration proposals to be completed by 31 December 2035		



REASON FOR COMMITTEE CONSIDERATION

1. In the opinion of the Head of Development Management the proposal is a major development and it is in the best interests of the National Park Authority that the application is considered by the Committee.

APPLICATION SITE

- 2. Dry Rigg Quarry, which covers 26.2 ha, is located approximately 500m to the south west of Helwith Bridge, on the north side of the Helwith Bridge to Austwick road. The quarry works a spur of Silurian age rock of the Horton formation, comprising hard siltstone and mudstone, commonly referred to as 'gritstone'. This extends eastwards from beneath Moughton Nab, a prominent crag formed from beds of flat-lying Carboniferous Limestone which overlay the gritstone. Working of the quarry faces into the hillside, under the existing planning permission, has been completed, and current working is in the base of the quarry, below the level of the surrounding land.
- 3. The quarry's processing plant is located below adjoining ground level in an old working area to the east of the main quarry void. The plant is well screened, except from a public footpath that runs along the southern rim of the quarry. The office weighbridge and other buildings, together with stocking areas, are located at the eastern end of the site. As a part of the scheme approved in 1996, screening mounds have been constructed around the north, east and south sides of the quarry. These conceal many of the views of the surface development, although there are views into the site from the minor road to Little Stainforth and from higher ground.
- 4. The scar created by quarrying of the hillside below Moughton Nab is visible from a wide area and has a significant and adverse impact on the appearance of this part of Ribblesdale. In addition, the screening mounds constructed to conceal views of buildings, stockpiles and vehicle operating areas form unnatural features, which are also detrimental to the landscape and appearance of the area.
- 5. The quarry adjoins Swarth Moor SSSI along parts of its northern, eastern and southern boundaries. This is an area of raised bog and valley fen. The boundary of the Ingleborough Complex Special Area of Conservation (SAC) and the Ingleborough SSSI lies approximately 70m to the west of the proposed extraction area.

PROPOSAL

6. Full planning permission for the proposed continuation of the winning and working of mineral until 31 December 2034, with a lateral and deepening extension of the extraction area down to 127 metres above Ordnance Datum within the existing site and revised restoration proposals to be completed by 31 December 2035

RELEVANT PLANNING HISTORY

7. The planning history of the site dates back to the 1950s. The most recent permission was granted in February 2012. This permitted the quarrying of an additional 3.5 million tonnes of stone until the end of December 2021. The scheme has involved the deepening of the main western part of the quarry by 41m and quarrying of a smaller area from the east of the processing plant. All the working for this development has been within the existing quarry footprint and the boundaries of the quarry have not been extended. A further year to the end of 2022 is permitted to undertake restoration works. The restoration works consist of the removal of plant and buildings and the removal of screening mounds, which surround the eastern part of the quarry adjacent to Swarth Moor SSSI and which form an unnatural feature

in the landscape. In addition, material which forms the northern tip area shall be taken down to original ground level. Quarry waste from these two areas is to be used to infill the eastern quarry excavation to create a restored shallow water and fen area. The main western quarry area will be allowed to fill with water to form a deep, steep sided lake.

CONSULTATIONS

- 8. Austwick PC: The Parish Council has commented that since the existing planning permission was granted in 2012 there have been issues concerning dust pollution in the air and on the roads and verges caused by HGV traffic from the quarry. The Councillors believe that statements in the application documents indicate that insufficient attention has been given to this pollution problem with no sense of importance or urgency. The installation of wheel and vehicle washing equipment and a statement to govern the method and frequency of road washing and sweeping should be prerequisites of any new planning permission.
- 9. Horton in Ribblesdale PC: The Parish Council objects to the proposal. The present dust suppression system is not effective and there is no indication that this dust will be effectively supressed during the intended working. Residents at Helwith Bridge will be subjected to dust particulates from road transport over an extended period of time and a conveyor system should be employed. There is a lack of blast and vibration information in relation to Foredale and there is risk to the water supply to Foredale Cottages. Any permission granted should be reviewed after five years to determine negative effects on the community and the environment.
- 10. Highways North Yorkshire: There are no local highway authority objections to the proposed development.
- 11. The Environment Agency: The Agency has no objections to the proposal. The quarry excavates gritstone of the Horton Formation. The low permeability of the bedrock ensures the degree and extent of drawdown at the quarry is limited and it is unlikely that any receptors will be adversely impacted. The report provides calculations on the estimated groundwater and surface water recharge rates on the completion of excavation and it is estimated that it should take 25 30 years to fill the void to a water level of 222.5m AOD. Groundwater ingress is considered to account for a small fraction of the recharge due to the very low permeability of the bedrock strata.
- 12. Natural England: Based on the plans and the additional documents submitted, Natural England considers that the proposed development will not have significant adverse impacts on designated sites Ingleborough Complex SAC, Ingleborough SSSI and Swarth Moor SSSI and has no objection. Natural England advises that the National Park, as a competent authority under the provisions of the Habitats Regulations, should undertake a Habitats Regulations Assessment (HRA) in relation to the Ingleborough Complex SAC. Tarmac's response document advises that further dust monitoring is being carried out to identify whether the current mitigation measures are sufficient to prevent impacts to Ingleborough Complex SAC/SSSI and Swarth Moor SSSI. If this monitoring demonstrates that the current mitigation is not sufficient and additional mitigation is required Natural England requests that they be reconsulted. Natural England welcomes the benefits of allowing drainage from Swarth Fen onto Swarth Moor SSSI, the updated excavation limits and restoration plans and the establishment of an environmental fund as mitigation.

- 13. CEHO Craven: The surveys carried out show no likely adverse effects to ground water.
- 14. Wildlife Conservation Officer: Has undertaken a Habitats Regulations Assessment (HRA) in relation to the Ingleborough Complex SAC as advised by Natural England. This has included consideration of the results of a three-month dust monitoring programme conducted by consultants for the applicants measuring dust deposition and composition in relation to Ingleborough Complex SAC/SSSI and also Swarth Moor SSSI. The conclusion from the HRA is that there will not be a significant effect on the Ingleborough Complex SAC if the Authority grants planning permission for the continuation of the winning and working of minerals until 31 December 2034 at Dry Rigg Quarry. This conclusion is reached on the understanding that a planning condition or conditions is/are imposed that secure the continuation of dust control measures that are as least as stringent as those currently in place. The Wildlife Conservation Officer also recommends that a condition be attached to any permission granted requiring a method statement for the proposed translocation of species rich grassland and that a mechanism is required to review restoration plans and aftercare proposals as time passes.
- 15. Area Ranger: The proposed development directly and indirectly affects a number of public footpaths and bridleways. The extension of the Quarry in Phase 2, which would directly affect two public rights of way must not be started unless and until these have been diverted. Unless and until this happens the right of way must remain free of obstruction and be available for use at all times. The rights of way indirectly affected must also remain free of obstruction and be available for use at all times. The Area Ranger suggests that it would be beneficial if the new rights of way, to be created as part of the site restoration, could form part of a circular bridleway route. There is also a suggestion for a route across Open Access Land from Moughton Nab to the footpath at the northern edge of Arcow Quarry

PUBLIC RESPONSES

- 16. The application has been advertised on site and in the local press. Following further discussions and consideration of consultation replies and public responses, the applicants modified the proposals and provided further detailed information. Following the submission of this further information, the application was re-advertised.
- 17. Objections and/or concerns have been received from eight local residents. The reasons can be summarised as follows:
 - Dust and dirt on the roads between Dry Rigg and Arcow Quarries. Wagons have not been properly cleaned off and the wheel wash and road sweeping have been only partly effective. Drivers speed. A conveyor should be used between the two quarries.
 - Could visibility on the Arcow access road be improved?
 - The adverse impact of quarry traffic through Settle.
 - The adverse impact on the landscape and views from surrounding areas. The environmental impact is inappropriate in a National Park. The quarry is a significant eyesore.
 - A further 13 years of quarrying to 2034 is too long and gives no option for mitigation of the impacts of quarrying.

- The site should be restored at the end of 2021 and more opportunities encouraged in keeping with National Park status.
- There have been numerous planning applications and a 'salami-slice' approach circumvents the requirement to assess the development in its entirety.
- Possible impacts on natural springs and water supplies.
- The adverse effects of blasting vibration, dust and light pollution.
- The company has deposited waste, including asphalt, concrete, belts and cables within the surrounding bunds and the northern tip.
- The proposals do not take account of work towards UK net zero carbon emissions and reductions in road and air travel.
- It is contrary to Local Plan policy L6.
- There is no shortage of high PSV (+65) material in the UK.
- There is incorrect ownership information and incorrect labelling of public rights of way in the application as at first submitted.
- 18. Friends of the Dales object to the apparently never ending postponement to the end of operations and the restoration of the site. At a meeting in November 2012 a director of Lafarge Aggregates and now a Tarmac Director stated that that the permission granted in February 2012 included all workable reserves at the quarry and they would not seek to work any additional rock at the site. The objection is based on the proposal being major development in a National Park and as such should only be approved in exceptional circumstances. Given that the material is available elsewhere, the exceptional criterion is not met and the application should be refused. They have two main concerns. The first is the impact of continued significant HGV movements on the roads in Ribblesdale. The second concern is the visual impact and implications for the landscape of the proposed lateral extension of the extraction area.
- 19. Yorkshire Subterranean Society occupies the property on the junction of the Arcow access road and is impacted by traffic between the two quarries. Dust on vehicle wheels and bodies leaves dust and slurry on roads. Sweeping and the wheel wash have improved this to a limited extent. There is noise and vibration from HGVs and drivers' speed. A conveyor should be used between the two quarries. There is vibration from blasting. Restoration would have long-term benefits in-line with National Park purposes to preserve natural beauty and the environment.
- 20. Craven Ramblers have no objection to the proposed footpath diversions, providing safe access is maintained at all times, and welcome new paths and access in the restoration proposals.
- 21. There have been three expressions of support for the application as a local industry and a vital employer.

ASSESSMENT

22. The application is accompanied by an Environmental Statement. A first phase of consultation and site and press advertisement was carried out on the basis of the application as submitted. A second round of consultation and advertisement was undertaken after additional information had been received.

- 23. The application seeks to extract 4.4mt of stone at an average of 350,000 tonnes per year over an extended quarry life of 13 years, until the end of December 2034. The area of additional working would be the area beneath the northern tip. Extending the quarry laterally would also enable the main quarry excavation to be deepened by a further 10m to 127m AOD. The northern tip area covers approximately 2.8 ha and this would be quarried to leave an extended area of deep, steep sided lake. Material from the tip would be stored in the quarry area to the east of the processing plant to be used with material from the screening bunds to infill the eastern part of the quarry as proposed in the currently approved scheme. Restoration would take place over a twelve-month period to the end of December 2035, although the applicants estimate that the deep water lake would take approximately 30years to fill with water to the final level of 222.5m AOD.
- 24. The methods of working as well as operating and transport hours are proposed to remain as at present:
 - Site operating hours: 07.30 to 17.30 Mondays to Fridays and 07.30 to 12.00 on Saturdays
 - HGV movements: 07.30 to 17.00 Mondays to Fridays. None at weekends.
- 25. At present, Dry Rigg Quarry exports a proportion of its production by rail using the rail sidings at the Company's Arcow Quarry. Stone is transported by road via Helwith Bridge and the Arcow Quarry access road to the rail sidings.
- 26. A current S106 agreement limits the combined total of road haulage from Dry Rigg and Arcow Quarries via the B6479 (ie excluding road haulage between Dry Rigg and the Arcow rail sidings) to 250,000 tonnes in any calendar year. This already exceeds the 50% reduction target set out in Policy L6. The applicants have offered a further 15% reduction in this combined limit to 212,500 tonnes per year until June 2029, when the Arcow permission finishes, and then 106,000 tonnes per year from Dry Rigg until the end of 2034.
- 27. Dry Rigg Quarry has 16 jobs on site and one new apprenticeship, together with hauliers and employment in businesses serving the site.

The main differences between the existing and proposed schemes.

- 28. The existing scheme, approved in 2012, permits the deepening of the existing quarry, with no lateral extensions. It extended the life of the site and the impact of quarrying and delayed the restoration of the site. It does not significantly affect the external appearance of the site and has the benefit of removing the northern tip to allow restoration of the tip area at original ground level.
- 29. The major difference of the scheme proposed by the current application is that the quarry would be extended laterally to work the stone beneath the northern tip. This means that the proposed new working would extend the steep, benched quarry faces below Moughton Nab and create an increased area of deep-water lake within the main quarry void. This would affect the visual appearance of the site, both during the working period and in the long term. It would also mean that restoration of the northern tip area at original ground level would no longer be

possible. The extended lake would have an area of approximately 9.0 ha and be around 95m deep. The applicants estimate it would take about 30 years to fill.

Key issues:

- planning policy
- visual impact and landscape
- supply of high PSV aggregate
- road and rail transport
- cleanliness of roads
- lighting
- blasting and vibration
- dust
- composition of quarry waste
- water supply
- Ingleborough Complex SAC, Ingleborough SSSI and Swarth Moor SSSI
- environmental compensation and biodiversity enhancement

Planning policy

L6(15) - Crushed rock quarrying

- W2(15) Biodiversity enhancement
- SP4 (15) Development quality
- SP5 (15) Major development
- 30. Section 38(6) of the Planning and Compulsory Purchase Act, 2004 places a duty on Local Planning Authorities (LPAs) that in determining planning applications regard is to be had to the development plan and that determination shall be in accordance with the plan unless material considerations indicate otherwise.

National Planning Policy Framework (NPPF)

- 31. This application is for a significant extension to the extraction area and life of a major quarry in the National Park and is considered to constitute major development. Paragraph 172 of National Planning Policy Framework (NPPF) sets out that great weight should be given to conserving and enhancing the landscape and scenic beauty in National Parks. Planning permission should be refused for major development other than in exceptional circumstances and where it can be demonstrated to be in the public interest. Consideration of such applications should include assessment of the need for the development including national considerations and the impact on the local economy, the cost and scope for developing outside the designated area, and any detrimental effect on the environment, landscape and recreational opportunities and the extent to which that could be moderated. Local Plan policy SP5 (Major Development) reflects national policy.
- 32. Paragraph 205 When determining planning applications, great weight should be given to the benefits of mineral extraction, including to the economy. Mineral planning authorities should, as far as practical, provide for the maintenance of landbanks of non-energy minerals

from outside National Parks. Authorities should ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source.

33. The NPPF encourages the promotion of sustainable transport. Existing sites for the bulk transport of minerals should be safeguarded.

National Park Local Plan (2015 – 2030)

- 34. The key policy in the Local Plan in relation to crushed rock quarrying is Policy L6. The main criteria of the policy are that extensions must be in disturbed land within an existing quarry boundary, the environmental and economic benefits of further quarrying will outweigh the impact on the landscape and the natural and historic environment and proposals should demonstrate how any unavoidable impacts will be mitigated. The policy requires that, where a site is rail linked, road haulage must be reduced by 50% based on limits in place in 2011. The proposals must also demonstrate local economic benefits, reduce visual impacts and offset biodiversity impacts through onsite or offsite enhancement in the locality.
- 35. Policy SP4 in the Local Plan sets out criteria to be met in respect of development quality including transport, human safety and amenity and environmental safeguarding.
- 36. Policy W2 in the Local Plan sets out that large scale development may be required to fund biodiversity off-site.

Visual impact and landscape

37. The existing quarry is prominent in the landscape and can be seen from public rights of way and roads over a wide area in this part of Ribblesdale. The main adverse elements are the stepped guarry faces that have been excavated into the hillside below Moughton Nab and the screening mounds that have been formed on the edge of Swarth Moor SSSI. The stepped faces are the result of past quarrying and cannot be restored. They will remain as a permanent landscape feature. The current quarrying has been in the base of the quarry and has not extended these faces. The new proposals would extend the visible faces by approximately 140m to the north, although they would not extend as far up the hillside and the scree slope below the Nab would be retained. The mounds that have been constructed around the eastern end of the quarry screen the buildings and stocking area from lower viewpoints, but are not fully effective from higher ground, such as Foredale Cottages or the minor road to Little Stainton. The company is proposing an increase the height of part of the mound to improve screening of views from Foredale Cottages. The screening mounds form unnatural features in the flat landscape adjacent to Swarth Moor SSSI. In both the current and the proposed schemes the mounds will be removed at the end of quarrying, although they would remain in place for an additional 13 years if a new planning permission is granted.

The supply of high PSV aggregate

38. Dry Rigg is one of a small number of quarries which supply high Polished Stone Value (PSV) aggregates with resistance to abrasion for use in the construction and maintenance of skid resistant roads. The quarry produces aggregate capable of meeting PSV 65+ specifications. The fine aggregate and dust fractions at Dry Rigg have a strong affinity with bitumen/emulsions meaning they can be utilised in cold-applied slurry seal surfacing systems.

Dry Rigg is one eight sources of PSV 63+ in England, of these Arcow Quarry and two quarries in Cumbria are in the North of England. Only one of the other English quarries, in Shropshire, has access to a railhead. There are active quarries in Scotland, Wales and Ireland, which produce high PSV stone.

39. High PSV aggregates, with a PSV in excess of 63 can be obtained from only a limited number of sources and Dry Rigg is one of four such quarries in the north of England. If Dry Rigg closes, replacement supplies from alternative sources in the UK or overseas would, for the most part, be likely to involve greater transport distances, with less availability of rail haulage and a correspondingly increased carbon footprint.

Road and rail transport

- 40. The main markets for stone from Dry Rigg are in Greater Manchester, Lancashire and West Yorkshire, which are supplied predominantly by rail to depots in Manchester and Leeds. Markets in North Yorkshire, Cumbria and Derbyshire are supplied mostly by road. In 2020, 64% of Dry Rigg and Arcow's output was delivered by rail. Stone is transported by road from Dry Rigg to the rail sidings at Arcow via Austwick Road to Helwith Bridge and the Arcow Quarry access road, a one-way distance of just over 2km. The Arcow Quarry access road is single track road with passing places. It is also the access to Foredale Farm and Foredale Cottages.
- 41. The rail sidings at Arcow Quarry are covered by the existing planning permission for quarrying at Arcow, which runs until 30th June 2029. If planning permission is granted to extend the life of Dry Rigg Quarry, a further permission will be required to retain the sidings and stocking area at Arcow so that it can be used to transport Dry Rigg stone by rail. A section 73 application (C/44/101G) has been submitted and this seeks to retain the sidings and stocking area at Dry Rigg until 31st December 2034. It would not extend the timetable for the restoration of the remainder of the Arcow site. It is proposed to deal with this application as a delegated decision.
- 42. Stone that is to be delivered by road from Dry Rigg travels via Helwith Bridge to the B6479. Data from the environmental statement indicates that 68% of this traffic turns south and travels through the centre of Settle to the A65, 18% turns south and travels to the A65 via Giggleswick and Buck Haw Brow and 14% turns north on the B6479 towards Ribblehead.
- 43. The applicants have offered a 15% reduction in the existing combined road traffic limit from Dry Rigg and Arcow quarries on the B6479 from 250,000 tonnes p/a to 212,500 tonnes p/a. At the end of the Arcow planning permission in June 2029, the limit from Dry Rigg would become 106,000 tonnes.
- 44. Assuming that Dry Rigg operates at 350,000 tonnes p/a and that the offered 212,500 road limit is split two thirds from Dry Rigg and one third from Arcow, it is possible to assess an approximate average level of road traffic as follows:
 - Dry Rigg total per day 52 loads (104 movements) of which
 - Dry Rigg to Arcow railhead 31 loads per day (62 movements) and
 - Dry Rigg to B6479 21 loads per day (42 movements)
 - Total traffic on Arcow access road 42 loads per day (84 movements)

Total traffic from Dry Rigg and Arcow Quarries on the B6479 – 32 loads per day (64 movements)

It should be stressed that these are approximate average figures based on broad assumptions.

45. Horton-in-Ribblesdale Parish Council and some of the responses from the public have suggested that a conveyor system should replace road transport between Dry Rigg and Arcow rail sidings. It would be possible in engineering terms to construct a ground conveyor between the two quarries along a route that avoided Swarth Moor SSSI, but the applicants do not own the land between the two quarries. A conveyor system would require a maintenance track alongside. It would remove the need for road traffic to the rail sidings, but could itself be a visually intrusive element in the landscape.

Cleanliness of roads

- 46. Austwick and Horton-in-Ribblesdale Parish Councils, together with local residents have commented that there have been problems with dust and dirt on the roads between Dry Rigg and the Arcow rail sidings. The company fully accepts that the roads must be kept in a clean condition at all times and is proposing the following measures:
 - The replacement of the existing wheel wash at Dry Rigg with a longer structure with a timed barrier to retain lorries for a sufficient period for cleaning;
 - A timed barrier to be installed on the Arcow wheel wash;
 - Hot pressure washing at least twice each day of the lorries operating between Dry Rigg and Arcow;
 - The majority of HGVs would be loaded from the hard surfaced stockpile near the site offices at Dry Rigg;
 - Daily inspections and recording of road conditions;
 - The payment system for the hauliers has been changed to a daily rate from a system based on the tonnage carried.
 - As at present, a road sweeper will be available if additional cleaning is required. At least once per month, a 'back to black' road sweeper would be employed.
- 47. It is essential that these measures are implemented and maintained effectively to ensure the roads remain in a clean condition.

Lighting

- 48. A full review of lighting at the quarry has been undertaken and the consultants responsible for this work have set out details of three options for reducing light pollution. The applicants have committed to the most comprehensive of these (Option 3), which would involve a new design of the lighting, with the purchase, wiring and installation of new luminaries. This would provide a fully controlled lighting system that should minimise the impact of quarry lighting on the National Park's Dark Skies status. Local Plan policy SP4 sets out that development should not have an unacceptable impact on the darkness of the night sky.
- 49. The site's operating hours are 07.30 to 17.30 Mondays to Fridays and 07.30 to 12.00 on Saturdays. Lighting is required at the beginning and end of the working day in winter. The

currently approved limits for lighting are 06.00 to 17.30. The applicants are requesting flexibility in the hours for carrying out routine maintenance work so that maintenance can be carried out at weekends, but subject to complying with the 06.00 to 17.30 limits on lighting.

Blasting and vibration

- 50. Guidelines and advice on blasting indicate that monitoring should be undertaken by the measurement of peak particle velocity at residential or sensitive properties. The US Bureau of Mines indicates that no damage is reported to have occurred in any of the published data at vibration levels less than 12.7 mm/sec. British Standards give satisfactory magnitudes with respect to human response of 6 to 10 mm/sec at a 90% confidence level at residential buildings. However, perception levels of blast induced vibration can be as low as 0.5 to 1.5 mm/sec.
- 51. At present, all blasts at the quarry are monitored at Newfield House and Foredale Cottages. All results are sent to the Authority. The existing permission sets a limit of 6 mm/sec at residential buildings. The readings in 2020 and so far in 2021 have varied from no reading being recorded to a maximum of 4.68 mm/sec (the only reading above 4.0mm/sec), with an average around 1.8 mm/sec. Published evidence shows these levels are well below a level that would result in cosmetic damage, but this level of vibration may be felt and may therefore cause concern.
- 52. Given current guidance and published evidence, it would not be realistic to defend setting a limit below 6mm/sec and it is therefore recommended that this limit is applied by condition on any permission granted.

Dust

- 53. The issues relating to dirt and dust on the roads between Dry Rigg and Arcow Quarries are discussed above. Environmental monitoring has included a three-month dust monitoring programme, measuring dust deposition and composition. Monitoring stations have been established at 9 locations, including across Swarth Moor SSSI, on the northern tip and at Foredale Cottages and Helwith Bridge. The general conclusion reached in the ES and from the monitoring is that: 'Consequently, the assessment shows that the proposed extension can be operated in a manner unlikely to cause significant adverse impacts in the vicinity of Dry Rigg Quarry, and with reference to best practice guidance, the overall impact of the extension is considered not to be significant.'
- 54. However, the monitoring at Helwith Bridge recorded increased dust deposition levels that were most likely related to road traffic on Austwick Road. The majority of HGV traffic on this road is quarry traffic and this emphasises the importance of ensuring the road is maintained in a clean condition at all times.
- 55. There is the potential for increased levels of dust to result from earthmoving work to remove the northern tip and from drilling and working the underlying rock. In this respect, it is important that earthmoving work is not undertaken during dry, windy conditions and that best practice is employed to minimise dust levels, particularly from drilling.

Composition of quarry waste

56. Objections have been received commenting that the quarry waste material forming the northern tip and also the screening mounds around the site contain lumps of asphalt, pieces of metal and items such as conveyor belt, cables and metal hawsers. The screen bunds, constructed around the site more than 20 years ago, and the regraded waste tips do contain some of these waste materials. Inevitably, this material comes to the surface and the only realistic action is periodically to collect it. The material comes from a period in the past when environmental standards at quarries were much lower than at present. The pieces of asphalt come from the time when there was an asphalt coating plant at the site. The issue has been discussed with the Environment Agency and they have confirmed that an Agency permit will be required when this 'legacy' material is moved.

Water supply

57. Concerns have been expressed that pumping to keep the deep quarry de-watered could adversely affect water supplies in the area. The quarry works 'gritstone' of very low permeability and the Environment Agency has commented: 'The low permeability of the bedrock ensures that the degree and extent of drawdown at the quarry is limited and it's unlikely that any receptors will be adversely impacted.' The Agency has not suggested that any monitoring of groundwater levels would be necessary.

Ingleborough Complex SAC, Ingleborough SSSI and Swarth Moor SSSI

58. The quarry adjoins Swarth Moor SSSI along parts of its northern, eastern and southern boundaries. This is an area of raised bog and valley fen. The boundary of the Ingleborough Complex Special Area of Conservation (SAC) and the Ingleborough SSSI lies approximately 70m to the west of the proposed extraction area, but at a higher level up the hillside. Natural England has concluded that the proposed development will not have a significant adverse impact on these designated sites. The Wildlife Conservation Officer has undertaken a Habitat Regulations Assessment (HRA) in relation to the Ingleborough Complex SAC, which concludes that there would not be a significant effect on the SAC providing conditions are imposed to secure the continuation of dust control measures that are at least as stringent as those currently in place.

Environmental compensation and biodiversity enhancement

59. The proposed extension of Dry Rigg Quarry would extend the period of impact of the quarrying and associated transport of material and delay the final restoration of the quarry by 13 years. In addition, it is considered that the final restoration scheme that would result from these proposals to extend quarrying has disadvantages when compared with the approved scheme. Local Plan policy W2 (Biodiversity enhancement) sets out that large-scale development may be required to fund wildlife enhancement off-site. The applicants have confirmed that they would agree to an Environmental Fund, administered by YDNPA, with payments of £35k pa, index linked, during the working and restoration period to 31st December 2035. This could be operated in the same manner as the existing Swinden Quarry Natural Environment Fund.

CONCLUSION

60. This proposal to extend Dry Rigg Quarry is considered to be major development. National Planning Policy Framework and Local Plan policy SP5 (Major development) set out that

planning permission for major development should only be granted in exceptional circumstances where it can be demonstrated to be in the public interest. Consideration of such applications should include an assessment of the need for the development, including national considerations, the impact on the local economy of permitting or refusing it, the cost and scope for developing it outside the National Park and any detrimental effect on the environment, landscape and recreational opportunities and the extent to which that could be moderated.

- 61. Local Plan policy L6 (Crushed rock quarrying) also sets out criteria that assess the economic benefits of job safeguarding against impacts on the landscape and the environment.
- 62. Local Plan policy SP4 (Development quality) requires that development will not give rise to unacceptable adverse environmental impacts, including levels of noise, dust and vibration, the darkness of the night sky and important public views.
- 63. The continuation of employment at Dry Rigg Quarry would be beneficial for the local economy with 17 direct employees, together with employment for hauliers and local businesses supplying the site. Set against these benefits is the adverse impact of a further 13 years of quarrying operations on the environment and on local amenity and a delay in restoring the site. Whereas the current permission involves deepening the existing quarry, this application is to extend the quarry laterally beneath the area of the northern tip. The existing approved scheme for removal of the tip material and restoration at original ground level would be replaced by a deep quarry excavation with an extension of the exposed quarry faces below Moughton Nab and an extension to the deep, steep-sided lake. These would have adverse visual and environmental impacts both during quarrying operations and in the long term.

64. A number of measures are being proposed to moderate or compensate for these impacts:

- An Environmental Fund administered by YDNPA would be established with annual payments of £35,000 pa, index linked.
- The scheme has been modified to retain the limestone scree below Moughton Nab and to provide a wider stand-off on the northern boundary to ensure there is a minimum 10m width of rock retaining water in the lake.
- Species rich soils from an area of approximately 0.27 ha at the western edge of the northern tip would be retained and translocated. It is thought these are probably soils that were stripped from the ground beneath the tip before the tip was established.
- The height of part of the screening bund would be increased to improve the screening of views from Foredale Cottages.
- New site lighting would be installed to minimise sky glow and light pollution.
- An additional 190m of dry stone walling would be constructed at Dry Rigg compared with the existing approved scheme.
- An additional 240m of dry-stone walling would be constructed on the southern boundary at Arcow Quarry to replace existing fencing.
- Additional measures would be introduced to improve the cleanliness of the roads between Dry Rigg and Arcow Quarries.
- Road transport on the B6479 would be reduced by a further 15%.

- 65. Dry Rigg quarry is one of 4 in the North of England and 8 in England as a whole that produce skid-resistant material capable of meeting a 63+ polished stone value (PSV) specification. There are additional sources of this material in Wales, Scotland and Ireland. If Dry Rigg closes, stone of equivalent quality would need to be come from another source. Commercial considerations would largely determine where this stone would come from. However, it would be likely to involve greater transport distances to supply markets in the North of England and there would be a reduced likelihood that the stone could be transported by rail.
- 66. A decision on whether this application should be approved depends on a judgement of whether the benefits of job safeguarding and benefits to the local economy outweigh the impacts on local amenity of a further 13 years of quarrying and the adverse visual and environmental impacts during quarrying operations and in the long term.

RECOMMENDATION

- 67. The judgement to be made is finely balanced: the proposal would provide the local economic and employment benefits of extending the life of the quarry but it would also have adverse environmental impacts. On balance, it is considered that the main impacts, other the continuation of the current visual impact, could be mitigated or compensated for and therefore it is recommended that permission is granted subject to strict controls and mitigation measures.
- 68. It is recommended that permission is subject to the completion of a S106 legal agreement covering:
 - Provision of a scheme for funding off-site biodiversity enhancement and environmental compensation measures until 31 December 2035, with annual payments of £35k pa (index linked).
 - The Company to undertake monitoring work and management of the quarry land and monitoring work on Swarth Moor SSSI in accordance with an agreed scheme based on the existing Restoration and Aftercare Management Scheme until the lake reaches its final level of 222.5m AOD and to fully fund this work.
 - The continuation of the Restoration and After-care Committee to oversee the monitoring and management work.
 - The provision and maintenance of pumping measures to maintain water levels in the restored shallow water areas at 222.5m AOD.
 - The provision of new public rights of way.
 - The replacement of fencing with dry stone walling on the southern boundary at Arcow Quarry.
 - The limiting of total combined levels of the road haulage of mineral from Dry Rigg and Arcow Quarries on the B6479 to 212,500 tonnes pa until 30th June 2029 and to 106,000 tonnes pa from Dry Rigg Quarry thereafter. Maximum limits for any single month to be 30,000 tonnes until 30th June 2029 and 15,000 tonnes thereafter.

69. It is also recommended that permission is subject to conditions covering the following matters:

- The winning and working of minerals and the sale and export of minerals to cease permanently not later than 31 December 2034

- Restoration to be completed by 31 December 2035.
- The development to be carried out in accordance with the application details, as amended.
- The submission for approval of an annual scheme with details of working, restoration, landscaping, planting and maintenance.
- The submission for approval of a scheme and method statement for the translocation of the species rich grassland and, if necessary, for the use of green hay.
- The submission for approval of a scheme for increasing the height of the screening landform on the northern boundary of the site.
- No stockpiling of mineral above the height of any screening landform adjacent to the stockpile.
- The submission for approval of a comprehensive scheme for the control and monitoring of dust.
- The submission for approval of a scheme for the placement of quarry waste from the northern tip in the eastern quarry area and for the grading, soiling and seeding of the backfilled area.
- No quarrying below 127m AOD.
- No quarrying, processing or associated operations (other than routine maintenance work) except between 07.30 to 17.30 hours Mondays to Fridays and 07.30 to 12.00 hours Saturdays.
- No lighting to be illuminated except between 06.00 and 17.30 Mondays to Sundays. All lighting to be switched off when not required.
- The submission for approval of a comprehensive lighting scheme in accordance with Option 3 of the Lighting Review with Proposals dated Nov 2020.
- No HGVs to enter or leave the site except between 07.30 to 17.00 Mondays to Fridays.
- No blasting except between 10.00 and 16.00 Mondays to Fridays.
- Ground vibration levels from blasting not to exceed a peak particle velocity of 6mm/second at any residential premises. All blasts to be monitored and the results forwarded to the NP Authority.
- Noise levels from operations not to exceed 50 dB(A) Laeq (one hour) at any residential premises.
- White noise type reversing alarms for vehicles and mobile plant.
- All plant and machinery to be fitted with effective silencers.
- No rock breaking equipment to be operated above a level of 193m AOD.
- No rock or aggregate to be imported into the site.
- No materials other than uncontaminated natural materials originating at Dry Rigg Quarry to be deposited on or utilised in restoration works at the site.
- All HGVs carrying mineral from the quarry to be securely covered.
- No additional plant or buildings without the prior grant of planning permission.
- The whole of the quarry access road to be retained with a bituminous macadam surface in a good state of repair, free from potholes.
- The submission for approval of a comprehensive scheme of measures for wheel and vehicle cleaning and the maintenance of clean conditions on the roads between Dry Rigg and Arcow rail sidings.
- The submission for approval of a comprehensive scheme for the control and monitoring of dust.
- All stone walling and fencing to be maintained in good condition.

- The submission for approval of a comprehensive scheme for removal of the screening bunds and quarry access road on the completion of working.