

Inspector's Report QD07.QD0014

Development	Further development of a Quarry and related ancillary site works.
Location	Ardgaineen, Claregalway, County Galway.
Planning Authority	Galway County Council.
Type of Application	Approval under Section 37L.
Observers	Department of Arts, Heritage and the Gaeltacht
Date of Site Inspection	12 th December 2016
Inspector	Paul Caprani

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1.0 Introduction

1.1. QD07.QD0014 relates to an application under the provisions of Section 37L of the Planning and Development Acts (as amended) for the further development of an existing quarry at Ardgaineen in central Galway. The proposal involves an extension to an existing quarry. The total area of the application site is 8.9 hectares. This consists of 4.35 hectares which is the subject of a separate substitute consent application which is yet to be determined by the Board (Ref. SU0053 – see file and supplementary report attached) and a greenfield area of 4.55 hectares to the northwest of the existing quarry, which is currently in agricultural use. The proposed development will result in an increase of the total area of the active quarry 14.9 hectares to 19.45 hectares. The application was lodged on 15th January, 2016 and was accompanied by an Environmental Impact Statement.

2.0 Site Location and Description

2.1. Existing Quarry Operations

The existing quarry is located on lands to the west of the N17 approximately 4 miles north of the village of Claregalway. There is a dense network of local roads in the general area and largescale ribbon development has taken place along these roads. The quarry is located approximately 1.3 kilometres to the west of the N17 and is accessed via the Ardgaineen Road (L-6182). The existing quarry covers an area of approximately 15 hectares. The existing quarry has been excavated to a depth of between 20 to 50 metres below ground level. There are two lagoon areas within the quarry floor where groundwater and surface water run-off are collected. The groundwater is pumped to a lagoonal area to the west of the main quarry, behind the existing offices and weighbridge, near the main entrance where it infiltrates back to groundwater beneath the existing quarry.

The rock excavated at the quarry is limestone. In addition to extracting limestone, other manufacturing activities are located on site and these include a concrete batching plant and a block making plant together with a asphalt/bitumen plant. Processing of materials also take place with crushing, screening and washing of

aggregate materials excavated on site. The batching plant, asphalt plant and block yard (where concrete blocks are stored) are located in the north-western corner of the site. The main processing of materials takes place centrally within the site while the weighbridge and offices are located adjacent to the south-west corner of the site. The quarry is set back from the Ardgaineen Road.

A c.200-metre-long access road links the main quarry area with the Ardgaineen Road to the south. The nearest groups of dwellinghouses are located adjacent to the local access road 200 metres south of the quarry. The nearest dwellings are located approximately 75 to 150 metres from the north-eastern boundary of the site. Agricultural fields surround the quarry on all sides.

2.2. Proposed Extension of Quarry

The north-eastern portion of the quarry (c.4.35 hectares) is the subject of a substitute consent application which is yet to be determined by the Board and should be assessed in conjunction with the current application. In addition to the substitute consent application it is proposed to extend the quarry further north-eastwards incorporating an area of 4.55 hectares. This area currently comprises of approximately 7 small to medium sized fields which are currently used for agriculture and are under grass. It is proposed that the area be deepened to a depth of approximately -10 OD.

- 2.3. It is proposed to excavate limestone from a greenfield area of approximately 4.55 hectares. Material extracted from the proposed excavation area will be processed into a range of aggregates within the existing quarry which accommodates an asphalt plant, a concrete batching plant and largescale crushing, screening and washing of aggregate.
- 2.4. The excavation activity will involve:
 - The stripping of overburden comprising mainly of glacial till material. This
 overburden will be stored in berms around the application site boundary or will
 be stored in vegetated stockpiles and used as part of the final restoration of the
 site.

- Rock will be extracted from the site from drilling and blasting techniques whereby a licensed blasting contractor will be employed to design and carry out the blasting of the bedrock.
- The blast material will be loaded into dump trucks and transported to the fixed processing plant in the main quarry area and will be processed on the quarry floor using mobile crushing and screening units.
- The processed aggregate from the quarry will be sold as graded aggregate to various clients and transported off site. Processed aggregate will also be used to produce readymix concrete. Sand and cement which are required for the mix are imported to the site and stockpiled where appropriate. Concrete blocks are also manufactured and stored in the north-eastern corner of the site. Aggregate will also be used in the manufacture range of asphalt products on site.
- The application site will be extracted down to a level of -10 OD. It is estimated that the application area consists of approximately 6.7 million tonnes of reserve which will be extracted at a rate of approximately 150,000 tonnes per annum. The applicant is seeking a planning permission for 50 years.

3.0 Planning History

3.1. Details of the planning history are set out in the EIS and are summarised in the original Inspector's Report prepared in respect of SU0053. The planning history is briefly summarised below:

On or including the subject quarry site:

Reg. Ref. 24002: Permission **GRANTED** by Galway County Council (22/07/77) to Mr. Thomas Hernon to open and operate a rock quarry in the townland of Ardgaineen. The site area is not stated but measures between 3.7 hectares to 4 hectares based on the site location plan.

PL7/5/088562/Reg. Ref. 65041: Permission **GRANTED** on appeal (30/11/92) for retention of stone crushing and screening plant and stock piling areas at Ardgaineen. The site area measured c.1.58 hectares.

PL7/5/088665/Reg. Ref. 65141: Permission **GRANTED** on appeal (30/11/92) for the erection of a macadam/asphalt plant, office building and a septic tank at Ardgaineen.

No site maps are attached to the history details forwarded by the planning authority and therefore the site area is not clear.

PL7/5/088667/Reg. Ref. 65144: Permission **GRANTED** on appeal (30/11/92) for the erection of a concrete batching plant for production of readymix concrete, concrete blocks and stock piling area at Ardgaineen. The site measured c.3.25 hectares.

Reg. Ref. 65913: Permission **GRANTED** by Galway County Council (18/05/92) to Frank Harrington Ltd for retention of existing aggregate stockpiling area in the townland of Ardgaineen. The site area is stated as 0.86 hectares.

Reg. Ref.13/575: Permission **GRANTED** by Galway County Council (11/11/13) to Harrington Concrete & Quarries for the erection of an aggregate storage shed and all associated ancillary facilities (1,104 square metres GFA).

3.2. Enforcement:

None referred to by Galway County Council Planning Authority.

3.3. Quarry Registration:

QV0056/QC2193: The quarry was registered under section 261 of the Act, as amended, and the planning authority decided to impose conditions on the quarry under section 261. The quarry owner/operator appealed conditions Nos. 2 and 6 but subsequently withdrew the appeal. The total landholding area was stated as 31.8 hectares, the area extracted as 7.7 hectares and the total extraction area as 22 hectares in further information response received 21/09/05.

3.4. Quarry Review:

QSP55: A notice issued from Galway County Planning Authority on 03/08/12 under section 261A(3)(a). It was determined that section 261A(2)(a)(i) applies and it was decided that section 261(3)(a)(i) and (ii) were fulfilled. The owner / operator was directed to apply to An Bord Pleanála for substitute consent under 177E accompanied by a remedial environmental impact assessment. The determination and decision were confirmed by the Board on review (02/05/13).

4.0 Application Submitted

- 4.1. The application was submitted on 15th January, 2016 and it was accompanied by the following:
 - A signed application form.
 - Copy of the newspaper notice and site notice.
 - Copies of drawings.
 - A letter of consent from adjoining landowner.
 - Environmental Impact Statement.

In receiving the application, the Board sought submissions from the following parties:

- Transport Infrastructure Ireland.
- Inland Fisheries Ireland.
- The National Environmental Health Office (HSE).
- The Commission for Energy Regulation.
- The Arts Council.
- Failte Ireland.
- An Taisce.
- The Heritage Council.
- The Development Applications Unit of the Department of Arts, Heritage and the Gaeltacht.

5.0 Submissions in Respect of Application

5.1. Submission from Galway County Council

The submission outlines the planning history associated with the site and states that there is no enforcement history on the site in question. The submission goes on to outline the various policies and provisions contained in the Galway County Council Development Plan as they relate to quarrying and the extraction industry. It is noted that the area is designated as "Class 1 – Low Sensitivity (least sensitive)" states that the Roads Department of Galway County Council have no objection to the grant of

further development consent subject to certain conditions being attached. It is considered that the quarry complies with the mineral extraction and quarry policies and objectives set out in the Development Plan. After reviewing the environmental impact statement and the report from the Roads Department it is considered that development consent should be granted in respect of the above application.

It is recommended that five conditions be attached to any grant of planning permission. These conditions relate to:

- (1) The provision of appropriate sight-lines at the entrance (70 metres).
- (2) A once-off payment of €40,000 to upgrade local roads.
- (3) The applicant shall provide and maintain appropriate road signage at the quarry entrance.
- (4) The employment of good practice when refuelling machinery so as to avoid spills and this should include a suitable double walled container or bund arrangement.
- Restoration proposals for the lands in question should be agreed with the Planning Authority.

5.2. A further letter on behalf of the applicant.

A submission dated 11th March, 2016 was received by the applicant. It relates to drawings and details of the proposed entrance to the quarry. It notes that access to the quarry is gained via a paved access road approximately 200 metres in length which leads to the local Ardgaineen Road (L6182). The access road and part of the quarry extraction area is located within lands which are under the ownership of Mr. Michael Burke. A copy of the land registry folio is attached. The applicant is in the process of acquiring lands which have been the subject of quarrying activity

including the access road from Mr. Michael Burke and it is hoped that this will be finalised in the near future. A letter is attached from the landowner Michael Burke to consent to quarrying activities being undertaken on the lands in question.

A separate letter was received from Mr. Frank Harrington, Managing Director of Harrington Quarries requesting that a decision of both the substitute consent application and the 37L application could be expedited as soon as possible in order to protect the current workforce operating at the quarry.

A further letter was received from the agents acting on behalf of the applicant on 29th March, 2016. It contains a response to the submission from Galway County Council and is briefly summarised below.

In relation to sight distances at the entrance it is stated that proposals in relation to the entrance to the quarry were agreed with Galway County Council and submitted to An Bord Pleanála as part of the further information request under the substitute consent application (SU0053)

In relation to the once-off payment of €40,000, the applicant has agreed to provide services and materials to the value of €40,000 associated with the upgrading of the road as far as the junction with the N17. This will be discussed further with Galway County Council's Roads Department.

In relation to road signage, a road signage scheme was agreed with Galway County Council and was submitted as part of a response for further information requested by An Bord Pleanála.

With regard to spills, it is stated the applicant has procedures in place for refuelling and maintenance of the plant and machinery.

Finally, it is stated that a restoration plan was submitted as part of the Section 37L application. This will be reviewed with Galway County Council and a landscape and restoration plan will be finalised and implemented.

6.0 **Observations**

A large number of 3rd Party observations were submitted in respect of the proposed development however these observations were received outside the appropriate period and were therefore deemed to be invalid.

6.1. Submission from the Department of Arts, Heritage and the Gaeltacht

A submission from the Development Applications Unit specifically related to nature conservation issues. It stated that the following observations are made by the Department in its role as a prescribed body under the planning legislation.

It notes that the quarry is not near any nature conservation sites and its closest is approximately 2.3 kilometres from a European site the Lough Corrib cSAC to the east and 6.5 kilometres to the same SAC to the west.

The flora and fauna chapter of the EIS lacks consideration and assessment of the cumulative effects of the current proposal taking ecological effects from 1990 into account. It is noted that the Gort to Tuam N17/N18 is located approximately 7 kilometres to the east of the quarry site.

In terms of screening for appropriate assessment, it is stated that the Lough Corrib cSAC is most likely to be at risk from the development. The background information and analysis and conclusions in the hydrology/hydrogeology chapter contained in the EIS will assist in screening. It is noted that no additional ecological or botanical surveys were carried out subsequent to the original remedial EIS being submitted. Only limited habitat information is provided. The plant species listed in the EIS are noted but are not put into context. The EIS identified calcareous grasslands, limestone pavement and scrub habitats which may correspond with Annex I habitats. Other grassland areas may be more species rich and semi-natural than indicated in the surveys undertaken in February. The current EIS discounts the presence of any Annex I habitats without scientific analysis or justification. Additional plant surveys should not be carried out as a mitigation measure. This information should be available at application stage. The EIS is ambivalent about the presence or use of the site by fauna and about the likely effects of the past and continued quarrying on fauna. No fauna surveys were undertaken. The use of the site by bats and other mammals is likely as indicated in the EIS as there are a good network of hedgerows and patches of scrub in and around the quarry. It is also stated a number of nearby buildings could be used as roosts by bats. The presence or status of birds including the Annex I species, Peregrine Falcon at the site should be established by a breeding bird survey and the mitigation measures for this species should be further reviewed on the basis of the findings. The development and implementation of a plan for the monitoring and control of non-native species at or potentially leaving the site should be advised.

7.0 **Development Plan Provision**

- 7.1. The site is governed by the policies and provisions contained in the Galway County Development Plan 2015 – 2021. The Plan notes that County Galway has extensive deposits of stones and mineral material which is a fundamental resource for the building industry. It is recognised that the winning and processing of these materials are key factors in the economic life of the county and that the Planning Authority will face a challenge in facilitating the gainful exploitation of the materials with minimum impact on the environment and least disturbances to residences.
- 7.2. Section 6.2 of the Development Plan specifically relates to mineral extraction in quarries. It states that the Council will facilitate harnessing the potential of the area's natural resources while ensuring that the environment and rural and residential amenities are appropriately protected. The Council would take full account of the DECLG Guidelines in respect of quarrying and ancillary activities.
- 7.3. Policy EQ1 relates to environmental management practice and states that the Council will have regard to environmental management practice as set out in the EPA Guidelines for the Extractive Industry.
- 7.4. Policy EQ2 seeks to ensure that adequate supplies of aggregate resources to meet future growth needs within the county. The Council will also facilitate the exploitation of such resources where there is a proven need and a market opportunity for such minerals and aggregates and ensure that this exploitation of resources does not adversely affect the environment or adjoining existing land uses.
- 7.5. The specific objectives are as follows:

Objective EQ1 – protection of natural assets, protect areas of geomorphological interest, groundwater and important aquifers, important archaeological features and natural heritage areas from inappropriate development.

Objective EQ2 – the council shall require the following in relation to the management of authorised aggregate extraction.

- (a) All quarries should comply with the requirements of the EU Habitats Directive, the Planning and Development Acts and the Guidance contained in the DoEHLG Guidelines and DM Standard 37 of this Development Plan.
- (b) Require development proposals on or in the proximity of quarry sites to carry out appropriate investigations into the nature and extent of all quarries (where applicable). Such proposals should also investigate the nature and extent of soil and groundwater contamination and the risk associated with site development works together with appropriate mitigation.
- (c) Have regard to the landscape character assessment of the county and its recommendations including the provision of special recognition of Esker areas as referenced in Galway County Council's "Galway's Living Landscapes – Part 1: Eskers".
- (d) Ensure that any quarrying activity has minimal adverse impact on the road network.
- (e) Ensure that the extraction of minerals or aggregates does not adversely impact on residential or environmental amenity.
- (f) Protect all known unworked deposits from development that might limit their scope for extraction.

Objective EQ3 – sustainable reuse of quarries, encourages the use of quarries and pits for sustainable management of post-recovery stage construction and demolition waste as an alternative to using agricultural lands subject to normal planning and environmental considerations.

Objective EQ4 – compliance with Article 6(3) of the European Habitats Directive ensure that all projects associated with mineral extractive industry carry out screening for appropriate assessment in accordance with Article 6(3) of the Habitats Directive where required.

7.5.1. Development Management Standard 37 - Extractive Development

The extraction of sand, gravel, stone etc. is fundamental to the continuing economic and physical development of the county. It is desirable that such materials will be sourced close to the location of a new development to minimise the need for long haul routes and potential interference with traffic flows and amenity. The following details shall be considered central to the determination of any application for planning permission for the extractive industry.

7.5.2. Guidelines

Compliance with section 261 of the Planning and Development Act, the DOEHLG Quarry and Ancillary Facility Guidelines 2004 and the EPA Guidelines for Environmental Management of the Extractive Industry 2006. Where extractive developments may impact on archaeological or architectural heritage, regard should be had to the DOEHLG Architectural Conservation Guidelines and the Archaeological Code of Practice (2002) in its assessment of planning applications. Reference should be made to the Geological Heritage Guidelines for the Extractive Industry 2008.

7.5.3. Landownership

Details should be submitted showing the proposed site in relation to all lands in the vicinity in which the applicant has an interest.

7.5.4. Deposits

Details to be submitted to include the depths of topsoil, subsoil and overburden and material at various points on the site. An indication of the type of minerals which it is intended to extract, a statement as to whether the parent rock from which the mineral is extracted is suitable for other uses, and the estimated total quantity of rock and material which can be extracted commercially on site.

7.5.5. Methods

The methods of excavation and machinery to be used on site should be submitted. Details to be submitted to include all proposed site development works, including the proposed method of working, any existing or proposed areas of excavation, stages of work proposed, location of any settlement ponds, waste material and/or stock piling of materials, methods for the removal and storing topsoil, subsoil and overburden etc.

7.5.6. Production

Details should be submitted to include the proposed production process to be employed, all requirements for water, electricity and/or other impacts to the production process and any proposals for chemical or other treatments.

7.5.7. Mitigation Measures

Details should be submitted to include the assessment of potential impacts on water resources, residential and visual amenity (including noise, dust and vibration impacts) biodiversity and any other relevant considerations together with appropriate proposals for mitigation.

7.5.8. Access

Vehicle routes from the site to major traffic routes and the impact on the adjoining road networks. Details should be included on the mode, number and weight of trucks or other vehicles being used to transport materials and any truck sheeting or washing proposals.

7.5.9. Rehabilitation

Details should be submitted should include reported plans and sections detailing the anticipated finished landform and surface/landscape treatments, both of each phase and whole excavation, quality and condition of topsoil and overburden, rehabilitation works proposed, the type and location of any vegetation proposed, the proposed method of funding and delivery of restoration reinstatement works etc.

7.5.10. EIS

Any environmental impact study required by statute should be submitted. An EIS should ensure that all impacts in relation to heritage, environment biodiversity, groundwater protection etc. are clearly addressed and appropriate mitigation measures are included.

7.5.11. Proximity

Details to be submitted should include the location of all existing developments in the vicinity of the site that may be affected by the site development works, extractive operations and/or traffic movements generated.

7.5.12. Landscape and Screening

Details should be submitted to include an indication of existing trees or other screening to be retained or removed or any proposed screening, grassing or planting of trees or shrubs and proposals for their maintenance.

7.5.13. Heritage and Biodiversity

Details would include any recommendations for the site to be considered as part of the geological heritage of the county and any proposed measures with regard to the protection and promotion of environment and biodiversity including any proposals for rehabilitation.

7.6. Quarries and Ancillary Activities: Guidelines for Planning Authorities (DoECLG 2004)

This document provides guidance to Planning Authorities on determining applications for planning permission for quarrying and ancillary activities. It notes the economic importance of quarries and envisages a sustained level of demand for aggregates to facilitate the provision of the infrastructure required to support the continuing economic and social development and to maintain Ireland's international competitiveness as a location for attracting inward foreign investment in the manufacturing and services sectors. Aggregates can only be worked where they occur and it is generally neither economically nor environmentally sustainable to transport them any great distance to their market due to increased transport costs. Many pits and quarries tend to be located within 25 kilometres of urban areas where most construction occurs. There will be a continuing need for some new and expanded aggregate quarrying operations on land to meet regional and local requirements. Potential environmental impacts associated with quarries include noise, vibration, dust, effects on the amount and quality of water discharge from a site, the lowering of the water table, effects on the natural heritage, cultural heritage, landscape and traffic and waste impacts. The following sections of the guidelines are particularly relevant to the case in question.

- 3.3 dust deposition/air quality.
- 3.4 water supplies and groundwater.
- 3.5 natural heritage.
- 3.9 waste management.
- 3.10 environmental management systems (EMS).
- 4.7 possible planning conditions.

8.0 Assessment

8.1. Introduction

I have read the entire contents of the file including the EIS submitted with the application, and have had particular regard to the issues raised in the observations submitted namely those by the Development Applications Unit (which at the time of writing the submission was part of the Department of Arts, Heritage and the Gaeltacht) and the submission from Galway County Council. I have also carried out a site inspection. I note the submission from the Development Applications Unit highlighted some perceived shortcomings in the flora and fauna section of the EIS but did not object outright to the proposed development. The submission from Galway County Council recommended a grant of development consent in this instance. The Board should also note the conclusions and recommendations in this accompanying substitute consent file SU07.SU0053 where it was recommended that planning permission be granted for the substitute consent application. This recommendation is a material consideration in determining the overall application under the provisions of Section 37L of the Act.

8.2. Principle of Development

In the first instance it is considered appropriate that the Board should address the principle of the development in the context of the general objectives and policies set out in the Galway County Development Plan and other guidance documents as they relate to Quarry's, particularly the Departmental Guidelines on Quarrying. Firstly, I note the Planning Authority has not raised any objection to the application currently before the Board and in fact are supportive of a grant of permission in this instance. The Development Plan sets out detailed prescriptive requirements under 'Development Management Standard 37' which relates to extractive development. It appears, having regard to the contents contained in the EIS (see my assessment further below) that the proposed development has, in the main, endeavoured to comply with the various requirements set out in DM Standard 37. The application provides details in relation to ownership and the method of extraction and the machinery to be used in undertaking the abstraction. Detailed information is provided in respect of the historic production and the proposed volumes of limestone to be extracted from the guarry site as are details of mitigation measures to be employed to reduce the environmental impact. Details of access arrangements and the proposal for restoration and reinstatement are set out in the EIS. The document pays appropriate attention to issues regarding heritage and biodiversity and this issue was explored in more detail in my assessment further below.

There are a number of issues however that the Board may wish to seek further information on, particularly in relation to impacts on residential amenity. These issues are explored in more detail in my assessment below.

Therefore, and subject to a caveats set out in the assessment below, I am satisfied that the proposed development complies with the general guidelines and policies with regard to the extractive industry set out in the Development Plan and generally accords with the main goals, policies and objectives set out in the Plan which seek to support and encourage the development of quarries in order to benefit the economic development of the county.

Finally, in relation to the principle of the development, I note that the development plan does not seek to prohibit or discourage quarrying activities in the area where

the subject site is located. In terms of landscaping sensitivity, the subject site is located designated as "Class 1 – Low Sensitivity". Such areas are deemed to be the most visually robust in terms of accommodating new development. It can reasonably be concluded therefore that the proposed development does not contravene any of the wider policy statements set out in the development plan in respect of the extractive industry and supports many of the wider goals in terms of supporting economic development within the county and wider region. Specific potential impacts on the environment and on surrounding residential amenity is assessed in my detail under separate subheadings below.

8.3. Impact on Flora and Fauna

The flora and fauna section of the EIS describes the existing habitats both within the proposed extended area and the area immediately surrounding the site. The ecological survey was carried out in February, 2013. The main habitat within the area proposed for extension comprises of 'Improved Agricultural Grasslands' (Fossit's Classification -2000). None of the habitats present correspond with Annex I habitat as designated under the Habitats Directive. The EIS concludes that there is low species diversity and most of the species present were described as being species which were abundant to the wider area. Overall the area was deemed to be of 'low conservation value'.

The DAHG submission notes that the surveys were carried out in February which is not the optimal time of the year to carry out such surveys. While this point is accepted, the survey undertaken clearly indicates the receiving environment comprises in the main of improved agricultural grassland typically associated with agricultural activities which are ubiquitous throughout the county and region. Such grasslands accommodate low species diversity and are not considered to be of any great significance in ecological terms. There is nothing to suggest that additional surveys would yield any information which would indicate that the receiving environment contains species of ecological importance. Of course it is open to the Board to require that additional surveys be undertaken prior to determining the application, however having regard to the conclusions in the baseline studies undertaken, which concluded that the receiving environment is unremarkable in ecological terms, I do not consider that additional surveys would be warranted or necessary in this instance.

The submission from the Department also states that the EIS has identified calcareous grassland, limestone pavement and scrub habitats which may correspond with Annex I habitats. It appears that this may have been the case in relation to the remedial EIS associated with application SU0053. This issue has been dealt with in my supplementary assessment on the associated substitute consent application. I can find no evidence in the EIS which suggests that the area which is to accommodate the proposed quarry extension accommodates such Annex I habitat. Nor did I encounter any exposed limestone pavement during my own inspection. I acknowledge that my site inspection did not involve a forensic examination of the fields seeking evidence of limestone outcrops. However, my conclusions are supported by the statement in Section 4.4.2 of the EIS which is clear and unambiguous in stating the following: "The site was not found to contain any semi-natural habitats which correspond to Annex I of the Habitats Directive 92/43/EEC. The grassland and scrub are common to the greater landscape and typical of the locality.... none of the habitats themselves were found to be protected, rare or threatened".

The DAU submission also states that no faunal surveys were undertaken as part of the EIA. Again this appears to be not the case, surveys were undertaken for invertebrates, birds and mammals. As in the case of habitats, the surveys did not uncover any species of conservation importance. No bats were recorded within 4 kilometres of the subject site. The bird surveys undertaken indicate that the birds encountered were all common countryside species. No qualifying interest birds associated with the nearby Lough Corrib SAC (Site Code: 00297) were present or found to be recorded within 2 kilometres of the active quarry. Furthermore, there was no habitat within the landholding which would support any of these species.

The active quarry (as opposed to the existing greenfield area into which the quarry is proposed to extend) was the only area found to have the potential for one species of conservation importance namely the Peregrine Falcon. The expansion of the quarry area provides potential for disturbance of nesting sites associated with this Annex I species. Although it should be borne in mind that the current active area of the quarry was only found to have the "potential" to host a nesting site for the Peregrine

Falcon. There was no evidence that suggests that nesting sites exist within the quarry.

Therefore, and in conclusion while it is obviously open to the Board to request additional information to augment the studies undertaken as part of the EIA process, I do not consider that such a request is warranted or justified as it has been adequately demonstrated in my view from the survey work undertaken that the site and its surroundings hosts any habitats or species of ecological value.

8.3.1. Visual Impact

The area in the vicinity of the application site is rural in nature with the predominant land use being agriculture and low density residential development. The rural landscape is characterised by gently undulating low-lying geomorphological features. In terms of environmental sensitivity, the application site is located in an area designated as (Class 1 – low sensitivity).

Furthermore, the fact that the quarry is set back a considerable distance from existing roadways ensures that the exposed limestone rock is not readily visible from any vantage points along the public roads in the vicinity. There are a number of buildings and quarry plant and machinery which are visible from the roadside boundaries. It should be noted that these structures will remain in situ and will not be altered as a result of the proposed extension. The fact that the extension will involve the excavation of rock below ground level further inland from the roadway network, will in my view ensure that visual impacts arising from the extension will be kept to a minimum. The stripping and mounding of overburden currently on site produce and augment perimeter berms will also reduce the visual impact of the guarrying activity. According to the information contained in the EIS, these berms will be planted which will further mitigate against any visual impact. On the whole therefore I am satisfied that the impact of the proposed development will be acceptable in the context of the existing receiving environment. The works to be undertaken would constitute an extension to an existing sub-surface quarry and should be assessed in the context of the existing works undertaken on site. Most of these works to date have the benefit of planning permission. The proposal constitutes an extension of an existing land use below ground level within a visually robust environment which is on the whole

screened from public vantage points along the surrounding road networks and is therefore deemed to be acceptable in my view.

8.3.2. Impact on Water and Groundwater

Chapter 6 of the EIS deals with hydrology and hydrogeology. It states that there is no surface water drainage streams or rivers in the vicinity of the quarry due to the karstic nature of the landscape. Having inspected the site, I found no evidence of any surface water streams or features in the vicinity of the site. The nearest rivers to the subject site are the River Creagh which rises from a small spring approximately 1.5 kilometres to the south-west of the quarry and flows in a south-westerly direction towards the River Corrib. The River Clare is a larger river and is located approximately 2.5 kilometres to the east of the subject quarry. If flows in a southerly direction before turning westwards into the Lake Corrib catchment.

Water quality monitoring was undertaken at the lagoon/sump areas in the existing quarry. The figures are presented in Table 6.2 of the EIS. The water was tested for a range of parameters and was found to be in accordance and well within the limits set out in the Surface Water Regulations of (1989) and the more recent Surface Water Regulations of (2009). The major threat arising from quarrying activity relates to increased levels of mineral suspended solids in any discharge. Nutrient loads associated with animal/human waste or agriculture are not prevalent in quarrying activity. The surface water quality monitoring results indicates that in each of the samples surveyed, the suspended solid content was less than 2 mg/l.

In terms of water management, it is stated that both rainwater and groundwater egress through the quarry walls collect in a sump area in the south-eastern portion of the quarry. It is stated that just over 1,000 cubic metres of water per day is abstracted from the quarry sump during winter months with approximately 360 cubic metres per day abstracted during the summer months. Much of this water is used for the manufacturing activities on site. Excess water is discharged to a grass lagoon area, located adjacent to the site offices to the southwest of the main quarry area and this percolates into the groundwater over time. Groundwater from the quarry floor is constantly being recirculated back to the groundwater recharge area through the grass lagoon. A further assessment of the impact of the quarry on the groundwater regime is set out in the supplementary report for SU 0053(a).

The existing quarry operations has resulted, according to the information contained on file, in a groundwater quality that meets statutory regulations in terms of various pollutant parameters. Furthermore, water collected in the quarry floor is not discharged to any surface water network in the vicinity of the site. All groundwater collected is either used in manufacturing processes on site or is pumped to a grass lagoon area to the immediate west of the working quarry area where it percolates back down to the water table underlying the site. The proposal therefore may result in greater volumes of water being collected within the quarry floor due to both precipitation and groundwater ingress. However, the quarry essentially operates a closed water management system whereby all water abstracted from the quarry is recirculated to groundwater via the grass lagoon. I am satisfied therefore that the water management measures undertaken in the quarry will not result in a deterioration of either groundwater or surface water status in the area.

In the case of SU0053, the Board raised a number of issues in respect of hydrology and hydrogeology by way of its additional information request. As in the case of SU0053 I am satisfied that the proposed development will not result in any drawdown of the water table or cone of depression. I am also satisfied that the use of explosives will not result in any significant groundwater pollution in terms of material increases in ammonia, nitrate or nitrite. Mitigation measures are employed, and these are set out in the EIS, to ensure that all hydrocarbon, oil and fuel spills are appropriately contained on site. I therefore consider that the impact arising from the proposed development on the surface water and groundwater regime in the vicinity is acceptable.

8.3.3. Impact on Residential Amenity

The nearest dwellinghouses to the subject site are located along the access road from the N17 leading to the quarry, these are located between 160 and 200 metres from the southern boundary of the quarry. The nearest dwelling from the eastern boundary of the quarry is estimated to be 160 metres away. There are no dwellings in close proximity to the western boundary of the quarry. The nearest dwelling to the northern boundary of the quarry is located at a junction, approximately 150 metres from the area in the north-eastern corner of the quarry which is used to store concrete blocks. Other dwellinghouses to the north of the site are located in excess of 200 metres from the boundary of the existing quarry.

Under the current application it is proposed to extend the quarry in an easterly and north-easterly direction. The north-eastern boundary of the quarry will be extended approximately 140 metres in a northerly direction while the eastern boundary of the quarry will be extended approximately 160 metres at its maximum from the existing quarry face along the eastern boundary. The quarry extension has the potential to adversely impact on residential amenity with the progressive moving of the extraction area in a northerly and easterly direction bringing the extraction activities closer to dwellinghouses in the vicinity. In particular, there is a small suburban type cluster of residential dwellings (c.15 dwellinghouses) which are currently located approximately 480 metres from the eastern boundary of the quarry. The separation distance would be reduced to just over 400 metres as a result of the proposed quarry extension. Likewise, the separation distance between the northern boundary of the proposed quarry extension and dwellinghouses to the north would be reduced by approximately 350 metres to approximately 270 metres.

Whether or not this has a material impact on the residential amenity of surrounding residences is assessed in more detail below.

In respect of air pollution, the major potential impact arises from fugitive dust. The fact that quarry excavations are to remain below ground level should assist in trapping fugitive dust and particulate matter within the confines of the quarry. Furthermore, significant levels of dust generation arise from the transportation of materials on and off site. In this regard the access to and from the quarry will remain the same and therefore it is highly unlikely that dwellings which would be in closer proximity to the extended working area will be affected by fugitive dust or air pollution.

However, the increase in traffic movements to and from the quarry as a result of the quarry extension could give rise to excessive dust levels for dwellinghouses along the access road leading to the quarry. The proposed quarry extension will involve a maximum extraction rate of 150,000 tonnes per year.

Unfortunately, there appears to be no detail in relation to historic productions activity at the subject site. The Traffic Section of the remedial EIS submitted with application Reg. SU07.0053 indicates that during peak times the quarry generated approximately 45,000 vehicular movements per year (traffic movements were based on a vehicle making a trip and from the working quarry). If one was to discount staff related and other trips to and from the quarry it may be reasonable to assume that perhaps 30% of the overall trips involved removing either raw aggregate or manufactured product off site and these products were removed in 20 tonne trucks. This would indicate that peak production in 2006 and 2007 equated to approximately 250,000 to 300,000 tonnes of product per year. As the current application seek to extract approximately 150,000 tonnes per year it may be reasonable to assume that dust generation from the activities proposed could be less than dust generation associated with historic peak activities. The level of dust generation arising from the proposed development could reasonably be expected to be less than that associated with peak activities.

Details of existing dust deposition monitoring results between 2012 and 2014 are set out in Table 8.3 of the EIS. The table indicates that there have been a number of breaches in acceptable limits for dust deposition (the Board will note that the results for 2012 are based on the recommended guideline value of 130 mg/m²/day for the Frisbee type method of assessment whereas results post 2013 are based on the Bergerhoff type method which permits dust deposition limits of up to 350 mg/m²/day).

Thus based on the information contained on file it is likely in my view that the expansion of extraction activities in a north and north-easterly direction will not give rise to excessive dust generation in the vicinities of dwellings to the north and north-east of the subject site having regard to the separation distances between the working quarry face and the dust sensitive receptors. Furthermore, based on historic data it would appear that the proposed level of extraction under the current application might be less than that during peak activities of 2006 and 2007 and consequently it might be expected that dust generation levels arising from the transportation of material to and from the subject site would likewise be lower. However, I fully acknowledge that information in relation to historic dust generation is limited and no data exists prior to 2012. I further note that the information contained

in the EIS is also limited in that no modelling of dust generation has been undertaken in order to ascertain likely dust deposition levels arising from the proposed development. Much of my analysis set out above is based on extrapolation and assumption and it not based on data, which perhaps should have been provided in the EIS. Thus the Board could seek further information prior to determining the application based on my assessment above or alternatively the Board may also come to the conclusion that while specific information is lacking with regard to future dust generation, the likelihood is, that with the employment of appropriate mitigation measures which are set out in Section 8.8 of the EIS, the impact arising from dust generation and air quality in general might well be acceptable in terms of impacting on residential amenity in the area.

8.3.4. Noise and Vibration

Similar conclusions can be reached in respect of noise arising from the proposed development. Table 9.2 of the EIS sets out details of a noise monitoring survey which was undertaken on the 20^{th} March, 2013. Five separate noise monitoring locations were assessed. These locations are indicated in Figure 9.1 of the EIS and roughly correspond with the nearest dwellinghouses surrounding the quarry. The L_{Aeq} limits at each of the locations sampled over a 60-minute period, range from 43.1 dB(A) to 52 dB(A). These noise levels are deemed to be within acceptable limits and are below the EPA limits of 55 dB(A). I undertook similar "on the spot" noise surveys during my site inspection and I arrived at figures which broadly coincided with the above ranges. The Board should also note that quarrying activities and the associating manufacturing activities have the benefit of planning permission and as such ambient noise levels would be not be typical of a solely agricultural rural environment.

As in the case of air quality and dust, the EIS has not modelled the noise impact which would arise as a result of progressing the quarry face in an easterly and northeasterly direction. It could generally be anticipated that noise levels at the noise sensitive locations to the south, south-west and north-west would be likely to experience lower noise levels whereas noise sensitive locations to the east and north-east (N1 and N5) would be likely to experience more elevated noise levels associated with the quarrying activity. I note that in the case of noise sensitive locations N1 and N5 the L_{Aeq} levels recorded were 43.1 dB(A) and 48.2 dB(A)

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respectively. These were the lowest noise levels surveyed in the vicinity of the site. While it cannot be determined definitely as to the noise levels that would arise as a result of the progressive movement of excavation in a northerly and easterly direction towards these noise sensitive locations, it is likely in my opinion that any increase in noise level is likely to remain below 55 dB(A) having regard to the figures contained in the EIS in respect of the noise survey and the relatively generous separation distances between the boundary of the extended quarry and the noise sensitive locations.

However, as in the case of dust and air quality, the Board may consider it appropriate to request a more comprehensive noise assessment based on detailed modelling in terms of the likely noise impact arising from future extraction activities.

In terms of vibration Table 9.4 sets out monitoring results for blasting activities which were undertaken on site. It appears from these results that blasting undertaken between 2009 and 2014 were below the recommended guideline value of 125 dB(A) (Lin) and 12 mm/s. I have no reason to doubt the veracity of the results presented nor do I have any reason to believe that blasting carried out as part of the proposed extension will not likewise comply with recommended guideline limits as has been the case to date. This conclusion is based on the fact that the separation distances between the quarry face and the nearest blast sensitive receptors will remain substantial and therefore should not give rise to concern. Normal protocols and mitigation measures will be put in place in respect of blasting.

8.3.5. Traffic

During the period of peak production, the quarry gave rise to between 160 and 170 traffic movements per day (2006 to 2007). The EIS states that *"it is unlikely that such levels of productions will be experienced in the future with levels expected to be much lower than 2006 and 2007 levels*". Details of the expected trip generation arising from the proposed extension of the quarry is not specified in the EIS. Again this in my opinion is a weakness of the EIS. No details are provided in relation to the breakdown of traffic movements in previous years or future movements under the proposed extension. However, the Board may agree that if production is capped at a maximum of 150,000 tonnes per year, the negative impact arising from future traffic

will be less than that associated with traffic in the past. Having inspected the site, I noted that the local road serving the site was generally in good condition with little or no evidence of dust generation along the alignment. I am further satisfied that sight lines are acceptable at the entrance of the quarry and are also acceptable at the junction of the local road serving the quarry and the N17. The fact that the quarry is located in such close proximity (1.3 kilometres) from a national primary route is also advantageous in terms of traffic and transport arrangements onto the wider road network.

8.3.6. Archaeology and Cultural Heritage

Section 13 of the EIS relates to archaeology and cultural heritage. It notes that in March, 2013 field work was carried out to identify any archaeological features. It notes that there are three non-designated monuments situated within the application area listed in the archaeological survey database. These include a souterrain, a ring barrow and an enclosure. It is noted that the souterrain was preserved by record with the permission of the National Monuments Service under Excavation Licence 05DE0560 and no longer exists.

In relation to the ring barrow it is stated that this is a badly damaged sub-circular structure. A geophysical survey commissioned and carried out in 2008 noted that this monument which measured 6 metres in diameter had a weekly magnetic response suggesting the barrow was mainly of limestone.

The enclosure feature was also identified during the assessment of the souterrain.

In terms of impact, it is stated that the proposed development will directly impact on two non-designated monuments listed in the archaeological survey database namely the enclosure and the barrow-ring barrow. The proposed development will have no other direct or indirect impacts on any other known items of cultural heritage, archaeology or buildings of heritage interest in the application area or the vicinity. In the worst case scenario soil stripping of the unstripped lands within the application area may impact on previously unknown archaeological deposits or artefacts without preservation by record taking place.

The EIS does not adequately quantify or assess what archaeological impact will arise as a result of the removal of these two features. The document gives no indication as to the importance of these monuments in archaeological terms. Based on this lack of assessment in the EIS, I would be reluctant to recommend a grant of planning permission until future information is gleamed with regard to the archaeological importance of these features which are to be removed from the site.

9.0 Environmental Impact Assessment

As already referred to in my assessment above I consider that the EIS submitted with the application has a number of shortcomings particularly in relation to quantifying, predicting and assessing the environmental impact on the receiving environment.

Firstly, I note that the EIS does not adequately assess the predictive noise and dust generation which will arise from the extension of quarrying activities on site. Detailed and predictive noise modelling may my view required to adequately assess what impact the extended quarry could have on noise sensitive receptors particularly to the north and east of the subject site. While the EIS refers to the day to day activities which will be undertaken at the application site and these include the operation of vehicles, plant and machinery, the removal of overburden, drilling and blasting, excavation, processing and transportation of material none of the potential noise impacts for each of these activities have been quantified nor has the cumulative impact arising from each of these activities been quantified or assessed in the EIS. In order to properly carry out EIA, the potential noise impacts should have been the subject of a detailed noise evaluation including a modelling assessment with appropriate prediction techniques to enable the Board to adequately quantify the likely noise impacts arising from the development on the receiving environment.

Similarly, any EIA should have contained a detailed and robust assessment in relation to likely dust deposition which would result from the extension of the quarry in a northerly and easterly direction. While the EIS contains details of dust monitoring which have historically taken place on site, no data has been provided in relation to likely dust deposition rates which occurred during peak production period and no details have been provided in relation to likely dust deposition particularly to the north and east of the subject site. While it may well transpire that dust depositions levels at the nearest sensitive receptors are acceptable, this has not been demonstrated in the document submitted.

Likewise, in relation to traffic, I consider that the assessment carried out in the EIS lacks detail to adequately assess the impact of the proposal arising from traffic. Details of the nature and type of trip generation associated with the activity are not set out in the file. A breakdown of different types of vehicles, (and associated loading capacity) entering and exiting the site are not adequately set out. No details are provided in relation to the annual average daily traffic on the local road the L-6182 serving the site. A more detailed robust and comprehensive traffic impact assessment is required to be carried out as part of the environmental impact assessment.

Finally, in relation to archaeology it is acknowledged that the proposed quarry extension will result in the removal of two non-designated monuments listed in the archaeological survey database, an enclosure and a ring barrow. However, the EIS fails to adequately assess the importance of these archaeological features. A more detailed assessment is required which assesses the importance or otherwise in archaeological terms of the removal of these features and whether or not the removal of these features constitutes an acceptable environmental impact in archaeological terms.

10.0 Appropriate Assessment

Under the quarry review application submitted in accordance with Section 261A(6)(a), the Board confirmed the determination by Galway County Council that the subject quarry carried out development for which a remedial environmental impact was required. No such requirement was considered necessary in accordance with the Habitats Directive. Both the Planning Authority and An Bord Pleanála therefore deemed that a stage 2 Appropriate Assessment was not necessary in this instance. It is noted that the nearest European sites are the Lough Corrib SAC and Lough Corrib SPA both of which are located in excess of 6 kilometres from the subject site. The Clare River which is located closer at 2 kilometres of the subject site also forms part of the Lough Corrib SAC. The qualifying interests associated with the SAC include the Freshwater Pearl Mussel and other lake and river species (including Crayfish, Lamprey and Otter) as well as a host of river and lakeside

vegetation. While there is a vast array of qualifying interests associated with the European site there appears to be no direct hydrological connection between the quarry and the SAC and therefore no possibility of any impact arising from the quarrying activities on the SAC. The application site hosts no qualifying interests in terms of habitats or species associated with the surrounding Natura 2000 sites. Nor will the works contribute to the deterioration or fragmentation of the qualifying interests. I also consider that there are no indirect or in-combination effects arising from the works to be undertaken on site. There are no quarries or other developments which could give rise to adverse cumulative impacts.

The Board appear to have accepted the above arguments in making its determination in respect of QV07/0056 and I can therefore only conclude that a Stage 2 Appropriate Assessment would not be warranted or justified in the case of the current application for substitute consent before the Board.

11.0 Conclusions and Recommendations

Arising from my assessment above, I consider that overall the proposed extension to the existing quarry may be acceptable in principle. However, significant further information is required prior to the Board determining the application. I therefore recommend that the Board request the following additional information prior to determining the application.

- The applicant is requested to submit further details in relation to the phasing of the proposed extraction including details of the volumes of materials to be extracted from the site on an annual basis.
- 2. The applicant is requested to provide more comprehensive details in relation to air quality and dust deposition arising from the proposed quarry extension. The applicant is requested to submit fugitive dust deposition modelling which assesses dust deposition rates which are likely to occur in the vicinity of the quarry based on relevant meteorological data.
- 3. The applicant is requested to submit more comprehensive data in respect of noise generation which is likely to occur as a result of quarrying activity. Appropriate predictive noise modelling should be undertaken to ascertain the likely noise levels which are likely to occur at the nearest noise sensitive

locations particularly to the north and east of the proposed quarry extension. Any noise modelling should include cumulative impacts arising from:

- Plant machinery and vehicles operating on site.
- The removal of overburden.
- Drilling and blasting.
- Excavation.
- Processing of materials.
- Transportation of materials.
- 4. The applicant is request to carry out a full and comprehensive traffic impact assessment in respect of the future expansion of the quarry. This traffic impact assessment shall be carried out in accordance with the NRA document entitled "Traffic and Transport Assessment Guidelines (May 2014)" and should include a breakdown of all traffic movements associated with the quarrying activity proposed to be undertaken on site.
- 5. The EIS states that the proposed development will directly impact on two nondesignated monuments listed in the Archaeological Survey Database GA057-167 – Ardgaineen Enclosure and GA057-166 – Ardgaineen Barrow – Ring Barrow. The applicant is requested to assess the importance of these two features in terms of their contribution to the cultural and archaeological heritage of the area. Based on the assessment carried out in the EIA submitted with the application, the Board is not satisfied that the loss of these archaeological features will not result in an unacceptable loss of archaeological heritage of the area.

Paul Caprani, Senior Planning Inspector.

20th December, 2016.