

Inspector's Report ABP-311614-22

Development	Permission for development for 24 years of two extensions to the south and west of existing quarry, total extraction area 8.6ha, berm along southwestern side of southern extension, all associated site development and landscaping works. Includes EIAR and NIS. Cuilrevagh and Largan, Elphin, Castlerea, Co. Roscommon.	
Planning Authority	Roscommon County Council	
Planning Authority Reg. Ref.	20310	
Applicant(s)	Hanly Quarries Ltd.	
Type of Application	Permission.	
Planning Authority Decision	To refuse.	
Type of Appeal Appellant(s)	First Party Hanly Quarries Ltd.	
Observer(s)	None.	
Date of Site Inspection	Friday 3 rd February 2023	
Inspector	Deirdre MacGabhann	

Inspector's Report

Contents

1.0 Site	e Location and Description	3
2.0 Pro	pposed Development	4
3.0 Pla	anning Authority Decision	6
3.1.	Decision	6
3.2.	Planning Authority Reports	7
3.3.	Prescribed Bodies	9
3.4.	Third Party Observations	10
4.0 Pla	anning History	12
5.0 Pol	licy Context	13
5.1.	National Guidelines	13
5.2.	Roscommon County Development Plan 2022-2028	14
5.3.	Natural Heritage Designations	14
5.4.	EIA Screening	15
6.0 The	e Appeal	15
6.1.	Grounds of Appeal	15
6.2.	Planning Authority Response/Observations/Further Responses	18
7.0 As	sessment	18
7.4.	Planning Assessment	20
7.5.	Environmental Impact Assessment	
7.6.	Appropriate Assessment	61
8.0 Re	commendation	74
9.0 Reasons and Considerations7		74
10.0	Conditions	75

1.0 Site Location and Description

- 1.1. The c.43ha appeal site lies on the eastern side of the R368 regional road that runs between Elphin and Strokestown, in the townlands of Cuilrevagh and Largan, County Roscommon. The site is situated in a rural area on Greywood Hill c.6km to the south east of Elphin and c.4km north of Strokestown. Access to the site is from a county road, L1410, that joins the regional road to the south of Elphin and to the north of Strokestown.
- 1.2. The appeal site comprises a working quarry, with ancillary processing areas. It is c.34ha in size and extends south west from the public road. The site falls within a stated landholding of c.278ha. The quarry is visible from the public road approaching the site from the south and passing the site. Otherwise it is largely contained by the topography. Development in the area of the site comprises a dairy farm c.490m to the north of the site and a limited number of one off houses along the public road, to the north and south of the quarry. Kiltrustan national school lies c.300m to the south east of the appeal site.
- 1.3. The hard rock limestone quarry has been cut into the drumlin hillside. Work is currently progressing to the south and west of the site, with extraction carried out in a series of benches. The proposed extraction areas lie to the west and south of the existing quarry. Rock is broken by blasting and moved on site for primary and secondary processing. Here rock is crushed, screened, washed, graded and stored in open bins or stockpiles throughout the quarry. Crushed rock aggregate is exported from the site for use in the construction industry. Aggregates are also used on site to manufacture other value added products via a concrete batching plant (making ready mix concrete, concrete blocks, bollards and road dividers) and a bitumen plant (producing road making material). Also on site, and closer to the public road are administrative offices, parking and a workshop.
- 1.4. The quarry is worked above water table. Surface water is discharged via a series of ponds along the northern boundary of the quarry into a stream that lies to the east of the quarry and discharges into Grange Lough, c.700m to the east of the site.

2.0 Proposed Development

- 2.1. The proposed development, as revised by way of significant further information (received and readvertised in July 2021) comprises:
 - Two separate extension areas. Area 1 lies to the west of the existing site. Extraction will take place over an area of c.3.46ha. Existing ground levels in Area 1 range from 116.11m AOD to 124.59m AOD. The estimated extraction volume of stone in this area is 1,527,187m³. Area 2 lies to the south of the existing site. Extraction will take place over an area of c.5.14ha. Existing ground levels in Area 2 range from 110.14m AOD to 114.98m AOD. Estimated extraction volume is 1,619,340m³. The new N5 Ballaghaderreen to Scramoge road project is to be constructed close to the southwest boundary of Area 2, with the extended quarry c.93m from the centreline of the new road and c.48m from the proposed CPO boundary.
 - Each extraction area will be worked to a ground level of 50m, consistent with the current floor level of the quarry and proposed level for unworked areas. Maximum depth of the western area is 65.32m and the southern area 43.678m, with both areas worked to three benches (see Proposed Land Sections drawing, PL-1623-01-010).
 - The construction of a berm (0.59ha) along the southwestern boundary of the site between the area of excavation and the new N5 national road. The berm will be 22m wide at base and 10m in height above current level. It will be constructed in earth excavated from the site surface and will be more than 276m in length. The berm will serve as a barrier for flyrock and a visual and acoustic screen.
 - The total site area of c.43ha comprises the existing quarry, c.34ha plus extraction Area 1, Area 2 and bund i.e. 34+3.46+5.14+0.59 = c.43ha.
 - Permission is sought for a period of 24 years.
- 2.2. It is stated in the EIAR (section 3.27) that the present working area is almost worked out and the extension areas will allow site operations to continue at the site, remaining at the same level with no intensification of site operations or production

levels. In section 10.3 of the EIAR it is stated that blasting is carried out 6 times per year depending on demand levels.

- 2.3. No stockpiles are proposed in the extension areas. Working hours will remain at 7.00 hours to 19.00 hours Monday to Saturday. No new plant will be required to extract rock from the proposed extension areas. Surface water will be collected and filtered through the existing settlement ponds, baffles and hydrocarbon filter. Blasting will be carried out by Irish Explosives Ltd in accordance with Blasting Design Control Measures plan (Appendix 3-1, Appendix C). A drilling rig will be used to drill boreholes for the placement of explosives and each blast will be monitored to record vibration and air overpressure from blasts.
- 2.4. Access to the site will continue to be from the main entrance from the public road. All HGVs will pass through a wheel wash. No refuelling will take place in either of the proposed extraction areas.
- 2.5. The proposed areas will be worked in a phased manner. In phase 1 Area 1, to the west of the existing quarry, will be worked in three phases, followed by Area 2, to the south of the existing quarry, in five phases. Area 1 is predicted to yield 3.6m tonnes of rock (1m³ = c.2 tonnes in weight) generating 183,262 HGV 20 tonne loads, with the potential for the material to be removed from the quarry in 523 working days. Area 2 is predicted to yield 3.9m tonnes of rock and generate 194,471 HGV 20 tonne loads, with the potential for all material to be removed from the quarry in 555 working days. [NB If the quarry was worked in this manner i.e. over 523 and 555 working days, this would equate to 350 20 tonne HGV loads leaving the site per day for Area 1 and Area 2].
- 2.6. Restoration will commence once areas of the site have been completely exhausted. It is stated in the EIAR (Landscape) that inert fill be imported to the site to c.80m AOD (Proposed Quarry Restoration Area, Drawing PL-1623-01-023C, Chapter 12, EIAR).
- 2.7. The planning application includes the following documents:
 - Planning Report.
 - EIA Portal Confirmation Notice (ID 2020127).
 - Environmental Impact Assessment Report (EIAR), June 2021.

- Hydrology Report.
- Archaeologist site trenching and investigation and archaeological assessment.
- Natura Impact Assessment.
- Restoration Report.
- Waste Management Plan.
- 2.8. On file is an unsolicited letter to the PA (23rd August 2021) regarding a third party observation made by Lagan Asphalt Ltd (see below). It is stated that the issue of whether the asphalt plant is exempted development is a live issue being addressed by the Courts and the position of the applicant is that the relocated asphalt plant is exempted development.

3.0 Planning Authority Decision

3.1. Decision

- 3.1.1. On the 13th September 2021,the PA decided to refuse permission for the development for three reasons (in summary):
 - Granting of permission would be premature having regard to the unauthorised status of the bitumen/asphalt plant, the linkages between the existing quarry and the asphalt plant and that the proposed development would facilitate significant intensification of overall quarrying activity which is partially dependent on the unauthorised element.
 - NIS has insufficiently assessed in combination effects, or the potential for adverse effects on European sites, as it assumes that the bitumen/asphalt plant has the benefit of permission and has been granted on the basis that it would cause no harm to any designated site.
 - 3. The potential for adverse environmental impacts on public health and the amenities of property in the vicinity, in respect of dust emissions, in particular from dust monitoring location D3.

3.2. Planning Authority Reports

3.2.1. Planning Reports

- 30th September 2020 <u>Appropriate Assessment Screening Report</u>. Considers that significant effects on European sites cannot be excluded, by virtue of possible deterioration of water quality via pollutants or sedimentation during operation and effects on Annaghmore Lough SAC, Lough Forbes SAC and Ballykenny-Fishertown Bog SPA. States that Stage 2 Appropriate Assessment Report is required.
- 30th September 2020 <u>Planning Report</u>. Describes the site, its planning history, pre-planning meeting, the proposed development, relevant planning policy, consultations and submissions made. It notes that the application is accompanied by an EIAR and refers to the need for a Stage 2 Appropriate Assessment (as per recommendation of Screening Report). Under Planning Assessment, the report refers to policies in the CDP which recognise the importance of aggregate resources to meet growth needs of the county and considers that the exploitation of natural resources is in principle acceptable, subject to absence of significant environmental effects. Under EIA the report identifies the need for additional information/clarification in respect of emissions to air (excessive dust emissions at monitoring location D3), conclusions that there will be no impacts on Annaghmore Lough SAC, cumulative effects on hydrogeology/hydrogeology with proposed N5, potential effects on biodiversity (arising from emissions to air and water) and requirement for pre-development testing (archaeology).
- 2nd October 2020 <u>Senior Planner's Addendum Report</u>. Recommends additional items of FI that are required, further consideration of alternatives (existing reserves, potential for extraction at depth), cumulative impacts with existing quarry operations, access route through overall quarry site to extension areas, proposed phasing plan, comprehensive restoration for proposed new quarry areas.
- 10th September 2021 <u>Appropriate Assessment Screening Report.</u> Considers that the NIS insufficiently assesses the potential impact of the proposed development in combination with all other relevant projects, notably it wrongly

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ABP-311614-22
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assumes that all operational components have planning permission and that such permission was granted on the basis of the absence of harmful effects on designated sites. The report concludes that it has not been established that the development, individually or in combination with plans and projects, would not adversely affect the integrity of a European site.

• 10th September 2021 – Planning Report. Refers to the FI response and submissions and observations. In section 7.1 it carries out an EIA in respect of the development having regard to the revised EIAR (FI response). The report considers that inadequate information has been received in respect of dust and that impacts of dust on population/ human health cannot be ruled out and due to the unauthorised status of a significant operational component (the bitumen/asphalt plant), which has been developed without assessment of its impacts, it cannot be concluded that no significant adverse, direct or cumulative effect on utilities are likely to arise. The EIA concludes that the proposed development has the potential to have direct and indirect effects on the environment in respect of population and human health and air and climate for the reasons stated above, or that these potential effects could not be mitigated by the measures proposed or conditions. Under 'Other Matters' the report refers to the on-going court proceedings in respect of the asphalt plant and states that it has considered the status of this plant solely in the context of carrying out its development management function as part of the assessment of the subject planning application. The report sets out the matters it has had regard to in consider the planning status of the asphalt plant and concludes that it does not have the benefit of planning permission nor is it exempted development. The report recommends refusing permission for the development for the reasons stated above (PA decision).

3.2.2. Other Technical Reports

 Environment (3rd November 2020) – Notes the FI requested, to make further comments once this is received. No further report on file or referred to in Planning Report.

3.3. Prescribed Bodies

- 3.3.1. The planning application was referred out by the PA to Department of Culture, Heritage and the Gaeltacht, TII, An Taisce, Heritage Council. The following responses have been made:
 - TII (18th August 2020, 8th and 23rd July 2021 Development located in proximity to and in study area for future national roads scheme. National road scheme should be protected and PA should consult with local Road Design Office.
 - An Taisce (10th September 2020) Potential to impact on archaeological sites warrants circulation to prescribed bodies, any extension of quarry required to address past failures to comply, new period for extended quarry should be
 <10 years. Submission on EAR Report and AA screening
 - Quarry envelope FI required to establish veracity of pre-1964 ownership. Dispute that quarry was the same active site in 2004 as 1964. Issues with implementation of results of legal proceedings under section 261A.
 - Description of quarry development Inadequate information in respect of existing quarry, including quarry envelope, reserves, justification for development and applicant's future intentions. Risk of future further extension by depth.
 - Cumulative impacts No assessment of cumulative impacts (with various quarry activities, construction and operational phase of N5).
 - Biodiversity No formal bird surveys undertaken to inform EIAR (proximity to Ballykenny-Fishertown Bog SPA, improved grasslands within the quarry). Impact on groundwater regimes and potential for impact on Annaghmore Lough (Roscommon) SAC. Inadequate information to discount negative impacts on Lough Forbes Complex SAC and Ballykenny-Fishertown Bog SPA. Need for NIS to examine impacts, including related development (N5).
 - Hydrology Lack of scientific information on hydrology, related sensitive sites and cumulative impacts with construction of N5. No field hydrological survey work. No baseline water quality data, surface

water compliance data, assimilative capacity assessment (discharge stream) or hydraulic transmissivity between groundwater and surface waters.

- Hydrogeology No monitoring of groundwater (levels or quality), no groundwater baseline data, seasonal groundwater levels, assessment of hydraulic connectivity, groundwater transmissivity or effects on wells.
- Cultural heritage Loss of archaeological features without licence (ROO23-065 and R0025-006), lack of confidence in future operations.
- $\circ~$ Excluded impacts Quarry is processing of stone from another quarry.
- Department of Culture, Heritage and the Gaeltacht (DCHG)(15th September 2020) – Recommends pre-development testing (archaeology).

3.4. Third Party Observations

- 3.4.1. There are three observations on file in respect of the planning application¹ (N. Noone, P. Sweetman, Friends of Irish Environment) made by third parties. Concerns are raised in respect of:
 - Substantial clarifications of Habitats Directive by CJEU since 261 AA of quarry. On the basis of the information provided, not possible for PA to find that the proposed and existing development will not have a negative effect on protected lands. AA should be carried out without lacunae. Information provided in EIAR does not fulfil this requirement.
 - Inadequate EIAR (direct, indirect and cumulative effects), no comprehensive review of environmental emission data.
 - No justification to develop site (other sites, deeper reserves in existing quarry area). No demarcation of 261 authorised works. No information on remaining reserves in existing quarry.
 - No NIS or assessment of cumulative effects (other processes and N5 construction).
 - Inadequate monitoring of groundwater and surveys/studies in respect of surface or groundwater.

¹ The PA report refers to four submissions but one of these was subsequently withdrawn.

- Determination of application premature based on (a) inadequacies in addressing risks to surface and underground water quality, sites of natural habitats, scientific and heritage interest, the amenity of the area and climate and (b) Supreme Court judgement Friends of Irish Environment v Government of Ireland in respect of Ireland's 2017 National Mitigation Plan [No. 2019/205]. Planned motorway and national primary road projects must be reassessed. Interdependence of project and N5 Ballaghaderreen to Scramoge Road project must be considered under relevant EU Directives.
- Chapter 8 of EIAR fails assess impact of the development on climate (including cumulative impacts with N5 and emissions from mobile plant).
- Do nothing scenario omits benefits to the environment (biodiversity and climate).
- 3.5. Subsequent to FI:
 - Lagan Asphalt (6th August 2021) Applicant should not benefit from planning permission as ongoing unauthorised asphalt plant. Injunctive relief sought in respect of unauthorised development and non-compliance with terms of air emission licence. Permitted asphalt plant (PA ref. PD/08/474) removed. New asphalt plant in materially different location. The development was subject to EIA and applicant cannot avail of any provisions of exempted development. Lack of adherence to operational conditions of 2008 permission. Risk to Annaghmore Lough SAC from emissions to water and air from asphalt plant (plant placed on exposed bedrock and directly connected to groundwater). Unauthorised asphalt plant is intrinsically linked to proposed development which is subject to EIA and NIS (aggregates extracted on site supply asphalt plant). Extension facilitates the unauthorised development and is premature until all unauthorised development is addressed.
 - Quarry Support Residents Group (9th August 2021) Refer to observations made by persons based outside of the locality, local residents in the area of the site support the planning application for the development. It states that the quarry causes little visual impact or disturbance by way of noise, vibration, pollution or traffic and is a longstanding sponsor of local activities and brings employment to the area.

4.0 **Planning History**

- 4.1. It is stated that the quarry has been operating since prior to 1st October 1964, with the following planning applications made subsequently, as referred to by parties to the appeal and/or attached to the appeal file:
 - PA ref. 6585 Permission granted on the 23rd April 1976 for a crushing plant (referred to in EIAR).
 - PA ref. 6586A Permission granted on the 18th October 1976 for a batching and block plant (referred to in EIAR).
 - PA ref. 6586B Permission granted on the 8th January 1978 for a transformer house (referred to in EIAR).
 - PA ref. 6586C Permission granted on 5th September 1983 for a workshop (referred to in EIAR).
 - PA ref. 05/872 Permission granted to Laragan Precast Ltd on the 23rd August 2006 to construct a production facility for the manufacture of precast concrete elements for the construction industry (history attached to file).
 - PA ref. 06/2399 Permission granted to Hanly Brothers Ltd on the 26th March 2007 for retention of existing three storey office building, car park, entrance and ancillary facilities and permission for construction of four storey extension to existing offices and installation of proprietary effluent treatment system (history attached to file).
 - PA ref. 08/9 Permission and retention permission granted to Hanly Brothers Ltd on 29th May 2008 to commission and operate a concrete batching plant and retention of structures to house and accommodate the batching plant (batching plant is an upgrade of an older existing plant permitted under PA ref. PD/6586, which will be maintained in use as a back-up batching plant) (history attached to file).
 - PA ref. 08/474 Permission granted to Laragan Asphalt Ltd on the 11th June 2008 to retain and permission to complete structures to house and accommodate the plant and permission to commission and operate a Bitumen plant (history attached to file).

- PA ref. 08/1217 Permission granted to Hanly Brothers Ltd on the 25th November 2008 to erect 2 no. wind turbines and ancillary site works for internal energy needs (history attached to file).
- PA ref. 18/259 Application withdrawn on 12th July 2018 for two extensions to the quarry, to the south and west, with a combined area of 8.6ha.
- 4.2. In addition, from the public on-line planning service, under PA ref. 21/640 the applicant has sought retention permission for the installation and operation of the asphalt plant (replacing that previously permitted under PA ref. 08/0474) and associated plant and infrastructure including aggregate storage shed, operator control cabin and ancillary works (site is c.1.47ha, within the existing quarry). The application was invalidated in November 2021 due to issues with the site location map/layout plan and red line boundary.
- 4.3. The subject quarry was registered under section 261 of the Planning and Development Act 2000, as amended, and on the 23rd August 2012 and the PA attached conditions to the operation of the quarry. Under section 261A, the PA served a Section 4A notice on the quarry determining that development was carried out after 1st February 1990 and would have required EIA or determination in respect of EIA, as part of the quarry had expanded beyond the limits set out by Condition no. 21 in the Section 261 order, and that the PA intended to issue an enforcement notice requiring the cessation of unauthorised quarrying.
- 4.4. Following legal proceedings, it is stated in section 3.24 of the EIAR that the application before the Board has been made on the basis that PA determined that the footprint of the existing quarry had reached the extent that could have been reasonably expected on the appointed day of 1st October 1964 and that any further extensions to the quarry require a grant of permission.

5.0 Policy Context

5.1. National Guidelines

 National Planning Framework, 2018. The NPF supports the strengthening of Ireland's rural fabric, recognises the importance of extractive industries and enables the extraction of aggregates and minerals where it is compatible with protection of the environment. National Policy Objective 23 supports the development of the rural economy by supporting sustainable and economically efficient industries including extractive industries.

- Regional Spatial and Economic Strategy for the Northern and Western Regional Assembly (2020). Provides a high level development framework for the Northern and Western Region that supports the implementation of the NPF.
- Quarries and Ancillary Activities Guidelines for Planning Authorities (2004). Refer to the essential role played by the extractive industry in the economic and social development of the State and recognise that minerals can only be worked where they occur. Set out guidelines for best practice and mitigation measures in respect of environmental effects.
- EPA Guidelines on Environmental Management in the Extractive Industry (2006). Set out guidelines for environmental management of quarries.

5.2. Roscommon County Development Plan 2022-2028

5.2.1. Section 6.5 of the current Roscommon County Development Plan deals with Extractive Industries. The plan recognises that quarrying and extractive industry has an important function in the economy of the county and that it is an important source of employment. Policies therefore facilitate the extraction of minerals and aggregates and associated processing where such activities do not have significant negative environmental effects and where such operations are in compliance with all national regulations and guidelines applicable to quarrying activities.

5.3. Natural Heritage Designations

5.3.1. The appeal site lies c.1.25km to the north east of Annaghmore Lough (Roscommon) Special Area of Conservation (SAC) and proposed Natural Heritage Area (NHA) (shared site code 001626). Other national and European sites lie in the wider area, including Kilglass and Grange Loughs pNHA (site code 000608), c.1.85km to the east of the site. The stream into which the appeal site's water management system discharges into, outfalls to this NHA, via Grange Lough. Further, water outflowing from Grange Lough discharges to the river Shannon at Lough Boderg/Lough Bofin.

The River Shannon, south of Roosky flows into Lough Forbes Complex SAC (site code 001818) and Ballykenny-Fishertown Bog SPA (site code 004101) (see attachments). Other national and European sites are referred to in the EIA and AA sections of this report.

5.4. EIA Screening

5.4.1. The application for the proposed development includes an Environmental Impact Assessment Report (EIAR). It is submitted on the basis that the proposed development comprises a combined extraction area of 8.6ha and therefore exceeds the 5ha threshold set out in paragraph 2 of Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended), for mandatory EIA.

6.0 The Appeal

6.1. Grounds of Appeal

- 6.1.1. First party grounds of appeal address the reasons for refusal. In summary these are:
 - First Reason (premature with respect to unauthorised status of asphalt plant):
 - Principle. The principle of extending the quarry is generally acceptable. PA positively disposed towards granting permission, with the exception of the reasons for refusal in respect of planning status of bitumen/asphalt plant and dust monitoring. Quarry is a major employer in a rural area and its extension is necessary, logical and desirable. Principle of quarry has been established on the subject site, as demonstrated in its planning history.
 - Planning status of bitumen/asphalt plant. The status of the bitumen/asphalt plant did not arise until the third party submission was lodged. The basis for the PA decision is that they are of the opinion that the site of the relocated plant is outside of the site boundary (planning unit) permitted through PD/08/474. Under PD/08/7474 the PA considered the asphalt plant ancillary to the quarrying activity on the overall landholding and the Planning Report, having regard to EIA and absence of environmental effects, recommended a grant of

permission. PA assessment and conclusions in respect of planning status of bitumen/asphalt plant is incorrect. The relocation of asphalt plant is exempted development (see Appendix 1). If the PA is correct, then they have erred in using this as a reason for refusal. High Court Judgement in Murray v ABP, ABP not prohibited from granting planning permission which incorporates an extant development which is alleged to amount to unauthorised development [NB The appellant incorrectly quotes Murray v ABP. The correct case is GL0322 Murphy v ABP see attachments). Asphalt plant is not a prescribed class of development for the purpose of section 176 of P&D Act 2000 (as amended) which requires mandatory EIA. EIA carried out under PD/08/474 at specific request of PA. Regardless of planning status of bitumen/asphalt plant, applicant has submitted an application for retention of same and has prepared a Stage 1 Appropriate Assessment report (Appendix 3 – AA Screening Report, asphalt plant). It concludes that an appropriate assessment is not required for the plant and that its relocation represents no worsening of emissions over baseline. PAs determination that the relocated bitumen/asphalt plant required an AA was made in a vacuum without supporting information. The bitumen/asphalt plant has been carried out in accordance with conditions of the permission, including condition no. 1 which refers to works necessary to give effect to the permission. The replacement asphalt plant is exempted development, under Class 21(a)(iii) of Part 1, Schedule 2 P&D Regulations, 2001 as amended, and as per the Board's determination of RL2223 (the appellant acknowledges that unlike the subject development, in this referral case the asphalt plant was deemed to be not exempted development because the site did not already include an asphalt plant) (see Appendix 4 and 5). The plant was erected under PA ref. 08/874 but sustained damage during cyclone Carmen in November 2010 and replaced at an alternative location with the quarry where it was less vulnerable to weather and better met operational requirements (proximity to materials). The structure has been in place for over 7 years (Appendix 7 – letter from

RCC to appellant accepting that the quarry has been on site for over 7 years), the PA have raised no objections to it and an Emissions Licence has been granted in respect of it (Appendix 9 – Air Pollution Licence). PA has acknowledged that there are fundamental linkages between the bitumen/asphalt plant and existing quarry (single planning unit). Development will not result in a significant intensification of overall quarrying activity. Development will facilitate the continued operation of the quarry.

- Second Reason (NIS insufficiently addresses cumulative effects):
 - Is a by-product of the first reason, relating to the alleged unauthorised nature of the asphalt plant, addressed above. PA incorrectly conclude that there is a risk to designated sites. As demonstrated in NIS report (Appendix 2 Comments on Reason no. 2 by ecologist in context of NIS) no adverse impacts on European sites arise from asphalt plant and there is no hydrological link to Annaghmore Lough SAC (Appendix 6 Hydrological and Hydrogeological Assessment) or likely adverse effects from air pollution (Appendix 8 Air Quality Impact Assessment of asphalt plant).
- Third Reason (dust):
 - Dust monitor, D3, has been slightly repositioned, as indicated in FI response. Audit of D3 dust monitor showed failure was due to presence of organic material, not generated in the quarry (likely faeces of birds and wildlife). On advice of laboratory, sample point was slightly repositioned and 2021 results show compliance with limits. Dust monitoring repositioned c.5m from initial site (see image 6.1 and 6.2 in appeal), away from possible contamination (e.g. animals rubbing up against it) and therefore no need to change location in Figure 8.2. All excessively high samples at the location were previously contaminated with organic matter (Table 8.3 appeal). Reposition allows for better monitoring (no contamination) and does not warrant refusal of permission.
- Other comments

 N5 permitted by ABP runs through part of what had been previously part of Hanly quarries site. Area will be worked as part of N5 to create a feature stone wall along the route. The N5 lies closer to the Natura 2000 site referred to in the Planning Report than the proposed extension. Local community in support of quarry.

6.2. Planning Authority Response/Observations/Further Responses

6.2.1. None.

7.0 Assessment

- 7.1. Having examined the application details and all other documentation on file, and inspected the site, and having regard to relevant policies and guidance, I consider that the main issues in this appeal relate to the following:
 - Planning status of bitumen/asphalt plant, consideration of plant in PA decision and prematurity of any grant of permission (first reason for refusal).
 - Adequacy of environmental impact assessment, including likely impact of dust emissions (third reason for refusal).
 - Effect on European sites (second reason for refusal).
- 7.2. The matters are considered, respectively, in the Planning Assessment, Environmental Impact Assessment and Appropriate Assessment sections of this report. Issues raised by third parties in observations are addressed under these headings, where relevant.
- 7.3. The following matters have also been raised by third parties in the course of the planning application and I comment on these briefly:
 - Registration of the quarry/proceedings under section 261A These are matters that have previously been addressed through the planning system and fall outside the scope of this appeal.
 - Past failures to comply In their observation An Taisce refer to section 35 of the P&D Act 2000 (as amended) and state that any application for extending a quarry operation needs to address issues of compliance. Section 35 enables

the planning authority to refuse permission for a development where there is a real risk that the development would not be completed in accordance with the permission. In this instance, the PA has raised concerns regarding the planning status of the existing bitumen/asphalt plant and this matter is addressed below. Other sections of this report also refer to the issue of monitoring information.

Re-assessment of road projects – Observers raise concerns regarding the interdependence of the proposed development and the N5 Ballaghaderreen to Scramoge Road project, in the context of the Supreme Court Judgement in the case of Friends of the Irish Environment v Government of Ireland in respect of Ireland's 2017 National Mitigation Plan [No. 2019/205] and the ruling that the Plan fell short of the Climate Action and Low Carbon Development Act 2015, as it insufficiently specified how Ireland would achieve its 2050 goals. It is argued that the planned road project needs to be reconsidered as a consequence of the ruling.

It is acknowledged in the planning application/appeal documents that the quarry may supply the N5 road project. However, the development is not predicated on the road project and is brought forward as an independent project, that *may* supply the road project. Whilst I am mindful of the Supreme Court judgement, the Board is required to determine appeals in the context of prevailing planning policy. This currently supports the development of the extractive industry in the State and in the County, subject to environmental safeguards.

 Processing of stone from another quarry – The planning application and appeal documents make no reference to the processing of stone from another quarry. If this is being carried out without permission, this would be a matter form the planning authority and is not one which falls within the scope of this appeal.

7.4. Planning Assessment

Planning status of bitumen/asphalt plant, consideration of plant in PA decision and prematurity of any grant of permission

- 7.4.1. Whilst accepting the general principle of extending the subject quarry, the PAs first reason for refusal considers that to grant permission for the development would be premature, having regard to the planning status of a key operating component, the bitumen/asphalt plant, and the fundamental interlinkages between it and its processes and the proposed extension.
- 7.4.2. The appellant argues that the PA has previously, under PA ref. 08/474, considered the bitumen/asphalt plant to be ancillary to the main quarry activity on site, that the plant is exempted development, with Joint Opinion of Counsel (Appendix 1) and Planning Report (Appendix 4) setting out the applicant's case. It is argued that EIA is not required as the plant does not fall within a prescribed class of development. With regard to AA, and whilst maintaining their assertion that the bitumen/asphalt plant is exempted development, the applicant provides a Stage 1 Appropriate Assessment (Appendix 3) of the plant. It is based on scientific information and concludes that appropriate assessment is not required. It is further argued that the applicant's intention to lodge a planning application in respect of the asphalt plant does not prevent him from claiming that the development is exempted (Fingal County Council v William P. Keeling & Sons Ltd [2005] 2 I.R. 108). It is stated that, the proposed development will not facilitate a significant intensification of overall quarrying, but to extend the operational life of the quarry with no increase in production or intensification of activity.
- 7.4.3. The appellant also refers to a court case under section 160 of the Planning and Development Act 2000 (as amended) taken by Lagan Asphalt Ltd. Notwithstanding the outcome of this, the appellant asserts that if the PA are correct in their finding that the asphalt plant is unauthorised, the Board is entitled to consider the case on the basis of the provisions of the High Court judgement in Murphy v ABP.
- 7.4.4. The proposed development comprises the lateral extension of the existing quarry in two directions, west and south. The bitumen/asphalt plant is one of a number of other processes associated with the existing quarry. It is therefore directly

associated with the subject development, utilising quarried materials for its operation. It is not the purpose of this assessment, nor would it be appropriate to, to determine the planning status of the bitumen/asphalt plant on the subject site.

7.4.5. However, having regard to case law (Murphy v ABP), the Board is entitled to consider the proposed development, regardless of the potential for unauthorised development within the quarry. This assessment is carried out on the basis that the asphalt/bitumen plant may be unauthorised. It makes no inference to the planning status of the plant, but, appropriately has regard to the potential for cumulative effects arising from the proposed development in conjunction with all other existing site operations.

Duration of permission

7.4.6. In their observation An Taisce argue that permission for an extension should be 5 to 10 years and no more than 10. The application seeks permission for a period of 24 years. Section 7.4 of the government's Guidelines for Planning Authorities on Development Management on Time Limits, enables planning authorities to grant permission for a duration of longer than 5 years if they see fit. Currently, national and local planning policies recognise the economic benefit of extractive industries and support the removal of aggregates and minerals subject to environmental effects. Further, the subject site is situated in a proven reserve and has been worked progressively since prior to 1964. In this context, and subject to an absence of significant environmental effects or adverse effects on European sites, I consider that a longer timescale for any permission is appropriate. However, given emerging policies under the government's Climate Action Plan, for the construction industry e.g. a shift to low carbon construction materials/methods, the Board may wish to limit activities to 15 years and a condition to this effect is contained in the schedule in section 10.

7.5. Environmental Impact Assessment

Introduction

- 7.5.1. I have carried out an examination of the information presented by the applicant, including the EIAR, and the submissions made during the course of the planning application and appeal. A summary of the results of the submissions made by the planning authority, prescribed bodies, appellants and observers has been set out in Section 3 and 6 of this report. The main issues raised specific to EIA in respect of:
 - Description of development.
 - Alternatives.
 - Biodiversity.
 - Population and human health.
 - Hydrology/hydrogeology.
 - Air and climate.
 - Cultural heritage.
 - Adequacy of EIAR.
 - Cumulative impacts.
- 7.5.2. These issues are addressed below under the relevant headings.
- 7.5.3. I am largely satisfied that the information contained in the EIAR and supplementary information provided by the developer, adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment and complies with article 94 of the Planning and Development Regulations 2000, as amended. It includes a non-technical summary, details of sources used for the descriptions and assessments and a list of experts who contributed to the report. In terms of the information specified in paragraph 1 and 2 of schedule 6, I am satisfied that the EIAR contains a description of the likely effects of the development on the environment, of measures to mitigate significant effects and a description of the reasonable alternatives considered. The proposed development comes forward on a site with a history of quarrying, with permission granted in respect of concrete batching, pre-cast concrete manufacturing, workshops, offices and an asphalt plant (now relocated). However, plans for the development do not indicate the location of these uses on site. As the development is integrated with these processes,

providing materials for the manufacture of products on site, and in the interest of clarity, I consider that plans and particulars of the development should properly include all of the processes carried out on site. I consider that any decision to grant permission should therefore require, in advance of development, plans indicating the structures on the site in the context of the proposed development.

7.5.4. The EIAR states that no difficulties were encountered in compiling the necessary information for the EIAR, with the exception of traffic data due to restrictions on movements imposed by Covid-19. This issue is addressed in the traffic section of this report and the use of 2017 data as a baseline is not unreasonable. Further, whilst I am satisfied that there is sufficient information on file to determine the appeal, previous permissions required an environmental management system for aspects of the development (C12, PA ref. 08/9) and submission of an annual environmental audit (C15, PA ref. 08/9 and C14, PA ref. 08/474) with the audit to include data on quantity of material leaving the site, annual topographical survey, and groundwater levels at monthly intervals (C14, PA ref. 08/474). Observers have raised concerns regarding absence of review of environmental emissions data and this is a legitimate concern. However, the planning authority are responsible for monitoring the implementation of planning permissions and for the reasons stated in this report, and absence of concerns raised by residents or prescribed bodies regarding past or on going environmental effects, I am satisfied that sufficient information has been submitted that allow the Board to make a determination in respect of environmental effects.

Alternatives and Do-Nothing

- 7.5.5. Chapter 3 of the EIAR describes the development and alternatives. It refers to the long standing nature of the quarry on the site and states that the rationale for the development is to extend the life of the existing quarry which is close to the permitted boundary. The proposed lateral extension is advanced as it is not economically viable to excavate below the water table, which would involve a significant change in terms of water management regime.
- 7.5.6. The report considers four scenarios:
 - A, alternative location,
 - B, do nothing,

- C excavation of existing reserves, and
- D extension to existing quarry.
- 7.5.7. The report considers that an alternative location is likely to be more problematic from an environment and community perspectives, given the absence of likely environmental effects. To do nothing is considered not an appropriate alternative given the existing quarry has reserves within its boundary that have yet to be excavated. Options C would result in no lands being worked outside of the current site but also the closure of the quarry (c.1-1.5 years of usable material). Option D is considered to be the preferred option, with the location of the extension areas determined by topography and the location of the new N5, and the well-established logistical route for aggregate delivery, existing services, skilled labour market in local community and the negative effects of relocation.
- 7.5.8. Rock at the quarry is removed by drilling and blasting, with this method stated to be well established, safe and an acceptable form or extraction. It is preferred over drilling and hydraulic fracturing alternative which is stated to be time consuming, require more frequent drilling as the stone remove would be much smaller than via blasting techniques, with the potential for prolonged noise effects.

<u>Assessment</u>

- 7.5.9. The Planning and Development Regulations, 2001, as amended, requires the EIAR to provide a description of the reasonable alternatives studied which are relevant to the proposed development and it specific characteristics and an indication of the mains reasons for the option chosen, taking into account the effects of the development on the environment.
- 7.5.10. Having regard to these requirements, and the long established nature of the existing quarry at the subject site, the alternatives considered by the applicant are reasonable and sufficient in terms of detail. Further, the pursuit of a lateral extension over depth is not unreasonable given the typical issues which arise with extraction below the water table in a karstified limestone landscape. Do nothing scenarios would have potential benefits to the environment and climate but of themselves are not sufficient reason for considering this option.

7.5.11. The applicant has not set out future intentions for the working of the quarry (as raised by observers). However, this is not a requirement in seeking planning permission or environmental impact assessment and the applicant is entitled to bring forward applications for development at the site for consideration/assessment in the prevailing policy context.

Risk of major accidents and disasters

7.5.12. The appeal site is not located in an environment that is subject to risk of natural disaster e.g. earthquake, landslide. The main risks arise from climate change (windier and wetter conditions). This matter is addressed below (Climate). Risks of accidents is largely confined to accidental spills. Slope stability is dealt with under Health and Safety legislation.

Population and Human Health

7.5.13. Chapter 5 of the EIAR deals with impacts on population and human health. It addresses human health in the context of relevant environmental topics addressed in the EIAR, as per EPA guidelines i.e. air, noise, water etc.

Baseline

7.5.14. The EIAR describes the receiving environment, the location of the development in a rural, sparsely populated area and recent decline of the population in the two EDs where the site is situated. The current quarry employs 70 full time workers and additional indirect employment e.g. maintenance fitters, fuel delivery. Economic activity in the wider area is largely agricultural. There are 25 residential dwellings within 1km of the site, situated alongside county roads (Image 5.3, EIAR). The applicant's EIAR refers to the EIAR prepared for the N5 Ballaghaderreen Bypass works approved by the Board in January 2019 and by Cabinet in 2021. Planning sites within 1km and 2km of the appeal site are shown in Table 5.4 and Figure 5.5 and indicate little residential development from 2000. Kiltrustan National School lies c.575m to the east of the quarry and Kiltrustan graveyard to the north of the school grounds.

Impact Assessment

- 7.5.15. The predicted impact of the proposed development on population and human health is based on the applicant's assessment of individual environmental parameters which are discussed elsewhere in the report.
- 7.5.16. The proposed development is predicted to have a positive effect on population and economic activity, with employment at the quarry helping to sustain population levels and generate income locally. No significant effects on settlement patterns, land uses (loss of agricultural land) or social patterns (Kiltrustan NS is further removed from proposed extension areas) are predicted. Potential impacts on human health are summarised as generation of dust during initial soil removal and berm construction, noise and vibration during blasts and moving material from blast faces to the processing plant and leakage of oils and fuels from plant and machinery to spoils or surface water/groundwater.

Mitigation Measures

- 7.5.17. The EIAR sets out mitigation measures in relation to population, employment and health and safety. Mitigation measures in respect of human health are addressed in specific chapters dealing with noise, dust etc. Mitigation measures include:
 - Site operations during normal working hours.
 - Additional berms to reduce visual, air, noise and vibration impacts (with some soils to be reused in restoration).
 - Continued employment in the rural area.
 - Installation of fencing along new site boundaries.
 - Additional warning signs at perimeter of quarry.
 - Environmental Management System to be put in place to address public safety and security, visual amenity, ecological management, noise emissions, emissions to air, fuel, water discharge, management of waste, transport and restoration and after use.

Cumulative Impacts

7.5.18. No cumulative impacts are predicted as the extension areas provide for the continued working of the quarry, with no intensification in output over historic levels. With the N5, it is stated that there is some potential for cumulative impacts, however as the quarry may provide stone for road building, it would have a positive impact

locally as it would reduce the distance over which stone would be hauled and occur only for a short period (over duration of road construction).

Residual Impacts

7.5.19. No significant residual impacts on human health are identified in the Report. Effects on population are considered to be positive. No monitoring is considered to be necessary in respect of impacts on population.

<u>Assessment</u>

- 7.5.20. The proposed development will extend the life of an existing quarry. It operates in a rural area and provides direct and indirect employment. I am satisfied that the development will make a **positive contribution to the local economy by the provision of direct and indirect employment and the availability of aggregates to the region.**
- 7.5.21. The appeal site is situated in a rural area where there is a low density of residential development, typically situated along public roads. The proposed extension areas to the west and south move extraction closer to properties along the R368 to the south west of the site. However, these dwellings remain at distance from the quarry and will be separated from it by the proposed N5 road. They are also already influenced by noise on the R368 and will be influenced by construction and operational noise on the N5. The visibility of the extension areas will be screened by existing topography and proposed berm in particular to the south west of the southern extraction area. Traffic levels of local road will remain high, with **significant adverse effects** on the amenity of the road as experienced by road users (see Traffic section).
- 7.5.22. Effects on human health are confined to the environmental topics addressed in the EIAR i.e. noise, dust, particulate matter, water quality. Having regard to my assessment of the likely effect of the development on these parameters, set out below, I am satisfied that subject to the implementation of proposed mitigation measures, significant direct, indirect and cumulative effects on human health will not arise as a consequence of the development.

Biodiversity

7.5.23. Chapter 4 of the EIAR deals with biodiversity. It sets out details on the ecological context for the development, an assessment of baseline conditions, identifies

potential effects (effects are defined as the outcome of an ecological impact) and residual effects with mitigation measures. The assessment of effects includes a description of forecasting measures used to identify effects and takes into account existing quarry operations, including bitumen plant, batching plant, offices and workshops and ancillary activities. Zone of influence extends to 15km for European sites.

Baseline

- 7.5.24. Baseline data includes desk and field survey work. Survey work comprises a habitat survey of the extension area in May 2020 and a whole quarry site June and November 2017. Only data from the 2020 survey is presented in the EIAR. No significant limitations are identified from the desk study and field surveys (section 4.51).
- 7.5.25. Designated sites within 15km of the site are indicated in Table 4-8 and Figure 4-1. These include Annaghmore Lough (Roscommon) SAC, Mullygollan Turlough SAC, Clooneen Bog SAC, Lough Forbes Complex SAC and Ballykenny-Fishertown Bog SPA. There is no reference to Natural Heritage Areas in the EIAR. In the area of the site these include Kilglass and Grange Loughs. Discharge water from the quarry empties into an unmanned stream and this stream discharges into the pNHA downstream of the appeal site.
- 7.5.26. The extension areas comprise predominantly improved agricultural grassland, with some hedgerows and hedgerow trees. Other habitats include quarry, buildings and artificial surfaces and spoil and bare ground. No rare, notable or invasive floral species were identified during the phase 1 habitat survey.
- 7.5.27. Data on protected or notable species present within the extension area identifies the potential for badger, lapwing, skylark, swift, yellowhammer, linnet and meadow pipit given the habitats present on site (Table 4-10). Bat suitability index indicates potential for some species, Table 4-11 (maximum score 49 for Soprano pipistrelle, range is 0 least favourable, 100 most favourable for bats). Field surveys found:
 - No sightings or field signs of bats, with treelines and hedgerows present providing limited connectivity with the wider landscape,
 - Suitable habitat for foraging badger (improved grassland) and setts (treelines and hedgerows),

- Limited habitat for nesting birds (southwest corner area 1), and
- Limited potential for herptiles (Common Frog).
- 7.5.28. Skylark (red list) and meadow pipits (amber list) were observed during survey work.

Impact Assessment

- <u>Do nothing</u>. In the absence of the development it is anticipated that the land will continue as an existing quarry and retain its present ecological value (it is stated that there has been little change in the findings between the 2017 and 2020 ecological surveys).
- <u>Construction/decommissioning.</u> The EIAR states that the existing quarrying operations are already in place, such that there will be no construction stage. With decommissioning and the implementation of the restoration plan, it is stated that the site has potential to support local wildlife, resulting in a long term positive impact.
- <u>Operational</u>. The EIAR identifies potential effects from quarrying arising from loss, destruction or fragmentation of habitat, disturbance and contamination.
- 7.5.29. The EIAR considers the effects of the development on European sites. This matter is considered in the AA section of this report. There is no assessment of likely effects on Kilglass and Grange Loughs pNHA.
- 7.5.30. Impacts on habitats, bats, badger, otter, birds and herptiles are all considered to be Negligible by virtue of low ecological value of habitats present on site, absence of bat roost potential or significant reduction in foraging habitats, absence of badger activity within the site, absence of otter activity in the local area and limited duration of construction work and abundance of habitat in the wider area (birds, herptiles).

Mitigation

- 7.5.31. Mitigation measures include:
 - Ground level roost potential survey of tree within the application site.
 - Pre-construction badger survey, prior to construction.
 - Pre-commencement breeding bird survey, if construction works carried out during the bird breeding season, prior to any commencement of works or

clearance of vegetation on site. If nesting birds are identified, buffer to be put in place and no removal of vegetation until end of bird nesting season.

 Survey of hedgerows in advance of works by ecologist, if hedgerows are to be removed during winter, with appropriate translocation of any hibernating herptile species.

Residual Impacts

7.5.32. With the implementation of mitigation measures and restoration, long term impacts on local habitats are stated to be long term positive. Impacts on protected and notable species are not considered to be significant.

Cumulative effects.

7.5.33. The EIAR states that as the development is an extension of the existing quarry, the cumulative effects of the development have been considered in the assessment. Further, mitigation measures are already in place for the current quarrying operation. With these it is stated that no cumulative effects are anticipated. With regard to the N5, the EIAR refers to the predicted impacts on the N5 project on the water environment (Appendix 6E), which concluded that with mitigation the development would have no significant impact on European sites. It is therefore concluded that no likely significant cumulative effects are expected.

<u>Assessment</u>

- 7.5.34. Having regard to the habitats observed on site and the results of both the desk top and field survey work, and proposed mitigation measures, I am satisfied that the proposed development will not give rise to significant direct or indirect effects on the ecology of the extension areas or adjoining lands.
- 7.5.35. The Restoration Report (Chapter 12, EIAR) states that the quarry, on completion of extraction, will be filled with inert fill and used to grow grass and a sustainable planting arrangement in a manner which promotes protection of the environment, biodiversity and agricultural values. Elsewhere the report states that the site will be restored to agriculture and forestry.
- 7.5.36. In principle, restoration of the quarry may have ecological benefits, as indicated in the EIAR, however the plans for the restored quarry do not indicate how this will be achieved. This matter is important, as the conclusions of the EIAR are predicated in

part on uses which are beneficial to ecology and biodiversity. If the Board are minded to grant permission for the development, I would recommend that this be subject to condition requiring submission of a detailed restoration plan, which maximises the potential for ecological enhancement and which indicates phasing of restoration as the quarry is worked.

- 7.5.37. In addition to the foregoing, I am mindful that the application involves the cumulative loss of natural/semi-natural habitat in the area of the site, notably with the adjoining quarry development and land take from the N5. Whilst this may not be significant, of itself, it adds to the overall trend in loss of habitats and biodiversity in the State. Further, the application comes forward on an extensive landholding and I consider that it is appropriate that additional mitigation measures are put in place to offset this loss of habitat over the lifetime of the quarry and achieve an overall net gain. This matter could be addressed by condition, with the plans for increasing the biodiversity of the wider landholding (commensurate with the extension area), over the operational lifetime of the quarry, integrated with arrangements for the restoration of the quarry, where possible.
- 7.5.38. The EIAR does not assess the likely effects of the development on NHAs. In the immediate area of the site and directly connected to it via the quarry discharge is Kilglass and Grange Loughs pNHA. The Hydrology and Hydrological Assessment, submitted with FI, provides data on water quality in the quarry, at the point of discharge, downstream of the discharge and in Grange Lough (the lough that lies between the site and the boundary of the NHA). Having regard to these findings, and subject to implementation of all mitigation measures and conditions in respect of surface water management, I am satisfied that the proposed development would not give rise to significant adverse effects on water quality in the Kilglass and Grange Loughs pNHA.
- 7.5.39. Potential effects of air pollution on ecology are addressed in the following section of this report and I am satisfied that no significant adverse effects will arise for the reasons stated.
- 7.5.40. Having regard to the foregoing, in particular the findings of the survey work in respect of each of the species considered, their generally limited use of the site area to be affected by the development, and subject to the implementation of the

proposed mitigation measures and conditions of the permission, I am satisfied that the proposed development will not have a significant adverse direct, indirect or cumulative effect on biodiversity in the area.

Land, Soil, Water, Air and Climate

Land and Soil

- 7.5.41. Chapter 7 of the EIAR deals with land and soils. The methodology for assessment includes reference to desk based survey work, site walkover and site investigations. Baseline
- 7.5.42. The EIAR refers to the drumlin landscape in which the site is situated, the limestone till that overlies the site (extension areas) and adjoining lands and the underlying limestone bedrock. The EIAR refers to Bricklieve Limestone Formation. In contrast, the Hydrological and Hydrogeological Assessment (Appendix 6E, EIAR) and GSI data for sheet 12 (as referred to in section 5.29 of the EIAR) refers to Ballymore Limestone Formation as the underlying bedrock. Section 5.40 refers to the absence of karst features within the existing quarry, with no evidence of dissolution widened discontinuities, shafts, underground tubes, streams, caverns or cave systems. [The absence of such features is supported by borehole date set out in the HH Assessment referred to under Water below].

Impact assessment.

- 7.5.43. Impacts on land and soil are predicted for the following scenarios/states of development:
 - Do nothing No significant impact on local or regional geology.
 - Construction/operation/restoration -
 - Direct No impact on sites of geological importance, temporary removal and storage of soils on site with re use during rehabilitation, permanent loss of bedrock (slight impact). Inspection of quarry faces under safety legislation.
 - Indirect No indirect effects, exposed faces may be of interest to geologists.

- Interactions Interactions with water environment assessed in water section of EIAR.
- Cumulative impacts Cumulative increase in exposure of rock deposits with quarry and N5 works (slight impact, positive geological feature associated with the N5 in EIAR for project).

Mitigation.

7.5.44. Mitigation measures referred to include measures to prevent emissions to soi/ground, appropriate management of soil/overburden stockpiles, remediation of the quarry on cessation (re-use of soils) and adherence to safety legislation in respect of the stability of rock faces.

Residual impacts.

7.5.45. With mitigation, no residual impacts on land, soils or geology are predicted.

<u>Assessment</u>

7.5.46. The applicant's assessment of likely effects on soil and land is not ideal. In particular it presents inconsistent and limited information on the nature of bedrock that underlies the site and no information on the location of temporary storage bunds (or certainty that soils removed from the site will be stored for restoration purposes). However, taken in conjunction with the information provided in the Hydrological and Hydrogeological Assessment, the nature of the development which entails modest land take, lateral extension above the water table in a limestone environment which is devoid of any evidence of karst features and proposed mitigation measures, I am satisfied that the proposed development will have no significant direct, indirect or cumulative impacts on land or soils. Loss of geological reserve is very modest in context of overall size of reserve. Issues in respect of temporary storage of soils and restoration of the site can be addressed by condition.

<u>Water</u>

7.5.47. Chapter 6 of the EIAR deals with the likely interaction of the quarry with the water environment, in terms of hydrogeology and hydrology. The assessment is based on plans and particulars in relation to the development, desk and field survey work (2017 and 21st May 2020) and Hydrological and Hydrogeological Assessment (HHA, Appendix 6E, EIAR).

Baseline Conditions

- 7.5.48. It is stated in the EIAR that the site lies in the Shannon Upper WFD Catchment Area and within the Owenur River sub-catchment, Owenur_SC_010. [EPA Catchments online viewer indicates that the site lies partly in the Owenur_SC_010 sub-catchment and partly within the Scramoge_SC_010 sub-catchment, see attachments. This is acknowledged in section 6.60 of the EIAR where it is stated that the southwestern part of the quarry and proposed southern extension area forms part of the catchment for Annaghmore Lough, see also section 3.2.4, Appendix 6E].
- 7.5.49. The appeal site has a discharge licence (WP-04-01, issued in 2011, Appendix 6C, HHA) which permits a daily discharge of 1,400m³/day, with stated Emission Limit Values for pH, BOD, suspended solids etc. It is stated in HHA (see below) that daily discharge volumes, submitted to RCC on a monthly basis, are generally between 300 and 600m³/day. The applicant's water balance calculation for the site indicates a runoff volume from the site (c.40ha) of 665m³/day (section 3.1, HHA).
- 7.5.50. Surface water is discharged under this licence to an unnamed stream to the north east of the appeal site which flows into Grange Lough, c.1km to the east of the site having passed through the surface water management system. [EPA Catchments indicate a WFD status of 'Good' for 2013-2018 and 'Moderate' for 2016-2021 for Grange Lough. Risk status is 'Review' in respect of meeting WFD objectives, 3rd cycle].
- 7.5.51. The applicant's surface water management system is shown in Figure 6-1, (I assume this is Proposed Site Layout 3, in Appendix 6A, EIAR) and includes:
 - Concrete settlement lagoons with concrete overflow sills and baffles (Cell 4) to manage suspended solids and catch any floating debris and oils.
 - 600mm diameter pipe that connects lagoons to discharge point (linear ditch which flows to Grange Lough).
 - Permanent monitoring station.
 - Detention points at wheel wash and aggregate wash system used to pipe water back into the system for reuse.

- 7.5.52. The site (and surrounding area) is not identified to be at risk of flooding in the OPWs Preliminary Flood Risk Assessment Maps, although land to the south west and removed from the quarry is at risk of groundwater flooding (high probability).
- 7.5.53. The appeal site is underlain by Ballymore Limestone Formation (bedrock geology), with groundwater flow in an epikarstic layer and solutionally enlarged fissures and conduits (section 3.2.3, HHA). Extensive karst features are shown on the GSI karst database to the west and north west of the site, including swallow hole, caves and a spring (section 3.2.3, HHA). During extraction operations at the site no deep karstic formations or cavities have been encountered.
- 7.5.54. The appeal site lies in the Carrick on Shannon, karstic groundwater body (IE_SH_G_048). [The GWB has 'good' status (2016-2021, EPA Catchments) and is 'Review' in respect of meeting WFD objectives]. The GSI's description of the GWB describes recharge mechanisms as point and diffuse, with swallow holes and collapse features providing the means of point recharge and diffuse discharge over the entire GWB via rainfall percolating through the sub-soil. The underlying bedrock aquifer is considered to be Regionally Important karstified aquifer dominated by conduit flow and covering an area of 928km².
- 7.5.55. Groundwater vulnerability across the site varies from Extreme to Rock at or near Surface or karst. Section 6.65 of the EIAR refers to the GSI well database and a borehole in proximity to the site. This is not mapped in Figure 6-11 but the GSI database show the quarry site (but not extension areas) falling within the buffer zone of a groundwater well/borehole to the north east of the site (see attachments). This would appear to be the Regional Water Supply Scheme referred to in Appendix 6E of the EIAR (see below).
- 7.5.56. The quarry sump is excavated to a base elevation of 40m OD and this has groundwater in it (section 3.1, Appendix 6E). A 6" borehole on the site provides water for the site using a 4" pump and it is inferred from this that the maximum abstraction is 450m³/day.

Conceptual Model

7.5.57. The HH Assessment provides information in respect of hydraulic connectivity to Annaghmore Lough SAC and to assess the cumulative effects of the development with the N5. It also provides monitoring information on the effects of the development on water quality downstream of the site and on groundwater. It refers to a number of data sources including published sources of information on the SAC and the geology hydrology of the area, site investigations carried out in 2018 (borehole depth c.45m OD, Appendix B) and additional site investigation boreholes (44m OD to 48m OD) carried out for the assessment (Appendix C).

- 7.5.58. The Assessment has regard to the source, pathway, target framework for assessment. With the 'source' including surface water discharged from the quarry into the stream to the east of the site, the quarry sump, the abstraction of water on site by borehole and volume of rainfall runoff. The 'pathway' is the hydrological and hydrogeological context for the development, that may connect the site to potential 'targets', including Annaghmore Lough and Grange Lough.
- 7.5.59. It is stated in the EIAR that RCC monitors discharge to the stream to the east of the site and that the monitoring and mitigation measures in place protect water quality in the stream. This is supported by data presented in section 8.0 of the Assessment which presents monitoring data of the unnamed stream downstream of the site, and water quality data for BHK4 (borehole to south of site, Appendix C, HHA), the 6" well on site, a spring c.300m to the north east of the. Data shows compliance with emission limit values for the discharge licence (except for slight exceedance with regard to suspended solids and PAH) and no adverse effects on final receptor (Grange Lough) or groundwater.
- 7.5.60. With regard to Annaghmore Lough, the HHA provides a cross section Conceptual Model from the site to the Lough through the N5, with the site, proposed extraction areas and N5 elevated above the Lough and groundwater, with the road scheme collecting all surface water runoff from surrounding lands. It concludes, that consequently, no direct, indirect or cumulative risks to the Lough from the quarry arise. [I understand this to be because abstraction areas are elevated above groundwater, bedrock has low hydraulic conductivity so any flows from the site will be largely via overland flow/through soils towards the Lough. These flows are intercepted by the N5 and redirected to ground, with little potential for direct, indirect or cumulative effects arising from the quarry, on the surface or groundwater regime of the Lough].
- 7.5.61. With regard to the loss of recharge to Annaghmore Lough from the southern extension area, which will now be directed to Owenur sub-catchment, Appendix 6E provides a hydrological impact assessment and water balance assessment to determine whether or not the development would impact on water levels in the Lough (which in turn may affect habitats on the site and species).
- 7.5.62. Using a volume of 1,500m³/day [equivalent to discharge licence and abstraction well] the Assessment calculates that the quarry will intercept/consume only 0.1% of the annual recharge amount to the Carrick on Shannon groundwater body (administrative area) and only 0.02% when the Regionally Important Aquifer is considered. This is concluded to have no potential to alter hydrological regime, as per WFD Guidance Document GW5 (Assessment of Impact of Groundwater Abstractions attached to Appendix A6).
- 7.5.63. Adopting a precautionary approach, the Assessment also uses the UK's methodology for assessing the hydrological impact of water abstractions (section 7.2 of Assessment), which also concludes an absence of effects on Annaghmore Lough.

Potential Impacts

- 7.5.64. Within the context of the Conceptual Model, the applicant considers and assesses potential impacts arising from activities associated with do nothing, construction/decommissioning and operational stage. It is stated in the EIAR that all surface water from the quarry will be directed to the existing surface water scheme and discharge point, with no surface water from the new quarry development to reach the road. The existing surface water management plan will be retained and new sections of the quarry floor directed surface water to the existing treatment location.
- 7.5.65. In summary predicted impacts are:
 - Do nothing Future baseline hydrochemistry conditions for all watercourses in the study area will remain relatively constant, and agricultural practices will continue to contribute to nitrates and phosphates entering hydrological environment.

- Construction/Decommissioning As the quarry is already in place, it is stated that there will be no construction stage and decommissioning effects will be dealt with in a remediation plan.
- Operational stage
 - Geology, Soils and Hydrogeology Impacts are predicted to arise from soil stripping (Moderate/Slight), contamination (Imperceptible), contamination of groundwater by nitrate/ammonia residues from blasting (Moderate/Slight), impacts on groundwater levels (Moderate/Slight), increase in suspended solids/release of contaminants into quarry void with effects on groundwater from extraction, crushing and washing (Imperceptible). With reference to Appendix 6E, no potential for contamination of Annaghmore Lough (Imperceptible).
 - Hydrology No areas within the site at risk of flooding (fluvial or pluvial), some risk of surface water flooding as it flows towards quarry detention ponds (Imperceptible). Risk of contamination with stored fuels/chemicals, accidental spills (Moderate). Increase in surface water runoff (increase in impermeable rock surfaces) and sediment load (Moderate). No risk to Annaghmore Lough from surface water runoff (intercepted by N5 drainage scheme) (Imperceptible). No new wastewater treatment requirements (use of existing on site WWTS).

Mitigation Measures

7.5.66. Mitigation measures are set out in section 6.89 on in the EIAR and include standard measures in respect of storage of fuels, refuelling, excavation and earthworks, pollution prevention and flood risk and compliance with discharge licence.

Residual Effects

7.5.67. With the application of mitigation measures, residual effects are considered to be Imperceptible to Slight.

Cumulative Effects

7.5.68. The EIAR states that the quarry is an extension to an existing quarry, all operations have been considered together including the bitumen plant, batching plant, offices

and workshop. Further, it concludes that as the extension are of the quarry entails localised and shallow works with the output retained on site, there is no potential for cumulative effects. [It is not clear what 'output' is being referred to, as extracted materials will be removed from site and surface water will be direct to the settlement ponds for discharge]. Cumulative impacts with the N5 are not predicted for the reasons stated in the EIAR.

Assessment

- 7.5.69. The proposed development comprises the lateral extension of the quarry, with extraction of the underlying limestone bedrock to take place above the water table. There is little monitoring information on file regarding the past performance of the quarry, which is not ideal. Notwithstanding this, from the information available, notably the HH Assessment (which includes recent water quality data), the conceptual model of the site and how it relates to its environment, proposed mitigation measures and adherence to emission limit values prescribed in the discharge licence, I am satisfied that the extension areas are not likely to have an adverse direct, indirect or cumulative effect on groundwater or surface water quality, on the underlying hydrogeological regime including effects on Annaghmore Lough.
- 7.5.70. If the Board are minded to grant permission, I would recommend conditions requiring that working takes place above the water table (as impact assessment is predicated on this), enhanced arrangements for monitoring and reporting, given the absence of regular monitoring data on file and provision of detailed arrangements for written agreement in respect of the internal on site water management system (that directs water to the settlement tanks) and to demonstrate how the quarry sump (groundwater) is protected from contaminated surface water flows. The EIAR does not address the risks to the water environment arising from climate change (see Climate section below), for example, from heavier and/or more frequent rainfall. This could also be addressed by condition, for example, requiring the applicant to prepare, for agreement with the planning authority, a climate action plan includes means to address the risks posed by climate change e.g. with discharge waters being held back under storm conditions when there is insufficient time in the settlement tanks.

- 7.5.71. Subject to these measures, I am satisfied that the proposed development is unlikely to adversely impact on water quality or water quantity in the area of the site or therefore to have any significant direct, indirect or cumulative impact on the water environment.
- 7.5.72. Third parties raise a number of concerns in respect of hydrology and hydrogeology. The HHA addresses a number of these issues, including scientific information on hydrology, field survey work, hydraulic transmissivity between groundwater and surface water, sensitive sites and cumulative effects with the N5 road construction project. I would accept that compliance data is lacking and there is no assimilative capacity assessment. However, data is presented which indicates the the quarry is not having any significant adverse effects on either surface or groundwater in the area of the site.

<u>Air</u>

7.5.73. Chapter 8 of the EIAR deals with air and climate (discussed below) and is primarily focused on dust emissions. It has regard to EPA Air Quality Data for rural areas, desk study data, habitats and species in the study area, visual inspection of the site and dust monitoring data. In addition, the appeal documents include an Appropriate Assessment Screening Report for the Replacement Asphalt Plant (Appendix 3 of appeal), an Air Quality Assessment of the Asphalt Plant (Appendix 8) and a copy of the Air Pollution Licence in respect of the plant (Appendix 9).

Baseline

7.5.74. The appeal site lies in a rural area with nearest sensitive receptors comprising residential dwellings in the vicinity of the site (H1 to H8) and St. Joseph's National School to the south of the site (Figure 8.1). The only EPA licenced activity in the Elphin/Strokestown area is an intensive pig rearing farm, EPA Reg No. P0515-01 (Laragan, Elphin). Other than emission from agriculture and local traffic there are no identified significant emissions to atmosphere in the area. The site lies in air quality zone D (rural Ireland, Figure 8.4) and it is stated that the site is likely to have similar background concentrations of sulphur dioxide, nitrogen dioxide and particulate matter to the annual mean concentrations measures at Kilkitt, Co. Monaghan (nearest EPA monitoring site) and to exceed ozone guideline values, which are likely to require European/global efforts to reduce ozone precursors.

- 7.5.75. Existing monitoring of dust emissions takes place bi-annually at three locations, D1, D2 and D3 (Figure 8.2). Analysis of emissions is set out in Table 8.3. Dust levels are generally comfortably within the prescribed emission limit of 350mg/m2/day, except for a number of results from location D3 which appear to be contaminated by organic matter. Section 8.29 of the EIAR states that dust deposition gauges are prone to contamination by local dust sources, especially when near roads (splashed/sprayed by passing vehicles).
- 7.5.76. The dominant wind direction at the site is from the west and south, with consequent dispersion of airborne emissions towards the east and north/northeast (Figure 8.3). Wind speeds are likely to exceed 2m/s for 93% of the time (Table 8.2).
- 7.5.77. During site visits, the EIAR reports no significant dust emissions from operations and processing activities (rock excavation, crushing and screening); wheel wash in operation at the exit from the site and no visible dust deposition at the roadside properties H1 to H3.
- 7.5.78. With regard to emission from the asphalt plant, attached to the Air Quality Impact Assessment Report (Appendix 8 of appeal), is a Air Emissions Compliance Monitoring Emissions Report. It was carried out on the 13th July 2021 and indicates emission levels well within emission limits (for sulphur dioxide and nitrogen oxides).

Impact Assessment

- 7.5.79. The EIAR identifies the potential impacts on air quality as:
 - Dust arising from works, including from stripping of overburden, extraction and process of aggregate, aggregate stockpiles and loading aggregate onto vehicles and transporting off site.
 - Emissions from plant and vehicles operating directly at the application site or indirectly transporting material to and from the site.

7.5.80. <u>Dust</u>.

 Direct - The EIAR states that as quarrying is already taking place at the site, dust emissions are likely to be as per existing (in processing area), or less as the quarry descends to lower depths allowing for increased attenuation by quarry walls and greater distance from St. Joseph's school.

- Indirect The risk of visual effects if dust suppression measures are not implemented.
- Human health States that effects could arise from environmental vectors such as air through which contaminants have potential to cause harm.
- Cumulative No anticipated effects with dust from pastoral activities. Quarry will be in close proximity to N5. Dust levels are likely to be as existing, or lower, as quarry deepens. No additional cumulative effects identified. Development is an extension of quarrying, with same level of output as current and historic levels.
- 7.5.81. <u>Asphalt/bitumen plant</u>. The Air Quality Impact Assessment uses the emission rates from the plant based on the air licence limit values and adopts a very conservative approach to the prediction of ground level concentrations of compounds dispersed from the facility (section 1.3), for instance including that emissions occur simultaneously 24 hours each day over a standard year. Predicted emission rates are added to background levels (rural area D) and predicted ground level concentrations at sensitive receptors in the vicinity of the site are shown in Table 4.1 (stack height 13.5m) and 4.2 (stack height 19m). Receptors R1 to R10 shown in Figures 7.1 (R11 is to the east of Annaghmore Lough, R12 within the site, R13 to the east of the site and south of Kiltrustan school and R14 at residential dwellings at further remove from the site – see co-ordinates). Predicted annual average ground level concentrations of sulphur dioxide, NO₂ and particulates (PM₁₀ and PM_{2.5}) are at least 57% of impact criterion. The report concludes that based on the very conservative assessment, the asphalt plant if operated within licensed emission limits will not breach air quality regulations, with all predicted ground level concentrations at sensitive receptor locations well in compliance with the stated air quality limit value, when the stack height is 13m or 19m (Appendix 4 of the appeal indicates the stack height of the 2008 plant at c.19m and the 2013 plant at c.13m).
- 7.5.82. With regard to effects on habitats, the AA Screening Report (Appendix 3 of appeal) includes an air quality modelling exercise for likely ground level concentrations of SO₂ and NO₂ at European sites in the area of the site. All predicted levels are well below critical levels, with the highest deposition rate at Annaghmore Lough of nitrogen of just under 0.0005 kg/ha/year and 0.15% of critical level. I would infer

from this that effects on Kilglass and Grange Loughs pNHA are also likely to be negligible.

Mitigation

7.5.83. Remedial/mitigation measures are summarised in section 8.62. These include standard measures for the control of dust emission within and outside of the quarry, including cleaning and watering of roads, inspection and cleaning of public roads, on site speed restrictions, covering of vehicles transporting material with potential for dust emission. Additional dust monitoring is proposed at locations H6, H7 between the quarry and N5 and at H8 (Figure 8.1).

Residual Impacts

7.5.84. With the implementation of mitigation measures residual impacts are predicted to be negligible.

Assessment

- 7.5.85. The PAs third reason for refusal refers to the potential for adverse environmental impacts on public health and the amenities of property in the vicinity, by virtue of dust emissions, in particular from dust monitoring location D3.
- 7.5.86. Dust monitoring of the quarry demonstrate dust levels at the three monitoring locations which are typically well below the emission limit of 350mg/m2/day. Of the 12 dust monitoring results presented (at each location), emission levels have been exceeded at D2 (opposite quarry entrance) twice and at D3, six times. In response to the appeal, the applicant states that dust monitor D3 which was situated on the boundary of an agricultural field was becoming contaminated with organic matter. The monitor has since been moved, with dust emissions now falling within the emission limit level. The dust monitoring analysis (Table 8.3) indicates compliance since July 2019.
- 7.5.87. The appeal site lies in a rural area and is largely removed from residential development. On file there are no complaints or issues raised by members of the local community regarding dust emission from the site.
- 7.5.88. The proposed development comprises extensions to the existing working quarry, with new extraction areas to the west and south of the site and no change to existing processing and ancillary operations, including the asphalt/bitumen plant. Within this

context it is not unreasonable to expect dust emissions to remain similar to existing. Further, with the location of the extension areas dust blow is more likely to be directed into the quarry. Dust emissions are likely to be greatest with soil stripping and construction of berm alongside the N5 and are likely to decrease as work progressed at depth within the quarry. However, subject to appropriate soil handing techniques I do not consider that the development is likely to give rise to significant adverse effects as a consequence of dust emissions.

- 7.5.89. The PAs second reason for refusing permission is the inadequate assessment of cumulative effects in the Appropriate Assessment, in particular due to the erroneous assumption that the bitumen/asphalt plant in the existing quarry has the benefit of permission and that permission has been granted on the basis that it will not cause any harm to designated sites.
- 7.5.90. The matter of likely effects on European sites is addressed in the AA section of this report. However, on the basis of the information presented by the applicant in terms of the existing Air Pollution Licence for the asphalt plant, and predicted effects of the air dispersion modelling exercise, I am satisfied that the applicant has demonstrated through conservative assessment that the asphalt plant is not likely to give rise to significant effects on sensitive receptors or habitats or ecological systems in the area of the site alone or in combination with background levels.
- 7.5.91. The EIAR refers to the potential for impacts from emissions from vehicles (e.g. combustion emissions, primarily oxides of nitrogen). This is not assessed in the report. The proposed development entails no change to working practices or level of output. It is not unreasonable to assume that there will be no change to emission levels from vehicles associated with the development. However, as stated in the Traffic section of this report, HGV levels associated with the overall site are significant and are likely to continue to detract from air quality in the immediate area of the site over the lifetime of the development, that the extension areas facilitate.
- 7.5.92. Having regard to the foregoing, I consider that the development will have significant direct and cumulative impact on air quality in the area of the site, however, this will not be to the detriment of human health or have adverse effects on biodiversity.

<u>Climate</u>

- 7.5.93. The Planning and Development Regulations, 2001 (as amended), requires that EIA consider the impact of a project on climate change through greenhouse gas emissions, the vulnerability of the project itself to future changes and its capacity to adapt to the impacts of climate change.
- 7.5.94. These matters have not been explicitly considered in the EIAR. However, for the reasons stated above, that the development provides an extension to the area to be quarried and provides for no intensification of use, there is unlikely to be any increase in GHG emissions (from plant and vehicles) but the use of the site by a large number of HGVs is likely to continue for the duration of the development. Of themselves the emission are unlikely to have a significant effect on background levels of greenhouse gas emission but they will not contribute to any reduction in transport emissions an aspect of the government's climate change agenda.
- 7.5.95. If the Board are minded to grant permission for the development I would recommend (a) management of lands within the ownership of the applicant to provide a net gain to biodiversity as a consequence of the development and an increase in vegetation, with potential to offset greenhouse gases produced on site/in transport, and (b) adoption of a climate action plan with associated measures to reduce energy use and reduce GHG emissions.
- 7.5.96. With regard to the vulnerability of the project to climate change, as stated above, the project may be affected by increased rainfall, rising groundwater levels and more frequent storms. As the site is situated in a hill and worked above ground level, effects of may not be significant in terms of the water environment (although surges in discharge of surface water may arise). However, the site has already been affected by adverse wind conditions (loss of original asphalt plant). Consequently, I consider that it would be prudent for any decision to require the development of a climate action plan for the site which deals with the reduction in greenhouse gas emission, considers the potential effects of climate change on the site and provides appropriate response plans.
- 7.5.97. Having regard to the foregoing, I am satisfied that the proposed development will not give rise to significant direct, indirect or cumulative significant impact on climate or be significantly vulnerable to the impacts of climate change.

Noise and Vibration

7.5.98. Chapter 10 of the EIAR deals with noise and vibration. The assessment is undertaken with regard to established standards and guidelines (section 10.9). It recommends that the noise and vibration limits set out in guideline documents are retained for the further operation of the quarry (section 10.13-10.18, EIAR).

Baseline

- 7.5.99. The nearest sensitive receptor is situated c.450m to the south east of the site [see also Image 5-3]. Noise is currently monitored, bi-annually, at three locations, N1 north of the quarry, N2 east of the quarry and N3 at the eastern boundary of the site (Figure 10-2). It is stated that to date there have been no complaints in respect of noise.
- 7.5.100. Noise monitoring results are set out in section 10.32 of the EIAR and indicate for 2019-2021 noise levels within daytime limit of 55dB LA_{eq,30}, with a minor exception at N2 (March 2021). It is stated that there was no evidence of tonal or impulsive qualities to the recorded noise at the nominated locations. The EIAR states that monitoring of blasts has been carried out at the nearest noise sensitive location 450m to the south east of the site, with a 0 reading received, and the quarry having no impact on the receptor.

Impact assessment

- 7.5.101. The following impacts are predicted:
 - Do Nothing. If development did not proceed, it is stated that the operator would continue to operate quarry within the authorised area until a further permission was granted.
 - Operation.
 - Noise. The proposed development will give rise to noise from stripping of overburden, blasting, extraction and processing aggregates, loading of aggregates and movement of aggregates within and from the site. Having regard to the monitoring of noise associated with the existing quarry, the EIAR predicts no cumulative effects of noise on the surrounding area. However, it recommends the bi-annual monitoring continue for the proposed extension area and additional monitoring near the N5.

- Vibration. Having regard to the absence of effects on the sensitive receptor 450m to the south east of the quarry, the EIAR predicts no impacts from blasting in respect of the proposed extension areas.
- Flyrock._The EIAR also considers that there is a risk that flyrock from the proposed extension area entering the new road (N5). It is stated that the risk of flyrock can be managed by appropriate design and management of blasts and provision of an agreed flyrock barrier/berm alongside the southern side of the extension area.
- Unplanned events. In the event of an emergency, the emergency response plan will be implemented. If noise levels exceeded, activity will cease until problem has been rectified.
- Decommissioning. Noise during decommissioning is likely to be similar to that during operation of the quarry. Noise limits to be complied with.
- Cumulative impacts. It is stated that the noise environment in the study area is dominated by road traffic noise, farm yard animals and dogs barking. Over time it is also anticipated that traffic on the N5 will increase with an increase in ambient noise levels. No cumulative impacts are predicted with the proposed development, with noise levels from the proposed development having no potential to increase existing ambient noise in the vicinity of the quarry.

Mitigation

- 7.5.102. The applicant proposes the following measures to mitigate the effects of noise:
 - Adherence to existing noise and vibration emission limits.
 - Additional noise monitoring point in proximity to the N5.
 - On-going biannual noise monitoring.
 - Construction of berm alongside the N5.
- 7.5.103. For vibration effects mitigation measures include:
 - Flyrock barrier and construction of berm on the southern side of the extension (Figure 10.6).
 - Peak particle velocity to not exceed 12mm/sec and air overpressure to less than 125 dB (Lin peak) with a 95% confidence level.
 - Appropriate blast design (section 10.74).

- Blast notifications to provide pre and post siren warnings. Blasting restricted to daytime hours during weekdays.
- All blasting operations to be carried out by certified 'shotfirer' in accordance with relevant health and safety legislation.
- Optimum blast ratio and maximum instantaneous charge.
- Monitoring of each blast operation and blasting in the proposed extension areas, with extra monitoring to monitor levels at the N5.

Residual impacts

7.5.104. With the implementation of mitigation measures, no residual impacts are predicted in terms of noise or vibration.

<u>Assessment</u>

- 7.5.105. The proposed development comprises the extension of the extraction area to the west and south of the quarry. The effect of the extension areas will be to move extraction away from some sensitive receptors to the north/north east of the quarry and closer to those to the west/southwest. In this direction, the quarry will be separated from nearest receptors by the alignment of the N5.
- 7.5.106. The applicant predicts that there will be no difference in noise or vibration over current levels, with continued adherence to emission limit values. The prediction of effects refers to noise monitoring data carried out over three years. There is no monitoring data in respect of vibration/blasting.
- 7.5.107. Notwithstanding this, no concerns are raised by the PA or third parties regarding the past performance of the quarry, or concern in respect of the proposed extension. Further, the proposed development comprises an extension of the extraction area and not an intensification of quarrying.
- 7.5.108. With regard to cumulative impact assessment, the noise surveys have been carried out with the existing operations on site (including HGV movements) and background noise, and therefore provide some measure of cumulative effects (there is mention of some equipment operating at the site during the noise survey, but this is not comprehensive).
- 7.5.109. However, from my inspection of the site, it is evident that noise that is generated by the quarry is largely confined to within the site, probably due to its

location on/near the quarry floor, the high faces of the quarry and the distance of active working areas and processing areas from public roads in the area of the site.

- 7.5.110. Having regard to foregoing, I am satisfied that the proposed development will not lead to significant adverse direct, indirect or cumulative impacts on sensitive receptors (people) in the area, as a consequence of noise or vibration. Impacts on biodiversity are not addressed in the EIAR, however, based on the information presented in the Biodiversity section of this report, in terms of habitats and species present on/near the site, the distance of the site from sensitive natural habitats, the nature of the development which is an extension to the existing operation and likely habituation to noise/human activity, I am satisfied that no significant direct, indirect or cumulative impacts on biodiversity will arise as a consequence of noise or vibration.
- 7.5.111. The Government's Guidelines to Planning Authorities on Quarries and Ancillary Activities recommend noise monitoring on a quarterly basis. If the Board are minded to grant permission, I would recommend additional noise monitoring which incorporates information on the activities taking place on site at the time of monitoring. Blast monitoring should be carried out for each blast. Any permission should also limit emissions to standard levels in order to prevent damage to human health and property.

Material Assets, Cultural Heritage and the Landscape

Material Assets

- 7.5.112. Chapter 11 of the EIAR deals with material assets. It focuses on the existing road network as the development is for the extension of an existing quarry, with no impacts on built services or waste management (to remain as is). The Chapter provides an assessment of the potential effects from traffic generated, site access proposals and the movement of loads associated with the proposed development. The assessment is carried out having regard to national policies, guidance documents, desk based research and field survey. Expected HGV volumes are based on best estimates on existing quarry data and peak period of the year. Manual traffic counts were taken at two junctions in June 2017. Study area is the local roads to where they connect to the R368.
- 7.5.113. Baseline

- 7.5.114. The EIAR identifies two junctions in the area of the site, as likely to be most affected by the development. These are junctions of the local road on which the quarry is situated, L1410, and its junction with the L1405 to the south, and the junction of the L1410 with the R368 to the north (Figure 9-1, Appendix 9A). The new section of the N5 is shown in Figure 9-1 and it is stated that the road has a new junction with the R368 to the west and the L1405 to the south east with the new junctions designed to accommodate traffic from the existing quarry. It is also stated that there is no proposal to increase the number of movements from the present state.
- 7.5.115. Traffic data from TIIs online mapping application is shown in Table 9-4, Background Peak Hour Traffic Flow Data (two way), indicating traffic levels on the N61 between Roscommon Town and Tulsk (>8km to the south west of the site) and on the N5 between Strokestown and Longford (c.5km to the south of the site). Traffic volumes on these roads are considered to be low in the context of the theoretical flow rate of a single carriageway rural road of c.13,000 vehicles (AADT – average) per day, as identified in DMRB TA46/97². [It is not clear how this data is relevant to the appeal].
- 7.5.116. Traffic count data for the junctions L1410/L1405 (junction A) and L1410 and R368 (junction B) are set out in Appendix 9B. Due to pandemic restrictions traffic count data from 2017 is referred to, with traffic counts taken at a recorded peak of 0800-0900 on a Friday morning. Data for junction A is shown on page 11 and for junction B on page 12. It indicates **24 HGV movements** on the L1410 between 8am and 9am at its junction with the L1405 (arms C, D, F, G and E). For the junction of the L1410 with the R368, **10 HGV movements** associated with the L1410 (arms B, C, D, E and 4). The EIAR reports no accidents on the L1410 on the RSA collision database (2012-2016, stated not to be updated since).
- 7.5.117. Sensitive receptors include Laragan Farm and Milling company, c.0.3km to the north of the quarry, agricultural and farm enterprises along the local road, Kiltrustan National School and c.0.7km to the east of the application site. There are no pedestrian facilities along the stretch of road or substantial use of it by pedestrians or cyclists.

² NB This publication has been withdrawn (superseded).

Impact Assessment

- 7.5.118. Potential effects are examined under the following headings:
 - Do nothing Traffic levels likely to remain unchanged, quarry likely to close years earlier if no extension permitted.
 - Construction and Decommissioning Existing quarry operations already in place, so no construction stage effects. Decommissioning will be dealt with in a remediation plan. Restoration plan shows only minor proposals in which traffic generation is likely to be limited and not significant.
 - Operational stage Total weight of rock to be extracted = 6,300,000³. If removed in 20t loads would equate to c.43 loads/day over a project lifespan of 20 years [6,300,000/20 = 315,000 20t loads; = 315,000/20*365 = 43 loads/day]. It is stated that the quarry is unlikely to operate on this basis. Further, with use of some of the aggregate for other purposes, where load sizes differ, and seasonal fluctuations in traffic over the year, EIAR identifies a peak day for the purpose of traffic assessment.
 - Operational and maintenance traffic generated by the quarry in a peak day is estimated as:
 - Stone deliveries (250 loads).
 - Concrete deliveries (50 loads).
 - Block deliveries (20 loads).
 - Cement deliveries (3 loads).
 - Articulated lorries accessing the site, including operations such as the bitumen plant, batching plant, offices and workshop (27 loads).
 - Staff (20 per day).

[In total the above estimate adds up to 350 HGV deliveries a day and 20 staff movements]. The estimated volume of traffic is broken down in hourly intervals in Table 9-5, with a total of 760 vehicle trips over a 24 hour period.

³ Area 1 =1,527,187m³ Area 2 = 1,619,340m^{3.} Total volume of rock to be extracted = 3,146,527m³. Converted to tonnes, with $1m^3 = c.2$ tonnes in weight = 6,293,054m³.

- 7.5.119. It is acknowledged that traffic from the quarry is likely to make up a significant proportion of traffic on the local road. In order to assess likely effects, it therefore assesses the likely effect of traffic on the two closest junctions (described above).
- 7.5.120. In order to provide a robust, conservative assessment, the applicant's assessment of impact on junctions L1410/,L1405 (junction A) and L1410/R368 (junction B) (a) factors up the 2017 data to 2019 and design years 2025 and 2035 using TII guidelines (b) Adds predicted traffic from the quarry (above) to the factored up traffic already using the junctions (which includes existing quarry traffic), (c) splits traffic movements into arrivals and departures in proportion to existing traffic flows.
- 7.5.121. Capacity assessments for the two junctions are carried out for 2020 (baseline), 2025 and 2030 (Appendix 9.B). It concludes that for the design years 2025 and 2030 the junctions will continue to operate in capacity with a minimum available capacity of 62% (junction A, 2035) and 72% (junction B, 2035).
- 7.5.122. Due to the low usage of existing capacity at the local junctions the impacts on these are considered to be low or negligible. Given that the L1410 is rural and likely to have a low AADT rate, the significance of any change is likely to be High, which results in effects which are considered to be slight to not significant. It is also stated that the quarry extension will not result in a significant increase in traffic flow over what is presently agreed with the existing quarry.
- 7.5.123. Effects of severance (ability of pedestrians to cross the road) is considered to be slight adverse based on threshold for increase in traffic to cause severance and little use of the road be pedestrians. The risk of road traffic accidents are considered to be slight to not significant by virtue of absence of accident history on the local road serving the site and no significant increase in traffic. It is stated that the N5 may increase aggregate demand in the short term (and traffic), but that this is unlikely to be busier than at other peak times. Overall, as risk of traffic accidents is linked to number of movements, a slight to not significant effect is predicted. No impacts are predicted from driver delay (no waiting on L1410 to turn into site, no significant increase in traffic through junctions).

Mitigation Measures

7.5.124. Section 9.89 sets out mitigation measures for traffic, which have already been implemented at the site. Measures include staggered approach to HGVs leaving the

site at peak times, minimising dirt on the public road, hauling of materials between 730am and 6pm Monday to Friday and 8am to 2pm Saturdays.

Residual Impacts

7.5.125. No significant adverse residual impacts are predicted (Table 9-6).

Cumulative Effects

7.5.126. As the quarry is an extension of an existing operation, all of the operations including the bitumen plant, batching plant, offices and workshops have been considered in the assessment, with no proposal for a significant increase in traffic from the existing quarry development, out with normal company growth. New junctions with the N5 have been designed to accommodate existing quarry traffic. EIAR for N5 road project states that the Ballaghaderreen to Scramoge section will remove significant volume of traffic from the existing road network including the R368 and lead to higher safety standards than the existing N5 corridor and reduction in collisions.

Assessment

- 7.5.127. The applicant's impact assessment is predicated on there being no increase in traffic as a consequence of the development. Indeed this is the basis on which the application is brought forward that the extension areas provide for the continued operation of the quarry, not its expansion.
- 7.5.128. The assessment of likely effects of predicted peak day traffic movements is therefore a robust assessment of traffic effects in that it 'double counts' traffic movements arising on the site. Further, it demonstrates that junctions in the area of the site can accommodate the number of vehicle trips predicted (RFCs well below 1).
- 7.5.129. I note that the peak day hourly traffic (Table 9-5) predicts 66 HGV vehicles travelling through the junctions of the L1410/L1405 (junction A) and L1410/R368 (junction B) between 8am and 9am This is substantially in excess of the HGV trips observed during the 2017 traffic survey i.e. 34 HGVs moving through the junctions at the same time.
- 7.5.130. Further, the extraction of material from the proposed extension area, over a period 20 years, with the quarry operating 5.5 days a week would equate to 55 20t HGV trips/day, calculated as follows:

- 6,300,000 tonnes available for extraction.
- If removed in 20t loads would equate to 315,000 HGV loads in total and 15,750 loads per year.
- 15, 750 HGV loads per year would equate to 55 HGV loads per day, based on a working week of 5.5 days over 52 weeks (15,750/(5.5x52=286)). This represents a small proportion of the peak load of the 350 loads/day generated by the quarry (700 HGV trips/day).
- 7.5.131. I note that in PA ref. 08/747 the EIAR makes reference to c.300 truck visits a date to the site as a whole. The traffic movements referred to are in excess of previous levels, but they are based on peak flows and worst case scenario. Again if the Board are minded to grant permission and in the interest of clarity I would recommend a condition that requires, as before, the applicant to provide details of material leaving the site and HGV trips associated with this.
- 7.5.132. Notwithstanding the foregoing, the proposed development will facilitate on going quarry operations and associated processing on the subject site. Traffic movements associated with the development as a whole will have a significant adverse effect on the L1410, for example, with a HGV trip generated by the site every minute in peak hours. The effect of the development will be to extend the period of operation of the quarry and therefore the timescale over which the effects of HGV movements on the local road will arise (L1410) and to a lesser extent in the wider road network. The proposed development would therefore result in a significant adverse effect on material assets (amenity and shared use of the L1410), directly and in combination with other traffic from the quarry. As discussed previously, if the board are minded to grant permission for the development, I would recommend that applicant to be required to develop a climate action plan for the site which deals with the reduction in greenhouse gas emissions and this may have some positive effects on HGV traffic.

Cultural Heritage

7.5.133. Chapter 11 of the EIAR deals with cultural heritage. It considers the effects of the development on cultural heritage, archaeology and architecture. The assessment is based on desk study and field survey (2019).

Baseline

7.5.134. There are no protected structures within the site. Two recorded monuments have been removed from the landholding, RO023-065 (Ringfort-rath) and RO023-066 (Ringfort-unclassified), the first to the south and the second to the north of the existing working areas. No other monuments of archaeological or historical potential are identified in the confines of the quarry or proposed extension areas. There are over 20 archaeological monuments within 2km of the site. Six of these lie relatively close to the site, three to the east of the existing quarry, 2 to the east and south of the proposed extension area and one to the northwest of the quarry (Figure 11.3 and Table 11.1).

Impact Assessment

- 7.5.135. Under the do nothing scenario, it is stated that there would be no additional impacts on cultural heritage as the land would remain in its current state.
- 7.5.136. The EIAR predicts that the development will have no direct or any indirect impacts on any known archaeology, cultural heritage or buildings of heritage interest. It is acknowledged that the development may disturb previously unknown deposits or artefacts without preservation by record taking place in the unextracted green field area.
- 7.5.137. Archaeological testing was completed in December 2020 (Archaeological Assessment, 2020). It comprises a description of the receiving environment, based on the archaeological and historical background of the area, previous archaeological investigations, cartographic sources and aerial photography, and provides details of archaeological test excavations, 21 test trenches, across the two extension areas. The testing was carried out under licence from the Department of Housing, Local Government and Heritage in consultation with the National Museum of Ireland. The testing identifies no features, sites or objects of archaeological significance in the course of the test excavations and recommends no further archaeological work (Appendix 11.1). The report identifies some difficulties in carrying out test trenching arising from health and safety matters (slope) and presence of an unmarked track. The difficulties are not identified as impacting on the conclusions of the report.
- 7.5.138. The EIAR refers to archaeological assessment work carried out for the N5 and that section of it in proximity to the appeal site (townlands of Cregga and

Cuilrevath). The assessment found no recorded monuments of the route in these townlands. No cumulative impacts are therefore predicted.

Mitigation and Residual Impacts

7.5.139. Mitigation measures are referred to in section 11.28 and 11.35 of the EIAR, however no measures are actually proposed. No residual impacts are identified or reinstatement measures required.

<u>Assessment</u>

7.5.140. Having regard to the foregoing, in particular the absence of features of cultural heritage, archaeology and architecture interest within the appeal site and the archaeological assessment of proposed extension areas, I am satisfied that there will be **no significant direct, indirect or cumulative impact on cultural heritage**.

Landscape

7.5.141. Chapter 12 deals with impacts on landscape (changes in landscape) and the visual effects (appearance of changes) of the development. The assessment has been carried out having regard to published guidelines, desk top study and site visits.

Baseline

7.5.142. The EIAR refers to the rural context for the development, location of extension areas joining the existing site and proximity of N5 Ballaghaderreen to Scramoge Road development project. The appeal site lies in LCA 4 – Kilglass Drumlin Landscape, Roscommon CDP with the area characterised by low undulating drumlins which are well drained and interspersed with a number of large lakes. The landscape is considered to be of Very High Value due to its tourist amenities including fishing, boating and scenic views. Designated scenic routes and views are removed from the appeal site. Forces of change include single rural dwellings, extent of afforestation (increasing) and 32km length of N5 realignment (with projected increase in demand for quarrying). The EIAR states that the existing quarry is well screened by existing tree lines, landscaping works carried out and the quarry office buildings. Potential effects may arise from changes to ridgelines. *Impact Assessment*

ABP-311614-22

- 7.5.143. Landscape. Figure 12.3 provides details of 8 no. viewpoints of the quarry, from the public road to the east of the site and the regional road to the west of it.
- 7.5.144. Visual effects. The EIAR defines a visual envelope of 2km within which the quarry is visible or partially visible (Figure 12.12). Beyond this boundary, visual effects are considered to be negligible. Sensitive receptors are stated to be identified within this radius with the viewpoints referred to in the landscape assessment providing representative photos of the site. The EIAR states that the higher worked areas including quarry faces are apparent in the landscape from the graveyard, viewpoint 1. The proposed extension will be visible from viewpoints 6, 7 and 8 (R368), but these will be offset by mitigation and with the N5 built between the R368 and the quarry.
- 7.5.145. Cumulative impacts. It is stated that due to the nature of quarrying operations there will inevitably be an impact on the surrounding landscape and the view from the proposed N5, but these will be offset by mitigation.

Mitigation

- 7.5.146. The EIAR states that the landscape and visual effects of the development will be mitigated by site layout/planning, planting, utilisation of existing landscape features, berms along the southern side of the quarry and progressive site restoration. It is stated that the proposed N5 will not have a view of the quarry due to the proposed berm along the southern side of Area 2 which will be constructed to control flyrock from the quarry and act as a visual and noise barrier. The EIAR refers to a landscape plan which shows the proposed planting and berms that are going to be developed to reduce visual impact of the quarry extension (Appendix 12-1). In this Appendix is the Restoration Report and series of drawings indicating sections through the site and level to which the site will be restored. It also provides details of the berm along the south of the site and slopes within the restored quarry. Otherwise there is no indication of any further bunds, planting or phased restoration.
- 7.5.147. The Restoration Report provides conflicting information on the future use of the restored site e.g. mainly agricultural and forestry use, left alone the quarry landscape can return to a rich zone of biodiversity, to restore ecological balance and produce self-sustaining plant and wildlife habitats. The report states that final reinstatement will be initiated when extraction is completed, with the quarry filled with

largely imported inert material and surfaced with sub soil and top soil and used to grow 'grass and a sustainable planting arrangement'. Fill will be imported under the applicant's Waste Recovery Facility Licence for inter material (Appendix A).

Residual Impacts

7.5.148. Residual impacts, during the operation of the quarry are summarised on page 19, section 12, with no significant landscape or visual impacts are predicted, largely due to the absence of views of the quarry from the surrounding road network, due to its depth, southern berm and location of the N5 between the site and sensitive receptors along the R368. The EIAR also refers to the ability of the drumlin Lakeland landscape to absorb development, due to its visual complexity.

<u>Assessment</u>

- 7.5.149. Having regard to my inspection of the appeal site it is evident that the appeal site lies in a rural drumlin landscape with the existing quarry is cut into a drumlin, Greywood Hill. The location of the quarrying in the landscape is referred to in the Roscommon County Council's Landscape Assessment Study which states that '*In terms of quarrying, there is a very large deep excavation type quarry on hills to the west, but this does not create a significantly adverse impact on the quality of view from either of the Scenic Route.*' Further, under key recommendations it states '*The rock cutting on the hill to the west at Greywood Hill is part of the local landscape character. However, where further applications for quarrying arise decisions should have regard to national quarrying guidelines including potential impact on the landscape'.*
- 7.5.150. The applicant's assessment of likely visual and landscape effects provides little evidence to support its assertions of absence of effects e.g. analysis of zone of visual intrusion, photomontages of likely effects landscape and visual effects.
- 7.5.151. Notwithstanding this, the proposed development will extend quarrying west and south. The topography of the Hill may change when viewed from the public road network to the west and southwest of the site, however, views of faces are unlikely with their orientation relative to public roads and rising topography in the foreground or intervening topography, including from the proposed N5. The proposed berm to the south of the site, alongside the N5 will further screen views of southern extraction area from the N5 and further west along the R368.

- 7.5.152. I am satisfied therefore that the proposed development would not have a significant impact on landscape character or result in significant visual effects in the area of the site. However, if the board are minded to grant permission I would recommend that prior to the commencement of development, this be subject to condition requiring a detailed landscaping plan for the site indicating locations of existing and proposed berms, planting of berms, locations where overburden and soils will be stored as the site as it is worked and arrangements for the progressive restoration of the site to beneficial ecological after uses (the site already imports inert fill). As stated elsewhere in this report, the landscape plan should be integrated with plans compensatory planting in the wider landholding over the lifetime of the project.
- 7.5.153. Subject to the forgoing, I am satisfied that the subject development will not result in direct, indirect and cumulative significant landscape effects as a consequence of the development.

Interactions

7.5.154. Chapter 13 of the EIAR addresses likely interactions between effects. I am satisfied that the key interactions have been identified and addressed in the EIAR. They are also addressed also in this report.

Environmental Management

7.5.155. In accordance with the EPA's Guidelines on Environmental Management in the Extractive Industry, I would recommend that should the Board decide to grant permission for the development, the quarry be required implement an Environmental Management System to include the full suite of mitigation measures and a comprehensive ongoing environmental monitoring system over the lifetime of the development and to demonstrate compliance with any conditions attached to planning permissions.

7.5.156. **Reasoned Conclusion on the Significant Effects**

7.5.157. Having regard to the examination of environmental information contained above, and in particular to the EIAR and appeal documentation, and the submissions from the planning authority, prescribed bodies and observers in the course of the application, it is considered that the main significant direct, indirect and cumulative effects of the proposed development on the environment are as follows:

- Population and human health Medium term positive direct and indirect effects on the local economy. Significant adverse effects on users of the L1410, nearby residents and sensitive receptors (including Kiltrustan national school) with on-going substantial HGV movements arising from the site and facilitated by the extraction extension areas. These effects will be mitigated by measures to reduce dust and dirt on the public road and stagger HGVs leaving the site in busy periods.
- Biodiversity Short to long term positive effects on biodiversity, with the implementation of recommended conditions for net biodiversity gain over the operational life of the quarry and restoration to beneficial ecological after-use.
- Land, soils, water, air and climate On going significant effects on the public road network arising from HGV traffic, in particular with emissions to air (dust, noise and greenhouse gases). These effects can be mitigated by measures to manage HGV movements on the local road, the environmental effects of traffic on the road and conditions which require the applicant to adopt a climate change action plan for the site with measures to reduce energy use and GHG emissions.
- Material Assets, cultural heritage and the landscape As stated, for the duration of the development, the proposed development will contribute ongoing high levels of HGV movements on the L1410. The extension areas have potential to give rise to significant landscape and visual effects. These can be mitigated by contextual topography, working at depth, existing and proposed bunding and conditions requiring a landscape plan which provides details of arrangements for temporary storage of soils, planting and progressive restoration.
- 7.5.158. Notwithstanding the conclusion reached in respect of the inability of the proposed measures to fully mitigate the impact of the development, it is considered that the environmental effects would not justify a refusal of planning permission having regard to the overall benefits of the proposed development.

7.6. Appropriate Assessment

Screening

- 7.6.1. The planning application for the proposed development does not include a screening report. Instead a NIS is submitted following the PAs request for further information. This screening assessment is therefore carried out *de-novo*.
- 7.6.2. <u>Test of likely significant effects</u>. The project is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the development is likely to have significant effects on a European site(s). The proposed development is examined in relation to any possible interaction with European sites to assess whether it may give rise to significant effects on any European Site.
- 7.6.3. Description of development. The proposed development is described in Chapter 3 of the EIAR and in section 2 of the Natura Impact Assessment (2021). It is also described in section 2.0 of this Report. In summary, the development comprises the lateral extension of the quarry to the west and to the south, with the extraction of limestone taking place by blasting above the water table. There will be no change to other processing operations carried out on site. Surface water will be managed on site and directed through existing settlement ponds for discharge under licence to an unnamed stream to the east of the site. This stream discharges into Grange Lough to the east of the site. Construction of the N5 road project is proposed to the south/west of the quarry alongside extension area 2 to the south of the existing quarry. Having regard to the characteristics of the proposed development, the following issues are considered for examination in terms of implications for likely significant effects on European sites:
 - Impacts on surface or groundwater, where there is potential connectivity to European sites.
 - Habitat loss/fragmentation and disturbance of species, during construction and operation, where there is potential to affect species of conservation interest that are associated with European sites.
 - Potential for adverse effects on European sites by way of air pollution arising on site (from all activities including asphalt plant).

- 7.6.4. <u>Submissions and observations</u>. In the course of the planning application and appeal, the following concerns were raised in respect of appropriate assessment:
 - Inadequate information and lacunae to conclude absence of effects on European sites (including in respect of impacts on surface and groundwater).
 - Inadequate assessment of cumulative effects (other processes and N5 construction).
- 7.6.5. <u>European sites</u>. The development site is not located in or immediately adjacent to a European site. The closest European site is Annaghmore Lough (Roscommon) SAC, which lies c.1.5km to the south west of the site. Other sites lie within 15km of the appeal site. A summary of these sites are set out below. Where a possible connection between the development and a European site has been identified, these sites are examined in more detail.

European Site (code)	List of Qualifying interest /Special conservation Interest	Distance from proposed development (Km)	Connections (source, pathway receptor)	Considered further in screening. Y/N
Annaghmore Lough (Roscommon) SAC (001626)	Alkaline fens [7230] Vertigo geyeri (Geyer's Whorl Snail) [1013]	c.1.5km (W)	Surface water, with southern part of the site falling within the same sub- catchment as SAC, WFD Sub- Catchment Scramoge_SC_010. Groundwater, with appeal site and Lough falling within the same groundwater body, Carrick on Shannon IE_SH_G_048. Potential for emissions from air.	Yes.
Mullygollan Turlough SAC (000612)	Turloughs [3180]	c.13kkm (SW)	SAC and appeal site fall within the same groundwater body (as above) but at distance from the site. Potential for emissions from air.	Yes.
Clooneen Bog SAC (002348)	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Bog woodland [91D0]	c.13km (E)	No surface water connectivity. SAC and appeal site fall within the same groundwater body (as above) but at distance from the site. Potential for emissions from air.	Yes.
Ballykenny- Fishertown Bog SPA (004101)	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	c.13km (E)	Hydrological connection from site to SPA via Grange Lough, Boderg Lough, Lough Bofin and River Shannon but at distance (c.25km by water).	Yes

Table 1: European Sites within possible Zone of Influence

			Greenland White-fronted Gosse has a range of 15km to 20km, with the site falling within this distance. Potential for emissions from air.	
Lough Forbes Complex SAC (001818)	 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150] Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] 	c.13km (E)	Hydrological connection from site to SPA via Grange Lough, Boderg Lough, Lough Bofin and River Shannon but at distance (c.25km by water). Potential for emissions from air.	Yes.

- 7.6.7. <u>Identification of likely effects</u>. There is no direct loss of habitat for any
 European site as a consequence of the development. Potential indirect effects arise from:
- 7.6.8. Changes to surface water flowpaths and groundwater regime. The appeal site sites across two surface water sub catchments. Annaghmore Lough SAC lies c.1.3km to the south west of the appeal site and redirection of surface water from the south west of the site (Scramoge_SC_010 sub-catchment) to the north east (Owenur_SC_010) could have implications for the SAC.
- 7.6.9. The appeal site is underlain by a substantial groundwater body (Carrick on Shannon GWB administrative boundary) and total aquifer (extent of water body). Groundwater plays a role in maintaining the habitats and Special Conservation Interests of European sites in the area of the site. The NPWS Conservation Objectives Report for Annaghmore Lough SAC states that the fen habitat at Annaghmore Lough is maintained by its high groundwater level. Similarly, Mullygollan Turlough, albeit at some distance from the site, is maintained by its hydrological regime which includes groundwater contribution, flood water and a stream (NPWS Conservation Objectives Report) and the lowering of the ground water can have significant effects on raised bogs (a qualifying interest of Clooneen Bog).
- 7.6.10. The existing quarry and proposed extension areas are worked above water table, with no direct effects on groundwater by way of pumping/lowering the water table.
 The quarry abstracts c.450m³ day from a well on site.
- 7.6.11. The HH Assessment estimates the proportion of surface water and groundwater at the site (i.e. falling as rain and not percolating to ground as flows are redirected to surface water and well water), as a percentage of (a) the Carrick on Shannon GWB annual recharge amount to groundwater from rain falling on its catchment Groundwater Body and (b) the total aquifer area's annual recharge to groundwater from rainfall, having regard to the Discharge Licence volume limit and abstraction from well on site of 1,500m³/day. It estimates that the quarry will intercept/consume 0.1% of the annual recharge amount to the whole aquifer. It concludes that the quarry will therefore have an inconsequential effect on groundwater, with reference to WFD

Guidance documents, which deems abstractions of <2% having no potential for adverse effects on groundwater (Table 1 and Table 4, HH Assessment). This conclusion does not seem unreasonable, on the basis of the scientific information presented, and would rule out effects on groundwater dependent terrestrial ecosystems including Annaghmore Lough SAC and the more distant Mullygollan Turlough SAC and Clooneen Bog SAC.

7.6.12. With regard to cumulative effects, the appeal site is separated from Annaghmore Lough by the N5 (see Figure 5, HH Assessment). In the HH Assessment, it is stated that the N5 has been designed to intercept and discharge surface water back to ground with no potential for adverse effects on Annaghmore Lough SAC. I note that the Board has granted permission for the N5 and considered that it would not have an adverse effect on Annaghmore Lough SAC. As the N5 sits between the proposed development and the Lough and will intercept overland flows to the Lough, I am satisfied therefore that the development would not have an adverse cumulative effect on the Lough as a consequence of the development an N5.

7.6.13. Emissions to water.

- Groundwater. The appeal site is connected to ground water via the sump in the quarry. Pollution arising in the quarry e.g. from accidental spills, could make its way to groundwater directly via the quarry sump, with potential for downstream effects on groundwater dependent ecosystems. Discharges through the quarry floor are unlikely given absence of karst features in the quarry floor, solid pan of limestone and low level of hydraulic conductivity (section 2 HH Assessment). Annaghmore Lough lies within c.1.3km of the site and is more at risk. Other groundwater dependent sites, Mullygollan Turlough SAC and Clooneen Bog SAC are at significant distance from the site (>13km) and with dissipation, settlement and dilution, significant effects on groundwater quality are highly unlikely.
- Surface water. Surface water from the site is discharged to the unnamed stream to the east of the site which is hydrologically connected to downstream European sites, Lough Forbes SAC and Ballykenny-Fishertown Bog SPA. At >13km from the appeal site and c.25km by water, with the effects of

settlement, dilution and dissipation, adverse effects on surface water quality are highly unlikely.

- 7.6.14. Emissions to air. Dust deposition from the quarry is likely to be most significant within 100m to 200m of the site. Further, dust monitoring has indicated levels well below the 1000mg/m²/day likely to have a significant effect on sensitive ecosystems. Impacts on European sites which are significantly removed from the site, as a consequence of dust, can therefore be ruled out. Emissions from the asphalt plant may give rise to adverse effects on air quality.
- 7.6.15. It is stated in the application documentation that the asphalt plant operates within emission limits and within a wider rural background where pollutants are significantly below threshold value. The maintenance of the dust filter system is identified in the EIAR for the original asphalt plant (PA ref. 08/474) as the main mitigation measures. Consequently, aspect of the development is conservatively carried forward for further assessment, with the potential for adverse effects on European sites in the immediate area of the site and to the east of it, Annaghmore Lough SAC, Clooneen Bog SAC, Mullygollan Turlough SAC, Lough Forbes Complex SAC and Ballykenny-Fishertown Bog SPA.
- 7.6.16. Habitat fragmentation. It is stated the applicant's NIS that during the winter months Greenland White-fronted Goose shelter in peatland habitat which is present in Ballykenny-Fishertown Bog SPA. Further the species will forage in low intensity agricultural grasslands. With the removal of agricultural grassland to facilitate the proposed development, this could result in loss of habitat and fragmentation of habitat directly as a result of the development and in conjunction with the construction of the N5 if there is further loss of habitat with the road project. Consequently, the potential for effects on Ballykenny-Fishertown Bog SPA are conservatively carried forward for further assessment.
- 7.6.17. *Noise and vibration*. Construction and operational noise, directly from the proposed development and in conjunction with the construction of the N5, may also impact on Greenland White-fronted Goose if it uses the agricultural fields of the appeals site for foraging (i.e. by way of disturbance).

7.6.18. <u>Mitigation</u>. No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise.

Stage 1 – Screening Determination

- 7.6.19. Potential for significant effects on the features and interests of the following sites cannot be screened out.
 - Annaghmore Lough SAC, No. 001626 (pollution of groundwater, air pollution).
 - Lough Forbes Complex SAC, no. 001818 (air pollution).
 - Ballykenny-Fishertown Bog SPA, No. 004101 (air pollution, habitat loss/fragmentation and disturbance).
 - Mullygollan Turlough SAC (air pollution).
 - Clooneen Bog SAC (air pollution).
- 7.6.20. Accordingly, a Stage 2 Appropriate Assessment is required to determine the potential of the proposed development to adversely affect the integrity of these sites.

Appropriate Assessment

- 7.6.21. <u>The Natura Impact Statement.</u> The planning application includes a 'Natura Impact Statement' (2021). It examines the likelihood of impacts of the proposed development on Natura 2000 sites, considering the conservation objectives of the site and their ecological structure and function. The NIS concludes that Lough Forbes Complex SAC and Ballykenny-Fishertown Bog SPA are the only sites likely to have hydrological and ornithological connectivity with the proposed development. However, Clooneen Bog SAC is also considered in line with the conservation objectives for Lough Forbes SAC. The report determines that the proposed development will not have significant adverse effects on the conservation objectives or integrity of the Natura 2000 sites alone or in combination with other plans or projects.
- 7.6.22. Having reviewed the documents and submissions and consultations, including the applicant's HH Assessment, Air Pollution Assessment and NIS Screening Report for the Asphalt Plan, I am satisfied that the information available allows for a complete assessment of any adverse effects of the development, on the conservation

objectives of the European sites carried forward for assessment, alone and in combination with other plans and projects:

- 7.6.23. <u>European Sites</u>. A brief description of each European site subject to AA, and their conservation objectives, is set out below:
 - Lough Forbes Complex SAC. This SAC is centred around Lough Forbes, a lake that has formed by a broadening of the River Shannon. The site includes the lake, a series or raised bogs, callow grasslands and a variety of other aquatic and terrestrial habitats to the west of Newtown Forbes. Conservation interests are natural eutrophic lakes, active raised bog, degraded raised bog, depressions on peat substrates and alluvial forests (see Table 1 above). Conservation objectives are to restore to favourable conservation conditions the habitats identified as conservation interest, by reference to a defined list of attributes and targets.
 - Ballykenny-Fishertown Bog SPA. This SPA has a similar boundary to Lough Forbes SAC. It is located on the border between counties Longford and Roscommon. It is centred around Lough Forbes and has well developed swap vegetation and displays natural transitions to seasonally flooded grassland, marsh and raised bog. At the time of its designation the site was used by part of the Kilglass and Forbes Greenland White-fronted Goose population. The NPWS Site Synopsis states that the geese appear to have abandoned the peatland site in favour of grassland sites elsewhere. Conservation objectives are to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interest for the SPA, Greenland White-fronted Goose.
 - Annaghmore Lough SAC. Annaghmore Lough lies at the centre of a network of small lakes in a rolling, drift-covered landscape. The shoreline slopes gently to the lake and these low-lying margins are extensively flooded in winter. In summer, when water levels recede, substantial areas of this shallow calcareous lake dry out, leaving flat expanses of exposed marl. A smaller, less calcareous lake occurs to the south of the site. The site is of interest for its Alkaline Fens and Geyer's Whorl Snail. Conservation objectives are to

maintain or restore the favourable conservation condition of its features of interest by reference to defined attributes and targets.

- Mullygollan Turlough SAC. This SAC is a turlough which has a high water table in the summer, supporting fen vegetation over peat in the centre and more typical turlough vegetation around the edges. Qualifying interest turlough habitat.
- Clooneen Bog SAC. Clooneen Bog lies approximately 3 km south-east of Roosky in Co. Longford on the east bank of the River Shannon, just north of Lough Forbes. The site comprises areas of high bog, including bog woodland and cutover bog, and is bounded by a mineral ridge to the east and agricultural fields to the north. Although it would have originally adjoined the River Shannon to the west and Lough Forbes to the south, it is now separated from these by a road and agricultural fields. Conservation objectives are to maintain or the favourable conservation condition of its feature of interest, turlough, by reference to defined attributes and targets.
- 7.6.24. <u>Aspects of Proposed Development.</u> Aspects of the proposed development that could adversely affect the conservation objectives of European sites are:
 - Emissions to water (ground).
 - Loss or fragmentation of habitats (grasslands).
 - Noise and vibration (if mobile species of CI affected).
 - Air pollution (habitats).
 - Cumulative effects (with other projects, plans and programmes).
- 7.6.25. <u>Emissions to Water.</u> The quarry sump has groundwater in it (section 3.1 HH Assessment). Activities on site may give rise to direct pollution of ground. The application refers to the surface water management system which directs all surface water the settlement lagoons prior to discharge. Further, monitoring of all groundwater in the area of the site shows no pollution of by way of sedimentation or hydrocarbons (Table 3, HH Assessment). It could be inferred from this that surface water is directed away from the sump. However, if the Board are minded to grant permission I would recommend a condition requiring the details of the surface water management system be provided to demonstrate how waters are directed away from

the sump at all times. Subject to this arrangement I am satisfied that there is no risk to groundwater quality or therefore to adverse effects on European sites which share the same groundwater body, notably Annaghmore Lough SAC as the nearest site.

- 7.6.26. Loss or fragmentation of habitats. It is stated in the NIS that Greenland Whitefronted Goose forage in low intensity agricultural grassland. In contrast, improved agricultural grassland is present on the appeal site which is not considered to be of low intensity due to the lack of species diversity. Given this and the distance of the site from the SPA and the current level of disturbance, it is considered in the NIS that Geese are unlikely to utilise the site or therefor result in any significant adverse effects to the integrity of Ballykenny-Fishertown Bog SPA.
- 7.6.27. This conclusion seems reasonable given the habitat present on site, the absence of any data by any party to indicate that the grasslands are or have been used by Greenland White-fronted Goose in the past. I am satisfied therefore that there is no significant risk of adverse effects on Ballykenny-Fishertown Bog SPA as a consequence of loss or fragmentation of habitats or disturbance.
- 7.6.28. <u>Air pollution</u>. In the appeal submissions, the applicant includes in appendix 3 an Appropriate Assessment Screening Report for the Replacement Asphalt Plant. The replacement asphalt plant has been fully operational since 2020 and is the subject of a new Air Emissions Licence granted by Roscommon County Council. The report identifies Annaghmore Lough SAC, Mullygollan Turlough SAC, Clooneen Bog SAC, Lough Forbes Complex SAC and Ballykenny-Fishertown Bog SPA as European sites within the influence of the project arising from arising from, amongst other things, discharges to air (the plant does not use or discharge wastewater).
- 7.6.29. The Screening Report sets out emission limits specified in the Air Pollution Licence AP 01-18. These are in respect of NO_x (as NO₂), particulates and SO₂, with the new plant providing best available techniques to reduce emissions to air. Monitoring of the plant indicates emission levels well below specified limits (section 4.4.3, Screening Report and on page 15 and Appendix 8.2 of the EIAR). Weather data confirms that wind blow is mainly from the west, south and south east and not towards Annaghmore Lough. Further, predicted dry deposition rates at nearest European sites (Appendix 1, AA Screening Report) are well below critical levels for protection of vegetation/habitats. The Screening Report refers to excessive

background nitrogen deposition levels at Lough Forbes Complex SAC and Clooneen Bog SAC, with the raised bog habitats particularly sensitive to nitrogen deposition, with conservation objectives for the European sites being undermined. However, as the asphalt plant is north of these sites, contributes extremely low levels of pollutants to background levels and limited wind blow in the direction of the SACs the Screening Report considers that the likelihood of significant effects on European sites as a consequence of air pollution is beyond reasonable doubt.

- 7.6.30. Having regard to the foregoing, in particular the scientific information and the very modest contribution that the asphalt plant makes to background levels and the controls placed on it via the Air Pollution Licence, I am satisfied that the proposed development, in combination with other activities on site including the asphalt/bitumen plant will not directly or indirectly give rise to the risk of significant adverse effects on European sites in the area of the site by virtue of air pollution. This conclusion is reached in the absence of any inference regarding the planning status of the plant.
- 7.6.31. <u>Cumulative Effects</u>. In addition, Chapter 8 of the NIS considers the likely cumulative effect of the development with other plans and projects that govern or are situated in the area of the site. The assessment includes the National Planning Framework, Regional Spatial and Economic Strategy for the Northern and Western Region and County Development Plan. All of these policy documents were subject to strategic environmental assessment with no potential for significant effects on European sites. Projects occurring in the area of the site are listed in Table 8-1 (5km of the development). It includes two wind turbines, domestic development and past permissions in respect of the quarry (bitumen plant, batching plant), agricultural development and upgrading of the N5. The proposed development in conjunction with the small scale developments are unlikely to give rise to significant effects on European sites. The quarry related projects and effects of N5 development have been considered already in this assessment with no potential for significant effects on European sites.
- 7.6.32. Integrity Test. Following the appropriate assessment and the consideration of mitigation measures, I am able to ascertain with confidence that the project would not adversely affect the integrity of Lough Forbes Complex SAC, Ballykenny-Fishertown Bog SPA, Annaghmore Lough SAC, Mullygollan Turlough SAC or

ABP-311614-22

Inspector's Report
Clooneen Bog SAC in view of the Conservation Objectives of this site. This conclusion has been based on a complete assessment of all implications of the project alone and in combination with plans and projects.

Appropriate Assessment Conclusion

- 7.6.33. The proposed development has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may Lough Forbes Complex SAC, Ballykenny-Fishertown Bog SPA, Annaghmore Lough SAC, Mullygollan Turlough SAC and Clooneen Bog SAC. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of the site, in light of their conservation objectives.
- 7.6.34. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a full and detailed assessment of all aspects of the proposed development including mitigation measures and monitoring in respect of environmental effects and there is no reasonable doubt as to the absence of adverse effects.

8.0 **Recommendation**

8.1. I recommend that permission for the development be granted, subject to conditions.

9.0 **Reasons and Considerations**

Having regard to:

- The policy context for the development which recognises that quarrying and the extractive industry has an important role in the economy of the county and that it is an important source of employment,
- The established history of quarrying at the site,
- The location of the quarry in a rural area and the location of the extension areas at distance from sensitive receptors,
- The nature, scale and design of the proposed development which comprises the lateral extensions and utilisation of existing processing plant,
- The detailed survey work which has been carried out in respect of the water environment and the risk of air pollution from the asphalt plant on the site,
- The proposed means to mitigate potential impacts and the arrangements for monitoring,
- Conditions of the permission to mitigate potential effects of the development,
- The acceptability of residual environmental impacts and the lack of adverse effects on Natura 2000 sites,

It is considered that the proposed development would not seriously injure the residential or visual amenities of the area or property in the vicinity of the site, or be prejudicial to public health or biodiversity and would be acceptable in terms of traffic safety. The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

1.	The development shall be carried out and completed in accordance with
	the plans and particulars lodged with the application, as amended by the
	further plans and particulars submitted on the 1 st day of July 2021, except
	as may otherwise be required in order to comply with the following
	conditions. Where such conditions require details to be agreed with the
	planning authority, the developer shall agree such details in writing with the
	planning authority prior to commencement of development and the
	development shall be carried out and completed in accordance with the
	agreed particulars.
	Reason: In the interest of clarity.
2.	The grant of permission shall be for a period of 15 years from the date of
	this Order. At the end of this period, the quarry use shall then cease and
	all related structures removed and remedial works including restoration
	works, in accordance with the general principles set out in the application,
	shall be carried out, unless, before the end of that period, planning
	permission shall have been granted for the continuance of quarrying for a
	further period. The site restoration works described in the application shall
	be completed within two years of the cessation of quarrying on the site.
	Reason: In the interest of visual amenity.
3.	Extraction depth shall not exceed -50mOD as per Drawing No. PL-1623-
	01-010 Rev D Proposed Land Sections and at all times extraction shall
	take place above the water table.
	Reason: In the interest of clarity.
4.	Prior to the commencement of development, a site layout plan shall be
	submitted to the planning authority indicating the location of all existing
	structures on the subject site.
	Reason: In the interest of clarity.
5.	Prior to the commencement of development, detailed arrangements shall
	be submitted for written agreement regarding the site's internal surface

	water management system and means to direct surface water flows away
	from the groundwater sump at all times.
	Reason: In the interest of public health and biodiversity.
6.	Prior to the commencement of development, the applicant shall submit
	detailed arrangements for written agreement with the planning authority in
	respect of:
	(a) The removal of soils from the extraction area and the arrangements
	for the storage of these soils, berms to be created and associated planting,
	(b) The phased restoration of the site, as it is worked, to beneficial
	ecological after uses. This phased restoration shall be set out in a Site Restoration Plan.
	(c) Arrangements for the provision and management of compensatory
	habitat within the landholding, for the lifetime of the quarry, as per
	'Biodiversity Net Gain Good Practice Principles for Development – A
	Practical Guide, CIEEM'. These arrangements shall be integrated
	with the Site Restoration Plan.
	Reason: In the interest of biodiversity.
7.	Prior to the commencement of development, a Climate Adaption Plan shall
	be submitted to the planning authority for written agreement. It shall
	identify measures to reduce energy use and greenhouse gas emissions at
	the site, an assessment of the vulnerability of the project to climate change
	and measures to address these vulnerabilities.
	Reason: In the interest of biodiversity.
8.	a) Mitigation and monitoring measures outlined in the Environmental
	Impact Assessment Report, the Appropriate Assessment Screening
	Report, Hydrological and Hydrogeological Assessment and
	associated documents submitted with this application, shall be
	compiled into a single Schedule of Monitoring and Mitigation
	Measures and submitted to the planning authority. These measures

		shall be carried out in full, except where otherwise required by conditions attached to this permission.
	b)	The Schedule shall be included in an updated Environmental Management System (EMS) and an updated Site Specific Environmental Monitoring Plan (EMP) which shall be submitted to and agreed in writing with the planning authority prior to re- commencement of the development.
	c)	The EMS and EMP shall be integrated with the discharge licence for the facility (WP-04-01) and Air Pollution Licence (AP 01-18) and any subsequent amendments to these, and shall include arrangements for monitoring emissions to water, air, noise, dust, HGV movements, phased restoration and monitoring of compensatory habitat. It shall specifically include details of the internal water management system and arrangements to direct polluted waters away from the quarry sump at all times.
	d)	The development shall be operated and managed in accordance with the agreed EMS required under (a) above.
	Reaso ameni	on : In the interest of protecting the environment and the residential ities of property in the vicinity and in the interest of public health
9.	a) b)	The developer shall monitor and record groundwater, surface water flow, noise, ground vibration, and dust deposition levels at monitoring and recording stations, the location of which shall be agreed in writing with the planning authority prior to commencement of development. Monitoring results shall be submitted to the planning authority at agreed intervals for groundwater, surface water, noise and ground vibration. This shall include at least dust monitoring on a monthly basis, groundborne vibration and air overpressure for each blast and noise surveys on a quarterly basis. On an annual basis, for the lifetime of the facility (within two months of each year end), the developer shall submit to the planning
		authority five copies of an environmental audit. Independent

		environmental auditors approved of in writing by the planning
		authority shall carry out this audit. This audit shall be carried out at
		the expense of the developer and shall be made available for public
		inspection at the offices of the planning authority and at such other
		locations as may be agreed in writing with the authority. This report
		shall contain:
		i. A written record derived from the on-site weighbridge of the
		quantity of material entering and leaving the site for all operations.
		This quantity shall be specified in tonnes. The information shall be
		submitted to the planning authority as part of the annual
		environmental audit and shall be made available for future planning applications in respect of the site.
		ii. An annual topographical survey carried out by an independent qualified surveyor approved in writing by the planning authority. This survey shall show all areas excavated, depth of excavation, those areas being actively managed for biodiversity gain and restored.
		iii. A written record of all complaints, including actions taken in
		response to each complaint.
	c)	All incidents where levels of noise, dust or emissions to water
		exceed the levels specified in this permission shall be notified to the planning authority within two working days.
	ط)	Following submission of the sudit or of such reports, or where such
	u)	insidents assure the developer shall experiments of where such
		thet the planning outbority may impose in writing in order to bring the
		that the planning authority may impose in whiting in order to bring the
		development in compliance with the conditions of this permission to
		further develop the quarry.
	Re	eason: In the interest of protecting residential amenities and ensuring
	as	sustainable use of non-renewable resources.
10.	The q	uarry, and all activities occurring therein, shall only operate between
	0700	hours and 1900 hours, Monday to Friday and between 0700 hours
	and 1	400 hours on Saturdays. No activity (e.g. loading, movement of

	machinery or material etc.) shall take place outside these hours or on
	Sundays or public holidays.
	Reason: In order to protect the amenities of property in the vicinity.
11.	During the operational phase of the proposed development, the noise level
	from within the boundaries of the site measured at noise sensitive locations
	in the vicinity, shall not exceed:
	• an LArT value of 55 dB(A) during 0800 and 2000 hours. The T value
	shall be one hour, and
	• an LAgaT value of 45 dB(A) at any other time. The T value shall be
	• an Exeq 1 value of 45 dB(x) at any other time. The 1 value shall be
	Reason : In order to protect the amenities of property in the vicinity.
12.	Dust levels at the site boundary shall not exceed 350 milligrams per square
	metre per day averaged over a continuous period of 30 days (Bergerhoff
	Gauge). Details of a monitoring programme for dust shall be submitted to,
	and agreed in writing with, the planning authority prior to re-
	commencement of development. Details to be submitted shall include
	monitoring locations, commencement date and the frequency of monitoring
	results, and details of all dust suppression measures.
	Reason : To control dust emissions arising from the development and in the
	interest of the amenity of the area.
13	(a) Blasting operations shall take place only between 1000 hours and
10.	1700 hour. Monday to Friday, and shall not take place on Saturdays
	Sundays or public holidays Monitoring of the noise and vibration arising
	from blasting and the frequency of such blasting shall be carried out at the
	developer's expense by an independent contractor who shall be agreed in
	writing with the planning authority
	(b) Prior to the tiring of any blast, the developer shall give notice of his
	intention to the occupiers of all dwellings within 500 metres of the site. An
	audible alarm for a minimum period of one minute shall be sounded. This

	alarm shall be of sufficient power to be heard at all such dwellings.
	Reason: In the interest of public safety and residential amenity.
14.	All Heavy Goods Vehicles departing the site shall do so via a wheel-
	washes adjacent to the public road.
	Reason: In the interest of ensuring that a clean road surface is maintained
	and in the interest of traffic safety.
15.	The developer shall pay to the planning authority a financial contribution in
	respect of public infrastructure and facilities benefiting development in the
	area of the planning authority that is provided or intended to be provided by
	or on behalf of the authority in accordance with the terms and Development
	Act 2000, as amended. The contribution shall be paid prior to re-
	commencement of development or in such phased payments as the
	planning authority may facilitate and shall be subject to any applicable
	indexation provisions of the Scheme at the time of payment. Details of the
	application of the terms of the Scheme shall be agreed between the
	planning authority and the developer or, in default of such agreement, the
	matter shall be referred to An Bord Pleanála to determine the proper
	application of the terms of the Scheme.
	Reason: It is a requirement of the Planning and Development Act 2000, as
	amended, that a condition requiring a contribution in accordance with the
	Development Contribution Scheme made under section 48 of the Act be
	applied to the permission to further develop the quarry.
16.	Prior to commencement of development, the developer shall lodge with the
	planning authority a cash deposit, a bond of an insurance company, or
	such other security as may be acceptable to the planning authority, to
	secure the satisfactory reinstatement of the site, coupled with an
	agreement empowering the planning authority to apply such security or part
	thereof to such reinstatement. The form and amount of the security shall be
	as agreed between the planning authority and the developer or, in default
	of agreement, shall be referred to the Board for determination.
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Reason: To ensure the satisfactory restoration of the site in the interest of visual amenity.

Deirdre MacGabhann

Planning Inspector

23rd March 2023