



An
Bord
Pleanála

Inspector's Report

QD16.QD0009

Development	Further Development at quarry
Location	Cregaree, Cong, County Mayo
Planning Authority	Mayo County Council
Applicant(s)	McGrath's Limestone Works
Type of Application	Application for Further Development of a Quarry under Section 37L
Submissions	Mayo County Council Geological Survey of Ireland Inland Fisheries Ireland
Observations	None
Date of Site Inspection	27 th October 2016
Inspector	Karla Mc Bride

1.0

SITE LOCATION AND EXISTING OPERATIONS

- 1.1 This is an application for Further Development at a quarry under Section 37L of the Planning and Development Act 2000 (as amended) and the application is accompanied by an Environmental Impact Statement (EIS) and Natura Impact Statement (NIS). This application follows on from a Section 261A (3) application for Substitute Consent which was lodged on foot of a section 261A (2) (a) (i) determination and section 261A (3) (a) decision by An Bord Pleanála.
- 1.2 This report should be read in conjunction with the report prepared by the Inspector in relation to the application for Substitute Consent under SU16.SU0132.
- 1.3 This application relates to the NW section of an existing limestone quarry which is located to the NW of Cong in County Mayo. A small section of the existing quarry is also located within County Galway. The quarry site occupies a rural area, it is located in the townland of Cregaree to the N of the R345, and vehicular access is off this road. The surrounding area is agricultural in character, the site boundaries are mainly defined by fencing, embankments and wooded areas, and the lands slope down from N to SE. There are several dwelling houses located along the local roads to the E, W and N of the quarry and there is a salmon fishery to the SE along the Cong River at Cong village. The site adjoins the Cong Canal to the E which connects the Lough Mask and Lough Corrib European sites. There are several other European sites, NHAs and Recorded Monuments in the surrounding area.
- 1.4 The overall limestone quarry comprises an overall area of c.67.7ha and it contains three separate sections including the existing quarry to the S, the Further Development area to the NW and a greenfield area of undisturbed land to the NE.

- 1.5 The rock in the existing quarry is extracted by both blasting and mechanical means, and the extracted material is mainly transported to the S section of the quarry for processing. Blasting under licence occurs at predetermined times. The excavated rock is crushed, screened in mobile crushers, graded, washed and stockpiled for transportation off-site. Processed material is either sold or used to produce ready mix concrete, concrete and crushed lime products. The material is weighed on the weighbridge at the site entrance in the SE section of the quarry which is also occupied by the site office and fuelling area. There is a large settlement lagoon system located in the SE corner of the existing quarry close to the site boundary with the Cong Canal, and there is a smaller pond located in a more central position to the S of the Further Development area. A scrap storage area is located in the NW section.
- 1.6 The “C” shaped Further Development area is located in the NW section of the overall quarry site and it comprises an area of c.10.58ha. The soil and overburden has been removed and used to construct berms around the site boundaries. Rock has been extracted to a depth of c.2.5m over most of the area although more extensive rock extraction has occurred in the vicinity of the S site boundary with the existing excavated quarry. The material was extracted, transported and processed in a similar manner to that outlined in section 1.5 above for the existing quarry. No fuel was stored in this area and there are no office facilities or services. Surface water is directed to the settlement lagoon system in the SE section of the existing quarry for discharge to the Cong Canal under licence from the County Council.
- 1.7 The quarry currently employs around 50 people in quarrying and quarry related activities including road construction projects. The quarry is operation on weekdays but not on Sundays and public holidays.

2.0 FURTHER DEVELOPMENT OF A QUARRY APPLICATION

The proposed development would comprise the extraction of c. 6.7million tonnes of limestone rock at the c.10.58ha quarry in two stages over a 50-year time frame.

- Stage 1 would be to a depth of + 5mOD
- Stage 2 would be to a depth of -12mOD

The proposed quarry works comprise:

- Extraction of stone
- Drilling and blasting of in-situ material
- Excavation of material and transport to existing quarry
- Processing, products and transportation to market
- Screening berms and landscaping

The application was accompanied by the following documents:

- Environmental Impact Statement (EIS)
- Natura Impact Statement (NIS)
- Further information in relation to European sites

3.0 SITE HISTORY

3.1 Relevant history

The site history is summarised in section 3.0 of the report prepared by the Inspector in relation to the application for Substitute Consent under SU16.SU0132 under the following headings:

- Pre 1964 and relevant planning applications
- Section 261 Registration
- Section 261A Determination

3.2 Substitute Consent application

Substitute consent was sought under SU16.SU0132 for quarry related works at the existing quarry which comprises a 10.58ha excavated area. The application was accompanied by a remedial Environmental Impact Statement and remedial Natural Impact Statement. The case file and Inspector's report are attached.

3.3 Legal proceedings

The owner/operator sought a Judicial Review of the Council and the Board decisions which were upheld by Mr Justice Charleton who directed McGrath Limestone Works Ltd. to apply to the Board for Substitute Consent. The owner/operator subsequently appealed this decision to the Supreme Court. The legal proceedings under Appeal no. 417/2014 have been postponed pending the outcome of the Board's determination on the substitute consent application under SU16.SU132.

3.4 Clarification of quarry status

The planning authority confirmed that the Substitute Consent area (and subject site) area comprises 10.58ha in the N section of the overall landholding and that the use of the pre-1963 area continues subject to the conditions attached to that area under Section 261.

4.0 PLANNING POLICY CONTEXT

4.1 The policy context is summarised in section 4.0 of the report prepared by the Inspector in relation to the application for Substitute Consent under SU16.SU0132 and there have been no changes to this context.

5.0 SUBMISSIONS

5.1 The Planning Authority

This report assessed the application under the following headings:

- Part 1 notes the legal position of the quarry.
- Part 2 deals with the effects of the proposal on the environment.
- Part 3 deals with the matters specified in S34(2) of the P&D Act.
- Part 4 summarises the conclusion.
- Part 5 suggests planning conditions in accordance with S34(4).

Part 2: Effects on the environment (EIS)

Human beings:

- Positive impact on employment and the local economy.
- Insignificant negative impact on agricultural land uses in the area.
- Nearby houses are buffered by earth berms and planting.
- Quarry generally not visible from public roads.
- Residential properties have the potential to be affected by noise emissions but no complaints received by the applicant or Council.
- Properties along the public road are unlikely to be affected by the cumulative impacts of traffic.

Fauna & flora:

- Potential direct and indirect impacts on flora and fauna resulting from land take and loss of habitats, disturbance and discharges.
- Loss of agricultural habitat will not significantly impact any species.
- Species already affected and disturbed by ongoing quarry activities.
- Discharges and emissions have not had significant impacts.
- No protected species or habitats identified in the ecological surveys.
- There is limited potential for cumulative impacts.

Soils:

- Loss of soil & overburden is a permanent but not significant impact.
- Loss underlying rock is a permanent but not significant impact.
- Mitigation measures are already in place to maintain and manage plant and machinery and to reuse soil and overburden in berms.

Water:

- Settlement water from the site will drain to settlement lagoons which discharge to the Cong Canal (under licence).
- Works above the water table with no impacts on groundwater.
- Rainwater is collected and pumped to the settlement lagoons.
- Washwater for crushing & screening is recycled from the lagoon.
- Spills and leaks could give rise to surface water contamination.
- EPA data indicates that water quality downstream is Good.
- Lagoon water complies with Environmental Quality Standards.
- There is sufficient capacity in the Cong Canal to accept discharge.
- Adequate mitigation measures to protect water quality.

Air and climate:

- Main impacts relate to dust, noise and vibration.
- Many of the houses in the vicinity post-date the quarry.
- Dust monitoring has been carried out since 2007 with levels of below 350mg/sq.m/day recorded.
- Mitigation measure include management of plant and equipment, and installation of wheel/under body wash facilities.
- EIS noise monitoring indicates levels of below 55dB (A).
- The only other source of noise is from nearby roads with no cumulative impacts predicted.
- EIS vibration monitoring data indicate that the standard operating parameters for quarry blasting have been met.
- Mitigation measures include mechanisms to maintain and manage vehicles and plant, maintenance of access roads, and monitoring.

Landscape:

- Located in a moderately sensitive landscape & along a scenic route.
- There are no identified protected views or prospects at this location.
- The landscape has been altered but the site is screened from view.
- Restoration and re-vegetation will minimise residual impacts.
- No other nearby quarries and no cumulative impacts predicted.

Material assets & cultural heritage:

- Loss of mineral resource is a minor negative impact.
- No items of cultural heritage in the vicinity.
- The road network has the capacity to accommodate quarry traffic.
- Some negative impact for traffic users entering/exiting the two county roads bounding the site (not fully addressed in the EIS).

Inter-relationship between the foregoing:

- Human beings, visual, noise, dust, material assets and traffic.
- Water & ecology.

Part 2: Effects on the environment (NIS)

- The impacts on individual habitats and species has been assessed.
- Little reference to the impact on the Conservation Objectives and Qualifying/Conservation Interests relative to the integrity of European sites, either by itself or in combination with other plans.
- New elements which were not present in the rNIS, including drilling and blasting, have not been assessed adequately.
- NPWS correspondence relates to the rNIS and not the current NIS.
- Many of the findings of the assessment of surface and groundwater impacts relate to the comparison of the local surface water and hydrological features prior to quarrying and the 2015 status.
- There is no prediction of future changes to surface and ground water as a consequence of the proposal, while there may be none predicted, this should be conclusively stated in the NIS.

- There are no detailed population surveys and assessments to support the NIS conclusion that there will be no negative impacts on Annex II species or on the Lough Corrib SAC or SPA.
- Each mitigation measure should include:
 - Evidence of how it will be secured and implemented
 - Evidence of degree of confidence in its success
 - A timescale for implementation
 - Evidence of how the measure will be monitored
 - Measures to rectify in the event of failure
- A mitigation measure for operating times was included in the rNIS but not the current NIS.
- The BIA should be incorporated into the mitigation measures to promote conservation and the possible maintenance/restoration of the favourable conservation condition of Lesser horseshoe bat.
- No reference to the impacts on European sites as a consequence of the decommissioning/restoration/reinstatement plans for the site.

Part 3: Matters specified in S34(2) of the P&D Act

- Consistent with the Mayo County Development Plan 2014-2020.
- There is no Special Amenity Area Order for this area.
- The site is not located within a European site but there is a potential hydraulic link to Lough Corrib SPA and Lough Carra/Mask SAC.
- Regard is had to relevant national policy and guidance.
- Suggested planning conditions are set out in Part 5 of the report.
- No other relevant applicable planning provisions or requirements.

Part 4: Conclusions

Having regard to:

- The location of the site within an existing quarry;
- the nature of the quarrying activities;
- The findings of the EIS and the mitigation measures;

- That there is no interaction with groundwater movement;
- That no direct or indirect impacts on Annex 1 aquatic habitats or Annex II species are envisaged;
- Past and current quarry activities do not appear to have adversely affected water quality;

The Council concluded that development would not be likely to have significant effects on the environment and it would be in accordance with the proper planning and sustainable development of the area, subject to compliance with conditions.

Part 5: Suggested conditions

Condition no.1: standard compliance

Condition no.2: implementation all EIS and NIS mitigation measures

Condition no.3: time constraints for works and restoration

Condition no.4: total annual output

Condition no.5: maximum extraction/excavation depth

Condition no.6: record of all extractions

Condition no.7: hours of operation

Condition no.8: details of blasting and frequency restrictions

Condition no.9: restrictions on vibrations from blasting

Condition no.10: operational noise limitations

Condition no.11: operational dust limitations

Condition no.12: wheel wash facilities

Condition no.13: bunding of over ground storage tanks

Condition no.14: drainage management plan

Condition no.15: no discharges to the public road

Condition no.16: details of the Environmental Management System

Condition no.17: landscaping details

Condition no.18: bonds

Condition no.19: financial contributions (S.48)

Condition no.20: financial contributions (S48(2)(c))

5.2 Prescribed bodies

5.2.1 The application was to the following prescribed bodies:

- Department of Arts, Heritage and the Gaeltacht
- The Department of Communication, Energy and Natural Resources
- Health Services Executive
- The Heritage Council
- An Chomhairle Ealaíon
- Inland Fisheries Ireland WRBD
- Fáilte Ireland
- An Taisce
- Irish Water

5.2.2 DCE&NR (Geological Survey of Ireland)

- No objection to the proposed development as the main concerns for groundwater linked to the karstic nature of the geological environment have been adequately addressed in the EIS.

5.2.3 Inland Fisheries Ireland WRBD

- Quarry water discharges via settlement lagoons to the Cong Canal which then flows through the IFI's Salmon Hatchery to the SE, and monthly water samples indicate that inflow from the Cong Canal has always been of a significantly high water quality standard.
- The hydrological report concludes that the quarry does not impact on ground and surface water, and the quarry has implemented a suite of environmental protection measures in agreement with IFI (including water management/recycling, a groundwater monitoring/sampling programme, bunding and site reinstatement works).

5.3 **Observers:**

No submissions received.

6.0 **RESPONSE SUBMISSIONS**

6.1 The **applicant** was requested to respond to the concerns raised by Mayo County Council, which are summarized in section 5.1 above.

Part 1: Legal proceedings postponed pending outcome of SU132.

Part 2(EIS): Accept the Council's views on the EIS

Part 2(NIS): The main points are summarised below.

Conservation Objectives:

- The screening assessment concluded that the sites which have potential to be impacted were Lough Corrib SAC & SPA, Lough Carra/Mask SPA and Ballymaglancy Cave SAC (NIS Table 2).
- NIS s.4.5 details the COs for these sites and lists the habitats & species for which they are designated, NPWS guidance explains measures to maintain or restore favourable conservation status.
- NIS s.5.1 examines the relationship between the quarry and the European sites and the relevance of each of the Qualifying Interests or Conservation Interests of each site to identify those that have the potential to be impacted by the proposed development.
- These included Oligotrophic, hard water lakes & floating river vegetation, aquatic species Salmon & Otter, wintering & breeding birds of Lough Corrib and Mask SPAs, and Lesser Horseshoe bats.

- The NIS has the benefit of having available scientific evidence from years of monitoring (air, water & noise) to support the conclusions reached (Tables 17 & 18).
- The relevant habitats and species were assessed in terms of their potential to be directly, indirectly or cumulatively impacted and the significance of potential impacts was summarised.
- The birds at Lough Corrib & Mask are outside the impact zone for noise disturbance and hydrological studies show that no pollutants enter (or will enter) Lough Corrib downstream of the quarry.
- The NIS concluded beyond scientific doubt that no impact has been shown in the past and none are predicted in the future.
- No restoration is proposed as the objective of maintaining the conservation status of the sites has been achieved through ongoing environmental management at the quarry.

New elements (drilling & blasting):

- Drilling and blasting were previously carried out in the S section of the site next to the existing quarry and this was referenced and assessed in the SU application.
- Noise and vibration monitoring is undertaken during daily activities and during blasting events to assess the levels which have been monitored in relation to the surrounding environs over many years.
- Noise and vibration monitoring was also undertaken during blasting at Lough Corrib (c.1.96km) which no noise or impacts recorded.
- Lesser horseshoe bat appears to have adapted to blasting over the past 60 years, their hibernation patterns have not been significantly affected and the direction of work is away from any known roosts.

- Noise levels have been below recommended guideline values with no evidence of disturbance to birds, bats or otters.

NPWS correspondence (rNIS):

- The correspondence in Appendix 1 relates to feedback obtained as part of a scoping document submitted to NPWS prior to compiling the rNIS and rEIS as part of the SC application.
- The current NIS was reviewed and updated based on the development objectives, comments and feedback from the NPWS.

No detailed population surveys:

- NIS conclusions are based on ecological field assessments c.20 site surveys, available desk survey data ongoing environmental monitoring results (air, noise & water) and a detailed hydro report.
- The Hydro report concluded that bedrock was impermeable and not karstified, and that quarry waters contribute 0.1% to the Cong Canal which discharges into Lough Corrib, with no impacts on ground or surface water or downstream aquatic species in the SAC/SPA.

Mitigation measures:

- Most of the measures are already carried out on a continuous basis.
- Annual audits ensure that existing measures are effective.
- The NIS recommended the construction of a berm and vegetated area along the W boundary to act as an ecological corridor for bats, other mammals and birds and to maximise biodiversity.
- Other measures including the retention of boundary walls and the remaining portion of the Cregaree site will be adhered to; and bat boxes will be erected at various along the boundary.

Operating times:

- The operating times in the rNIS and NIS refer to existing quarry arrangements and the Council have suggested similar conditions.

Bat Impact Assessment (BIA):

- The BIA proposed several mitigation measures including the retention of boundary walls and the remaining portion of the Cregaree site and associated vegetation; the provision of a new vegetated strip along the entire W boundary with native tree species; and the erection of bat boxes along the boundary.
- Bats have also benefited from ongoing conservation measures including the erection of stone walls and berms to the W; the retention of a wooded area to the S; and the retention of a wet woodland corridor along the canal to the E.

Decommissioning/restoration/reinstatement:

- The proposal would not have any impacts on ground & surface water and that water quality standards would not be breached, and there have been no adverse impacts from past quarrying and no future impacts are predicted.
- The restoration policy is for 150 years when the quarry will be allowed to flood and become a lake, and the mitigation measures will enhance biodiversity and the protection of habitats and species.
- Further studies will be carried out prior to decommissioning, restoration and reinstatement and during final decommissioning to ensure that there is no impact on species and habitats.

Part 3 & 4: Matters specified in S.34(2) and conclusions

- Accept Council findings and conclusions.

Part 5: Suggested conditions

Agree with all of the suggested conditions except for the following:

Condition 4: The cumulative measurement requires of total annual output would restrict the operation of the quarry business and the ability to diversify into new markets for quarry products.

Condition 6: The volume of various types of material is commercially sensitive information which is not for general publication but will provide overall figures exported off site on an annual basis.

Condition 7: Request re-wording to correlate with Condition 6 of S261.

Condition 8: Request that the frequency of blasts be changed to correlate with the S.261 conditions.

6.2 No other response submissions received from any of the parties.

7.0 FURTHER INFORMATION

7.1 The applicant was requested to amend the EIS and NIS to take account of the Kildun Souterrain SAC which is located to the E of the quarry. The Lesser horseshoe bat is the Qualifying Interest for this SAC as well as several other SAC sites in the vicinity of the quarry, including Lough Corrib (S), Louth Mask (N) and Ballymaglancy Cave(SW), all of which have been included in the EIS and NIS.

- 7.2 The applicant stated that Kildun Souterrain SAC was screened out from further assessment because of the separation distance with the quarry and changes in the vicinity of the site which have impacted on the viability of the maternity roost. These changes include road improvements with a resultant increase in traffic and the demolition of structures that housed the roost. It was also stated that most of the foraging area extended to the NE and away from the quarry direction.
- 7.3 Having regard to the network and prevalence of bat roosts and hibernation sites in the surrounding area, the foraging opportunities at and around the quarry site, and the potential for commuting routes to traverse the quarry, the applicant was requested to include this SAC in the EIS and NIS, along with the other aforementioned SACs. This was required to enable a comprehensive assessment of the potential impacts and effects of the proposed development on bats and the SACs for which the Lesser horseshoe bat is a Qualifying Interest. The documents were amended accordingly with no resultant change to the EIS and NIS conclusions or mitigating measures.
- 7.4 The inclusion of the Kildun Souterrain SAC in the EIS and NIS resulted in minor amendments to these documents which does not constitute significant further information. There is now sufficient information for the Board to undertake an Environmental Impact Assessment and Appropriate Assessment of this application for further development.

8.0 ASSESSMENT

8.1 The main issues arising from this application for further development at the c.10.58ha quarry are:

- Development plan policy
- Environmental Impact Assessment
- Appropriate Assessment
- Conditions

8.1 Development Plan policy

The site is located in an un-zoned rural area outside of any established settlement and the use of the lands for quarrying is compatible with national and local planning policy as set out in the 2004 Quarry Guidelines and the current County Mayo and County Galway Development Plans for the area, and in particular the policies and objectives which deal with the extractive industry.

8.2 Environmental Impacts

8.2.1 The Environmental Impact Statement

The applicant submitted an Environmental Impact Statement (EIS) which describes the receiving environment, identifies potential impacts and assesses the potential for likely significant impacts on the standard range of environmental components, and it examines alternatives. The EIS describes the existing mitigation measures at the quarry and proposes new measures, it identifies cumulative impacts and assesses residual impacts post mitigation. Most sections of the EIS contain survey results, data analysis and maps. The Technical Appendices (which include an Ecology Report, Bat Impact Assessment, Hydrological & Hydrogeological Assessment and Traffic Impact

Assessment) are located the end of the document. The EIS was accompanied by a non-technical summary. The EIS was amended to take account of the Kildun Souterrain SAC which forms part of an extensive network of European sites in the surrounding area for which the Lesser horseshoe bat is a Qualifying Interest.

8.2.2 Environmental Impact Assessment

A summary of the Environmental Impact Statement (EIS) and the Inspector's Environmental Impact Assessment (EIA) are set out below.

8.2.1 Human beings

EIS: Section 4 of the EIS deals with the impact of the quarry on human beings. It contains population, socio economic, housing, employment, tourism and recreational data for the area and confirms that a number of houses are located within the vicinity of the quarry. It notes that 50 people are directly employed and a further 50 are indirectly employed by the quarry, and states that the quarry indirectly benefits the wider economy. The EIS states that appropriate measures are in place to ensure compliance with relevant health and safety legislation.

EIA: The site boundaries are defined by a mix of embankments and wooded areas, and vehicular access to the quarry is via an entrance located along the S site boundary with the local road. Nearby houses are buffered from disturbance by earth berms and planting. Although residential properties have the potential to be affected by dust and noise emissions, the Council has not received any complaints. The quarry is generally not visible from public roads including the scenic route to the S along the R345. The planning authority raised concerns in relation to operational hours, the effects of the works and suggested conditions. The IFI and GSI did not raise any concerns.

- No residual impacts are anticipated.

8.2.2 Flora and fauna

EIS: Section 5 of the EIS deals with the impact of the quarry and its ancillary activities on flora and fauna. Several desktop and field surveys were undertaken in relation to habitats, flora and fauna which continued on up until September 2015, and included seasonal survey data. The zone of influence was defined as the FD area, the overall quarry and the immediately surrounding area (3km radius of the quarry plus 15km downstream). Impacts were assessed in relation to the location of European sites; the extent of noise, vibration and dust impacts on ecological receptors; downstream separation distance; and the location of Lesser Horseshoe Bat colonies and suitable foraging habitat.

The EIS states that the main habitat in the FD area (before the extraction which is the subject of the Substitute Consent application) was dominated by grassland/scrub and improved grassland, with woodland (including hedgerows), scrub, and limestone pavement (Priority habitat) with grassland, heath and scrub, and the area was suitable for a range of flora, fauna and invertebrates. The FD area may have contained three Flora Protection Order flowering plants (Chives, Lady's Tresses and Wood Bitter-vetch (which is endangered)) and four species of moss which are listed as threatened. Most birds, including those which are listed as conservation interests for the nearby European sites, are unlikely to have regularly used the FD area because of the activities in the overall quarry.

The FD area may have contained several protected species of mollusc, butterfly and odonata which are threatened or near threatened, as well as Smooth newt and Common frog. The FD area provided suitable habitat for several protected species of mammal (including pine martin, otter, stoat, pigmy shrew and bank vole), and suitable foraging and roosting habitat for several protected species of bat (including Daubentons, Natters, Lesser Noctile, Pipistrelles, Brown Long-eared and Lesser Horseshoe).

The EIS states that the main habitat in the FD area is now classified as “Active quarries and mines with some re-colonising bare ground” with some narrow sections of “Limestone Pavement” along the W and NW boundaries. No significant plants or mammals were recorded during the surveys. Otter is known to frequent the undeveloped Cong Canal to the E. No suitable habitat for roosting, hibernating or breeding bats (including Lesser Horseshoe Bats associated with nearby SACs) was identified, although bats are likely to commute along a large stone wall to the W and the Cong Canal to the E, and to forage over vegetated areas within and around the overall quarry landholding. Some foraging birds were recorded in the FD site and surrounding area (Meadow pipit, Pied wagtail and Linnet) and in the overall quarry (Peregrine falcon, Kestrel, Sparrowhawk and Grey wagtail), along with two pairs of breeding Ringed plover. Common frog was recorded on the berm in the FD area which also contains suitable areas for Common lizard.

The EIS states that past quarry activities have not had an adverse impact on groundwater or surface water quality, with no resultant impacts or effects on downstream aquatic habitats or species, and that future quarry works will not have any impacts. This issue is addressed in more detail in sections 8.2.4 and 9.0 below.

The EIS stated that past quarry activities (which are the subject of the Substitute Consent application) have resulted in the irreversible loss of habitats (including limestone pavement), flora (including rare and/or protected species) and fauna (including mammals, birds, bats, amphibians and invertebrates) which is significant at local level. Impacts related to noise, vibration, dust and water quality were assessed as neutral as they are tightly regulated and managed. Quarry noise appears not to have affected bat hibernation sites in the vicinity of the quarry as their population numbers are relatively stable.

The EIS states that the creation of berms and the preservation of natural habitats along the S and E boundaries have contributed to biodiversity and foraging opportunities for bats (including Lesser Horseshoe Bat). Existing mitigation measures include the creation of berms as wildlife corridors; training; and noise, dust, waste and water quality management. Proposed mitigation measures include the creation of new berms along the W boundary to provide an ecological corridor; ongoing ecological surveys; no works during the breeding season for Ringed Plover; and no blasting during the breeding season for Peregrine Falcon. No cumulative or residual impacts are predicted.

EIA: The FD area, the overall quarry and the surrounding area originally comprised a range of habitats, flora and fauna. This included protected (and priority) habitats such as Limestone Pavement within the FD area, and a variety of lakes, watercourses, woodlands and caves in the wider area (including Lough Mask, Lough Corrib and Ballymaglancy Cave). It also included several protected species which either occupied, frequented or foraged in the FD area (plants, small mammals, bats, amphibians and invertebrates). Some of these species were identified as endangered, threatened or nearly threatened (including Wood Bitter-vetch, 2 species of moss and invertebrates).

The FD area has been cleared of all vegetation, soil and overburden, and the top layer of limestone rock has been extracted to a depth of c.2-2.5m although a small section that interfaces with the original quarry has been extracted to a depth of c.14m. This previous loss of habitat, flora and fauna represented a direct, negative, permanent and irreversible impact. Although these impacts were of a mainly local scale, the impact of the loss of endangered and/or threatened species from within the site could have been regional and national in significance. However, the proposed development will not give rise to any further loss of habitat, flora and fauna. It is also likely that the neighbouring lands, which may contain or be frequented by these aforementioned species, has not been, and will not be, significantly

affected by quarry activities. This is subject to the continued monitoring of dust, water and noise emissions and the implementation of mitigation measures including the planted berms around the site boundaries.

In relation to indirect impacts, several sites of importance to bats in the wider area (for roosting, breeding, hibernation and foraging) appear not to have been significantly affected by past quarry noise and it is unlikely that they will be affected by future quarry noise. Bats still use the perimeter of the FD area, the overall quarry and the surrounding area for commuting and foraging. Birds also frequented the FD area before the extraction works which are the subject of the Substitute Consent application, although not to any significant extent because of the noise and disturbance associated with overall quarry activities. Although the past loss of foraging grounds has had an impact on birds and bats, future impacts are not considered significant and some species will continue to use the area, subject to continued monitoring and the implementation of mitigation measures.

The reuse of the excavated soils and overburden to form berms around the FD area has contributed to biodiversity, and the continued maintenance and planting of these berms with native tree and shrub species will enhance commuting routes for bats and other small animals, and provide access to foraging opportunities for several species of bats and birds. The overall quarry restoration reinstatement proposals should also take account of ecological concerns.

The concerns raised by the planning authority in relation to inadequacies in the NIS assessment are noted and will be addressed in section 9.3 below. The IFI is satisfied that quarry water discharges via settlement lagoons to the Cong Canal have always been of a significantly high water quality standard with no adverse impacts on their downstream salmon hatchery. The GSI did not raise any concerns in relation to flora and fauna.

The FD area has a direct aquatic link to a number of watercourses and European sites in the wider area by way of its connection to the overall quarry (including the Lough Corrib SAC to the S). Some of these watercourses and European sites could be affected by quarrying activities in the FD area. However, this issue will be addressed in more detail in section 8.2.4 and section 8.3 below.

- No residual impacts anticipated.

8.2.3 Geology and soil

EIS: Section 6 of the EIS deals with the impact of the quarry and its ancillary activities on geology and soils within the quarry and the surrounding area.

The EIS states that the topography of the FD area is gently sloping from N to SE (15mOD to 26mOD). The underlying bedrock comprises a type of Cong Limestone (CO) which is virtually impermeable, although the Cong Canal Formation (NL) to the W is more porous. Soils Maps indicate that the site originally comprised “BminSW” mineral soils underlain with “karstified limestone bedrock at surface”. There are no geological features within the site although there are several features in the wider area. The top layer of rock has been removed which has had a localised permanent impact, and the topsoil has been used to create screening banks along the boundaries.

According to EIS Drawing No. PP-120-00, rock has been extracted from the existing quarry to a level of between 15mOD and c.5mOD over a number of benches to ensure stability and enable future restoration. The top layer of rock in the FD area was previously extracted to a depth of c.2-2.5m although a small section that interfaced with the original quarry has been extracted to a depth of c.14m. The existing levels over most of the FD area are between 18mOD to 26mOD. It is proposed to extract some 6.7million tonnes of

rock from the FD area to an ultimate level of c.-12m OD over two stages within a c.50-year time frame. Stage 1 would be extracted to a depth of 5.0mOD and Stage 2 would be extracted to a depth of minus 12.0mOD.

The EIS states that there is potential for groundwater pollution from accidental spillages however most repairs and refuelling take place in the existing quarry in workshops and bunded areas. Existing mitigation measures include monitoring and restoration. There are two other small quarries within c.0.9km and 1.9km, with no cumulative impacts predicted with these and the existing quarry.

EIA: The loss of rock is an inevitable and permanent consequent of quarrying, however the creation of planted berms around the boundaries has served to protect visual amenity and enhance biodiversity, and no known sites of geological interest would be affected by the proposed works.

Approximately 6.7 million tonnes of rock would be extracted from the FD area over 50 years to an ultimate level of -12m OD. The amount of rock that would be removed is extensive, the timeframe is expansive, and the depth of extraction would be significantly greater than in the existing quarry. This combination of volume, depth and time poses a challenge to impact prediction, other than to state conclusively that the loss of rock will have a permanent, direct and irreversible impact.

The proposed extraction would take place over two stages. Stage 1 would result in a quarry floor level of 5mOD which is similar to the levels in the existing quarry. Stage 2 would result in a level of minus 12mOD which would be significantly lower than the floor of the existing quarry. It is noted that the EIS impact predictions are correlated with the evidential absence of any significant environmental impacts as a result of past activities in the existing quarry (c.5mOD). Furthermore, the geological characteristic of the underling bedrock and the EIS

borehole evidence (which is assessed in section 8.2.4 below) indicate there would be no adverse impacts on groundwater as a result of the proposed works. However, having regard to the “C” shaped configuration of the FD area and the narrow width of some of the sections, particularly at the interface with the existing quarry, I have concerns that it might not be possible to extract to a depth of minus 12mOD in the FD area in a safe, benched or practical manner. This concern could be addressed by way of a planning condition.

On-site management of fuelling and equipment repairs currently seeks to prevent groundwater contamination and the on-going mitigation measures, which include adherence to best practices, will further minimise any adverse impacts soils and geology, subject to the aforementioned conditions. The IFI or GSI did not raise any concerns in relation to soils and geology.

- No residual impacts anticipated subject to a condition restricting the works to Stage 1 only.

8.2.4 Hydrology and hydrogeology

EIS: Section 7 of the EIS deals with the impact of the quarry and its ancillary activities on hydrology and hydrogeology within the quarry and the surrounding area.

The EIS states that the site lies on a land bridge of limestone between Lough Mask and Lough Corrib, that the Cong Formation (CO) limestone bedrock within the quarry is virtually impermeable, and that site levels fall gently N to SE. The Cong Canal, which is a manmade feature to the E of the quarry, links Lough Mask to Lough Corrib, is also located within the Cong Formation. The limestone bedrock to the W is part of the Cong Canal Formation (NL) which curves around the quarry and extends N and S to the shores of Lough Mask and Lough Corrib.

The EIS states that this bedrock (NL) is more porous than the quarry bedrock (CO), that the boundary between the two types runs along a W to E axis along which there are many caves and springs, and that groundwater flows from Lough Mask to Lough Corrib are part of a very deep groundwater system that is c.30-40m below sea level.

The EIS states that the site lies within the WFD catchment of “Mask-Trib of Corrib” River waterbody which has a Moderate water quality status, Lough Corrib and the Cong Canal have Good Status. Surface water discharges from the quarry via settlement lagoons in the SE corner to the Cong Canal, the Cong River and Lough Corrib. There is an IFI fisheries hatchery to the SE of the quarry along the Cong River.

The EIS states that the site is underlain by the “Corrib-Robe groundwater body which has an overall WFD status of Poor with an overall objective to “restore.” The poor status is related to one or more of the surface water bodies in the catchment having a high phosphate level as a result of farming activity and/or septic tanks however the phosphate levels in the Cong Canal are not the source. The EIS states that IFI and quarry ground water monitoring data indicate that suspended solids and nitrogen concentrations in water discharging from the quarry are usually below detection limits.

The EIS describes the underlying aquifer as Rkc (Regionally important karstified aquifer dominated by conduit flow), there are no karst features in the SC area or the overall quarry site although there are several caves and springs located to the S of the site. There are no wells located within the quarry and there are no wells or public water abstraction areas with c.4km of the site. Surface water flows from N to SE and is discharged from the quarry via a settlement lagoon to the Cong Canal. There is no evidence of flooding on the surrounding area.

The EIS states that the main works that have already taken place in the FD area, which are the subject of the Substitute Consent application, relate to scrub clearance, soil removal and the separation of the top 0-2.5m of weathered limestone rock from the underlying upper bedrock to create a solid platform. It states that there has been no abstraction of solid limestone bedrock over most of the FD area although a 1.7ha area bedrock in the FD area has been excavated to a depth of 14m where the FD area interfaces with the original quarry. It states that the water table has not been breached, no water is pumped from the FD area, there is no ground water flow from the S face of the FD area although there are some seeps during heavy rainfall.

The EIS undertook a hydrogeological and hydrological assessment of the entire quarry which analysed existing monitoring results from groundwater boreholes and cored holes. Monthly water level monitoring data was recorded and data loggers were installed to record groundwater levels across the entire site. Ground water borehole water levels, water inflows from exposed blast faces/quarry walls or from upper floor runoff zones, and flooding levels in the quarry floor were also recorded. The assessment concluded that quarry activities had not adversely affected ground or surface water quality locally or in the wider catchment, and that extraction in the much smaller (albeit deeper) FD area would not have an adverse impact. This conclusion was substantiated by the EPA and OPW water quality and hydrometric data for the waterbodies. There is no flood risk as the canal and river have substantial spare capacity to carry massive amounts of water. The existing mitigation measures include the settlement lagoon, management systems, discharge licences and monitoring.

EIA (Groundwater): The past extraction of a small amount of rock from the FD area to a modest depth has not resulted in any breaches of the water table or seepage of surface water or pollutants to groundwater and there are no ponds on the floor of the FD area. There is small pond on the floor of the existing quarry close to the interface

with the FD area which does not appear to be fed by pumped water. Although this could indicate that the water table has been breached, it is considered unlikely having regard to the extensive bore hole data contained in the EIS and supporting Hydro Report, and the dense and impermeable nature of the underlying bedrock.

Vehicles and machinery would not be refuelled or maintained in the FD area and extracted rock would be transported to the existing quarry for processing. This would minimise the potential for ground water pollution as a result of spillages and leakages and mitigation measures would be put in place to prevent and deal with accidents. There are no wells or public water abstraction points in the surrounding area that could be affected by the proposed development.

EIA (Surface water): Past quarry activities in the existing quarry and FD area have not given rise to any significant levels of surface water run-off from rainfall or water flowing into the quarry from higher ground. Surface water from the FD area would either flow or be pumped to the settlement lagoons in the SE corner of the existing quarry. The settled water would then be pumped to the Cong Canal to the E of the quarry (under a Discharge Licence), which ultimately drains into the Lough Corrib SAC via the Cong River.

These watercourses are linked to the quarry over a relatively short distance and the proposed development could potentially have an adverse impact on surface water quality and aquatic wildlife downstream of the site. However, the EIS water monitoring results, which have been supported by EPA and IFI data, indicate that water quality in the canal, river and lake have not been adversely affected by past quarry works to any significant extent. The IFI states that it is satisfied that quarry water discharges to the Cong Canal have always been of a significantly high water quality standard with no adverse impacts on their downstream salmon hatchery along the Cong River. Provided that existing water management and monitoring practices are

maintained, the proposed development (Stage 1) would not have an adverse impact on surface water quality in the surrounding area.

The site is not located within a floodplain or a flood risk area and the Cong Canal has adequate spare capacity to carry additional large volumes of water. Past quarry activities have not given rise to any flooding concerns in the surrounding area and it is unlikely that the proposed development (Stage 1) would give rise to flooding, subject to the continued implementation of water management and monitoring practices. The planning authority, IFI or GSI did not raise any further concerns in relation to hydrology and hydrogeology.

- No residual impacts anticipated.

8.2.5 Climate and air quality

EIS: Sections 8 and 9 of the EIS deals with the impact of the quarry and its ancillary activities on climate and air quality on the surrounding area. The EIS states that activities in the FD area (vehicles and operational plant equipment) could give rise to CO₂ and N₂O emissions and that current emissions from the existing quarry are monitored as part of the ongoing Energy Management System. It states that there are several houses to the E and W of the quarry and that the nearest house is c.110m to the NE of the FD area, and that there are no ecologically sensitive areas nearby. Dust deposition monitoring of quarrying activities has been carried out at 6 locations around the site since 2007 and most results were below the guideline value of 350mg/sq.m./day. Existing on-going mitigation measures include routine wetting of hard standing areas and stockpiles, wheel wash facilities, speed limits and monitoring. The only other source of dust is from nearby roads and two small quarries that are c.0.9km and 1.9km away, with no cumulative impacts predicted.

EIA: Quarry operations give rise to the inevitable emission of dust particles as a result of extraction, processing, stockpiling and movement. The surrounding area is not densely populated and there are no ecologically sensitive areas in the immediate vicinity, and most of the site is screened by embankments, berms and wooded areas. The planning authority recommended that dust control measures be put in place to prevent pollution and to protect residential amenity and the adjoining road network. It is noted that dust deposition in the surrounding area from past quarry operations has not been a noticeable problem and it has not given rise to any significant adverse impacts, however the planning authorities conditions should nonetheless be attached to any grant of permission. The IFI and GSI did not raise any concerns in relation to climate and air quality.

- No residual impacts anticipated.

8.2.6 Noise and vibration

EIS: Section 10 of the EIS deals with the impact of noise and vibration from quarry activities on the surrounding area (including extraction, blasting, processing, transportation and berm construction). The results of on-going monitoring at six locations around the quarry indicate that past operations within the FD area and overall quarry were within acceptable limits, and noise levels were below 55dB(A) at the nearest houses. The EIS vibration monitoring data indicate that the standard operating parameters for blasting have been met to date. There is no record of noise complaints to the County Council in relation to past quarrying activities. On-going existing mitigation measures include compliance with guidelines, optimal blast design, minimising drop heights, and regular maintenance of equipment, and monitoring. The only other source of noise in the surrounding area is from along nearby roads with no cumulative impacts predicted.

EIA: The generation of noise and vibration is an inevitable consequence of quarrying and the levels generated will depend on the type of activity undertaken (including excavations, blasting, processing and haulage) as well as weather conditions. The surrounding area is not densely populated and most of the site is well screened by embankments and wooded areas. The planning authority requested that blasting be restricted to not more than 4 events per month with prior notification given to residents within a 600m radius. However, the applicant would prefer a similar condition to the Section 261 registration arrangements which permits 6 blasts per month. Given the potential level of disturbance caused by blasting, I am satisfied that 4 blast events per month would be in the best interest of local residents. The applicant's supporting documentation also recommended the prohibition of blast events within one hour of sunrise and sunset to avoid disturbance to commuting bats, with no blasting during the breeding season for Peregrine Falcon, and no works during the breeding season for Ringed Plover. This could be addressed by way of a planning condition. The IFI and GSI did not raise any concerns in relation to noise and vibration.

- No residual impacts anticipated subject to the attachment of conditions in relation to the timing of blast events.

8.2.7 Roads and traffic

EIS: Section 11 of the EIS deals with the traffic impacts of the quarry and its ancillary activities on the surrounding area and road network and a Traffic Impact Assessment (TIA) was prepared. The analysis of the junction of the quarry entrance with the R345 during operational hours indicate that the existing junction operates well below the maximum desirable 0.85RFC and within capacity up to 2030, and that the maximum queue length is less than 1 vehicle under all scenarios. There is no record of any collisions along the R345 in the vicinity of the entrance between 2005 and 2012. The TIA recommended that the right

hand visibility splay be assessed with regard to the proposed lowering of the speed limit to 60km/hr along the R345, that visibility be maintained accordingly and that existing signage is free for vegetation.

EIA: Quarry operations could give rise to traffic generation along the local and regional roads. Vehicular access to the quarry is off the R345 regional road, visibility at the junction is adequate in either direction, the R345 is not heavily trafficked, and it has sufficient capacity to carry current and future quarry related traffic. The Planning Authority has raised concerns in relation to possible negative impacts for traffic users entering and exiting the two county roads bounding the site to the E and W which may not have been fully examined in the rEIS. However, traffic generation in the surrounding area from past quarry operations has not been a noticeable problem, it has not given rise to any significant adverse impacts, and it is unlikely that the proposed development (Stage 1) would give rise to problems in the future. The IFI and GSI did not raise any concerns in relation to roads and traffic.

- No residual impacts anticipated.

8.2.8 Landscape, restoration and visual impact

EIS: Section 12 of the EIS deals with the visual impact of the quarry and its ancillary activities on the landscape. The landscape assessment identified the main landscape types and a landscape and restoration plan is proposed. There are no protected views in the vicinity of the quarry although the R345 is a designated scenic route between Cong and Clonbur. It concludes that the FD area is not visible because of the presence of embankments and wooded areas around the site boundaries. Although the FD area can be seen from a small number of locations, including some nearby houses, the impact is not significant. The landscape and restoration plan recommends the use of more tree

planting to further screen the quarry and reduce the visual impact, with the ultimate flooding of the quarry to form a lake.

EIA: Quarry works have an inevitable impact on the landscape. The quarry is located within a landscape that rises up gently from Lough Corrib to the S, the site boundaries are mainly defined by stone walls, embankments, fencing and wooded areas, and views into the site are largely obscured by these features. The quarry is located along a section of the R345 which is a tourist and scenic route however there are limited views into the FD area because of the aforementioned boundary features and the separation distance between the FD area and the quarry boundary and the R345. No heritage features in the immediate vicinity would be affected. The FD area is visible from a number of houses located along the local road to the N of the quarry although the impact is not significant because of the separation distance and the screening arrangements. Any localised visual impacts would be addressed by the restoration plan, berms and additional tree planting, full details of which should be required by way of condition. It is noted that the planning authority, the IFI and GSI did not raise any concerns in relation to the landscape or visual impacts.

- No residual impacts anticipated.

8.2.9 Material assets and Cultural heritage

EIS: Sections 13 and 14 of the EIS deal with the impact of the quarry and its ancillary activities on material assets, archaeology and cultural heritage, within the quarry site and the surrounding area. There are no recorded monuments, sites of archaeological interest, protected structures or NIAH structures within the site. However there a number of heritage features in the surrounding area. These include three Neolithic Tombs, several early medieval ringforts and enclosures, and later medieval ruins (including Cong Abbey). There are three Protected Structures in the vicinity of the quarry including the Cong Canal to the

E, and several non-designated NIAH structures which include farmhouses, houses, churches, a smithy, bridges and demesne walls, gates and railings. The EIS states that there have been no significant negative impacts on material assets or archaeology and cultural heritage to date and none are predicted.

EIA: Quarry operations have resulted in the inevitable removal of substantial amounts of rock from the site and the loss of some agricultural land. However, the works have not had any known adverse impacts on material assets, archaeology or cultural heritage in the area. However, it is possible that archaeological material could be discovered during the proposed extraction works and future restoration phase. A planning condition should be attached to ensure the preservation of any artefacts. It is noted that the planning authority, IFI and GSI did not raise any concerns in relation to material assets, archaeology or cultural heritage.

- No residual impacts anticipated subject to the attachment of an archaeological condition.

8.2.10 Interactions and cumulative impacts

EIS: Section 15 of the EIS summarises the interactions and states that the relevant interactions and cumulative impacts have been identified in the various sections of the EIS. It concludes that the main interactions are between human beings, water and the landscape. The existing quarry, two small quarries in the wider area and the salmon hatchery at Cong are the only other projects in the vicinity, and no cumulative are impacts predicted.

EIA: Quarrying can give rise to inevitable and unavoidable impacts on the environment and many of these impacts interact with each other. The main area of concern relates to the effects of the extraction and processing works on human beings, hydrology and hydrogeology and the interaction with soils and geology and surface water processes, ecology, and on the landscape.

The proposed mitigation measures and suggested conditions related to the management of surface water, processing water and on-site drainage, and site restoration, should ensure that adverse impacts are not significant. With the exception of the existing quarry, there are no other developments in the surrounding area that could give rise to cumulative or in-combination impacts. It is noted that the planning authority, IFI and GSI did not raise any concerns in relation to interactions or cumulative impacts.

- No residual impacts are anticipated.

8.3 Appropriate Assessment

8.3.1 The Natura Impact Statement

The application was accompanied by a Natura Impact Statement (NIS). The main concerns related to ecology and the concerns raised by the planning authority are summarised in Sections 5.1 and 5.2, and addressed in sections 8.2.2 and 8.2.4 of this report. These sections should be read in conjunction with this assessment. The NIS was amended to take account of the Kildun Souterrain SAC which forms part of a network of European sites in the surrounding area for which the Lesser horseshoe bat is a Qualifying Interest.

The NIS described the FD site, the overall quarry, the surrounding area and the development for which substitute consent is sought. It used the extensive data which was collected as part of the EIS desk and field surveys (including the Ecology, Bat Impact Assessment and Hydrology & Hydrogeology reports).

The NIS confirmed that the development was not located within a European site. The Screening Assessment identified 13 European sites within a 15km radius of the quarry and screened out the sites which did not have the potential to be affected by the development. The NIS identified the following 6 European sites where potential interactions are likely, and these sites are located within a c.4km radius of the works.

- Lough Carra/Mask SAC & SPA
- Lough Corrib SAC & SPA
- Ballymaglancy Cave SAC
- Kildun Souterrain SAC

The NIS stated that there is no spatial overlap between the FD area and these European sites and that no direct impacts are predicted. It stated that these sites have the potential to be indirectly affected because of: - potential hydrological links with implications for water quality; disturbance to commuting

routes for otter; and disturbance to foraging habitat for bats; and noise disturbance to wintering and breeding birds.

The NIS listed the conservation interests for the SPAs, the qualifying interests for the SACs, and the conservation objectives for each of the sites. The NIS identified the potential sources of direct and indirect impacts (which include surface water discharge, noise, dust, vibration and waste) on these sites and assessed the impacts and the significance of the impacts.

The NIS also assessed cumulative impacts in relation to existing quarrying activities and the impacts of other activities in the surrounding area. The NIS examined the ongoing mitigation measures (related to the management of noise, dust, waste and water) and proposed new mitigation measures (which relate to berms, planting and birds), and it identified residual impacts post mitigation. The final section dealt with restoration which mainly relates to the future flooding of the extraction area. The NIS was accompanied by appendices which contained the Botanical Survey Data, Bird Survey Data, and Bat Impact Assessment Report.

The NIS concluded that development in the FD area and the overall quarry was not likely to have any significant adverse effects, on its own or in combination with other plans and projects, on the conservation of any European Sites in the area.

8.3.2 Appropriate Assessment

The SC area is not located within an area covered by any European site designations and it is not relevant to the maintenance of any such site. However, the following European sites are located within a 15km radius of the SC area and overall quarry.

European site	Site	Code	Distance KM	Relevant features
Lough Carra/Mask	SAC	001774	c.1.4 - NW	Aquatic, otter & bats
Lough Carra/Mask	SPA	004062	c.2.4 - NW	Birds & wetlands
Lough Corrib	SAC	000297	c.1.9 - S	Aquatic, otter & bats
Lough Corrib	SPA	004042	c.2.0 - S	Birds & wetlands
Ballymaglancy Cave	SAC	000474	c.2.5 - SW	Bats
Kildun Souterrain	SAC	002320	c.3.8 - E	Bats
Clyard Kettle-holes	SAC	000480	c.6.5 - NE	Turloughs
Mocorha Lough	SAC	001536	c.8.2 - E	Fens
Cloughmoyne	SAC	000479	c.10.0 - SE	Limestone
Shrule Turlough	SAC	000525	c.10.4 - E	Turloughs
Skealaghan Turlough	SAC	000541	c.11.9 - NE	Turloughs
Ardkill Turlough	SAC	000461	c.14.4 - NE	Turloughs
Greaghans Turlough	SAC	000503	c.15.7 - NE	Turloughs

I am satisfied that all but 6 of these 13 sites can be screened out of any further assessment because of:- the main features of the European site; the absence of any aquatic connection between the European site and the SC area; the absence of suitable habitats within the SC area and the overall quarry for species that have been identified as qualifying interests or conservation interests for the European sites; and/or the separation distance between the SC area and the European site, which would be beyond the normal commuting range of relevant species.

The relevant European sites are:

Site name	Site	Code	Distance	Direction
Lough Carra/Mask	SAC	001774	c.1.4	NW
Lough Carra/Mask	SPA	004062	c.2.4	NW
Lough Corrib	SAC	000297	c.1.9	S
Lough Corrib	SPA	004042	c.2.0	S
Ballymaglancy Cave	SAC	000474	c.2.5	SW
Kildun Souterrain	SAC	002320	c.3.8	E

The generic Conservation Interests for the two SPAs are:

1. To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA.
2. To maintain or restore the favourable conservation condition of the wetland habitat at Lough Mask and Lough Corrib SPAs as a resource for the regularly-occurring migratory waterbirds that utilise them.

Site name	Code	Conservation interests	Attributes & Targets
Lough Carra/Mask	004062	Tufted Duck Black-headed Gull Common Gull Lesser Black-backed Gull Common Tern Greenland White-fronted Goose Wetland and Waterbirds	None specified
Lough Corrib	004042	Gadwall Shoveler Pochard Tufted Duck Common Scoter Hen Harrier Coot	None specified

		Golden Plover Black-headed Gull Common Gull Common Tern Arctic Tern Greenland White-fronted Goose Wetland and Waterbirds	
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The generic Conservation Interests for the SACs is:

1. To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

Site name	Code	Relevant Qualifying Interests	Attributes & Targets
Lough Carra/Mask	001774	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp Lesser Horseshoe Bat Otter	None specified
Lough Corrib	000297	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. Floating water vegetation Lesser Horseshoe Bat Slender Naiad Salmon Otter	None specified
Ballymaglancy Cave	000474	Caves	None specified

		Lesser Horseshoe Bat	
Kildun Souterrain	002320	Lesser Horseshoe Bat	None specified

All but two of the Qualifying Interests for the Lough Carra/Mask SAC can be screened out of any further assessment because of the topography of the area, the nature and characteristics of the underlying limestone bedrock and the absence of any groundwater or surface water connection (directional flow) between this SAC and the FD area, as summarised in sections 8.2.3 and 8.2.4 above.

There is no direct physical connection between the FD area and the Ballymaglancy Cave SAC and “Caves” which is one of the Qualifying Interests for this site can be screened out of any further assessment.

Favourable conservation status of a habitat is achieved when:

- Its natural range, and area it covers within that range, are stable or increasing, and
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and

- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The potential indirect impacts relate to:

- Transport of pollutants in surface water flowing into the SAC/SPA via on-site discharges to the Cong Canal.
- Transport of pollutants in ground water flowing into the SAC/SPA.
- Ex-situ impacts on qualifying species outside the SAC/SPA but which is an integral and connected part of the population of qualifying interest species such as otter and several species of bird and bat, as a result of noise, vibration, dust and waste.

Discussion:

Lough Carra/Mask SPA and Lough Corrib SPA:

The Lough Carra/Mask SPA is located c.2.4km to the NW of the FD area and overall quarry whilst the Lough Corrib SPA is located c.2.0km to the S. These sites have been designated for their importance to several species of bird (including wintering, migratory, wetland and waterbirds). The surrounding lands, which are located outside the SPA site boundaries also provide backup support for feeding and roosting birds and it is possible that birds commute over the FD area when flying between the two SPA sites.

The EIS carried out extensive bird surveys which were used to inform the NIS and the survey data is summarised and analysed in the section 8.2.2 above. Several bird species were recorded using or flying over the FD area and it is possible that species which are listed as Conservation Interests for the nearby European sites may have foraged in the overall quarry landholding and adjacent lands. However, it is likely that noise and disturbance from on-going

activities in the existing quarry, which has been operational for several decades, rendered the FD area relatively unsuitable for foraging birds on a regular basis. Although Peregrine Falcon and Ring-necked Plover have been recorded in the FD area, these species are not listed as Conservation Interests for the SACs. The existing and proposed mitigation measures, which relate to the control of dust, noise, vibration and blasting, and enhancement of biodiversity would serve to minimise future impacts.

Having regard to the foregoing, I am satisfied that there is sufficient scientific information before the Board to reach a conclusion that the proposed development in the FD area would not have a significant adverse effect on this European site and its Conservation Objectives, which seek to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA, and the wetland habitat as a resource for the regularly-occurring migratory waterbirds that utilise them.

Lough Carra/Mask SAC:

The Lough Carra/Mask SAC is located c.1.4km to the NW of the FD area and overall quarry boundary. The remaining relevant Qualifying Interests, which have not been screened out during this assessment, comprise Otter and Lesser Horseshoe Bat.

Otter is known to commute along the undeveloped Cong Canal to the E of the FD area. However, given that there are no watercourses traversing the FD area and overall quarry landholding it is unlikely that this species would use the FD area.

Lesser horseshoe bat is known to occupy several other SACs in the surrounding area in addition to the Lough Carra/Mask SAC, and the potential effects of the proposed development on this species will be assessed in the following sections.

Having regard to the foregoing, I am satisfied that there is sufficient scientific information before the Board to reach a conclusion that the proposed development in the FD area would not have a significant adverse effect on

this European site and its Conservation Objectives, which seek to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected (Otter).

Lough Corrib SAC:

This SAC is located c.2.0 km to the S of the FD area which is connected to this SAC via the on-site drainage arrangements. Surface water which is collected in the settlement lagoons in the SE corner of the existing quarry is discharged (under licence) to the Cong Canal to the E which drains into the Cong River to the SE, which ultimately discharges to Lough Corrib to the S of the site. The remaining relevant Qualifying Interests, which have not been screened out during this assessment, comprise Oligotrophic waters (containing very few minerals of sandy plains (*Littorelletalia uniflorae*)), Hard oligo-mesotrophic waters (with benthic vegetation of *Chara* spp.), Floating River Vegetation, Salmon, Lesser Horseshoe Bat, Slender Naiad, and Otter.

Oligotrophic waters, Hard oligo-mesotrophic waters and Floating Water Vegetation have been identified as Qualifying Interests for all of Lough Corrib. The status of water bodies and water quality in the catchment of the FD area and existing quarry have been summarised and assessed in section 8.2.4 above, as has the quality of the water that is discharged from the quarry settlement lagoon to the Cong Canal. The main threat to water quality in the Lough Corrib SAC and the three aquatic Qualifying Interests relates to changes in water chemistry as a result of rising phosphorous and nitrogen levels in the watercourses that drain into the lake.

Records indicates that the chemical composition of the discharged quarry water and the levels of suspended solids is well within accepted parameters. The concentration of nitrogen in quarry waters is low because of the nature of the works and the water management systems that are in place. The increased levels of phosphate in the catchment are mainly related to farming practices and domestic septic tanks and not quarry water discharge. It is therefore unlikely that the proposed development in the FD area would have

an adverse effect on the chemical composition of the NE section of Lough Corrib in the vicinity of the quarry, the aquatic Qualifying Interests, or the Conservation Objectives for this SAC which seek to maintain or restore the favourable conservation condition of Annex I habitats and Annex II species in the lake.

Atlantic Salmon has been recorded in the River Corrib and Lough Corrib and the IFI salmon hatchery is located downstream of the FD area and existing quarry at Cong Village. This species is susceptible to changes in water quality and smothering from suspended sediments. As previously stated, the EIS, EPA and IFI water quality monitoring results indicate that the quality of water discharging from the quarry to the Cong Canal, and from the Cong Canal to the River Cong has been to a high standard. Provided that all existing environmental management practices and monitoring procedures are maintained, it is unlikely that the proposed development in the FD area would have an adverse effect on this aquatic Qualifying Interest, or the Conservation Objectives for this SAC which seek to maintain or restore the favourable conservation condition of Annex I habitats and Annex II species in the lake.

Slender Naiad has been recorded in NW corner of Upper Corrib but not in the NE section of the lake which is located within c.2.0km of the overall quarry and SC area. According to the NPWS Article 17 Report Backing Document 2013 for “*Najas flexilis*, the Slender Naiad”, the N and NE sections of the lake do not contain suitable habitat for this species. Slender Naiad is vulnerable to changes in water chemistry, and in particular increases in the concentration of phosphorous and nitrogen. For the reasons outlined above, in relation to Oligotrophic and Hard oligo-mesotrophic waters, it is unlikely that development in the FD area would have an adverse effect on this Qualifying Interest or the Conservation Objectives for the SAC, which seek to maintain or restore the favourable conservation condition of Annex II species.

Otter is known to commute along the undeveloped Cong Canal to the E of the FD area. However, given that there are no watercourses within the FD area and overall quarry it is unlikely that this species would traverse the site.

Lesser horseshoe bat is known to occupy several other SACs in the surrounding area in addition to the Lough Corrib SAC, and the potential effects of the proposed quarry works on this species will be assessed in the following section.

Having regard to the foregoing, I am satisfied that there is sufficient scientific information before the Board to reach a conclusion that the proposed development in the FD area would not have a significant adverse effect on this European site and its Conservation Objectives, which seek to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected (Oligotrophic waters, Hard oligo-mesotrophic waters, Floating River Vegetation, Atlantic Salmon, Slender Naiad and Otter).

Ballymaglancy Cave & Kildun Souterrain SACs, and Lough Mask/Carra & Lough Corrib SACs:

Ballymaglancy Cave SAC is located c.2.5km to the SW of the FD area and quarry boundary, Kildun Souterrain SAC is located c.3.5km to the E, Lough Carra/Mask is located c.1.5km to the NW, and Lough Corrib SAC is located c.2.0km to the S. The remaining relevant Qualifying Interests, which have not been screened out during this assessment, comprise Lesser Horseshoe Bat.

The EIS and NIS were informed by extensive bat surveys (refer to section 8.2.2 above). It is likely that Lesser Horseshoe Bat foraged within the FD area prior to the quarry works which are the subject of the Substitute Consent application. It is also likely and that it commutes along the perimeter hedges and trees, as well as frequenting the adjacent lands. Quarry activities, which have been on-going for several decades in the existing quarry and more

recently in the FD area, had the potential to adversely affect this species by the loss of foraging habitat, interference with commuting routes and general disturbance from the works. The proposed development also has the potential to adversely affect this species by interference with commuting routes and general disturbance from the quarry works, particularly in relation to noise, vibration and blasting.

The survey results indicate that bat populations in the nearby SACs have not been significantly affected by disturbance from quarry activities and that there is substantial foraging habitat in the surrounding area. Although there has been a loss of foraging habitat, the FD area and overall quarry continue to provide commuting routes along the perimeter embankments and wooded areas. The existing and proposed mitigation measures, which relate to the control of dust, noise, vibration and blasting, and the enhancement of biodiversity by way of berms and tree planting would serve to minimise impacts and to provide more opportunities for commuting and foraging bats.

Having regard to the foregoing, I am satisfied that there is sufficient scientific information before the Board to reach a conclusion that the proposed development in the Further Development area would not have a significant adverse effect on these European sites and their Conservation Objectives, which seek to maintain or restore the favourable conservation condition of the Annex I habitats and Annex II species for which these SACs have been selected (Lesser Horseshoe Bat).

Conclusions:

I concur with the conclusions reached in the NIS that the proposed development in the FD area would not have significant adverse effects on any European Sites.

Appropriate Assessment conclusion:

On the basis of the information provided with the application and appeal, including the Natura Impact Statement, and in light of the assessment carried out above, I am satisfied that development in the Further Development area, individually, or in combination with other plans or projects would not have an adverse effect on the integrity of the following European Sites in view of the site's Conservation Objectives:

Site name	Site	Code
Lough Carra/Mask	SAC	001774
Lough Carra/Mask	SPA	004062
Lough Corrib	SAC	000297
Lough Corrib	SPA	004042
Ballymaglancy Cave	SAC	000474
Kildun Souterrain	SAC	002320

8.4 Conditions

8.4.1 The Planning Authority recommended that this application for further development should be approved subject to a number of conditions related to time constraints for works and restoration, total annual output, extraction depth, hours of operation, details of blasting, noise and dust limitations, wheel wash facilities, bunding of over ground

storage tanks, drainage management plans, landscaping, and bonds and financial contributions. The details are summarised in section 5.1 above.

- 8.4.1 The applicant had no objection to most of the conditions suggested by the planning authority, except for the following.

Condition no.4: requires that the total annual output from the site be measured cumulatively with the output from the existing quarry. The applicant raised concerns that this would restrict the operation of the quarry business and the ability to diversify into new markets for quarry products. The TIA concluded that the quarry entrance is adequate and that the local road network has sufficient capacity to accommodate traffic associated with the proposed development up to 2030. The concerns are noted.

Condition 6: requires the developer to keep a record on site of all materials extracted from the site and concrete exported from the site, commencing one month from the site which should be made available to the planning authority on request. The applicant raised concerns in relation to the commercially sensitive nature of this information which is not for general publication but stated that he will provide overall figures exported off site on an annual basis. This is acceptable.

Condition 7: requires the quarry should operate between 0700 hours and 1800 hours from Monday to Friday and between 0800 hours and 1600 hours on Saturday, and not at all on Sundays and public holidays. The applicant has requested re-wording of this condition to correlate with Condition 6 of the S261 Quarry Registration. The S261 condition states that the quarry should operate between 0700 hours and 1800 hours from Monday to Friday and between 0700 hours and 1800 hours on Saturday, and not at all on Sundays and public holidays. Where

market conditions or the nature of particular ancillary processes require greater flexibility of working hours these times may be adjusted following the written agreement of the Council. The 0800 hours should be retained for Saturdays as per the planning authorities suggested condition, in the interest of residential amenity. It would be reasonable to include the last section of the S261 Registration condition as any change to operational hours would require the written agreement of the planning authority.

Condition 8: Request that the frequency of blasts be changed from 4 to 6 blasts per month to correlate with the S.261 conditions which. This issue has been addressed under section 8.2.6 above where it was concluded that the 4 blasts per month restriction should be retained in the interest of residential amenity and the protection of wildlife.

9.0 CONCLUSIONS AND RECOMMENDATIONS

In conclusion, having regard to the documentation on file, the submissions received, a site inspection and the assessment above I recommend that permission for further quarry development be granted subject to conditions in accordance with the following **Draft Order**:

REASONS AND CONSIDERATIONS

The Board had regard to, *inter alia*, the following-

- (a) the provisions of the Planning and Development Acts, 2000 to 2015, 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 Mayo County Development Plan 2014 to 2020,
- (d) the provisions of the Galway County Development Plan 2015 to 2021,
- (e) the Environmental Impact Statement submitted with the application,
- (f) the Natural Impact Statement submitted with the application,
- (g) the report and the opinion of the planning authority under section 37L (12) (a),
- (h) the submissions/observations made in accordance with regulations made under Article 270(1) of the Planning and Development (Amendment) (No. 2) Regulations 2015,
- (i) the planning history of the site,
- (j) the pattern of development in the area,
- (k) the details contained within application for substitute consent on the site ref. SU16.SU0132,
- (l) the nature and scale of the, and
- (m) the Inspector's Report.

Appropriate Assessment

The Board noted that the proposed development is not directly connected with or necessary to the management of a European Site. Having regard to the nature, scale and extent of the subject 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 effects of the development on nearby Natura 2000 sites. 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 European Site Nos. 001774, 004062, 000297, 004042, 000474 and 002320, or any other European site, in view of the site's Conservation Objectives.

Environmental Impact Assessment

The Board considered that the Environmental Impact Statement submitted with the application, the report, assessment and conclusions of the Inspector with regard to this file and other submissions on file, was adequate in identifying and describing the direct and indirect effects of the proposed development. The Board completed an environmental impact assessment, and agreed with the Inspector in her assessment of the likely significant effects of the proposed development, and agreed with her conclusions on the acceptability of the mitigation measures proposed and residual effects. The Board adopted the report of the Inspector. The Board concluded that, subject to the implementation of the mitigation measures proposed, the proposed development would not be likely to have adverse impacts on the environment and subject to the following conditions, the effect of the proposed development on the environment would be acceptable and would be in accordance with the proper planning and sustainable development of the area.

CONDITIONS

1. The grant of permission for further development of a quarry shall be in accordance with the plans and particulars, including the mitigation measures contained in the Environmental Impact Statement and Natura Impact Statement, submitted with the application on the 18th

day of December 2015 and the further information that was received by the Board on 14th day of February 2017, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity.

2. This grant of permission for further development of the quarry relates to Stage 1 only, and the developer shall comply with the following:
 - a. Excavation in the quarry shall be limited to 5m Ordnance Datum.
 - b. Prior to the commencement of development, a benchmark shall be established on sit as a reference point from which all levels shall be taken. Details of the location and construction of the benchmark to be referenced to Ordnance Datum shall be agreed in writing with the planning authority.
 - c. A topographical survey shall be submitted to the planning authority on a five yearly basis before the end of June.

Reason: In the interest of orderly development and clarity.

3. Within three months of the date of this order, details of the surface water management system for the entire site shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

This shall include the following:

- (a) A detailed layout plan of the surface water features on site.
- (b) Details of the number, location and capacity of the settlement lagoons.
- (c) Calculations on the predicated surface water flow into the lagoons.
- (d) Predicated retention time of the existing and proposed settlement lagoons.

- (e) Time frame for implementation of any changes which may be required.
- (f) Management measures relating to the capacity of the system to cater for extreme rainfall events.
- (g) Details for the treatment of wastewater from the wheel wash facility.
- (h) There shall be no discharge of quarry water to any roadside drains or adjacent watercourses in the absence of a Discharge Licence.
- (i) No extraction shall take place below the level of the water table.

Reason: To ensure protection of groundwater quality and to provide for the satisfactory disposal of surface water.

4. The details of all blasting, including blast design and implementation and the hours under which blasting will be permitted shall be agreed in writing with the planning authority at least one month prior to the commencement of development. The frequency of the blasting operation on the entire quarry shall be limited to not more than four production blasts per month. Blasting shall take place between 1000 and 1600 hours from Monday to Friday only, but not before sunrise or after sunset and not during the breeding season for Peregrine Falcon and Ringed Plover. Monitoring of the noise and vibration arising from the blasting shall be carried out at the developer's expense by an independent contractor to be agreed in writing with the planning authority. Prior to any blast, the developer shall give notice of its intention to occupiers of all dwellings within 600 meters of the site. An audible alarm for a minimum period of one minute shall be sounded. The alarm should have sufficient power to be heard at all dwellings adjacent to the quarry.

Reason: In the interest of public safety and to protect wildlife and residential amenity.

5. Vibration levels from blasting operations shall not exceed a peak particle velocity of 12 millimetres per second when measures at any three mutually orthogonal directions. 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 8 millimetres per second. The air over-pressure from any blast shall not exceed a value of 125 dB (lin) maximum peak.

Reason: In the interest of public safety and to protect wildlife and residential amenity.

6. 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 $L_{A,T}$ 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.

7. The total dust emissions arising from on-site operations shall not exceed 350 milligrams per square metre per day averaged over a continuous period of 30 days when measured as deposition of insoluble and soluble particulate matter and at any position on the boundary of the quarry. An adequate hose capacity shall be maintained to dampen down stockpiles, waste piles and equipment during periods of dry windy weather to prevent emissions of fugitive dust.

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

8. All over-ground tanks containing liquids other than water to be contained in a waterproof bunded area, which shall be of sufficient volume to hold 110 percent of the volume of the tanks within the bund. All water contaminated with hydrocarbons, including storm water shall

be discharged via a grip trap and three-way oil interceptor with sump to the watercourse. The sump to be provided with an inspection chamber and shall be installed and operated in accordance with the requirements of the planning authority.

Reason: In the interest of orderly development.

9. The wheel-wash facility shall be used by all laden trucks departing the site and any aggregate, silt or muck carried out onto the road shall be promptly removed by the developer.

Reason: To protect the public road and in the interest of traffic safety.

10. 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 on-site dust.
- (d) Proposals for the on-going monitoring of dust emissions at dwellings in the vicinity.
- (e) Proposals for the bunding of fuel and lubrication storage areas and details of emergency action in the event of accidental spillage.
- (f) Details of safety measures for the land around the quarry, to include warning signs and stock proof fencing.
- (g) Monitoring of ground and surface water quality, levels and discharges.
- (h) Managing of all landscaping with particular reference to enhancing the ecological value of woodland/grassland on the berms and buffer areas.

- (i) 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.

11. The quarry, and all activities occurring therein, shall only operate between 0700 hours and 1800 hours, Monday to Friday and between 0800 hours and 1800 hours on Saturdays. No activity shall take place outside these hours or on Sundays or public holidays. Where market conditions or the nature of particular ancillary processes require greater flexibility of working hours these times may be adjusted following the written agreement of the Council.

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

12. Restoration shall be carried out in accordance with a restoration plan, which shall include existing and proposed finished ground levels, landscaping proposals, boundary tree planting and a timescale for implementation. Prior to the commencement of restoration works, a further survey of the site by an ecologist shall take place to establish, in particular, the presence of nesting birds, bats or other species of ecological value, including flora, which may have recently moved onto the site. The restoration plan shall have regard to the results of this survey. This plan shall be prepared by the developer, and shall be submitted to, and agreed in writing with, the planning authority within three months of the date of this grant of permission.

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

13. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site.

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 site restoration) relating to the proposed development.
- (b) Employ a suitably-qualified archaeologist who shall monitor all excavation works, and
- (c) Provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the 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 site during the site restoration phase and to secure the preservation and protection of any remains that may exist within the site.

14. Within three months of the date of this order, 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 of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000. 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 the Board to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000 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.

15. Within three months of the date of this order, the developer shall pay to the planning authority a special financial contribution in respect of road improvement works to the R345 in the vicinity of the quarry in accordance with the terms of the Development Contribution Scheme

made under section 48 (2) (c) of the Planning and Development Act 2000. 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 the Board to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000 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.

16. Within three months of the date of this order, 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.

Karla Mc Bride
Senior Planning Inspector
28th April 2017