An Bord Pleanála



Inspector's Report

Development: Application under Section 37L of the Planning and Development Acts 2000-2015, for further quarrying of rock at Ballynacarrig, Balintra, Co. Donegal.

Planning Application to Board

Related Substitute Consent File	: 05E.SU0054
Applicant	: Roadstone Ltd.
Planning Authority	: Donegal Co. Council
Type of Application	: Further quarrying under section 37L
Observer(s)	: None

Date of site inspection

: 10th November 2016

Inspector: Michael Dillon

1.0 Introduction & Context

- 1.1 This application to the Board arises following the commencement of Section 37L of the Planning and Development Act 2000, which provides, *inter alia*, for the making of planning applications direct to the Board for continuation of quarrying, where an application for substitute consent for a quarry was with the Board before 15th July 2015, and where a decision had not issued in relation to the substitute consent application. The legislation provides for the two applications to be dealt with in conjunction.
- 1.2 In the context of this application, SU0054 was recommended for a refusal of permission (Inspector's Report dated 13th June 2014) for one reason relating to the partial destruction of a Recorded Monument. New Regulations were subsequently introduced by the Department of Environment, Community and Local Government which related to section 37L of the Act, and the applicant opted to pursue this new channel for expansion of the quarry operation.

2.0 Site Location & Description

- 2.1 The red line boundary site has a stated area 18.8ha, and incorporates existing extraction area, future extraction area and habitat & site restoration areas. The existing quarry area is estimated at approximately 24ha. and upon expansion, will run to roughly 30ha. The 18.8ha area incorporates most of the land within the eastern half of the guarry site, as well as a portion along the northern boundary. It excludes partially worked-out areas, worked-out areas, marshalling area and all associated activities such as tar plant, block yard, concrete plant, lime plant etc. and also some agricultural lands next to the N15. Expansion proposed is generally in a southeasterly and southerly direction, with a smaller area on the northern boundary. The southerly expansion area is used for grazing and comprises open grassland with some areas of scrub hazel/blackthorn - evident in aerial photographs. There is a fine dry-stone wall along the eastern boundary of the extended extraction area to the southeast. There is a stream flowing along the southern boundary of the site – which disappears into swallow holes in three places. Part of this stream has already been re-routed and culverted along the southern boundary of the wider quarry site (referred to as the New Stream) – to carry waters past the quarry workings.
- 2.2 The wider quarry development is as described within substitute consent application ref. SU0054, and it is not proposed to repeat it here. There does not appear to have been any substantial additional quarrying carried out since this site was last inspected by this Inspector in June 2014. On the date of site inspection, the quarry was operational: the tar plant was also operational.

2.3 There is one small sump on the quarry floor – from which water was being pumped on the date of site inspection. There is a small amount of ingress seeping from quarry walls into the quarry pit. A second pipe for pumping from the quarry floor was not operational on the date of site inspection. Vegetation around the siltation ponds at the quarry entrance has recently been cleared. The two outfalls from the siltation ponds were running clear on the date of site inspection.

3.0 **Proposed Development**

- 3.1 Permission was sought on 20th January 2016, for quarrying development for a number of elements-
 - Quarrying within an area of 18.8ha of which 11.7ha already comprises extraction area. Of this increased area – approximately 4.9ha will comprise rock extraction void.
 - Extraction to an initial bench of 58m OD, with further extraction to a floor level of 45m OD.
 - Continued de-watering of the quarry to keep the groundwater level at or just below 45m OD.
 - Use of drilling and blasting to extract limestone.
 - Habitat establishment programme which principally allows for the flooding of the quarry upon completion of extraction to a depth (variously indicated at 13m or 17/18m) above floor level of 45m OD.
 - Site restoration.
- 3.2 The application is accompanied by the following-
 - Environmental Impact Statement (EIS) dated January 2016.
 Volume 1 is a Non-Technical Summary: Volume 2 is the Main EIS: and Volume 3 contains Appendices (wherein most of the hard detail and facts are contained).
 - Natura Impact Statement (NIS) dated November 2015.

4.0 Planning History

The planning history of the quarry, the subject of application for substitute consent SU0054, is set down within that respective file, and it is not proposed to repeat it here. There would not appear to have been any further planning applications on this site since 2014.

5.0 Planning Context

5.1 Development Plan

The document is the Donegal County Development Plan 2012-2018.

5.2 National & Regional Guidance

Of relevance are the following-

- Quarries & Ancillary Activities: Guidelines for Planning Authorities, April 2004 – issued by the Department of Environment, Heritage and Local Government.
- Border Regional Planning Guidelines 2010-2022.
- Section 261A of the Planning and Development Act 2000 and related provisions (January 2012) and Section 261A Supplementary Guidelines (July 2012) – issued by the Department of Environment, Community and Local Government.

6.0 Planning Authority Report

The Board referred the application to Donegal County Council for comment – by letter dated 26th January 2016.

6.1 Donegal County Council

The response of DCC, received by the Board on 1st March 2016, can be summarised in bullet point format as follows-

- The Development Plan indicates that the quarry is not affected by any special amenity designations. The quarry is not located within an area of Especially High Scenic Amenity or affected by any designated views or prospects.
- Ballintra SAC and pNHA abuts the quarry to the northeast and east.
- It is noted that the quarry historically took access from the N15, and that the entrance should be designed to meet current standards of safety.
- The quarry is not located within a floodplain.
- Mitigation measures are in place to protect Recorded Monument DG103-019 – a cashel in the northeast part of the site.
- The NIS, which accompanies the application, addresses European sites which could potentially be affected by quarrying.
- The planning authority has no objection, in principle, to the proposed expansion subject to a number of conditions being attached (15 in number). The conditions deal with the following-
 - Development to be carried out in accordance with drawings submitted to the Board on 20th January 2016.
 - o Restoration of the worked-out quarry.
 - Sight visibility at the exit on the N15.
 - Operation hours 0800-1800 Monday to Friday and 0800-1400 on Saturdays.
 - Fencing around quarry to prevent trespass by livestock.

- Noise levels of 50dBA when measured at any residential buildings – together with annual monitoring.
- Dust deposition and monitoring.
- Bunding for oils/chemicals stored on site.
- Spillages of aggregate on the public road.
- Discharge of surface water onto the public road.
- No other development (whether or not exempted development) to be carried out within the site.
- o Signage.
- Removal of scrap metal annually.
- Bond for restoration of quarry.

6.2 Applicant's Response

The submission of Donegal County Council was referred to the applicant for comment. The response of Quarry Plan, agent on behalf of the applicant, Roadstone Ltd, received by the Board on 4th April 2016, can be summarised in bullet point format as follows-

- The quarry has historically operated from 0700-1900 hours Monday to Friday and 0700-1700 hours on Saturdays. There is no justification for reducing the hours of operation, as noise, dust and landscape impacts have been assessed by the Council and found to be acceptable. Other quarries in the immediate area, including one operated by the applicant company at Laghy – has hours of operation in accordance with the Quarries and Ancillary Activities – Guidelines for Planning Authorities (2004).
- It is considered that the noise level proposed at 50dBA is too low and a noise level of 55DbA would be more appropriate. The Quarry Guidelines suggest daytime limits of 55dBA and night-time limits of 45dBA. It is suggested that noise limits not exceed 55dBA, when measured at the nearest noise-sensitive receptor.
- The suggested condition 10 is unreasonable. Exempted development rights should not be withdrawn from the entire site. The condition should be deleted in its entirety.
- The applicant proposes an additional condition in relation to blasting as follows-
 - Residents within 500m should be given advance notice of blasting.
 - Blasting should only take place between the hours of 0900-1800 Monday to Friday – except in emergencies.
 - Ground vibration should not exceed a peak particle velocity of 12mm/s as measured at any receiving location, when blasting occurs at a frequency of once a week or less.
 - Air overpressure arising from blasting should not exceed 125dB(Lin) max. peak with a 95% confidence limit when measured at an occupied dwelling.

 Monitoring for vibration and air overpressure should be carried out for each blast – at locations to be agreed with the planning authority.

7.0 Observations & Responses

7.1 Prescribed Bodies

By letters dated 22nd February 2016, the Board invited the following Prescribed Bodies to comment on the application-

- National Environmental Health Office, HSE.
- Department of Communications, Energy and Natural Resources.
- Inland Fisheries Ireland.
- Development Applications Unit of Department of Arts, Heritage and the Gaeltacht.
- The Heritage Council.
- An Taisce.
- An Chomhairle Ealaíon.
- Fáilte Ireland.
- Eirgrid.
- Transport Infrastructure Ireland.

7.2 Responses from Prescribed Bodies

7.2.1 Transport Infrastructure Ireland

The response, received on 3rd March 2016, can be summarised in bullet point format as follows-

- Noted that existing access is from N15.
- Any grant of permission should require compliance with need to safeguard the strategic function and safety of the national road network.

7.3 Observations from Individuals

None received.

8.0 General Assessment

The principal issues of the proposed development relate to impact on groundwater in the context of the necessity to dewater this quarry during extraction, impact on European sites (particularly Ballintra SAC located immediately to the east of the proposed quarry), impact on archaeology (particularly the cashel on the eastern extremity of existing quarrying) and impact on residential amenity in terms of noise and dust.

8.1 Development Plan & Guidance

There has been no change in Development Plan status since my original report of 13th June 2014 for file ref. SU0054.

8.2 Development Contribution

The report of Donegal County Council on this application recommends that a condition be attached to any grant of planning permission requiring the payment of a bond for the restoration of the quarry following cessation of quarrying. The amount of the bond was not specified. It would be appropriate to attach a condition requiring payment of such a bond to any grant of planning permission issuing from the Board.

I note that the Council did not recommend that a condition be attached requiring payment of development contribution. There is no mention of quarrying in the Donegal County Development Contribution Scheme. There is reference to commercial development being charged per sq.m, but as no buildings or structures are proposed with this quarry expansion, this provision would not seem to apply.

8.3 Lifetime of Any Permission/Hours of Operation

The 2004 Quarry Guidelines suggest operational hours of 0700-1800 Monday to Friday and 0700-1400 hours on Saturdays. In the interests of residential amenity and consistency, it would be appropriate to use the Quarry Guidelines recommended times. These are not the same operating hours as recommended by Donegal Council. The applicant counters that the existing quarry is already operating from 0700-1900 hours Monday to Friday, and 0700-1700 on Saturdays. This may well be the case – the historical pattern established at this quarry may be so. However, what is before the Board is an extension of quarrying, and I would not see why the recommendations of the Guidelines should be set aside in this instance.

8.4 Restoration

Drawing MDA 15-109 v2, which accompanies the application, indicates finished ground levels upon completion of quarrying. The quarry (at least that portion of it outlined in red on this application) is to be allowed to flood up to a depth of 13m (elsewhere in the EIS 17-18m). Restoration provides for a small amount of woodland planting around the perimeter of the quarry, together with some small amount of filling in the northeast corner of the quarry site (immediately abutting the cashel and a pair of timber poles supporting a 110kV line which traverses the site north/south). The flooded quarry will continue to drain via a new open channel to a pair of

lagoons next to the quarry entrance on the N15, and from thence to a culvert beneath the N15 and into the Ballymagrorty Stream and onwards to Durnesh Lough. No actual use has been indicated for the flooded quarry – and it is assumed that it will remain an open feature with nature allowed to take its course. I would be satisfied that the restoration proposals, as outlined, are acceptable in principle. I have elsewhere in this Report commented on the desirability of a bond condition for restoration of the quarry.

8.5 Electricity Line

There is a 110kV power line traversing this site north/south. The line is supported on two pairs of timber poles. The support poles in the northeast corner of the quarry have resulted in restricted quarrying in this area. The second set of support poles is located within the proposed expansion area – and drawings indicate that it is proposed to remove the ground which supports this set of poles. No proposals have been put forward to relocate the line or its support structures. This issue would need to be addressed by way of condition attached to any grant of planning permission for quarry expansion. It may be that planning permission would be required for alterations to the existing power line.

8.6 Operational Period of Permission

The applicant has stated that there is approximately 22 years of extraction within the proposed quarry extension, but does not state at what extraction rate. It is assumed that the likely annual extraction rate (300,000 tonnes) has been considered in relation to the calculation. I would be satisfied that a twenty-year permission could be granted for the proposed extension area.

8.7 Other Issues

8.7.1 Fencing

The wider boundary of the quarry is controlled by dry-stone walls and post & wire fences. In the interest of security, proper boundary treatments should be in place to prevent trespass by farm animals or humans. Signage will be erected warning people to keep out. Barriers and gates control access to the overall quarry.

8.7.2 Floodlighting

There is no indication of demountable floodlighting in use at quarry faces or on the quarry floor. In the event that such was to be used in the future, control in relation to the hours of operation of the quarry would serve to control the hours when such floodlighting might be necessary.

8.7.3 Exempted Development

Donegal County Council has recommended that a condition be attached to any grant of planning permission, de-exempting any future development which might otherwise have been considered as exempted development. No reason is given for this requirement. It would appear to be particularly onerous in relation to an application for extension of quarrying operations at an existing operational quarry. I would not see that such a condition is necessary in this instance.

9.0 Environmental Impact Assessment

9.1 General Comments

The EIS is accompanied by a Non-Technical Summary – contained within a separate volume. The main volume of the EIS supported by a separate volume of appendices. The hard information is mostly contained within the appendices. The quarry is located 7.1km from the boundary with Northern Ireland: there will be no significant trans-boundary impacts arising from the extension of this quarry.

9.2 Consideration of Alternatives

Section 2 of the EIS refers to alternatives. Having regard to the nature of the application, consideration of alternative sites is not relevant – being an extension to a working quarry, where supporting infrastructure is already in place. Again, consideration of alternative means/methods of extraction is not relevant, having regard to the limited extent of the proposed expansion area and the nature of the resource. The quarry resource is as it is. The means of treatment of silt is standard, and existing infrastructure at the quarry is to be used. The applicant concludes that given the ownership of the site, and the value of the resource, there are no alternatives to the continued operation of this quarry. This would appear to be reasonable.

9.3 Structure of Environmental Impact Statement

The EIS submitted examines the impact of the proposed development under a grouped format approach, with each of the impact areas set out in Article 3 of the EIA Directive being addressed for potential impacts, proposed mitigation measures, and residual post-mitigation effects. There are separate chapters covering:- geology; water; air quality & climate; noise & vibration; landscape; waste management: ecology; traffic; natural resources; socio-economic impacts; cultural heritage; and the interrelationship of the foregoing. The impact on human beings, where relevant, is covered within each of the chapter headings. The EIS addresses the main likely significant direct and indirect effects that the development will have on the environment.

9.4 Historical/Current Operating Level

In terms of impacts, and having regard to the concurrent application for substitute consent before the Board (ref. SU0054), it is noted that the wider quarry site is operating at an historically low output level relative to the height of the economic boom, when the quarry was registered under Section 261. The figures quoted in the EIS for annual tonnage are 541,879 in 2005 and 104,229 in 2012 – being the high and low points. There are no annual tonnages given for years after 2012 – but certainly quarry activity was limited on the dates of site inspection by this Inspector.

9.5 Geology

Section 5 of the EIS deals with this issue. The quarry is located within the Ballyshannon limestone formation. The overburden in this location comprises thin soil and weathered rock. Rock is to be extracted by blasting. The proposal is for an extension to an existing limestone quarry. There are karst features in the area - particularly the stream on the southern boundary which disappears into swallow holes at three locations. Extraction will be at two bench levels of 13m maximum each. The floor level of the proposed extraction area will be 45m OD – to match the floor level of the existing quarry. This level is below the water table, and water is currently pumped from the existing quarry floor. Some 4.9ha of land will be taken into the guarried area. The thin topsoil stripped will be mounded around the edges of the guarry. In terms of the amount of similar-type rock which exists in this area, the expansion by 4.9ha will not have a significant impact on the resource of the wider area. I note that there are no geological heritage sites within the guarry extension area or immediately abutting it - as per the Geological Survey of Ireland (GSI).

9.6 Water

9.6.1 Section 6 and Appendix 2 of the EIS deal with the issues of hydrology and hydrogeology. Groundwater flows in a westerly direction. The site overlies the Donegal-Ballintra Groundwater Body, which forms part of a Regionally Important Aquifer (karstified but dominated by diffuse flow). The groundwater vulnerability is high, arising from the exposure of the water table. There are no Source Protection Areas in the vicinity of the quarry. Six piezometer bore holes (BH1-BH6) have been installed around the quarry perimeter (illustrated on Figure 3 of Appendix 2 of the EIS). Groundwater levels have been collected on a monthly basis since November 2014. The greatest variations are in BH1 and BH2 on the northern boundary of the quarry. Quarry dewatering is not affecting water levels in the other four boreholes. This is not surprising, given the proximity of BH1 & BH2 to working quarry faces. No boreholes were

identified at local properties – houses being served by a group water scheme. The quarry itself is served by this group water scheme.

- 9.6.2 There are no flooding issues identified with the existing quarry. The proposed extension will not have any impact on flooding. The quarry void is to be allowed to fill upon completion of quarrying, with discharge to the New Stream as is currently the case within this quarry.
- 9.6.3 The existing floor of the guarry is at 45m OD and the proposed extension area of 4.9ha will have the same floor level. Quarrying is below the existing water table and it is necessary to pump water from the quarry floor (via a secondary sump fitted with an electric pump). The primary sump area is 3,500m² of quarry floor on the western edge of the deepest sinking, from whence water percolates to the secondary sump. The primary sump area was almost completely dry on the date of site inspection, and dewatering was not occurring in this part of the quarry. There is evidence of water seeping from existing guarry faces – but no karst conduits discharging into the quarry void. Dewatering imposes a steep-sided cone of depression around the guarry (as deduced from piezometer measurements), but the overall radius of groundwater lowering is of limited lateral extent. Water pumped from the quarry floor is discharged to two lagoons next to the concrete plant, and where not used for dust suppression/concrete block making and other associated quarry uses, discharges via open drain to a pair of siltation lagoons beside the quarry entrance on the N15. The discharge from the lagoons is via hydrocarbon interceptor and back into the New Stream and beneath the N15 (2m diameter pipe), en route to Durnesh Lough, and ultimately Donegal Bay. The discharge is subject to Licence from Donegal County Council (indicated as Lwat 51 - copy included in Appendix 2 of the EIS). It is not proposed to alter this arrangement. The discharge rate varies from 300-350m³ per day in dry periods to 5,000-6,000m³ per day in wet periods. The peak discharge has been estimated at 6,250-7,500m³ per day – commensurate with an expansion of 25% in the guarry area. The EIS indicates that the Discharge Licence currently allows for a daily maximum discharge of 8,600m³.
- 9.6.4 Results of piezometer measurements on the boundary with Ballintra SAC to the east, indicate a groundwater level of 5-10m below the surface. It is not proposed to increase quarry depth any further in the vicinity of Piezometer 1 in the northeast corner of the site although the quarry is to be expanded slightly to the north. It is expected that the drawdown in Piezometer 3 in the southeast corner of the extended quarry area will be the same as in Piezometer 1 (currently a drawdown of 7-8m at a 15m setback from the quarry edge) where the quarry floor will be at the same 45m OD. The impact of potential drawdown on the SAC is examined in the Appropriate Assessment section of this Report.

- 9.6.5 The stream along the southern boundary of the quarry has already been partially diverted (630m length) around the quarry works and is referred to as the New Stream. Where it forms the southwestern boundary of the principal proposed expansion area, this stream is a karst feature disappearing into swallow holes at three locations. Tracer testing has confirmed that the emergent waters are those from upstream sinkholes. It is proposed to engineer the channel of this stream along the entire southern boundary of the quarry/expansion area. This would appear to be a reasonable proposal.
- 9.6.6 Mitigation measures put forward include collection and monitoring of data (groundwater levels in the piezometer network and flow readings at the V-notch weir). This will provide the necessary notice of any need to apply for a variation to the Discharge Licence. Annual rainfall is estimated at 1,250mm (elsewhere in the EIS 1,400mm) with one-in-one-hundred sixhour flood events estimated at 58.2mm. The quarry floor will continue to provide excess storage capacity in the event of storm rainfall events flooding to a shallow depth of 15-20cm. This will ensure that no flooding will be created outside of the quarry following a storm event arising from pumping to the New Stream. Following flooding water would be pumped from the quarry floor up to a maximum of 8,600m³ per day as allowed for in the Discharge Licence.
- 9.6.7 It is proposed to allow the quarry to flood on completion of quarrying. The water level is variously indicated as 58m or 62/63m. In order to safeguard existing plant at the site, the water table would have to be maintained at the lower level of 58m. It is stated that a drainage solution connecting to the New Stream is required. Drg. MDA 15-109 v2 indicates a new outfall in the southwestern corner of the flooded area discharging via an open channel to the siltation lagoons at the quarry entrance. I note that part of this open channel is already in existence.
- 9.6.8 The cumulative impact of the development with other plans or projects has been considered, particularly in relation to the Ballynacarrick Landfill site (now closed) some 1.3km upstream of the quarry site and which drains to the New Stream. Part of this landfill is not lined, and monitoring is ongoing. The proposals are acceptable in principle, and would not result in any significant impact on groundwater or surface water.

9.7 Air Quality & Climate

9.7.1 Section 9 and Appendix 3 of the EIS deal with the issue of air quality. An expansion of this nature will not have any significant impact in relation to release of greenhouse gases from machinery and plant. The principal impact of a quarry on air quality will relate to dust. There is a wheel-wash

at the entrance to the quarry site. There was no indication of any significant deposition of dust along roadside boundaries or hedgerows in the area on the date of site inspection. There was one sprinkler system in operation at a stockpile within the marshalling area on the date of site inspection. There was no evidence of any significant wind-blown dust on surrounding lands. Quarry faces and berms will act as barriers to migration of fugitive dust.

- 9.7.2 Drilling and blasting will continue to be the mode of extraction of rock with drilling approximately two days every fortnight, and blasting on two days a month. Crushing and screening units are fully mobile, and most operations take place on the quarry floor close to the blast sites. Dust monitoring is carried on at five locations on the quarry perimeter indicated at Figure 1 of Appendix 3. Monitoring was carried out at four points since 2004, and at a fifth point since 2008. Locations 4 & 5 will be of most relevance in relation to the proposed expansion. Most of the monitoring results indicated levels below 350mg/m²/day. Crushing and screening has the potential to generate fugitive dust, as does stockpiling and transferring aggregate into vehicles. Vehicles on haul routes can create dust during dry periods. Rainfall at 1,250mm (elsewhere in the EIS 1,400mm) per annum will help to suppress dust.
- 9.7.3 Mitigation measures to be put in place are stated to include the following-
 - Stockpile management to ensure that large stockpiles are not built up and that double-handling is reduced as much as possible.
 - Surfaces sprayed with water during dry periods.
 - Stockpiles sprayed with water during dry periods.
 - On-site speed limits.
 - Dust will be removed from concrete/tarmacadam areas.
 - Limiting fall heights when loading vehicles.
 - Limiting works on stockpiles during windy periods.

A Dust Management Plan is included within Appendix 3.

- 9.7.4 I have elsewhere in this report commented upon the potential impact of fugitive dust on the Ballintra SAC to the east of the quarry, where dust deposition was examined in association with ecology quadrat surveys.
- 9.7.5 I would be satisfied that, having regard to the nature of the application (expansion of an existing quarry and use of existing crushing, washing and grading facilities), and to the mitigation measures outlined in the EIS, the proposed development would not result in any significant impact on the air quality of the area. A condition should be attached to any grant of planning permission requiring compliance with the maximum dust deposition of 350mg/m²/day (measured over a 30-day period) contained within the Quarry Guidelines 2004.

9.8 Noise & Vibration

Section 8 and Appendix 4 of the EIS deal with the joint issues of noise and vibration.

9.8.1 <u>Noise</u>

Following blasting, crushing and screening will be carried out by mobile plant on the quarry floor – as is the system currently operated. Figure 1 of Appendix 4 identifies 11 no. noise-sensitive receivers (NSRs) - all of which are houses. NSR11 is closest to the quarry site, and is stated to be occupied by a former quarry operative. In addition, the locations of five noise monitoring locations (NMLs) are indicated. The principal generators of noise in the area are the quarry and the N15. The highest recorded background noise levels (September 2015) were at NML5 - located on the N15 outside the quarry. Noise from the quarry extension is likely to result from blasting, crushing and screening of rock, aggregate being hauled within the site and HGV movements into and out of the site. I have elsewhere in this report referred to hours of operation, which would serve to lessen the nuisance of noise at certain hours of the day/night. Quarry operations at this site have been on-going for a number of years. Existing noise sources such as the tar plant, concrete plant and lime plant will not be altered by this application to extend the extraction area - other than their useful lifespan will be prolonged. There is no reason why an extension of the guarry should lead to any change in noise levels - given that the same operational arrangements are to be maintained. The principal quarry extension to the south and southeast will not bring guarrying any closer to the closest house (NSR11), and at no point during the different phases of extraction from the extension area will the noise level at NSR11 exceed 50dB. The operator is satisfied that the noise requirements of the Quarry Guidelines can be met in the guarry extension.

9.8.2 Vibration

A blasting analysis is included at Appendix 4 of the EIS. Blast monitoring has been carried out at this quarry since 2003. Results are presented from 2003-2012 (but not beyond). No house is within 200m of the proposed extension area – the closest being a house to the southwest (occupied by a former quarry operative). A mobile drilling rig has been used in the past for preparation for blasting, and it is proposed to continue this method of extraction. It is indicated that drilling currently takes place two days per fortnight, with blasting taking place twice a month. The applicant has indicated a willingness to comply with the Quarry Guidelines standards for blasting.

9.8.3 <u>Mitigation Measures</u>

Principal noise/vibration mitigation measures proposed include the following-

- Limitation in working hours.
- On-site speed limits (particularly important for empty HGVs.
- Quarterly noise-monitoring.
- Use of appropriate plant, regularly maintained, and fitted with exhaust silencers.
- Location of crushing equipment on quarry floor screened by quarry faces.
- Monitoring of blasts for vibration and air overpressure.

9.8.4 Conclusion

I would be satisfied that the undulating landscape, location of plant on the quarry floor, nature of the material to be extracted, the presence of low earth berms and, finally, the separation distance of the quarry from houses in the area would result in noise nuisance from a quarry expansion of this nature not being significant. A condition should be attached to any grant of planning permission requiring that noise emissions be within the parameters set down within the Quarry Guidelines 2004 - 55dB(A) by day-time (La_{eq} I hour) and 45dB(A) by night-time (La_{eq} 15 minutes). Similarly, I would be satisfied that there would not be any increased vibration nuisance arising from the expansion of the is quarry, where it is proposed to continue existing blasting practices, and where the nearest residence is more than 200m from any extended extraction area.

9.9 Landscape & Visual

Section 9 and Appendix 5 of the EIS deal with these inter-related issues. The site is located within the Donegal Bay Drumlins Landscape Character Area (LCA) 37 – the Draft Donegal Landscape Character Assessment having been completed in August 2015). The quarry operations currently cover an area of approximately 24ha – to be expanded to approximately 30ha. The landscape in the area does not have any county designation. There are no Scenic Views designated in this area. The quarry is already visible from the N15 for traffic heading north towards Donegal town and is visible on the county road (L7385) to the south. The extension of the quarry will extend the extent of visibility on the N15 to some degree. The restoration of the quarry using stripped topsoil around the margins will serve to improve the visual amenity of the area – particularly with woodland planting. The flooding of the quarry will not have any significant impact on the landscape, as it will not be widely visible.

9.10 Waste Management

Section 10 of the EIS deals with this issue. All waste materials are stored in distinct areas of the quarry – either on the quarry floor, at the workshop sheds or at other locations adjacent to ancillary activities at the quarry. The proposed extension to quarrying will not have any different impact than that currently arising from the operation of this quarry. I would be satisfied that the proposed development will not have any significant impact in terms of waste. It would be appropriate to attach a condition requiring waste to be regularly removed – at least annually.

9.11 Ecology

Section 11 and Appendix 6 of the EIS deal with this issue. The quarry is located immediately adjacent to Ballintra SAC. The potential impact of the quarry extension on this European site is dealt with under the Appropriate Assessment section of this Inspector's report. Having regard to the potential impact of the development on Ballintra proposed Natural Heritage Area (pNHA), I would note that comments in relation to the European site of the same name (within the Appropriate Assessment section of this Inspector's Report) would apply to potential impacts on the pNHA, and it is not proposed to repeat them in this section of the Report. The boundary of Ballintra pNHA is almost the same as that for the Ballintra SAC – and is exactly the same where it abuts the quarry.

9.11.1 Baseline Habitats

Field surveys were undertaken in July and August 2015. Habitat surveys (map included at Figure 5 of Appendix 6 of the EIS) of the proposed expansion area revealed-

- Improved grassland (approximately 1.2ha).
- Active quarries & mines.
- Recolonising bare ground associated with areas of the quarry which have not been subject to recent active quarrying (approximately 1.4ha).
- Scrub mostly hazel with some blackthorn (approximately 1.2ha).
- Dry calcareous and neutral grassland/Scrub mosaic (approximately 1.9ha). This habitat was not considered to qualify for the Annex I habitat Semi-natural dry grasslands and scrubland facies on calcareous substrates, because all but one qualifying species (Early purple orchid) was absent. Neither was it considered that the amount of orchid species present was sufficient to qualify this habitat for Annex I Orchid-rich calcareous grassland status.
 None of these habitats are EU Annex I habitats.

9.11.2 Baseline Avifauna

Peregrine (*Falco peregrinus*) was observed to be nesting within the quarry – notwithstanding that this is a working quarry. This is an Annex I species – the only recorded on the site. Six bird species listed as amber/red on the Birds of Conservation Concern in Ireland (BoCCI) survey were encountered on the site – Herring gull, Swallow, House martin, Meadow pipit, Robin and Mistle thrush. In addition, Buzzard, Blackbird and Willow warbler were also recorded.

9.11.3 Baseline Fauna

No evidence of bats was recorded on the site. Leisler's bat has been recorded in the wider area. There are no old buildings, caves or mature trees within the expansion area. The quarry extension area would include appropriate foraging area for bat species. Mammal species, such as Hare are likely to occur on the site. No evidence of Badger was recorded. The removal of habitat will not have a significant impact on these species, regard being had to the amount of similar-type habitat which exists within the wider area.

9.11.4 Baseline Flora

Common rock rose (*Helianthemum nummularium*) is known to occur within the adjacent SAC (its only known Irish location). Woody thymemoss (*Plagiomnium cuspidatum*) has been recorded in the wider area, but was not encountered on the site. Two transects running east/west from the edge of the existing quarry into the SAC to the east were carried out at eight quadrats measuring 2x2m each, to record the species therein.

9.11.5 Potential Impacts

Potential impacts of the proposed quarry extension were identified as-

- Loss of particular habitats.
- Impact on Peregrine which is nesting within the existing quarry.
- Impact of fugitive dust on plants particularly Common rock rose within the adjoining Ballintra SAC.
- De-watering and impact on water-dependent flora, fauna and habitats downstream of the quarry.

9.11.6 Mitigation Measures

The principal mitigation measures to be employed on this site include the following-

- Minimisation of dust nuisance through observance of operational procedures for handling/storage of aggregate. A minimum of 40m setback from the SAC is proposed for the southeastern extension area. To the north, the existing quarry edge is set back only 14m from the SAC in places.
- Water handling procedures and discharge through siltation of lagoons.
- Extension of possible habitat for nesting Peregrine through creation of more cliff faces, may ultimately be a positive impact of the development. In addition, a nest box will be provided on a suitable face of the quarry. There will be no blasting within 150m of any Peregrine nest whilst the nest is active.
- No clearance of Scrub or Improved grassland habitats during bird breeding season (March August inclusive).

• Recreation of new habitats when the quarry void is flooded, including Artificial lakes & ponds, Woodland and Dry calcareous grassland habitat (this latter on a strip of Improved grassland in the southeast corner of the quarry extension area) will constitute a positive impact.

9.11.7 Conclusion

The proposed extension, whilst it will ultimately result in the loss of certain areas of particular habitats, will result in the creation of other types of habitats, both during quarrying and upon completion and restoration. The loss of habitat types is not significant in the context of the amount of similar-type habitats in the immediate area. The period of disturbance is limited – running to twenty years – after which time quarrying is to cease. The proposed development if for continuation of quarrying at an existing site, where processes are in place to minimise the emissions to air and water. The quarry extension will be set back a minimum of 40m from the edge of the adjoining SAC to the east. The proposed development will not have any significant impact on the ecology of the area.

9.12 Traffic

Section 12 of the EIS deals with the issue of Traffic. Sales figures are provided by the applicant for the years 2005-2012. It is not clear why such results are not available up to 2014 at least – perhaps relating to commercial sensitivity. The annual tonnage extracted fell from 541,879 in 2005, to 104,229 in 2012. This would clearly have had an impact on HGVs entering and leaving the site. Sight distance at the existing entrance is good. There is no proposal to alter the entrance/egress arrangements in place at this quarry. It is proposed to extract up to 300,00 tonnes per annum – somewhere in the middle between the extraction high point in 2005 and low point mentioned for 2012. The traffic volumes on the N15 will not have increased or altered to such an extent where the continuation of quarrying for c.22 years would have a significant impact on traffic. There is a wheel wash on the site. The extension of the lifetime of this quarry will not have a significant impact on traffic or road safety.

9.13 Natural Resources

Section 13 of the EIS deals with natural resources. It is proposed to extract up to 300,000 tonnes per annum over a 22-year period – approximately 6.6m tonnes of rock over the lifetime of the permission. Rock extracted will be processed on site. Soil stripped from the excavation area will be re-used for restoration of the site. Having regard to the availability of similar-type rock and soil in the wider area, the proposed development will not have any significant impact on this aspect of the environment.

9.14 Socio-Economic

Section 14 of the EIS deals with the issue of impact on population, employment and the economy. There will be no significant impact on population arising from the proposed extension. The extension of the lifetime of the quarry by up to 22 years will provide for continued employment for the 12 people currently employed on the site: this number having fallen from a high of 20 employees during the economic boom up to 2007. There will be indirect employment benefits for hauliers and construction employees. The company pays annual rates to the Council of €21,000. This continuation of this level of employment in a rural area is a positive impact on human beings.

9.15 Cultural Heritage

- 9.15.1 Section 15 and Appendix 7 of the EIS deal with this aspect of the environment. There are no Protected Structures either within or immediately abutting the proposed quarry extension. The National Inventory of Architectural Heritage (NIAH) indicates no structures in the immediate vicinity of the proposed expansion area. There is a fine drystone wall along the eastern boundary of the southeasterly extension of the quarry. The proposed extension will not have an impact on this feature. The application was referred by the Board to the Development Applications Unit of the Department of Arts, Heritage and the Gaeltacht: no comment was received.
- 9.15.2 The site was visited by the archaeologist, who prepared this section of the EIS, on 17th September 2015. The site, as outlined in red, encompasses a cashel or ring fort located on the eastern boundary of the guarry - within the northeastern portion. Approximately half of this Recorded Monument, indicated on the Sites & Monuments Record of the OPW as (DG103-019), was removed at some stage in the past as part of ground clearance for guarry expansion, which subsequently never took place. There has been no quarrying within this sector of the quarry since the site was last visited by this Inspector in June 2014. It is proposed to guarry further in this northeast corner, but the presence of the timber support poles for the 110kV line at this location is a constraint. These poles are located close to the Recorded Monument. It is proposed to erect a 20m buffer zone around what remains of the recorded monument. This buffer zone will be fenced. The proposed quarry expansion will not have any significant impact on what remains of Recorded Monument DG103-019. Having regard to the extent of soil-stripping involved with the quarry expansion, it would be prudent to attach an archaeological monitoring condition to any grant of planning permission issuing from the Board.

9.16 Inter-relationship of Foregoing

Section 16 of the EIS addresses the issue of interaction between the foregoing headings. I do not consider that there are any significant interactions which have not been addressed within the EIS.

9.17 Conclusion

The EIS is in compliance with Articles 94 and 111 of the Planning and Development Regulations, 2001, as amended. The EIS contains the information specified in paragraphs 1 & 2 of Schedule 6 of the Regulations. There is an adequate summary of the EIS in non-technical language. The EIS identified the likely significant direct and indirect effects of the proposed expansion of this quarry on the environment. I would be satisfied, having regard to the preceding subsections of this Report, that the operation of this quarry extension would not have a significant impact on the environment.

10.0 Appropriate Assessment

10.1 Stage One Screening

The application is accompanied by a Natura Impact Statement (NIS). This document includes a Stage 1 Screening Assessment, which identified sites within 15km of the quarry. The principal impacts were identified as noise, dust and hydrology. Only Ballintra SAC could potentially be affected by noise or dust – the other sites being too far away to be affected. Sites within a different water catchment or at a higher altitude were also excluded. Five sites were screened in for further consideration-

- Ballintra SAC (Site code 000115) immediately to the north and east of the quarry expansion area.
- Durnesh Lough SAC (Site code 000138) 2.3km to the west of the overall quarry. The connecting distance is 4.0km by water from the New Stream quarry outfall beside the N15.
- Durnesh Lough SPA (Site code 004145) 3.2km to the west.
- Donegal Bay SPA (Site code 004151) 3.9km to the northwest.
- Donegal Bay (Murvagh) SAC (site code 000133) some 4.0km to the northwest of the site.

Having regard to the distance of the two SPAs from the quarry extension and the absence of any water feature on the quarry site which would attract the bird species listed as special conservation interests of the European sites, it is reasonable to screen out these two sites. It is noted that outfall water from the quarry must flow through Durnesh Lough before discharge to Donegal Bay. Similarly, Donegal Bay (Murvagh) SAC can be excluded because of the distance from the quarry site and the nature of the habitats which form the Conservation Interests of the site.

10.2 Stage Two Appropriate Assessment

The following two European sites are considered under the heading of AA.

10.2.1 Ballintra SAC

The overall conservation objective is to maintain or restore the favourable conservation status of habitats and species of community interest-

- European dry heaths.
- Limestone pavements (Priority habitat).

Nationally, mining and quarrying is identified as a low importance threat to European dry heath, and a high importance threat to Limestone pavement. It should be noted that there are no specific Conservation Objectives for this SAC. The NIS estimates that European dry heath habitat is 480m from the proposed quarry extension area [I estimate the distance to be closer to 380m], whilst Limestone pavement habitat is estimated to be located 50m from the proposed expansion area [I would concur with this estimate].

10.2.2 Durnesh Lough SAC

A set of Conservation Objectives for this European site was produced on 5th October 2016. The qualifying interest habitats are-

- Coastal lagoons.
- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae).

The target areas for the two habitats are stated to be stable and stable/increasing respectively.

10.3 Potential Impact on Ballintra SAC

10.3.1 The existing guarry is dewatered to a level of 45m OD. Whilst it is proposed to extend the quarry a small extent to the north and more significantly to the southeast and south, there is no proposal to deepen the guarry beyond 45m OD. The summit of Ballintra Hill (to the east of the quarry) is currently 92m OD. The EIS indicates that there is currently a spring at approximately 80m OD on the northeastern margin of dry heath which constitutes the source of a small stream flowing across the northeast corner of Ballintra SAC, and draining from southeast to northwest, veering north via the Rockhill Stream into the catchment of the Ballintra River. The proposed expansion will not result in bringing the guarry any closer to the gualifying interest habitats within the SAC than is already the case with existing quarrying operations. The Limestone pavement habitat is not a groundwater dependent habitat. European dry heath is a habitat dependent on free-draining soil, and so is not groundwater dependent. I would be satisfied that the separation distance (minimum 380m from the quarry extension area) would be more than

sufficient to protect this latter habitat. I note that piezometers indicate that current dewatering of the quarry reduces the water table on the eastern boundary by up to 12m.

10.3.2 Dust monitoring at five points around the guarry for the years 2008-2015 is outlined in section 6.1.3 of the NIS. Monitoring points D4 (28m from the SAC) and D5 (128m from the SAC) indicate variable deposition rates - but always less than 350mg/m²/day. The proposed extension will not bring guarrying operations any closer to the Limestone pavement habitat within the SAC than is the case at present (approximately 50m), and the same obtains for European dry heath habitat (approximately 380m). I would be satisfied that the separation distance from European dry heath habitat will ensure that there will be no impact on this habitat arising from fugitive dust. Ecological surveys were carried out in July and August 2015 in preparation of the NIS. Two transect surveys extended east/west from the quarry face into the Limestone pavement habitat of the SAC. A total of eight guadrats (2m x 2m) were examined, including for dust – indicated at Figure 11 of the NIS. No dust was observed on plants. Plants on limestone pavement are unlikely to be negatively impacted by limestone dust - not as a result of smothering, but by changes in soil pH. The quarry face will help to contain fugitive dust where the prevailing wind is from the southwest - two benches of 13m each. I would be satisfied that fugitive dust will not have an impact on the qualifying interests of this SAC.

10.4 Potential Impacts on Durnesh Lough SAC

There is a possibility that discharge waters from the guarry could impact on downstream Durnesh Lough. Coastal lagoons are clearly water dependent habitats: although the same does not obtain for Molinia meadows habitat. Coastal lagoons could be impacted by changes in nutrient levels or pH. Sedimentation could also impact on this habitat. Measurements at the discharge point in the past have highlighted instances of exceedance of the Discharge Licence limits for suspended solids and also aluminium and phosphate readings. Monitoring at Durnesh Lough on behalf of the guarry owner had not indicated simultaneous spikes in level there, indicating that the intervening 4.0km of stream has the assimilative capacity to deal with any problem relating to quarry discharges. Having regard to the nature of the application which constitutes an extension to an existing guarrying operation, necessity to dewater the guarry through a series of siltation lagoons, the requirement for a Discharge Licence from Donegal County Council, the distance downstream of the European site from the outfall point (some 4.0km) and the nature of the habitats to be conserved within the European site, I would be satisfied that the proposed extension to the quarry would not have an impact on the qualifying interests of the SAC.

10.5 In-combination Impacts

The in-combination impact of the development with other plans or projects has been considered, particularly in relation to the Ballynacarrick Landfill site (now closed) some 1.3km upstream of the quarry site. Monitoring of this landfill is ongoing. There are other active quarries in the area – the Ballymagrorty Quarry some 1.6km to the southwest and the Laghy Quarry some 5.2km to the north-northeast. The proposed development will not result in any cumulative impact on European sites, when considered with any other plan or project in the area.

10.6 Mitigation Measures

Mitigation measures suggested in the NIS include the design stage of the quarry extension to ensure a set-back from the edge of Ballintra SAC to north and east. The principal mitigation measure relates to water handling and continuation of current practices in relation to pumping and treatment of groundwater inflow to the quarry void. Finally continuing dust management is identified as a mitigation measure to protect the SAC. There are no other specific measures proposed, but best practice in relation to refuelling of plant and machinery, storage of lubricants/chemicals, and in dealing with accidental spills of hydrocarbons will serve to protect groundwater within the quarry is pumped. Monitoring of the discharge from the silt ponds already takes place (by way of Discharge Licence).

10.7 Conclusion

The application was referred by the Board to the Development Applications Unit of the Department of Arts, Heritage and the Gaeltacht (amongst others) for comment: there was no response received. I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects, would not adversely affect the integrity of European sites 000115, 000138, or any other European site, in view of the sites' conservation objectives.

11.0 Recommendation

I recommend that permission be granted for the Reasons and Considerations set out below and subject to the attached Conditions. I attach a draft Order for the Board to this effect.

REASONS AND CONSIDERATIONS

In making its decision the Board had regard, inter alia, to the following:

- (a) the provisions of the Planning and Development Act, 2000, as amended, and in particular Section 37L,
- (b) the 'Quarry and Ancillary Activities, Guidelines for Planning Authorities issued by the Department of the Environment, Heritage and Local Government in April 2004,
- (c) the provisions of the Donegal County Development Plan, 2012-2018,
- (d) the Environmental Impact Statement submitted with the application to further develop the quarry,
- (e) the Natura Impact Statement submitted with the application,
- (f) the report and the opinion of the planning authority under section 37L(12)(a) of the 2000 Act, as amended,
- (g) submissions made in accordance with regulations made under Article 270 of the Planning and Development (Amendment) (No. 2) Regulations 2015,
- (h) the report of the Board's Inspector, including in relation to potential significant effects on the environment,
- (i) the planning history of the site,
- (j) the pattern of development in the area,
- (k) the nature and scale of the development the subject of this application to further develop the quarry, and

Appropriate Assessment

Having regard to the nature, scale and extent of the subject proposed development, the Natura Impact Statement submitted with the application and the mitigation measures contained therein, the submissions on file and the Inspector's assessment, the Board completed an Appropriate Assessment of the impacts of the development on nearby Natura 2000 sites, specifically the Ballintra Special Area of Conservation (Site code 000115) and Durnesh Lough Special Area of Conservation (Site code 000138). The Board concluded that, on the basis of the information available, the subject development, either individually or in combination with other plans or projects would not adversely affect the

integrity of any European site, having regard to the conservation objectives of those sites.

Environmental Impact Assessment

The Board had regard to the Environmental Impact Statement and completed an Environmental Impact Assessment in relation to the proposed development in question, and considered that the assessment and conclusions of the Inspector's report were satisfactory in identifying the environmental effects of the development undertaken. The Board adopted the Inspector's report and agreed with the Inspector's conclusions in relation to the acceptability of mitigation measures and residual effects, which would be acceptable on the environment.

Having regard to the acceptability of the ecological and environmental impacts as set out in the foregoing it is considered that, subject to compliance with the conditions set out below, the subject development would be in accordance with the proper planning and sustainable development of the area.

CONDITIONS

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, including mitigation measures proposed, 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. This grant of permission to further develop the quarry shall be for a period of 20 years from the date of this order.

Reason: To enable the effects of the development to be reassessed in the light of the operation of the permission to further develop the quarry and the circumstances then obtaining.

3. Mitigation and monitoring measures outlined in the Environmental Impact Statement and Natura Impact Statement submitted with this application, shall be carried out in full, except where otherwise required by condition attached to this permission to further develop the quarry.

Reason: In the interest of protecting the environment and in the interest of public health.

4. There shall be no discharge of quarry water from the site to any roadside drain or adjacent watercourse in the absence of a Discharge Licence.

Reason: In order to protect ground and surface waters.

5. This grant of permission to further develop the quarry does not authorise the importation of materials for the restoration of the site.

Reason: In the interest of clarity.

6. The development shall be operated and managed in accordance with an Environmental Management System (EMS), which shall be submitted by the developer to, and agreed in writing with, the planning authority prior to commencement of development. This shall include the following:

(a) Proposals for the suppression of on-site noise.

(b) Proposals for the on-going monitoring of sound emissions at dwellings in the vicinity.

(c) Proposals for the suppression of dust on site.

(d) Details of safety measures for the land above the quarry, to include warning signs and stock-proof fencing.

(e) Management of all landscaping.

(f) Monitoring of ground and surface water quality, levels and discharges.

(g) Details of site manager, contact numbers (including out of hours) and public information signs at the entrance to the facility.

Reason: In order to safeguard local amenities.

7. Within three months of the date of grant of permission to further develop the quarry, all over-ground tanks containing liquids (other than water) shall be contained in a waterproof bunded area, which shall be of sufficient volume to hold 110 per cent of the volume of the tanks within the bund. All water contaminated with hydrocarbons, including stormwater, shall be discharged via a grit trap and three-way oil interceptor with sump to a watercourse. The sump shall be provided with an inspection chamber and shall be installed and operated in accordance with the written requirements of the planning authority.

Reason: In order to protect groundwater resources.

8. Scrap metal and other waste material shall be removed at least annually from the site in accordance with the written requirements of the planning authority. Such materials shall be deemed to include scrapped trucks, other scrapped vehicles, empty oil barrels, broken or otherwise unusable truck bodies, worn out conveyor belts/chains, worn out batteries, unusable tyres and worn out conveyor/roller shafts.

Reason: To protect the amenities of the area.

9. Quarrying within the proposed expansion area, and all activities occurring therein, shall only operate between 0700 hours and 1800 hours, Monday to Friday and between 0700 hours and 1400 hours on Saturdays. No activity shall take place outside these hours or on Sundays or public holidays. No rock-breaking activity shall be undertaken within any part of the site before 0800 hours on any day.

Reason: In order to protect the amenities of property in the vicinity.

- 10. 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-
 - (a) an L_{ArT} value of 55 dB(A) during 0700-1800 hours. The T value shall be one hour.
 - (b) an L_{AeqT} value of 45 dB(A) at any other time. The T value shall be 15 minutes.

Reason: To protect the residential amenities of property in the vicinity.

11. The depth of the excavation shall be no lower than 45m Ordnance Datum.

Reason: In the interest of clarity.

12. The wheel wash facility at the quarry exit shall be used by all HGVs leaving the site. Any aggregate, silt or muck carried out onto the public road shall be promptly removed by the developer.

Reason: In the interest of traffic safety.

13. (a) 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 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.

(b) A monthly survey and monitoring programme of dust and particulate emissions shall be undertaken to provide for compliance with these limits. Details of this programme, including the location of dust monitoring stations, and details of dust suppression measures to be carried out within the entire quarry complex, shall be submitted to, and agreed in writing with, the planning authority prior to commencement of any quarrying works on the site. This programme shall include an annual review of all dust monitoring data, to be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

Reason: To control dust emissions arising from the development in the interest of the amenity of the area and of nature conservation within the Ballintra SAC.

14. (a) Vibration levels from blasting shall not exceed a peak particle velocity of 12 millimetres/second, when measured in any three mutually orthogonal

directions at any sensitive location. The peak particle velocity relates to low frequency vibration of less than 40 hertz where blasting occurs no more than once in seven continuous days. Where blasting operations are more frequent, the peak particle velocity limit is reduced to eight millimetres per second. Blasting shall not give rise to air overpressure values at sensitive locations which are in excess of 125 dB (Lin) max peak with a 95% confidence limit. No individual air overpressure value shall exceed the limit value by more than 5 dB (Lin).

(b) A monitoring programme, which shall include reviews to be undertaken at annual intervals, shall be developed to assess the impact of quarry blasts. Details of this programme shall be submitted to, and agreed in writing with, the planning authority prior to re-commencement of quarrying works on the site. This programme shall be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

Reason: In order to protect the amenities of property in the vicinity.

15. The 110kV power line which traverses this site shall only be altered upon consultation, and in agreement, with Eirgrid. The route of this power line shall not be altered, other than in accordance with exempted development provisions, without a prior grant of planning permission.

Reason: In the interest of public safety and orderly development.

16. The developer shall facilitate the archaeological appraisal of the extension area. In this regard, the developer shall:

(a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,

(b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works, and

(c) provide arrangements, acceptable to the planning authority for the recording and for the removal of any archaeological material which the planning authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (*in-situ* or by record) and protection of any archaeological remains that may exist within the site.

17. Prior to commencement of development, a restoration plan which shall be based on the principles set out in Section 3.3.4 of the Environmental Impact Statement accompanying the application, shall be submitted to, and agreed in writing with, the planning authority. The plan shall include, inter alia, existing and proposed finished ground levels, landscaping proposals and a timescale for implementation. Restoration of the site shall be carried out in accordance with this plan.

Reason: To ensure the satisfactory restoration of the site, in the interest of visual amenity.

18. 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.

Reason: To ensure the satisfactory restoration of the site in the interest of visual amenity.

MATTERS CONSIDERED

In making its decision, the Board had regard to those matters to which, by virtue of the Planning and Development Acts and Regulations made thereunder, it was required to have regard. Such matters included any submissions and observations received by it in accordance with statutory provisions.

Michael Dillon, Inspectorate.

29th November 2016.