An Bord Pleanála

Inspector's Report ABP 307697-20

Development	Lateral extension of existing quarry
Location	Cecilstown, Mallow, Co. Cork
Planning Authority	Cork County Council
Planning Authority Reg. Ref.	19/5802
Applicant	David O'Flynn
Type of Application	Permission
Planning Authority Decision	Grant subject to conditions
Type of Appeal	3rd Party v. Grant
Appellant(s)	1. Tim O'Keeffe 2. Concerned Residents Kilgilky
Observer(s)	None
Date of Site Inspection	23/09/21
Inspector	Mary Kennelly

Contents

1.0 Introduction

1.1. The proposed development relates to an extension to an existing quarry, which was established prior to 1964. The quarry was registered under Section 261 of the Planning and Development Act 2000 (QR058). The planning authority granted registration for a period of 20 years subject to 53 conditions, one of which restricted the excavation area to 2ha. Further conditions prohibited blasting and restricted the extraction rate to 5 truckloads of extracted material per day, which was averaged over any three-month period.

1.2. The quarry operator appealed seven of the conditions of registration (PL04.QC2145). The Board decided to omit two conditions Nos. 51 and 53, which related to a special contribution and archaeology, respectively, and to amend a further condition to allow up to 10 truckloads per day. The remainder of the appealed conditions were unaltered. The quarry was also subject to a Section 261A registration, and the planning authority decided in August 2012 that no further action was required (CK QY144).

2.0 Site Location and Description

2.1. The site is located approx. 10km to the north-west of Mallow and c.4km to the west of New Twopothouse. It is situated in a rural area approx. 4km to the west of the N20 and a similar distance to the north of the N72, in the townlands of Scart, Ballyclough and Kilgilky South. Ballyclough village lies approx. 1.5km to the south-east and Cecilstown lies approx. 1km to the south-west.

2.2. The existing limestone quarry is accessed by means of the local road network which leads north westwards from the N20 or the N72 National Primary Roads. At present, the site is accessed by means of an entrance off the L5302-12, which is a minor road that leads northwards from Ballyclough village through a residential cluster and passed several farmhouses and one-off houses. The entrance to the site is via a track (c. 700m long) which leads southwards between two houses, one of which is the applicant's dwelling, and through a farmyard. This entrance is located close to a bend and is c.1.5km to the east of the Kilgilky crossroads junction with the L1201, which travels south towards Cecilstown. The proposed development includes the

provision of a new entrance from the L1201, which would replace the existing entrance, and would travel across farmland to the west of the quarry.

2.3. The site subject of the appeal comprises the existing quarry operation which has an area of c.2.12ha with 0.49ha reinstated. The site of the proposed 5ha extension lies immediately to the east of the existing quarry and forms part of the applicant's overall farm holding of 65.94ha. The red line boundary includes lands to the immediate south of the existing extraction area and to the east of the proposed extension of the extraction area, together with the proposed route of the new access from the L1201 to the west. The ground level of the existing quarry falls in a westerly direction from c.100m to 92m OD. The current level of the excavated area is stated as 89m OD.

2.4. The lands in the vicinity are largely in agricultural use with single, one-off houses along the local road network. There are several quarries in the vicinity and an equestrian centre to the northwest. Ballyhass Lakes are located to the southwest. There are several recorded monuments within and adjoining the overall landholding including a Lime Kiln CO024-087 (which has been quarried away over the years), three ring-ditches (CO024-252/253/254) and a Rath or ringfort near the route of the proposed new accessway (CO024-088) as well as a bowl furnace (CO024-255).

3.0 **Proposed Development**

3.1. The application was lodged with the planning authority on 18/07/19 with further plans and details submitted 20/12/19 following a request for further information dated 11/09/19. Following a Request for Clarification of Further Information on 21st February 2020, a Response was submitted on 16/03/20.

3.2. A 15-year permission is sought for an extension to an existing limestone quarry and all associated site development works and landscaping works. The proposed extension is 5ha to the east of the existing extraction area. It is proposed to access the quarry by means of a new access route and entrance from the L1201-57 to the west of the extraction area. The proposed works include the following

- Change to extraction method to include blasting
- Crushing and screening of aggregates

- Construction of new access road from L1201-57 and cessation of existing access from L5302-12
- Installation of prefabricated administration office
- Parking area
- Wheel wash
- Weighbridge
- Covered fuel storage area
- Entrance signs
- Lighting
- CCTV cameras
- Rainwater harvesting tank
- New overhead and underground power supply

3.3. Haul routes are proposed by directing traffic south along the L1201 towards the N72 or north towards the R580, which would lead to the N20 in due course.

3.4. The extraction will involve the removal of c.3m of overburden and the depth of the limestone is estimated at 9m. Extraction of rock is by means of blasting, crushing and processing. The proposed crushing and screening is described as a dry process and there will be no material washing on site. Extraction would be carried out on a 3-phased basis over 15 years. The construction phase will include the restoration of the existing quarry by restoring the natural slope to the west. Landscaping and a high steel wire fence are proposed around the existing and proposed quarry. Berms will be constructed to the north and south and blended into the re-formed slope.

3.5. The proposed extraction rate would involve 70,000 tonnes p.a. with 4 no. employees. It is stated that on the basis of market demand, it is likely that quarrying, crushing and screening would be carried out on average for one week every two months, which equates to c.10 days per quarter. It is estimated that 12-15,000 tonnes of rock can be quarried and screened in a week. The proposed hours of operation are 0700 to 1800 Mon-Fri and 0700 to 1400 on Saturdays

3.6. The application is accompanied by an EIAR and NIS.

4.0 Planning Authority Decision

4.1. Decision

Grant permission for the above-described development subject to 38 no. conditions:

Condition 1: Compliance with plans and particulars lodged on 18/07/19 and as amended by plans and particulars lodged on 20/12/19 and 16/03/20 save where amended by the terms and conditions of this permission.

Condition 2: permission for extraction granted for 15-year period duration.

Condition 3: hours of operation 0800 to 1800 M-F 0800 to 1400 Sat. only.

Condition 4: Revised Rehabilitation and Landscape Plan to be submitted prior to the commencement of development for agreement which shall include the retention of the existing berms and tree planting along the site boundaries of the main quarry and provision of a sod and stone hedgerow along the public roads close to entrance, as well as details of any internal roads for approval. All structures to be removed on cessation of quarrying activities.

Conditions 5, 6, 7, 8: Requirements re landscaping and protection of trees and hedgerows.

Condition 9: sight distances of 80m in both directions.

Condition 10: Haul routes in accordance with submitted details. Access to R580 shall be to the north on L1201 and LP1048 only and access to N72 shall be to south along L1201 only.

Condition 11: Signage required at either side of entrance.

Conditions 12 & 13: Drainage at entrance and along new access route – to include 3 culvert drains under new road and a drainage channel across the full width of the access driveway inside the entrance gate.

Condition 14: Existing entrance shall not be used for quarrying activities.

Conditions 15, 16 & 17: Requirements for archaeological mitigation and monitoring to include a 20m buffer zone around the monuments CO024-252/254/088. Required

to carry out an archaeological excavation under licence of CO024-253 and for at least 8m around it.

Conditions 18 & 23: Noise parameters not to be exceeded and monitoring requirements.

Conditions 19, 20 & 21: Dust deposition limits and mitigation/monitoring requirements including fixed water spray system to be installed.

Conditions 21 & 23: Submission of monitoring results to planning authority.

Condition 22: Treatment and recording of complaints

Conditions 24, 25, 26 & 27: Blasting time restrictions, monitoring, ground vibration and air overpressure parameters, advance notice requirements and submission of blasting monitoring and procedures to planning authority.

Conditions 28 & 29: Environmental monitoring and liaison with public requirements.

Condition 30: Groundwater monitoring proposals to be implemented at five locations as detailed in submission by Viridius Consulting Ltd. and frequency of monitoring shall be monthly for first 3 months and quarterly thereafter.

Conditions 31 & 32: Surface water discharge from access road and drainage ditch to be monitored on a daily basis.

Conditions 33, 34 & 35: Bunding of fuel tanks/ storage of waste oil in bunded area/ spent fuel in leakproof covered bins.

Condition 36: Discharge of water contaminated with hydrocarbons including stormwater from bunded and fuel handling areas to be via grit trap and hydrocarbon interceptor to surface water drainage system.

Condition 37: Special contribution of €126,000 towards road upgrading and maintenance work.

Condition 38: Payment of €5,000 bond to guarantee the satisfactory completion of tree and shrub planting and all other landscaping proposals required by condition 6.

4.2. Planning Authority Reports

4.2.1. Planning Reports

The **first (Primary) Area Planner's** report dated **11/09/19,** which contains an EIAR assessment in Appendix 2, refers to the reports and submissions received. It was noted that the site is in a rural area under strong urban influence, is outside of any areas identified as High Landscape Value and is within the screening assessment zone for the Blackwater River SAC. It was further noted that part of the site (NW corner) is within the indicative 1% AEP and 0.1% AEP event pluvial flood risk zones as set out in the draft Preliminary FRA and that sections of the proposed new access route overlaps pluvial flood risk zones.

The most significant **visual impact** was considered to be from the northwest, the north and the north-east, as the site would be screened by topography from all other directions. Notwithstanding the exposed nature of the site, it was considered that the propose planting along the berms would help to mitigate the visual impact. However, it was considered that existing landscaped mounds and berms should be retained where possible and the removal of roadside hedging to facilitate the new entrance should be minimised. A landscaping bond was also recommended.

In terms of **residential amenity**, distances from settlements (975m from Ballyclough and 1km from Cecilstown) and from the nearest dwellings (425-500m) were noted, and that there are 8 dwellings within a 1km radius. Other noise and dust sensitive receptors include equine facilities in the area and there is a dwelling house close to the site of the proposed new entrance. It was noted that the applicant had come to an agreement with the nearby equestrian centre to close the quarry for a number of days per year for equine events. However, additional information was required in respect of noise impacts and whether tonal/impulsive elements had been included in the predicted noise levels. Further information was also required in respect of blasting in terms of the rationale for it, the potential impacts and the notification procedure. In terms of dust, a more up-to-date evaluation of existing dust levels together with meteorological data is required to enable a further review of the potential impacts.

In general, **traffic impact** and the proposed **new access** were considered to be an improvement on the previous application for a similar scale extension which involved

using the existing access. However, the information provided regarding the rate of extraction and frequency/volume of truck movements, which is likely to vary considerably with market demand, would necessitate improvements to the local road network and as such, a special contribution would be required.

With regard to **hydrology** and **hydrogeology**, a risk assessment of the potential impact of heavy rainfall on groundwater together with appropriate mitigation measures to protect the water table was recommended by the Environment Officer. The need for a revised flood risk assessment which addresses the proposed access route was also identified.

The need for **Archaeological** buffer zones around three of the monuments and excavation/monitoring were identified, which could be addressed by condition. **Revised reinstatement plans** would be required in respect of the new entrance and access route and in terms of the reinstatement of lands to agricultural use.

Further information on the basis of the above was recommended.

The **First report** from the **Senior Executive Planner** dated 1**1/09/19** notes the above report. It is considered that the applicant be afforded an opportunity to address the issues highlighted above. In addition, the SEP discussed the proposed development with the Heritage Officer and agreed that additional matters should be required as further information. These matters related to

- A detailed habitat map.
- Clarification of the extent of scrub woodland/trees to be removed.
- Detailed drawing of all existing watercourses and surface water drains.
- Details of any invasive species surveys.
- Details of breeding bird survey work
- Outline EMS proposal.

FI recommended as set out in the above reports.

4.2.2. **FI was submitted on 20th December 2019**

The **Second Area Planner's** report dated **21/02/20** following FI refers to the other Council internal reports summarised below. Most items had been addressed

satisfactorily but there were still some outstanding items. These included the following

- Need for a further reduction in the width of the proposed new entrance (once sightlines achieved)
- A more robust dust impact/monitoring evaluation
- Clarification of the minimum depth of the unsaturated zone to protect groundwater
- Reinstatement of the entrance/access route (i.e. removal of new access at end of quarrying period)
- A revised habitat map which should correspond with the landscape and rehabilitation plans in terms of scale and accuracy. The landscape and rehabilitation plans should also show details of the target habitat types over the whole site at closure
- Draft CEMP to include details of environmental measures to be implemented when the new access route, watercourse crossing, berms and haul roads are being constructed.

Deferral was recommended pending clarification of above. The Senior Executive Planner endorsed the recommendation.

4.2.3. Clarification was sought on 21st February 2020. A response was submitted on the 16th March 2020.

The **Third Area Planner's** report dated **01/07/20** raised no objection subject to conditions. The **Senior Executive Planner** endorsed the recommendation.

4.2.4. **Other Technical Reports**

1. <u>Engineering Reports</u>

The **Area Engineer's** report dated **5/09/19** notes that it is proposed to provide a new access onto the LP-1201-57 and that the existing entrance will no longer be used for quarry activity. Sightlines of 80m and proposed access route width of 6m were considered satisfactory. It was noted that under 16/4477, it was proposed to haul 70,000 tonnes/year, equating to 10 truckloads a day (averaged over 3 months). However, based on the extraction rates in the current proposal (72,000t/year), it was

concluded that this equates to 15 trucks/day or 30 trucks/day (arriving and departing). It was further noted that the rate of extraction may increase to 150,000t/year depending on the market, which would result in 60 trucks/day, which represents a significant increase. Thus, the upgrade of the LP-1201-57 would be required. A special contribution was recommended of €126,000 (representing 50% of costs of upgrade to cater for the increased HGV loading and ongoing ditch maintenance). Furthermore, a revised flood risk assessment was required to address the flood risk on the proposed access road.

Second Engineering Report dated **27/01/20** following FI was satisfied with the revised access and report on pluvial flood risk. Otherwise, no objection subject to conditions which included one requiring the payment of a special contribution towards planned future works and maintenance on haul routes due to extra HGV movements.

A **Third Engineering Report** dated **31/03/20** following **Clarification of FI** received on **16/03/20**, noted that the entrance has been scaled down but that the applicant had maintained sight lines.

2. <u>Environment Reports</u>

Environment Report (Dust and Noise) dated **04/09/19** recommends FI. Given that one of the winter dust readings indicated a level of 465mg/m²/day, notwithstanding the explanation that it related to fugitive dust form an earthen berm that was unvegetated, it was considered that a more recent and comprehensive evaluation of the existing levels was required together with meteorological data, to enable the assimilative capacity to be determined. Similarly in terms of noise, more recent noise surveys based on the operational quarry together were requested. In terms of predicted noise, clarification was required re whether tonal/impulsive elements were included as well as how it is proposed to audit and ensure compliance with the mitigation measures during overburden removal. Justification for blasting, clarification of existing situation and potential impacts of same were identified as needing clarification.

Environment Report (Ground and Surface Water) dated **05/09/19**:

It was noted that the removal of 3m of overburden and 9m of rock would increase the vulnerability of the aquifer to silt laden surface water runoff and

chemical/hydrocarbon spillages. Although the proposed floor level ranges from 91-93m OD, there was an extremely wet weather event in 2016 where the water table was measured at 91.66-91.03m OD. A risk assessment of a similar event occurring was requested, which should specify the minimum depth of rock to be maintained to protect ground water. Specific reference to Ballyclough water supply also required.

In addition, the following FI was requested:

- Environmental monitoring proposals to take account of the significant intensification of quarry and introduction of blasting.
- A draft plan for reinstatement of quarry area for agricultural use.

The **Second Environment Report** on **noise and dust** dated **20/02/20** following FI has no objection in relation to noise subject to conditions. However, there was dissatisfaction with dust surveys carried out on 27th September and 29th October 2019, which had found a number of exceedances of the threshold, which had been explained as dust arising from ploughed fields on the farm. The EO sought a more robust and comprehensive survey around the site boundary.

The **Second Environment Report** on **surface and ground water** dated **20/02/20** following FI noted that a minimum depth of unsaturated rock to ensure protection of groundwater was not specified, and requested that this be addressed together with mitigation measures where the existing quarry floor is below the minimum “safe” level. It was further requested that a full schedule of environmental monitoring for SW and GW be carried out based on the identified risks and taking account of the significant intensification of the quarrying activities.

Further **Environment Reports** dated **22/06/20** and **24/06/20** following **Clarification of FI** received on **16/03/20** were received. The GW/SW report noted that the depth of excavation is designed to follow natural ground water levels and that a minimum unsaturated depth of 5m is to be retained above winter GW levels. The SW drainage ditch which is to be crossed by the new access road will be inspected daily/weekly and sampled monthly for a range of indicator parameters. No objections were raised re ground and surface water subject to conditions. Similarly, no objections were raised in respect of noise and dust environmental matters subject to conditions following receipt of FI on 16/03/20.

3. Ecology Reports

The **Ecology Report** dated **11/09/19** identified a need for further information on the following matters

- A detailed Habitat Map to include habitats on the access route and to show an overlay of the proposed quarry and associated infrastructure.
- Quantification of the extent of woodland scrub habitat which is proposed to be removed, to include a description of age and structure of trees for removal.
- Detailed drawing of all existing watercourses and surface water drains within and immediately adjoining the site to include the seasonal stream referenced at 7.2.3 of the EIAR, with detail as to where any such features discharge to. Drawing at Appendix 7.4 to be overlain on the proposed development.
- Details of any invasive species surveys which have been recorded on the site, and details of survey methodologies.
- Details of breeding bird survey work undertaken at the site.
- An Outline Environmental Management System proposal for the site.

The **Second Ecology report** dated **20/02/20** following FI identified errors in the Habitat Map, with some habitats omitted and other habitats proposed for removal not adequately shown, and a lack of correspondence between the Habitats Map and the footprint of the development. A revised Habitat Map was requested, which should be prepared in accordance with Heritage Council guidelines and should not have any discrepancies with the Rehabilitation Plan and the Landscaping Plan. These plans should also show the details of the proposed target habitat types over the whole site at closure. In addition, the Ecologist requested that a Draft CEMP be submitted.

A **Third Ecology Report** dated 22/06/20 identified discrepancies between the revised habitats map and the revised rehabilitation plan in that the haul route is to be removed in the former but retained in the latter. Furthermore, the rehabilitation plan indicates a proposal to reuse material from the berms in the reinstatement of the quarry but in the habitats map, all planted berms are to be retained. It was stated that although it would have been preferable if these matters had been resolved satisfactorily in the clarification of FI, it was considered that they could be addressed by means of conditions, which should require the retention of all berms. Further

conditions related to landscape mitigation and to the timing and supervision of the removal of scrub habitat.

4. Archaeology Reports

The **Council Archaeologist** in a report dated **20/02/20** stated that the assessment in Chapter 12 of the EIAR had satisfactorily assessed the archaeological potential of the site and that the proposed mitigation measures were generally acceptable. The County Archaeologist raised no objections subject to conditions.

5. Public Lighting

Public lighting report **(12/08/19)** recommended deferral and to seek further information requiring a design and lux contour drawing for new public lighting along a stretch of 100m on either side of the proposed entrance. The **Second Public Lighting** report **(02/01/20)** raised no objections subject to conditions.

6. Chief Veterinary Officer

A report was received from the Chief Veterinary Officer (email dated 10th September 2019). It is stated that the site was inspected and reviewed from an animal health/welfare and veterinary public health perspective. It was noted that there is little deviation from the planning application Ref. 16/4477, in which the CVO had raised concerns regarding noise and dust impacts on the established equestrian centre on neighbouring lands. It was pointed out that he had reviewed the RFI submitted with respect to 16/4477, and in particular the Acoustics Report, the Dust Monitoring and Air Quality Report and the equine health impact assessment. It was further stated that he was in agreement with the planning authority's Environment Report (dated 27/03/17) in response to this RFI.

In conclusion, it was stated that the CVO had no objection to the grant of permission on Animal Health and Welfare grounds subject to adherence to the conditions as set out in the Environment Report, in response to the RFI submitted to the planning authority on 27th March 2017, in respect of Application Reg. Ref. 16/4477.

4.3. Prescribed Bodies

4.3.1. **Environmental Health Officer, HSE** in a report dated **06/09/19** can be summarised as follows:

- Need for an annual noise survey at representative locations and times with a documented system.
- Monitoring and assessment of wastewater disposal and the potability of water should be carried out. Any potable water supply must comply with EU Drinking Water Regulations 2014 and any wastewater must be treated and/or discharged in accordance with the EPA Code of Practice. There should be no discharge of wastewater to ground water.
- Annual monitoring of emissions to air must be carried out and mitigation measure will be required for prevention of spread of dust to surrounding residential properties. Emissions to air should include particulate emissions and petrochemical emissions.
- Monitoring and assessment of ground and surface water impacts should include consideration of any private wells in the area. An assessment of risk from storage of chemicals should be made with particular regard to any accidental spillage.
- Emergency measures to be employed.

4.3.2. **Geological Survey Ireland** notes:

- Its records show that there are no County Geological Sites in the vicinity of the proposal.
- Groundwater Vulnerability Map indicates areas of Extreme Groundwater Vulnerability around the proposed area which should be taken into account.

4.4. Third Party Observations

4.4.1. Ten submissions were received by the P.A. of which three were in support of the development. The third-party submissions are on file for the Board's information.

4.4.2. One of the objections had 34 signatures. The issues raised in the objections relate to impacts on bloodstock and livestock, environmental impacts including impacts on

human health and on the amenities of adjoining property by reason of noise, vibration and dust, structural impacts, water quality and supply impacts, flood risk, impacts associated with access and traffic in terms of road safety and the capacity of the road network and impacts on wildlife and ecology.

4.4.3. One of the letters of support was from the applicant's father, Tom O'Flynn. This related mainly to traffic volumes and flow on the local road network, and it was submitted that the proposed quarry extension would not have a significant effect on the road capacity. Other letters of support were from Greenvalley Transport and Plant Hire Ltd. and Htwo Transport which related to road safety and capacity of the road network and the demand for high quality aggregates.

5.0 Planning History

5.1. Planning decisions on site

5.1.1. **QR058 – Section 261** – P.A. granted registration of pre 1964 quarry for 20 years subject to 53 conditions. The area of excavation was reduced from 4.5ha to 2ha under condition 2. The rate of extraction was restricted to a max. of 5 truckloads per day averaged over a 3-month period (Cond. 3). Blasting was prohibited (Cond. 9).

5.1.2. **PL04.QC.2145 – Appeal against conditions of S261 registration** – seven conditions appealed and conditions 51 and 53 were omitted (special contribution of c.€20,000 and archaeology) and one condition (No.4) was amended. Extraction area confirmed at 2ha, extraction rate increased to 10 truckloads per day and blasting allowed s.t. permission from P.A. in advance. No washing of materials of settlement ponds allowed and operator required to carry out 4 noise surveys p.a. and to submit an annual topographical survey to Council.

5.1.3. **CKQY144 – Section 261A** – Cemex Ltd. – notice issued by P.A advising that no further action was required.

5.1.4. **09/5856** - **Permission refused** (Cemex Ltd) for **extension to existing quarry** within overall area of 38.92ha, closure of existing entrance and construction of new site entrance onto L1201. Proposal included change of extraction method, processing of aggregates, construction of admin building/facilities/weighbridge etc., landscaping,

restoration etc. Permission refused for 5 no. reasons which may be summarised as follows:

1. **Residential amenity** – P.A. was not satisfied that the proposal by reason of its nature, scale and duration of 30 years, as well as noise, dust and traffic levels due to proximity to existing dwellings, would not be out of character with rural area and would not give rise to undue level of inconvenience and general disturbance to existing residents.
2. **Impact on drinking water** – L.A. has significant/strategically important spring resource in Ballyclough. P.A. was not satisfied that water table will not be breached or that an unacceptable level of drawdown on the output of the spring due to groundwater being pumped from the operation. It would therefore be contrary to Objective INF 5-8 to conserve sources of drinking water and to minimise threats to quality/quantity of reserves.
3. **Traffic impact** – having regard to traffic volumes that would be generated, not satisfied that would not endanger public safety by reason of traffic hazard due to lack of capacity in the road network and conflict between pedestrians and vehicles.
4. **Tourism** – having regard to the nature of the development and to the number of existing quarries in the vicinity, the P.A. was not satisfied that the proposed development would not threaten the integrity of the landscape and environment which it is an objective to preserve for fishing and golf tourism as set out in Objective Econ 6-8
5. **Archaeology and cultural heritage** – not demonstrated that development would not have a negative effect on the non-structural elements of the built-heritage and on safeguarding sites, features and objects of archaeological interest which it is an objective to preserve (ENV 4-5 and ENV 3-1).

5.1.5. **16/4477 – <u>Permission refused</u>** (current applicant) for **extension (5ha) to existing quarry** to east of existing extraction area. Proposal involved retention of existing access to north onto L5302-12. It also involved a change to extraction method to blasting, crushing, screening of aggregates, upgrade of existing access road, installation of admin office, wheel wash, weighbridge, fuel storage, rainwater harvesting tank, overground and underground power supply etc. Appeal to ABP

(PL04.248788) was withdrawn prior to determination by the Board. Reason for refusal was based primarily on traffic impact on local road network and public safety due to traffic hazard due to the heavy traffic volumes and the seriously substandard narrow local road network.

5.2. Planning decisions in the general vicinity

5.2.1. The Area Planner's report summarises other applications which pertain to other quarry operations in the overall area and to other planning permissions for one-off houses. These include (07/8289) Glenstone Quarries c.6.5km to northwest of site (36ha); Ducon Concrete (08/5429) c.3.8km to northwest for extension to quarry (total area c.15ha) including blasting, screening and crushing – granted on appeal (PL04.232137); and Whelan's Limestone Quarries (07/6290) c. 4km to east – continuation of quarry granted by ABP (PL04.227565).

5.2.2. Reference was also made to other tourism-related developments including the redevelopment of Ballygiblin Manor and stables as a 40-bed hotel and 18-hole golf course with associated clubhouse etc. (08/4403) which is located less than 1km to the west; and a holiday home development and associated recreational tourist related facilities (08/4748) which is located c.2km to southwest.

6.0 Policy Context

6.1. National Policy

National Planning Framework (NPF)

Extractive industries are important for the supply of aggregates and construction materials and minerals to a variety of sectors. The planning process will play a key role in realising the potential of the extractive industries sector by identifying and protecting important reserves of aggregates and minerals from development that might prejudice their utilisation. Aggregates and minerals extraction will continue to be enabled where this is compatible with the protection of the environment in terms of air and water quality, natural and cultural heritage, the quality of life of residents in the vicinity, and provides for appropriate site rehabilitation.

National Policy Objective 23 - Facilitate the development of the rural economy through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bioeconomy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.

Quarries and Ancillary Activities Guidelines for Planning Authorities 2004

These guidelines, which provide guidance on the extractive industry, emphasise the economic importance of quarries. Reference is made to environmental implications and the potential for environmental effects across a wide range of topics, which need to be taken into account in the assessment of applications for proposed quarries and/or expansion of existing quarries. The potential impacts identified include noise, vibration, dust impacts, traffic volumes, safety and effects on the capacity of road networks, waste management, impacts on water quality and supply as well as groundwater levels, effects on natural heritage, cultural heritage and landscape and visual amenities.

The Planning System and Flood Risk Assessment – Guidelines for Planning Authorities

These guidelines set out good practice in the consideration of flood risk in planning and development management. The key principles include the following:

a) Avoid development in areas at risk of flooding (sequential approach)
b) If this is not possible, consider substituting a land use that is less vulnerable to flooding.
c) Only when both avoidance and substitution cannot take place should consideration be given to mitigation and management of risks.

Exceptions to the restriction of development due to potential flood risks are provided for through the use of the Justification Test, where planning need and the sustainable management of flood risk to an acceptable level can be demonstrated.

6.2. Regional Policy

Southwest Regional Planning Guidelines 2010-2022

These guidelines acknowledge the important contribution that mineral resources, and in particular aggregates, make to the economy of the region and to the construction industry. It is stated that there is a need to protect the sustainability of these resources and assets.

Regional Spatial and Economic Strategy for the Southern Region

The RSES provides the framework through which the NPF's vision and the related Government policies and objectives will be delivered for the Region. The main aim is to implement the NPF policies at the regional level in achieving balanced regional development.

6.3. Local Policy

Cork County Development Plan, 2014

Objective EE 12-1 Safeguarding Mineral Reserves

Protect and safeguard the county's natural mineral resources from inappropriate development, by seeking to prevent incompatible land uses that could be located elsewhere, from being located in the vicinity of the resource, since the extraction of minerals is resource based.

Objective EE 12-3 Impacts of Mineral Extraction

Minimise environmental and other impacts of mineral extraction through rigorous application of licensing, development management and enforcement requirements for the extractive industry and ancillary developments.

All extractive industry developments to have regard to the 'Quarries and Ancillary Activities Guidelines for Planning Authorities (2004)' published by DoEHLG or as may be amended from time to time.

With new quarry and mines and extensions to existing quarries and mines regard should be had to visual impacts, methods of extraction, noise levels, dust prevention, protection of rivers, lakes, European sites and other water sources, impacts on residential and other amenities, impacts on the road network (particularly with regard

to making good any damage to roads, road safety, phasing, reinstatement and landscaping of worked sites.

Objective HE 3.1 Protection of Archaeological sites

(a) Safeguard sites and setting, features and objects of archaeological interest generally.

(b) Secure the preservation (i.e., preservation in situ or in exceptional circumstances preservation by record) of all archaeological monuments including Sites and Monuments Records (SNR) and the Record of Monuments and Places (RMP) as established under Section 12 of the National Monuments (Amendment) Act 1994, as amended, and sites, features and objects of archaeological and historical interest generally. In securing such preservation, the planning authority will have regard to the advice and recommendations of the Department of Arts, Heritage and Gaeltacht as outlines in the Frameworks and Principles for the Protection of the Archaeological Heritage.

6.4. Natural Heritage Designations

The nearest designated site is Blackwater River SAC (site code 002170) which is located c.6km to the south. Kilcolman Bog SPA is also located within 15km of the site.

7.0 The Appeal

7.1. Grounds of Appeal

Two third-party appeals have been received.

7.2. Concerned resident (Ballyclough, Scart, Kilgilky South, Cecilstown)

(submission by Sean R. McCarthy Consulting Engineers Ltd. accompanied by supporting details on their behalf). The submission included 35 signatures.

The appeal submission can be summarised as follows:

- **Previous history** - Reference is made to the planning history on the site including PA Ref. 16/4477 refusal of permission, PL04.248788 which was

withdrawn, and QR058 (Registration), condition 9 of which indicates the unsuitability of the area for quarrying given its rural and agricultural character.

- **Capacity of road network** - The road network in the area is substandard and not suitable for the increased volume of heavy goods vehicles which the proposed development will generate. The network caters for both commercial and tourist traffic including busses attending Ballyhass Lakes amenity centre. The proposed development will generate additional traffic which, when taken together with the existing traffic using the network, will result in excessive levels of heavy goods traffic on the local roads.
- **Haul routes -** There was no indication that the haul routes would result in traffic from the development accessing the N20, which is the most direct route via the L-5302-12. This route is totally unsuitable for commercial vehicles, particularly when there is no limit specified restricting the volume of vehicular traffic.
- **Traffic hazard -** The planning authority decided to refuse permission for a similar development on the basis of the unsuitability of the road network, but this matter has not been addressed. Thus, the proposal will generate a traffic hazard which will expose existing residents to risk of injury. The P.A. has failed to take into account that the sight distances as per condition no. 9, cannot be achieved within the site of the development, and as such it cannot be complied with.
- **Rock blasting –** the P.A. did not permit rock blasting under the registration of the quarry, yet it is proposed in the current application. However, there have been no changes in the planning or environmental regulations in the meantime which would make it acceptable to carry out rock blasting. Under no circumstances should rock blasting be permitted as it will result in unacceptable noise levels which would have a detrimental effect on farming activities in the vicinity, which includes bloodstock and livestock rearing.
- **Water quality impacts** – water supply in the area is by way of ground water extraction. Rock blasting will have an adverse effect on ground water levels and has the potential to compromise ground water extraction from borehole wells in the area. No adequate investigations have been carried out in respect

of the effects of extraction. This is unacceptable and would be contrary to the proper planning and sustainable development of the area.

- **Visual amenity** – the proposed development will damage the visual amenity of the area – see letter from An Taisce dated 23rd March 2016.
- **Hours of operation** – the quarry can be operated for 56 hours per week even though the standard working week under the EU Directive is 39 hours.
- **Conditions of P.A. decision are inadequate** – the conditions are inadequate and open to various interpretations and lack adequate certificate of compliance. Furthermore, they do not address the concerns of the residents.
- **Unsuitable development** - The proposal is totally unsuitable for the rural area and will detract from the rural environment and is therefore contrary to the proper planning and sustainable development of the area.
- **Validity of application** – the description of development and the location of the development are incorrectly described in the documentation submitted to the P.A. and therefore a decision should not have been made by the P.A.

7.3. **Tim O'Keeffe, Kilguilkey South** (submission by Sean R. McCarthy Consulting Engineers Ltd. accompanied by supporting details on their behalf). Mr. O'Keeffe is a farmer whose dwelling and farmland are located immediately to the west of the proposed entrance accessing the development.

The appeal submission can be summarised as follows:

- **Previous history** - Reference is made to the planning history on the site including PA Ref. 16/4477 refusal of permission, PL04.248788 which was withdrawn, and QR058 (Registration), which indicate the unsuitability of the area for quarrying given its rural and agricultural character.
- **Rock blasting –** rock blasting was prohibited under the registration of the quarry, yet the P.A. has now granted it under the current application. However, there have been no changes in the planning or environmental regulations in the meantime which would make it acceptable to carry out rock blasting. Neither have noise levels or nuisance from blasting changed in the intervening period. It is not clear why the P.A. changed its mind.

- **Nature of Mr. O'Keeffe's farm** – the farming activity includes the breeding of thoroughbred horses. Quarrying operations will have a significant impact on the enjoyment and use of his lands including impacts on air quality, noise and vibration from blasting. It will have a detrimental effect on his bloodstock, particularly blood mares and foals. It is therefore contrary to the proper planning and development of the area and will conflict with permitted development in the area.
- **Pollution from noise and dust** – the proposed development by reason of the quarrying activities and the vehicular traffic will generate a significant level of dust which will have an adverse effect on his farm and on the welfare of his animals.
- **Impact on wildlife habitats** – the development is located close to a wildlife area which includes a fox covert and peasantry together with various wild animals including squirrels, hares and rabbits as well as birds. Rock blasting will dramatically interfere with the habitats of these animals and birds.
- **Substandard road width** – the roadway adjoining the proposed entrance is 4.9m in width and is therefore inadequate to allow trucks to pass. This will lead to a conflict with existing permitted traffic and will generate a traffic hazard.
- **Surface water pollution** – no adequate provisions have been made to protect existing watercourses in the vicinity of the development, which will lead to pollution of streams, rivers and water intake systems including wells in the area.
- **Conditions of P.A. decision are inadequate** – the conditions are inadequate and open to various interpretations and lack adequate certificate of compliance. In granting permission, the P.A. has failed to abide by their own guidance in the conditions attached to the registration of the quarry.
- **Validity of application** – the entrance to Mr. O'Keeffe's farmyard and dwelling are not shown on the enlargement map. The P.A. failed to obtain confirmation that the applicant had received consent from landowners within the development site.

7.4. Applicant Response

The submission by Mr. David O'Flynn (25th August 2020) comprises a combined response to both appeals contained in one document, together with an appendix, (Appendix A), in which the various consultant agents involved in the preparation of the application have provided further specific responses to the points raised in the grounds of appeal. Much of the response is in the form of a rebuttal of the grounds of appeal. However, the following points are of note:

7.4.1. Principle of development

- Supported by national and local policy. There are a number of substantial capital investment projects planned for the area in the coming years, (including the M20 and the N72/N73 Mallow Northern Relief Road) which would benefit from the high quality Waulsortian limestone from the quarry.
- Rate of extraction/intensification – The Area Engineer's calculation that the extraction of 150,000 t/year would give rise to 60 trucks/day included Saturdays, Sundays and Bank Holidays. The exclusion of these days would result in 50 truck movements per day.
- P.A. had accepted the nature and extent of the proposed development under 16/4477 and the primary concern under this decision was the access from the L5302. This has now been addressed by the costly acquisition of adjoining lands and provision of a new access onto the L1201.

7.4.2. Noise and Vibration

- The proposed development will operate in compliance with the relevant noise conditions.
- Best practice noise mitigation measures will form part of site management practices.

7.4.3. Rock blasting

- It is not accepted that the quarry registration prohibited rock blasting as the Board's decision amended Condition 9 to allow an agreement or application for blasting to take place subject to a full noise assessment.

- The appellant's lands (Mr. O'Keeffe) are located 1.5km west of the proposed quarry and Kilguilkey House Equestrian Centre is located 0.9km north of the proposed development. The assessment of noise/vibration impacts on animal welfare was carried out by an equine veterinarian (addressed in Chap 9 of EIAR). This concluded that there would be no negative impacts on the horses at the equestrian centre, which is closer than Mr. O'Keeffe's farm.
- Blast monitoring will be carried out as required by the conditions of the planning permission. An Environmental Management System (EMS) will also be in place.

7.4.4. **Air Quality and Dust**

- Chapter 8 of the EIAR addresses air quality and dust and was supplemented by further detail at FI stage. Prevention and mitigation measures are detailed.
- The assessment concluded that most dust would settle out within 100m of the point of generation. The meteorological data confirms that the prevailing wind is from the southwest. It was concluded that the impact on the sensitive receptors within 500m of the quarry, based on the assessment undertaken, there will be no significant dust nuisance or impairment of amenity outside of the site boundary.
- As the appellant's (Mr. O'Keeffe's) property is 1.5km away, and given the prevailing wind direction, it is not accepted that there would be any significant effects on his farmland.

7.4.5. **Traffic impact and traffic hazard**

- Local road network – comprises mainly of L-roads. The L1201 is a good quality two-way single carriageway with appropriate horizontal and vertical alignment to the road designation and 80kph design speed. The impact of the quarry on the local road network would be minimal.
- Proposed Access – the entrance to the appellant's farm is included in the drawings (401a-PL1 and 401-PL3) showing the extent of the 80m and 165m sightlines respectively from the entrance. Visibility splays are provided in accordance with the requirements of TII Publication DN-GEO-03060.

- Road safety – the width of the road in the vicinity of the proposed site entrance is c.5m-5.5m and is appropriate as set out in TII Rural Road Link Design (DN-GEO-03031-10). The road is adequate to accommodate the traffic that would be generated by the proposed development.
- Haul routes – have been arrived at through discussion with the planning authority. One proposes to direct HGV traffic southwards along L1201 to the N72 and the other would direct traffic northwards along the L1201 to junction with R580 and then eastwards along R580 to N20. HGV traffic will not travel via the L5302.
- Extraction rate and traffic generation – the existing rate of extraction is 70,000 t/year which gives rise to 10 truckloads per day averaged over 3 months. The proposed average extraction rate will be equivalent to this, but as it will be subject to market demand, could rise to 150,000 tonnes p.a. or 20 truckloads per day. It is estimated that traffic flows would increase morning peak flows by 0.9% and evening peak flows by 1.6% at the proposed junction location in opening year and in the design year (2035), the respective figures would be 0.9% and 1.8%. A PICADY analysis shows that there would be no discernible impact on through traffic.
- Visibility splays – sightlines can be achieved as shown on submitted drawings and visibility splays will be maintained.

7.4.6. **Impact on wildlife**

- The area of woodland in question is located approx. 1.5km to the west of the proposed development. Given that it is further removed from the site of the proposed development than the equestrian centre, the likelihood of adverse impact on any wildlife within the woodland from noise and vibration would not be likely to be significant.
- The woodland habitat would not be interfered with or affected by the proposed activities.
- The woodland is surrounded by three quarries, one of which is the subject site. The other two quarries, Ballygiblin (0.5km to west) and Ballyhass Quarry (0.6km to south-west) appear to have ceased operations. However, the

current level of biodiversity in the woodland has not been significantly affected by the operation of these two quarries which are closer than the proposed development.

7.4.7. **Impact on surface water and ground water**

- The nearest watercourse is a small seasonal stream/ditch which is located c.500m to the west of the proposed quarry area. There will be no direct linkage or drainage to this feature from the development. The proposed new access road will cross it, but no road drainage will be directed to it. The groundwater flow direction is to the West/SW and there are no wells within 1km to the West/SW of the quarry.
- Site specific mitigation measures are set out in the EIAR (Chapter 7) and in the RFI which are based on the environmental risks identified. These measures are specifically designed to protect the local drainage features, the groundwater aquifer and the local water environment from risk of pollution.

7.4.8. **Archaeology**

- For the avoidance of doubt, the RMP known as the Limekiln – CO024-087 – no longer exists. It had been used for lime production in the period pre-1964 and again in the 1980s.

7.4.9. **Other Issues**

- It is not accepted that the application was deficient as Mr. O'Keeffe's lands and entrance were shown on the submitted drawings. The description of the development is accurate.
- Letters of consent were obtained from all relevant landowners.
- Impact on animal welfare – the Chief Veterinary Officer has no objection to a grant of permission on animal welfare grounds subject to adherence to conditions as set out in the Environment Report.
- The conditions imposed by the P.A. are reasonable and enforceable and appropriate to the nature and extent of the development proposed. The applicant has not appealed any of the conditions and is happy to abide by them.

7.5. Planning Authority Response

A response was received from the planning authority on 27th August 2020 as follows:

> Conditional permission was recommended, having regard to the nature and scale of the proposed development, the site context, the relationship with property in the vicinity and the potential impacts, the internal and external reports, along with the recommendations of the Area Engineer, the Environmental Officer, the Archaeologist, the Ecologist and Vetinary Officer.

7.6. Observations

No observations have been received.

8.0 Planning Assessment

I consider that the issues can be assessed under the following headings:

- Principle of development
- Traffic and Access
- Amenities of area and neighbouring properties
- Water quality
- Ecology
- Cultural heritage
- Other Issues

8.1. Principle of development

Policy context

8.1.1. The national and regional policy framework emphasises the economic importance of the country's mineral resource and of the development of quarries in appropriate circumstances, particularly in respect of supporting the construction industry. The NPF highlights the importance of the supply of aggregates and construction materials to a variety of sectors and states that extraction will continue to be enabled where it is compatible with the protection of the environment and community

amenities. **National Policy Objective 23** embodies this commitment in seeking to facilitate the development of the rural economy through supporting sustainable and economically efficient agricultural and food sectors, together with forestry, fishing and aquaculture, energy and extractive industries…. while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.

8.1.2. The current Cork County Development Plan recognises that aggregate resources contribute significantly to the economic development of the county and seeks to facilitate its further development. However, it is acknowledged that the exploitation of such resources is required to be carried out in a manner that does not adversely impact on the environment, existing infrastructure and the amenity value of neighbouring lands. Objectives EE12-1 and EE12-3 seek to protect the natural mineral resources and to minimise environmental impacts from extraction.

Nature and extent of proposed development

8.1.3. Permission is sought for an extension of an existing limestone extraction area within a larger landholding of 65.9ha, which includes a long-established quarry operation. The existing working area is c.2.12 hectares, with c.0.49ha reinstated. It was established prior to 1964 and has since been the subject of a S261 Registration and a S261A determination that no further action was required. The registered quarry is approx. 2ha in area and was restricted to 10 truckloads per day averaged over three months. The extraction area is currently accessed by means of a long internal track within the landholding which travels southwards from the L5302, though the applicant's farmyard and agricultural lands for a distance of c.700m. The proposal seeks to extend the working area mainly to the east and to the south with an additional extraction area of 5ha, to change the method of extraction to include blasting, screening and crushing of aggregates on site and to provide a new access to the quarry from the L1201 to the west. It is proposed to carry out the extraction in three phases over a 15-year period. The provision of the new access involves the purchase of additional lands from two landowners.

8.1.4. The lateral extension of the extraction area within an existing quarry is considered to be acceptable in terms of the above policy provisions. However, in addition, regard must be had to other policy considerations, notably those pertaining to landscape,

biodiversity and protection of the community and of the environment. Given that the quarry has been established since before 1964, has been registered under QR058 and 04.QC.2145, the principle of quarrying activity is established at this location. In assessing the appropriateness of the expansion of the extraction area as proposed, however, regard should be had to the nature and extent of the proposed development and the likely impacts on the environment.

8.1.5. The total amount of rock to be extracted is stated to be 1,080,000 tonnes. The proposed extraction rate would involve 70,000 tonnes p.a. with 4 no. employees, over 15 years. It is stated that this rate would equate to the permitted rate of extraction for the existing quarry which was permitted at a rate of 72,000 tonnes/year, which was defined as 10 truckloads per day (averaged over 3 months). It is stated that this would mean that it is likely that quarrying, crushing and screening would be carried out on average for one week every two months, which equates to c.10 days per quarter. It is estimated that 12-15,000 tonnes of rock can be quarried and screened in a week. The proposed hours of operation are 0700 to 1800 Mon-Fri and 0700 to 1400 on Saturdays.

8.1.6. However, notwithstanding the above, the developer has advised that the extraction of material will be subject to market demand, which means that the rate of extraction could increase to 150,000t/year. The applicant states that the variability of market demand could mean that there would be periods of time where there would be no trucks leaving the site and others, at periods of high demand, where up to 40 trucks a day could be leaving the site. The Area Engineer, however, has pointed out that the number of trucks would have to be doubled to account for departure and arrivals. On this basis it was estimated that an extraction rate of 150,000 tonnes p.a. could give rise to 60 truck movements per day, based on 20 tonnes per truck (i.e., 30 full trucks and 30 empty trucks).

8.1.7. The quarrying activity, as described above, is likely to be intermittent rather than continuous, with blasting occurring on a minimal number of days followed by crushing and screening and potentially further periods with no activity. I would agree that the introduction of blasting could be appropriate in principle as it is likely to reduce the frequency and duration of noise levels associated with rock ripping. This matter was addressed under QC.2145 when the Board decided that blasting could be considered to be appropriate in the future, subject to a satisfactory noise

assessment. However, the current proposal, which seeks flexibility to respond to market demand by doubling the current rate of extraction, could result in a significant increase in the intensity of the use over short periods of time, with the potential for significant effects on the environment by reason of increased noise, vibration, dust and traffic impacts. This matter will be considered further under the various topic headings below in the assessment of the likely impacts on the amenities of the area and on the environment.

Comparison with Previous Decisions

8.1.8. Concern has been expressed by the third parties regarding what is perceived as a substantial departure from determinations under previous decisions. It is believed that the area was deemed to be unsuitable for quarrying activity due to its rural character, that blasting was 'prohibited' and that the local road network was deemed to be unsuitable for this type of activity. However, quarrying activity is a long-established use on this site, albeit at a smaller scale and without rock blasting, and has been confirmed by the S261 registration process as outlined above, (reference numbers QR058, PL04.QC2145 and CKQY144 refer).

8.1.9. Although the planning authority had attached a condition to the registration of the quarry (QR058) prohibiting blasting, this condition (No. 9) was appealed to the Board (QC2145). The first party has pointed out that the Board's Inspector considered it impractical to prohibit blasting in a limestone rock quarry and believed it to be an activity that could prove to be less intrusive in terms of noise than the alternative of rock ripping. However, as blasting had not previously been an established use of the quarry for registration purposes and as a noise baseline assessment of the impacts was not available to him, he recommended that the condition be reworded to allow for a future agreement or application for blasting to take place, subject to a full noise assessment. It should be noted, however, that the Board decided not to amend condition 9, which means that the current position is that blasting is not permitted at the existing quarry. Notwithstanding this, it would be unreasonable to exclude consideration of controlled blasting at a limestone rock quarry as part of the methodology, provided that the environmental impacts are adequately considered and mitigated. This matter will be addressed below.

8.1.10. It is further noted that permission was subsequently refused for an extension of the quarry (09/5856) by the P.A. on various grounds including the impact on the amenities of the area by reason of noise, dust and traffic. However, this application by CEMEX (ROI) Ltd. was for a much larger quarry extension of 27ha, compared with the current application for 5ha. The current applicant then applied for an extension to the existing quarry (16/4477) of a scale and nature similar to the current proposal (5ha), which differed only in respect of the proposed access. That application had proposed using the existing access from the L5302. The P.A. decided to refuse permission for one reason only, which related to the volume of traffic and the impact it would have on the local road network and that it would create a traffic hazard. The first party has pointed out that the refusal on this singular reason means that the planning authority had been satisfied with all other aspects of the development, which had inter alia proposed the introduction of blasting, crushing and screening of aggregates.

8.1.11. In conclusion, it is considered that quarrying activity is well established in the overall area including the subject site and can be carried out without unduly interfering with the rural character of the area, which is dependent on agriculture, provided that the environmental impacts are adequately controlled. The site is not located within a High Value Landscape. Given the nature of the undulating agricultural landscape and the relatively flat topography in the vicinity of the site, and as it is set back a considerable distance from the public roads, the existing quarry is not readily visible from the surrounding countryside. The nature of the mineral resource within the site, Waulsortian Limestone, is regarded as a highly valued limestone resource. The proposed extension of the quarry would be within the immediate surroundings of the existing extraction area. It is considered that having regard to the nature and character of the surrounding area and in light of the planning history associated with the site and the policy framework for the extractive industry, it is considered that the proposed development would be acceptable in principle. Site specific issues will be addressed in the following sections.

8.2. **Access and Traffic**

8.2.1. Chapter 11 of the EIAR addresses traffic and transportation and is supplemented by amended plans and details submitted by way of FI. At the outset I note that the

principal difference between the permitted quarry and the proposed development is the proposal to cease the use of the existing access from the L5302 and to provide for a new access from the L1201. The EIAR (11.4) indicates that the rate of extraction will be similar to the existing/permitted rate of 70,000 tonnes, which means that there would be no increase in intensity of extraction and/or in vehicular movements arising from the lateral extension of the extraction area. However, I note from the Inspector's report and Board decision on QC.2145 that the rate of extraction for the registered quarry was 50,000 tonnes per annum and the Board expanded the daily limit from 5 truckloads (as required by the planning authority) to 10 truckloads per day.

8.2.2. The proposed rate of extraction and associated trip rate as set out in the EIAR (11.4) estimates an average of 10 truckloads per day (increasing to 20 truckloads at periods of high demand) which is based on a calendar year rate of 365 days. I note however, that the planning authority applied a rate of 250 days per year (excluding Saturdays, Sundays and Bank holidays). On the basis of 20 tonnes per truck and 250 days per year, I estimate that the extraction rate for the established quarry (50,000T/p.a.) would give rise to 10 truckloads or 20 return trips per day. However, the proposed extraction rate is given as 72,000 tonnes/year rising to 150,000 tonnes/year at periods of high market demand. The P.A. estimated between 14 and 30 truckloads a day on the basis of 250 days, or 30-60 HGV trips/day. Bearing in mind that the proposed operating hours are given in the EIAR (2.1.3.6) as Mon-Friday (full days), half days on Saturdays and no operation on Sundays/Bank Holidays, 250 days should be increased to 277 days to account for the inclusion of half days on Saturdays.

8.2.3. I would estimate that the proposed extraction rate of 72,000 tonnes p.a. would result in 13 truckloads or 26 return trips daily (based on 277 days p.a.). However, the proposed development seeks permission to be able to respond to market demand with a maximum extraction rate of 150,000 tonnes p.a., which would give rise to 27 truckloads per day, or 54 round trips daily. It is acknowledged that the developer has stated that in order to respond to the market, there would be days when there would be no trucks leaving the site, yet on other days, there could be up to 40 trucks per day in operation.

8.2.4. Regardless of how it is calculated, it is considered that the proposed development would give rise to at least a doubling and more than likely an almost trebling of the current permitted trip generation. This would represent a significant increase in HGV traffic on the local road network, which would be even more notable by reason of the fact that the quarry has not been operational for some years. The Traffic Impact modelling, however, was based on 40 HGV/5 car arrivals and 40 HGV/5 car departures a day, which represents the worst-case scenario. It is also acknowledged, that the current quarry operation utilises the L5302, which is a particularly substandard road with very poor alignment, narrow widths and sharp bends which travels through a cluster of residential properties to the south and a very substandard and poorly aligned junction to the north. The proposed development would result in the cessation of the use of this route and instead provide for a new junction with the L1201, which is a wider road with a much more appropriate alignment.

8.2.5. The proposed haul routes were identified in consultation with the planning authority. Two separate routes to the national road network were identified. Route A involves the direction of traffic north along the L1201 towards the junction with the R580 and eastwards along the R580 towards Buttevant, where it would join the N20 leading north towards Limerick and south towards Mallow/Cork. Route B would involve directing traffic south along the L1201 towards Cecilstown and beyond towards the N72 and from there would travel eastwards to join the N20 at Mallow. It is noted that the current traffic was estimated as zero in terms of arrivals/departures of staff and HGVs as the quarry is currently not operational.

8.2.6. Traffic modelling has been carried out using PICADY for the opening year (2020), opening year +5 (2025) and future year +15 (2035) based on the peak hour flows. The current AADT on the L1201 is stated to be approx. 450-500 vehicles, which is likely to increase to 550-600 vehicles by 2035, by reason of traffic growth on the network (excluding the development). Each of the two haulage routes were assumed to cater for 50% of the traffic volumes generated. The Picady analysis related to the proposed new junction with the site entrance from the L1201. This showed that the proposed development would contribute approx. 0.9% to morning peak traffic flows in both the opening year and the future year, and in the evening peak hour, it would contribute 1.6% (2020) and 1.8% (2035) respectively. Thus, the operation of the

proposed quarry would have very little impact on the traffic flows on the L1201 or on queue lengths at the proposed new junction.

8.2.7. The results of the modelling are not unexpected as the AADT of the road is quite low and the volume of traffic generated by the proposed development relative to the baseline traffic flow is also relatively low. I would agree that the predicted traffic impact would be low in terms of increases in traffic flow and that as such, a priority T-junction is likely to be the best option for the design of the junction. However, the traffic impact analysis undertaken in the EIAR is largely confined to the impact of traffic flow on the capacity of the road network rather than an assessment of the impact of a significant increase of HGV traffic on a relatively narrow and poor-quality local road network. It is acknowledged that the RFI addressed the issue of sightlines and traffic safety in the design of the proposed junction, but the impact of up to 80 trucks (40 with full loads) traversing up and down the L1201 on a daily basis was not adequately addressed.

8.2.8. The proposed development could increase the traffic flow on the road by up to 12%, the majority of which would be HGV traffic. The planning authority Roads Engineer's reports in respect of a previous refusal on the site (09/5856), which had also proposed an access onto the L1201, had indicated that 30 trucks per day "would have serious consequences for the road with depressions, heaving of road edges, damage to the drainage system and erosion of grass margins, all of which will have a detrimental effect on the quality of the existing road." It is estimated that the proposed development would generate c.30 HGV trips per day at an extraction rate of 72,000 tonnes/p.a. and up to 80 HGV trips per day at an extraction rate of 150,000 tonnes/p.a. In respect of the current scheme, the Area Engineer considered that there would be a significant increase in HGV movements and that whilst the proposed entrance onto the LP-1201-57 is a better option, this will necessitate the upgrading of this road. It was, therefore, recommended that a special contribution be required to be paid as follows.

- Upgrading of LP1201-57 in the vicinity of the new entrance (€15,000)
- Upgrading of the junction between the LP1201-57 and LP1201-31 (€36,000)
- Upgrading of LP1201-57 to junction with LP1203 to the south (€75,000)
- Total Roads Special Contribution - €126,000

8.2.9. The special contribution costs are broken down in the Area Engineer's report of 5/09/19. In general, the costs are associated with improving the road to cater for HGV turning movements and ongoing maintenance of drainage ditches. It is considered reasonable to apply the special contribution condition for these works in this instance, which can be considered to come within the parameters of what may be considered as a special contribution in accordance with Section 48(2)(c) of the Planning and Development Act 2000 (as amended) and with paragraph 7.12 of the Development Management Guidelines, 2007 providing guidance with respect to same. It is noted that the applicant has not appealed this condition. I also note that the planning authority decision did not include a condition requiring the payment of a contribution under the General Development Contribution Scheme. On this basis, should the Board be disposed to a favourable decision, I recommend that a condition requiring the payment of a Special Contribution be attached to any such permission which should be based on an amount to be agreed between the applicant and the planning authority.

8.2.10. The third-party appellants raised concerns regarding traffic safety, particularly in relation to the width of the L1201 in the vicinity of the proposed entrance, which was considered to be substandard. However, the Area Engineer was satisfied with the design of the proposed entrance and that the required sightlines could be met. It was further noted that the proposed signage on the approach to and at the entrance to the quarry was satisfactory. However, the planning authority considered that the proposed entrance as originally submitted would result in an excessive amount of hedgerow to be removed. This matter was the subject of a FI request and clarification. I note that the revised drawings show the retention of most of the existing hedgerow, but with its height reduced to 1.0m, which it is stated will be maintained at this height. As the applicant intends to purchase the lands in question as part of the proposal to provide the new entrance and access route, this would be within his control. It is considered that should the Board be minded to grant permission, a condition to this effect should be attached to any such permission.

8.2.11. Third parties also expressed concern that the L5302 will continue to be used as part of the haul route as it represents the shortest distance to the N20. However, the existing access/entrance from this road will cease to be used for the purposes of the quarry and the P.A. attached a condition to this effect. It is considered that should

the board be minded to grant permission, a similar condition should be attached, and it should also be specified that the L5302 shall not be used as part of the haul route, for the avoidance of doubt, as this road is unsuitable for such an increase in HGV traffic.

Access and Traffic - Conclusion

8.2.12. The proposed development will result in a significant increase of HGV traffic along the L1201, but it is proposed to provide a new entrance on this road with good visibility and road signage. Although it is a local road, it is relatively straight and in reasonable condition, and is relatively lightly trafficked. It is also proposed to be subject to upgrading pursuant to the application of a special contribution. In addition, the proposal involves the cessation of the use of the L5302 and associated entrance and the use of the L1201 instead, which is likely to have a positive impact on vehicular and pedestrian safety along the L5302. This is a particularly substandard road with very poor alignment and a high number of residential entrances. It is considered that subject to the attachment of appropriate conditions to any permission as discussed above, the proposed development would not adversely affect the capacity of the local road network and would be acceptable in terms of traffic safety and convenience.

8.3. Amenities of Adjoining Property

8.3.1. The nearest dwellings to the existing quarry are located immediately to the east along local road L5302, where there is a cluster of houses, with a further dwelling along the road to the west, close to the proposed new entrance. There are two houses one on either side of the existing entrance and a scattering of dwelling houses, farmhouses and equine centres in the general vicinity. Ballyclough village is located just over 1 kilometre to the south-east and Cecilstown village is c.1.3km to the south-west. There are 27 no. dwellings within 1 kilometre of the site. Appellants and observers to the appeal consider that the noise, dust, vibration and traffic will adversely impact on their residential amenities, that conditions attached to the permission (as decided by the P.A.) are inadequate and that the proposed development is inconsistent with the rural character and predominantly agricultural use of the area, with a number of equine centres in the vicinity of the site. I have addressed traffic in section 8.2 above.

8.3.2. The existing pit measures approx. 2ha in area and is landlocked within the applicant's holding. It is surrounded by agricultural lands on all sides and the proposed extension (5ha) is sited on part of these agricultural lands to the immediate east and south of the existing pit. The site boundary extends c.500m to the east and c.100-200m to the south of the pit to the boundaries of the landholding, beyond which lies agricultural lands in third party ownership. The northern and western boundaries adjoin agricultural lands in the applicant's ownership. The nearest receptors include 8 dwellings within 500m of the proposed extraction area, the closest of which is 450m distant to the east. There is a cluster of 13 houses at this location which is situated along the L5302 at the sharp bend in the road. The dwellings located along the L1201 to the west of the site are generally 700-800m distant. The existing noise environment is predominantly rural with road traffic noise and agricultural practices being the most significant noise sources.

Noise

8.3.3. The quarry was not operating at the time of my inspection and the documentation on file indicates that it may not have been operating on a full-time basis for a few years. However, there is an existing pit which means that the current workings would be screened to a certain extent by the cliff faces and berms. It is proposed to change the current practices within the existing quarry by introducing blasting, processing and screening, which will have noise implications, but as blasting would replace the current practice of rock ripping/breaking, there would also be benefits in terms of noise emissions. It is stated that processing would occur during 1-2 weeks after each blast only, which would be at intervals of once every two months. The expansion of the quarry laterally would also necessitate the removal of overburden from time to time, which is stated in the EIAR as once every two years. As the tonnage to be processed and transported off site will also be increased, (particularly in periods of high demand), additional traffic will be generated by the proposed development which will generate noise emissions, and the access will be relocated to the L1201, with potential noise impacts near the entrance.

8.3.4. The proposed method of extraction will involve the removal of c.3m of overburden and the depth of the limestone is estimated at 9m. Controlled blasting is proposed, and the blasted rock will be removed by extractor and fed into a mobile crusher. The crushed rock will be loaded into a dumper and moved to a stockpile area, where it

will be screened and stockpiled for removal. The proposed crushing and screening is described as a dry process and there will be no material washing on site. The construction phase will include the restoration of the existing quarry by restoring the natural slope to the west. Landscaping and a high steel wire fence are proposed around the existing and proposed quarry. Berms will be constructed to the north and south and blended into the re-formed slope.

8.3.5. Condition 18 attached to the planning authority's decision limits noise at the nearest sensitive receptors to not more than 55 dB(A) L_{AR} (30 minute) between 0800 hours and 1800 hours, Monday to Friday and between 0800 hours and 1400 hours on Saturdays with emissions not to exceed 45 dB(A) L_{Aeq} (15 minutes) at any other time. The condition goes on to state that the said stipulated noise parameters are in accordance with those as recommended in the Guidelines on Quarries and Ancillary Activities issued in 2004 and EPA Guidance on Environmental Management in the Extractive Industry (Non-Scheduled Minerals). It should be noted, however, that the EIAR (9.2) states that the noise criterion of 55dB measured as $L_{Aeq\ 1\ hr}$ (daytime) and 45dB $L_{Aeq\ 1\ hr}$ (night-time) is considered relevant to the assessment in light of the DoEHLG Guidance on Quarries and the related EPA document (Environmental Management in the Extractive Industry, 2006). In this regard, it is stated that the daytime criterion would apply between 08.00 and 18.00 hours and on Saturdays 0800 to 1400 hours, and the night-time criterion would apply to activities between 0700 to 0800 hours. However, the hours of operation (condition 3) exclude the latter period of 0700 to 0800 hours. Condition 23 requires the implementation of a Noise Monitoring Programme to monitor noise emissions arising from the proposed development, the scope and methodology of which shall be submitted to and agreed with the planning authority.

8.3.6. As the quarry is not currently operational, it has not been possible to provide recent data on operational noise measurements. Operational noise levels were therefore determined by means of predictive modelling. The EIAR relies on historic noise data from surveys carried out in 2007/2008 and in 2015, as well as a more recent survey in 2019. The first set of data was contained in the EIS for a much larger quarry under 09/5856, which included results from 5 stations (summarised in Table 9-1 and Fig. 9.2 of the EIAR), which included operational noise levels. This indicated that the noise levels ranged from 40 to 63dB $L_{Aeq\ 15}$ at four stations, and that road traffic was

the dominant noise source. The noise emissions from the quarry were only audible at the onsite station (at the existing pit).

8.3.7. Further noise monitoring was carried out in 2015. However, no activities were taking place at the existing pit at the time of the survey. Noise levels ranged from 37-61dB $L_{Aeq\ 1hr.}$ Road traffic noise dominated at all three locations, as well as tractor noises and dog barking. A further survey was carried out on 8th January 2019 at a location near to the proposed new site entrance. The noise levels ranged from 59-62dB $L_{Aeq\ 1hr.}$ Similar noise sources were audible.

8.3.8. Modelling was undertaken for the noise sensitive receptors in the vicinity including the appellants' properties to the west and east. Predicted noise levels from identified sources based on the type of operations and activities that will be carried out at the site, which would arise at the nearest receptors are set out in Appendices 9-5 and 9-6 of the EIAR. It is stated that it is proposed to progress the extraction eastwards before progressing northwards. The nature of the activities and the predicted noise levels for each such activity is set out in detail at Sections 9.6 and 9.7 of the EIAR. The duration and frequency of each of the activities, together with the plant required, is outlined. It is noted that overburden removal will take place over 4 years during the initial phase and at 2 yearly intervals after the initial phase, with events lasting approx. 1 week. It is further noted that rock breaking will no longer take place and instead blasting will be used prior to processing and screening.

8.3.9. The major potential noise sources were identified and grouped under headings of normal operations with loaders and trucks on access road; with overburden removal; with drilling; and with processing. The results of the modelling are set out in Table 9.4 of the EIAR. It is concluded that the predicted noise emissions for the proposed extraction works would not exceed the 55dB L_{Aeq} noise limit and would be significantly lower than this daytime criterion. Having regard to the principles of the logarithmic scale this conclusion is accepted. The night-time criterion would be marginally exceeded during periods of processing and overburden removal. It is stated in the EIAR that this could be addressed by commencing overburden removal and processing only after 0800 hours. However, as stated previously, condition 3 of the P.A. decision stipulates hours commencing at 08.00 hours every day for all activities. This condition has not been appealed and it is suggested that should the Board be minded to grant permission, a condition to this effect be attached to any

such permission. I would also accept the argument that processing and loading operations on the pit floor will benefit from screening provided by the pit sides, extending to a height of 9m with a further 3m provided by the overburden edge, and that additional screening will be provided by the berms along the northern, western and some of the southern boundaries.

8.3.10. Table 9-5 sets out the change in noise levels at the nearest NSLs. It shows that during normal quarrying activities, there will be no change in ambient noise levels at all receptors, and the changes in background levels will be +1dB at the nearest, rising to +3dB at the property opposite the entrance. The increases in levels are greater for overburden removal, drilling and processing where the existing levels are very low. However, these activities are of short duration and limited frequency and do not breach the recommended noise criteria. The noise impact does not contain tonal or impulsive characteristics.

8.3.11. The construction phase, which includes re-grading the slope of the pit, erection of earthen berms, overburden removal, construction of new access and installation of wheelwash and weighbridge etc., is expected to last 3-4 months. During this phase $L_{Aeq\ 1hr}$ levels are predicted to rise to a maximum of 43dB at the nearest dwellings to the east, peaking during the construction of the berm near the north-eastern corner. At a dwelling opposite the proposed entrance, noise levels are predicted to rise to approx. 31dB $L_{Aeq\ 1hr}$ during access road construction works. Noise levels at all other dwellings are predicted to be significantly lower and levels will not exceed the 63dB criterion for construction phase emissions at any of the NSLs. In the absence of Irish guidance for noise limits for this type of construction works, the applicant has had regard to BS 5228-1&2:2009 & A1 2014 Code of Practice for noise and vibration control construction and open sites. The works will be required to comply with the parameters set out therein.

8.3.12. I consider that notwithstanding the significant changes proposed to the working methods and the lateral expansion of the quarry and having regard to the screening effects of the existing pit and the proposed berms, together with the implementation of best practice mitigation measures, the conclusions of the noise impact assessment appear reasonable, and I consider that significant residual noise impacts on sensitive receptors are unlikely to arise.

Blasting and Vibration

8.3.13. The impact of blasting and vibration on the structural integrity of properties in the vicinity and procedures in terms of prior notification of affected persons were raised by the appellants. The prohibition on blasting arising from previous planning decisions on the site was also raised, but this matter was addressed under 8.2 above.

8.3.14. I note that the EIAR (9.8) indicates that blasting will comply with the PPV12mm/s limit at receptors as recommended in the DOEHLG Quarries and Ancillary Activities Guidelines and will not exceed the blasting criteria. By way of further information (20/12/19) it is confirmed that it is likely that there will be 6 blasts per year at intervals of 2 months. It is pointed out that as the quarry lies on a seam of high-grade limestone, there are only two methods for extracting the rock, namely mechanical extraction and blasting. It is stated that mechanical extraction is slow, noisy and cumbersome and is no longer considered viable at the quarry. It would involve several breakers operating at the same time, giving rise to excessive noise emissions on a continuous basis. Thus, from an acoustic point of view, blasting is the preferred method. A comparison of the two methods is set out in Table 1 of the RFI document (20/12/19).

8.3.15. In terms of emissions, blasting gives rise to vibration transmitted through the ground and blast pressure wave propagated through the air. It is stated that the PPV levels will be comfortably below the 12mm/s recommended in the DOEHLG guidelines during all blasts and as such there will be no risk of impacts to buildings in the vicinity. It is anticipated that overpressure levels will not exceed 120 dB_{lin} and will be well within the limits set out in the DoEHLG guidelines. Details of the procedures giving public notice prior to blasting are detailed in section 4.17 of the FI submission and is considered to be in accordance with industry best practice.

8.3.16. Conditions 24, 25, 26 and 27 attached to the planning authority's decision impose controls on blasting activities. These controls relate to vibration and overpressure limits, advance notification to residents, sirens before blasting and allowable hours for blasting (10.00am – 18.00 pm Monday to Friday). I note that the vibration and overpressure limits set out in condition 25 are consistent with the recommendations set out in the Guidelines on Quarries and Ancillary Activities 2004 and the EPA

Guidelines on Environmental Management in the Extractive Industry (2006), that is, that vibration levels shall not exceed a peak particle velocity of 12mm/sec and air overpressure values shall not exceed 125 dB (L_{in})max peak, when measured at any noise sensitive house within the surrounding area.

8.3.17. Having regard to the details provided within the EIAR and as supplemented in the FI received by the P.A. on 20th December 2019, and to the proposals to comply with blasting limits on the site, it is considered that subject to appropriate conditions regarding monitoring, notification and vibration/overpressure limits, blasting associated with the proposed development is not likely to result in any significant impacts on sensitive receptors.

Dust and Air Quality

8.3.18. Parties to the appeal raised concerns with regard to air quality impacts, including dust emissions. These impacts relate to both human and animal welfare issues.

8.3.19. Air quality is addressed in Chapter 8 of the EIAR, supplemented by further detail submitted by way of further information. The recommended emission limit value of 350 mg/m^2/day set out in the Quarries and Ancillary Activities Guidelines for Planning Authorities (2004) and the EPA Guidelines on Environmental Management in the Extractive Industry (2006) is recognised as the appropriate limit which has been referenced in the EIAR and RFI, and in the P.A.'s conditions. The assessment in the EIAR was based on information derived from the EIA undertaken in 2016, ambient air quality databases maintained by the EPA, and dust deposition monitoring carried out by the applicant in 2007-2008.

8.3.20. Dust deposition monitoring (2007/2008) was undertaken at 3 no. locations around the perimeter of the site, as indicated in Figure 8-2-1, one to the north, one to the east and one to the south. Baseline monthly dust monitoring results are provided in Table 8-2-1 for the periods 1st Aug to 28th Aug 2007 and 8th Dec. 2007 to 6th Jan. 2008. These surveys showed that at one of the monitoring stations, D2 (to south of site) the dust levels exceeded the 350mg/m²/day threshold at 465mg. Although this was explained as windblown dust from an adjacent earthen berm which had been left unvegetated, the P.A. sought FI in the form of more recent surveys and a more robust assessment of the issue.

8.3.21. The further information submitted on 20th December 2019 provided additional monitoring results for the period from the 27th of September 2019 to the 29th of October 2019. There were 4no. monitoring stations - to the north (D1), the north-east (D2), the south (D3) and the north-west (D4). The deposition levels varied significantly and exceeded the 350mg/m²/day threshold by considerable amounts. The levels recorded to the south (D3) were within the threshold limit and those at D1 (to the north near the existing entrance) were slightly elevated. However, the levels recorded at D2 (4,421mg/m²/day) and D4 (25,010mg/m²/day) were substantially above the threshold limit. The Board should note, however, that the quarry was not operational at this time and that the high dust deposition rates were explained as being due to windblown dust from ploughed fields close to D2 and D4, which had been ploughed, set and rolled between the 10th and 13th of October 2019.

8.3.22. The sources of the potential dust deposition associated with the proposed development have been identified in the EIAR (8.2.4) and FI (2.2) which include traffic movements, blasting, crushing, screening, loading aggregate into a HGV trailer and windblown from exposed surfaces, stockpiles, aggregates and unvegetated berms, as well as reinstatement works. It is generally accepted that residents living in proximity to quarries can be affected by dust up to 0.5km from the source, but that the most severe impacts would be experienced within 100m of the dust source (DoEHLG Quarries and Ancillary Activities Guidelines). This is because particles greater than 100µm quickly fall out in close proximity to the source, and although smaller particles can be carried further in the wind, most dust is deposited within 100m of the emission point.

8.3.23. Mitigation measures proposed (8.2.6 EIAR and 2.3 FI) are generally typical of industry good practice, similar to those set out in the previously referenced Planning Guidelines and EPA Guidelines. Measures include use of berms and tree planting to screen quarrying activities and the grass seeding of exposed soil as soon as practical, as well as locating dust generating activities (such as processing and screening) within worked out areas. Other measures include the incorporation of dust extraction systems, the use of water sprays to moisten handled material/haul routes, paving of haul routes and control of vehicle speed, seeding of soil mounds, fitting of atomiser nozzles and the use of water bowers and wheel washes to minimise dust deposition.

8.3.24. The nearest sensitive receptors are residential properties within 500m, which corresponds with the advice given in the Quarries and Ancillary Activities Guidelines (DOEHLG 2004). Eight of the houses in the cluster to the east have been identified as sensitive receptors, one of which lies at 450m. In terms of impact, it is noted that the prevailing wind direction is from the southwest and that all of the highly sensitive receptors are due east of the quarry extension area, with the closest receptor on the down prevailing wind side is 705m from the proposed operational area. It is proposed to carry out monitoring of dust deposition on three occasions annually on an ongoing basis and a Dust Management Plan will be put in place.

8.3.25. I would accept the conclusions that based on the site topography, the proposed site layout, the location and distances to highly sensitive receptors and the meteorological conditions, subject to the implementation of the mitigation and monitoring measures set out in the EIAR and FI (as summarised above), the proposed development would not give rise to significant dust nuisance or adverse impacts on the residential amenities of the properties in the vicinity. The P.A. decision included several conditions (Nos. 19-23 inclusive) which specified a limit of 350mg/m²/day, averaged over 3 days, when measured at the site boundaries, the implementation of a monitoring system, the installation of fixed and mobile water spray systems and the establishment of a recording system for complaints.

Impacts from Noise, Vibration and Dust on the nearby Equestrian Centre and livestock/bloodstock on adjacent farms

8.3.26. Appellants have raised this issue. It is claimed that noise, vibration and dust will have an adverse impact on animal welfare and on the breeding of blood stock and livestock on nearby farms. There is an equestrian centre located to the northwest of the quarry site. The EIAR (9.9) and Appendix 9-7 – Equine Health Impact Assessment by Dr. Henk Offereins (2016) addresses these potential impacts. It was found, based on a review of the scientific literature available, that horses are generally subjected to high levels of dust, noise and vibration as part of their progression from stud farms to racing stables. The author carried out two site inspections of the subject site as part of the study. It should be noted that the study was based on a previous planning application which involved the use of the existing access from the north, which would mean that trucks would be travelling directly passed the equestrian centre.

8.3.27. Noise levels at the nearest point to the equestrian centre are predicted at 40dB, with the noise emanating from passing trucks at 44dB. Given that horses are frequently exposed to noise levels of 58-62dB at race meetings, 66-68dB during helicopter flyovers and up to 76dB at a typical race event, it was concluded that the predicted noise levels arising from the proposed quarry would not have a negative effect on health or production and would not lead to an increase in stress levels in the nearby equestrian centre. In terms of vibration, it is stated that horses are transported by road and air on a regular basis with no proven adverse effects. It was considered that there would be no discernible vibration impacts from blasting at the proposed quarry as it would be felt at an extremely low level and would be of very short duration. Given that the proposed development is located c.500m from the equestrian centre, it would not be likely to elicit a flight response or any other adverse impacts. Dust impacts arising from quarrying activities were found not to be detrimental to equine health, as it contains little or no endotoxins, moulds, bacteria and allergens. However, it was acknowledged that there may be a slight localised negative impact on the air environment in the immediate surrounds, which would reduce with distance.

8.3.28. The report concluded that the proposed quarry activities would have no negative impact on horse health, welfare or planned equestrian activities at the nearby equestrian centre. However, in order to achieve required safety levels for both riders and horses, it was considered essential that planned cross country equestrian events would not collide with planned blasting at the quarry. It is noted that the applicant has agreed with the owner of the adjacent equestrian centre that the quarry would be closed for a number of agreed days per year for equine events. No significant impacts are therefore expected on bloodstock or livestock.

Impact on Amenities of Adjoining Properties – Conclusion

8.3.29. I consider that the proposed lateral extension of the quarry subject to appropriate mitigation measures in line with best practice will ensure that noise, vibration and dust impacts arising will not have an adverse impact on the residential amenities of property in the vicinity or on the health and welfare of bloodstock or livestock at nearby farms. The operator will establish an Environmental Management System, a draft of which has been provided with the EIAR and will be subject to agreement with the planning authority prior to implementation.

8.4. Impact on Water Quality and Supply

8.4.1. Appellants have raised concerns about the impact of the proposed development on water quality particularly in terms of groundwater, and also in respect of water supply by means of local wells. Water and Hydrology are addressed in Chapter 7 of the EIAR and in further information submitted to the P.A. on 20/12/19 and 16/03/20. Groundwater hydrology is addressed in Chapter 6 of the EIAR (Land and Soil).

8.4.2. The site of the proposed development is described in the EIAR as comprising permeable till and bedrock, which is free draining, and does not have any drainage features or water courses within its boundaries. All surface water in the existing quarry drains directly to ground and there is no runoff. The water table has not been breached by previous quarry activity. However, there is an un-named stream within the landholding which is located to the northwest of the extraction area, which would be crossed by the proposed new access route. It is located approx. 700m from the proposed expansion area and is described as a sinking stream, which drains to a small karstic depression (or swallow hole) sited approx. 200m to the west of the landholding boundary. It is stated that the drainage ditch/stream is dry for much of the year but sometimes overflows and acts as a spring during wet weather periods, when it drains in a westerly direction towards the Ketragh River (3km to west).

8.4.3. The Ketragh River is a tributary of the Awbeg River, which in turn is a tributary of the Blackwater River. This is the main drainage system in the region. The Blackwater River is designated as an SAC and is regarded as being of high regional importance due to its salmonid designation and its importance for other species and habitats. There is one other water feature within the overall landholding identified in the EIAR which is a small area of soft boggy ground with rushes and scrub vegetation and is located c.200m to the west of the existing quarry. A shallow drain runs out of this feature in a westerly direction along an old hedge line towards the drainage ditch/stream described above.

8.4.4. The description of the site hydrology (groundwater) states that limestone in the area is classified as a Regionally Important Aquifer due to the karstic nature with the potential to supply very large volumes of groundwater from springs and boreholes (7.2.4 of EIAR). There are several spring water supplies in the area which are described in the EIAR. These include Ballyclough Spring, (1.8km to south) which is a

productive groundwater spring that supplies Ballyclough Village, and Mountnorth Spring, located 2.5km to the southeast, which is also part of the public water supply for the area. The Mountnorth Spring Zone of Contribution is well removed from the quarry landholding (EPA Report in appendix 7.9 of EIAR). The developer has provided a detailed assessment by a hydrogeological specialist of the potential risk to Ballyclough Spring from the proposed development, (undertaken at request of P.A. in respect of previous application 16/4477 and presented at Appendix 7.12 of the EIAR). It was concluded that the quarry expansion does not lie within the ZOC of Ballyclough Spring.

8.4.5. The proposed development will not significantly change the run-off characteristics of the site or cause changes in peak flows or volumes due to the free-draining nature of the soils and bedrock. Surface water runoff will be contained within the quarry. Rainfall within the extraction area will be allowed to percolate to ground and there will be no runoff from the site. It is not proposed to interfere with the groundwater table or to abstract any groundwater or surface water.

8.4.6. Groundwater monitoring results submitted indicate that the excavations thus far and proposed are above the highest recorded winter water table level, which occurred in December 2015. The planning authority raised concerns regarding this and sought reassurances regarding the provision of a ‘cushion’ to protect the water table and ground water resource. It was pointed out that whilst proposed quarry floor levels are given as 91-93m OD, there was a very heavy rainfall event in 2016 which resulted in GW levels of between 91m and 91.6m. A risk assessment of a re-occurrence was requested and a specified minimum depth of unsaturated rock to protect GW levels. FI submitted in December 2019 and March 2020 addressed this matter. It was confirmed that the depth of excavation was designed to follow the natural ground water levels and that a minimum unsaturated depth of 5 metres would be maintained above winter ground water levels. Outside of this period, the unsaturated bedrock would be around 10m above the water table.

8.4.7. The main impacts to the water environment are likely to arise from the potential for contamination of surface and ground water in the vicinity. The removal of 3m of overburden and the quarrying of 9m of rock will increase the vulnerability of the aquifer to silt-laden surface water runoff and spillages of chemicals, hydrocarbons etc. This will also increase the potential for recharge of the underlying bedrock from

rainfall percolating to ground. More specifically, impacts such as accidental contamination of soils, bedrock and the aquifer through fuel spillages and the potential for suspended runoff in surface waters would be of concern. Potential impacts will also arise to surface water quality from dust washing off vegetation and into local watercourses and accidental spillage of polluting substances entering the groundwater and potentially migrating to watercourses.

8.4.8. Importantly, however, the proposed development will not interfere with the water table, will retain a buffer zone of at least 5m above winter ground water levels and will not involve any abstraction of water. Furthermore, there are no surface water features on the site other than the drainage ditch to the north-west of the extraction area and the small area of soft ground to the west. No extraction is proposed in the vicinity of these features and the drainage ditch will be bridged and culverted to prevent any impacts from the crossing of the watercourse by the proposed access route to surface water. It is proposed to implement best industry practice mitigation measures such as the use of dedicated and bunded re-fuelling areas, bunding of storage areas for fuel and chemicals, the containment of surface water within the bunded areas, and control of sediment generation by quick re-vegetation of earthen berms. There will also be regular monitoring of surface water during construction and of groundwater level depth (monthly) and annual groundwater sampling (annually).

8.4.9. I would agree with the conclusions that following the implementation of the proposed mitigation measures and monitoring regimes, that the proposed development would not give rise to any significant residual adverse impacts on local drainage systems, watercourses or karstic groundwater features. The RFI (20/12/19) responded to the objection regarding the impact of blasting on groundwater by stating that as groundwater is contained within open fractures in the bedrock, the presence of such water-bearing features will not decrease during blasting. Thus, the aquifer characteristics will not change and there will be no effect on local water supplies. Furthermore, the quarry area is stated to be outside the catchment area of Mr. O'Brien's well. Thus, it is unlikely that there would be any significant impact on the water quality or quantity of wells in the vicinity of the site arising from the proposed expansion of the quarry.

8.5. **Ecology**

8.5.1. I refer the Board to sections 9.3 and 10.0 of this report which address biodiversity and appropriate assessment.

8.5.2. A desk study was undertaken followed by a site survey which was carried out in May 2019. The habitats recorded are reflective of those found within a working quarry area together with improved grassland and are classified as being of local importance. There is an area of scrubland in the middle of the proposed extraction area and some treeline and hedgerow habitats along the southern and eastern boundaries of the site. The majority of birds utilising the site are common in the vicinity and are mainly green listed. During a previous survey in November 2015, it was established that amber listed species including Robins, Starlings and Hen Harrier were present in the overall vicinity. However, no breeding bird surveys were carried out due to the time of year, but it was concluded that there were no suitable habitats present to warrant specialised bird surveys. Hen harriers (Annex I) are not expected to utilise the site due to the lack of suitable habitat, and it is thought that the sighting of this species may have been coincidental. The habitats present were not considered suitable for bats or badgers and no evidence of these species was found. Rabbits and foxes were noted as being present as well as some rodent species.

8.5.3. The proposal will result in the removal of scrub which will affect any avifauna that use the habitat. However, it is proposed to carry out any vegetation clearance outside of the breeding bird season and any impact outside of this period is likely to be of localised scale (i.e., within the site). The area to be cleared is also small and does not have any rare plants of any conservation value. The main impact in terms of removal of habitat relates to the removal of a large area of arable crops and it is proposed to backfill the area and restore it to agricultural use. Disturbed ground will also be backfilled to ground level and restored as agricultural use. In terms of noise impacts, it is noted that noise and disturbance could potentially impact nesting birds and disturb other fauna. However, the avoidance of vegetation clearance during the nesting period and the implementation of mitigation measures is likely to result in any such impacts being of minor significance.

8.5.4. By way of FI (20/12/19 and 16/03/20) the applicant has prepared a revised habitat map to address minimisation of habitat loss by retention of most of the existing scrub and earth berms and to rectify discrepancies between this and the proposed landscaping and restoration plans. The planning authority was still dissatisfied with some of the details provided in terms of resolving discrepancies, but it was decided to address this by means of conditions (Nos. 4, 5, 6, 7 and 8 refer). The existing berms will now be retained, and additional tree planting will be carried out to reinforce the treelines along the site boundaries as part of the landscaping and rehabilitation plans. The proposed new haul route will also be removed, and the lands returned to agricultural use.

8.5.5. Third party appellants have raised concerns regarding the potential impact on a nearby woodland. The applicant, in the response to the appeal, identified this woodland as being c.1.5km to the west of the site. It was pointed out that the said woodland would not be directly impacted by the proposed development as no habitats would be interfered with. In terms of potential impacts from noise, dust and blasting, it was noted that the EIAR had included an assessment of the potential impacts on the equestrian centre which is located at a much closer distance (0.9km), and which had concluded that there would be no significant adverse effects on animal welfare. As such, it was stated the potential effects on the resident wildlife of this woodland would be even less likely due to the greater distance. Furthermore, it was pointed out that there are several existing quarries in the general vicinity including Ballygiblin Quarry (c.0.5km from woodland) and Ballyhass Quarry (c. 0.6km from woodland). Although these quarries as well as the subject site, appear to have ceased quarrying operations at present, it was considered that the existing and proposed quarrying activity that has been present in the area to date has not had a significant detrimental effect on the wildlife in the woodland.

8.5.6. In conclusion, the habitats and biodiversity within the site are of local importance and are generally of low value. It is proposed to retain and enhance the existing habitats of higher value and to avoid the bird breeding season for vegetation clearance. The proposed quarry extension is unlikely to have any significant negative effects on the existing ecology and biodiversity of the area and in time will result in a positive effect following rehabilitation. Due to the long-established quarrying activity on the site and in the vicinity, it is not unreasonable to suggest that fauna and avifauna identified,

would appear to have generally adapted to the level of disturbance arising from same and there is no substantive reason as to why the said species will not continue to do so with the continuing activities.

8.6. **Other Issues**

8.6.1. **Deficiency in application** – the applicant refutes the claims by the third parties that the application was deficient. The three main areas of alleged deficiency related to firstly, failure to show Mr. O'Keefe's entrance and farmyard on the submitted plans; secondly, failure to demonstrate consent from all landowners within the development site; and thirdly an incorrect description and location of the development.

In response (25/08/20) the applicant has pointed out that the farm and entrance in question are shown on the following drawings –

Site Location Map 01-PL2 (Scale 1:10560)

Proposed Entrance and Sightlines 401a-PL1 and 401-PL3

Letters of consent have been provided from the relevant landowners, whose lands are shown on Drawing 04-PL2. Letters of consent were provided from the following landowners and are on the file (each date stamped 18/07/19).

Mr. Dan Dulohery, Kilgilkey House, Kilgilkey, Cecilstown, Mallow, Co. Cork

Mr. Patrick Ahern, Lisleigh House, Lisleigh, Ballyclough, Mallow, Co. Cork

There is no evidence provided to demonstrate that the description of development or location of development is inaccurate. The application was validated by the planning authority and the Board's examination of the issues is de novo.

8.6.2. **Conditions imposed by P.A. inadequate and open to interpretation** - The applicant's response is that the conditions imposed by the P.A. are reasonable and enforceable and appropriate to the nature and extent of the development proposed. It is further stated that the applicant has not appealed any of the conditions and is happy to abide by them. I would also point out that the board's examination of the issues is de novo and should the Board decide to grant permission, appropriate conditions will be attached to any such permission.

9.0 Environmental Impact Assessment

9.1. *Introduction*

9.1.1. This section of the report comprises an environmental impact assessment of the proposed development. A number of the matters to be considered have already been addressed in the Planning Assessment above. This section of the report should therefore be read, where necessary, in conjunction with the relevant sections of the said assessment.

9.1.2. Both the 2014 amended EIA Directive (Directive 2014/52/EU) and the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 are applicable. In terms of the classes of development in Schedule 5, Part 2 of the Planning and Development Regulations 2001, as amended, for which an EIAR is required, the extraction area, at approx. 7.0 hectares, is above the 5-hectare threshold for extraction of stone, gravel, sand or clay.

Content and Structure of EIAR

9.1.3. The EIAR consists of 2 volumes, grouped as follows:

Volume 1 – Main Report and Non-Technical Summary

Volume 2 – Appendices

A Stage 2 NIS Report also accompanies the application.

9.1.4. In accordance with Article 5 and Annex IV of the EU Directive, the EIAR provides a description of the project comprising information on the site, design, size and other relevant features. It identifies, describes and assesses the direct and indirect significant effects of the project on the following environmental factors: (a) population and human health; (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape and it considers the interaction between the factors referred to in points (a) to (d). It provides a description of forecasting methods and evidence used to identify and assess the significant effects on the environment. It also provides a description of measures envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects. The mitigation measures are presented in each chapter.

Where proposed, monitoring arrangements are also outlined. It is stated that no difficulties were encountered in compiling the required information.

9.1.5. The EIAR is supplemented by further information submitted (20/12/19 and 16/03/20) in response to requests for same by the planning authority during its assessment of the application.

9.1.6. I am satisfied that the information provided in the EIAR is sufficiently up to date and is adequate for the purposes of the environmental impact assessment to be undertaken.

9.1.7. I am satisfied that the EIAR has been prepared by competent experts and note the qualifications and expertise of the persons involved in its preparation as set out in Section 1.3 and at the beginning of each chapter.

9.1.8. I am satisfied that the information provided is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. I am also satisfied that the information contained in the EIAR complies with the provisions of Articles 3, 5 and Annex (IV) of EU Directive 2014/52/EU amending Directive 2011/92/EU and Article 94 of the Planning and Development Regulations 2000, as amended.

9.1.9. I have carried out an examination of the information presented by the applicant, including the EIAR and further information response and the submissions made during the course of the application and the appeal. A summary of the submissions made have been set out in sections 4.0 and 7.0 of this report.

9.1.10. The main issues raised specific to EIA can be summarised as follows:

- Impact on population and human health arising from noise, vibration, dust and traffic.
- Impact on water quality and supply, including flood risk.
- Impact on biodiversity arising from activities on the site.
- Impact on material assets arising from vehicular movements and visual amenity.

9.1.11. These issues are addressed below under the relevant headings and as appropriate, in the reasoned conclusions and recommendation.

Consultations

9.1.12. Details of the consultations entered into by the applicant by way of an informal scoping exercise as part of the preparation of the project are set out in section 1.7 of the EIAR. The list of consultees and a summary of submissions received are set out in Table 1.7.2.

9.1.13. Submissions received during the course of the planning authority's assessment of the application including submissions from prescribed bodies are summarised in sections 4.3 and 4.4 above with the 3rd party appeals and observations received by the Board summarised in sections 7.2 and 7.3 above.

Vulnerability to Risk of Major Accidents and/or Disaster

9.1.14. The requirements of Article 3(2) of the Directive include the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disaster. The EIAR addresses this issue in section 4.2.

9.1.15. The potential for natural disasters that may occur are considered to be limited to flooding and fire and the risk of such events occurring affecting the proposed development and causing the works to have significant environmental effects is limited.

9.1.16. The proposed development is not regulated or connected to or close to any site regulated under the Control of Major Accident Hazards Involving Dangerous Substances Regulations (Seveso sites).

Alternatives

9.1.17. Article 5 (1) (d) of the 2014 EIA Directive requires:

"(d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;"

9.1.18. Annex (iv) (Information for the EIAR) provides more detail on 'reasonable alternatives':

"2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for electing the chosen option, including a comparison of the environmental effects."

9.1.19. Examination of Alternatives was considered in Section 1.6 of the EIAR. As the proposed development relates to the lateral extension of an existing, long-established quarry, I consider that the ability to consider alternatives is somewhat constrained. Such scenarios are acknowledged in the Guidelines for Planning Authorities on EIA which notes that some projects may be site specific so the consideration of alternative sites may not be relevant. I note from the EIAR that consideration was given to development of green field sites to the north, to the east and to the north-east, which were ruled out on the basis of the quality of rock available at the preferred location. The alternative of expanding the quarry area by 27ha was also ruled out on the basis of impacts on the amenities of the surrounding area, as had been proposed in P.A. Reg. Ref. 09/5856, which was refused. A subsequent application (16/4477) for an extension to the quarry similar to the current proposal but relying on the existing access route was also refused on traffic grounds. The current proposal incorporates a revised access route to the quarry. In addition, alternatives in respect of site layout and project design as well as a do-nothing alternative were considered.

9.1.20. I acknowledge that aggregates can only be worked where they occur and as a relatively low-value, high-density material, must be located within reasonable distance of key markets in order to make transport costs economically viable. I am therefore satisfied that the EIAR has satisfactorily addressed the issue of alternatives.

9.2. Population and Human Health

9.2.1. Chapter 4 of the EIAR addresses Population and Human Health. However, the likely effects of the proposed development on human beings and health are also addressed under several of the headings of this environmental impact assessment and, as such, should be considered as a whole. Chapter 4 addresses socio-economic considerations, land use, health and safety, and human health. Chapter 8

addresses air quality and Chapter 9 addresses noise and vibration. Other impacts that have the potential to impact on humans include potential effects on water, traffic and landscape. These are discussed in the respective chapters of the EIAR.

9.2.2. I consider that there is an overlap with section 8.3 of the planning assessment above and I recommend that the sections be read in tandem.

Receiving Environment

9.2.3. I refer the Board to section 1 above which gives a description of the site and its location. Cecilstown Village is c.1.3 to the south-west with Ballyclough Village c.1km to the south-east. The lands in the vicinity are largely in agriculture use. One-off housing along the local road network is noted. There are 27 dwellings within 1km of the site, 8 of which are within 500m of the extraction area, and an equestrian centre is located c.800m to the northwest.

9.2.4. The baseline environment in terms of population is set out. A demographic profile of the area is presented. Tourist attractions in the vicinity are noted. These include the Blackwater Valley which is a key tourism asset in terms of walking, cycling and fishing, including Ballyhass Lakes (2km to south) which is an important spring trout fishery. There are no schools in the immediate area.

9.2.5. The baseline environment in terms of noise is set out with the monitoring locations considered to be acceptable in view of the nearest sensitive receptors. The results of historical monitoring (for 5 no. stations) dating back to 2007-2008 are provided in Table 9-1, with a more recent survey (3 stations) dating from November 2015 provided in Table 9-2. This was supplemented by further results for 2019 in relation to one more station near the new entrance location (Table 9-3) and clarification of information was also provided in the FI response (20/12/19). It was noted that as the quarry has not been operational for a number of years, it was not possible to provide recent data on operational noise measurements, although some of the surveys in 2007/08 included operational noise levels.

9.2.6. The noise levels in 2007/8 ranged from 40dB to 63dB $L_{Aeq\ 15}$ and road traffic noise was the most dominant noise source, with audible noise levels from the operation of the quarry being confined to the quarry floor. The results of the 2015/2019 monitoring at the 4 no. locations shows levels ranging from 37-62dB $L_{Aeq\ 1hr}$, but whereby no quarrying activity was taking place.

9.2.7. In a 'Do Nothing Scenario' the quarry would cease operation following extraction of the remaining reserves in the existing quarry with loss of employment and failure to provide for a source of aggregate material for the construction industry.

Predicted Effects

9.2.8. The continuance of extraction within the existing quarry and its extension will require a workforce of 4 full time staff with a further 10 employees at construction stage. There will also be a number of indirect jobs including construction service providers, material suppliers, hauliers etc. It will contribute to new employment opportunities and will support the construction and related industries. No economic activity will be displaced through the construction phase. It is unlikely that the operation of the quarry will have an adverse impact on the primary economic activity in the area of farming, including on livestock and bloodstock, as a quarry has been in operation at the site for a substantial period of time.

9.2.9. Activities during the construction phase are likely to result in impacts on residential amenity but these will be temporary and will be mitigated. As quarrying has been carried out on the site and at several other quarries in the vicinity for a significant period of time with a variety of extraction methods, it is not envisaged that property values would be adversely impacted by the continuation of quarrying activities at this location. It is considered that the extension will have an imperceptible impact on recreation, amenity and tourism given its distance from any major tourist sites and absence of recreational or amenity uses in the vicinity. Although there is an equestrian centre c.800m to the northwest, the applicant has come to an agreement with the owner to suspend quarrying activities prior to and during any cross-country events at the centre. There are no other recreational facilities in close proximity.

9.2.10. For the purposes of environmental impact assessment health and safety matters are controlled by other regulatory instruments.

9.2.11. Modelling was undertaken for the noise sensitive receptors in the vicinity including the appellants' properties to the west and east. Various activities involved in the development were modelled including drilling, processing, overburden removal and trucks/loader vehicles on the access roads. The results of the modelling are set out in Appendix 9-6 and summarised in Table 9.4 of the EIAR. It is concluded that the predicted noise emissions for the proposed extraction works would not exceed the

55dB L_{Aeq} noise limit. It is noted that during periods of processing and overburden removal, noise emissions will marginally exceed the 45dB early morning criterion as the nearest dwellings to the east. However, compliance with the criterion can be achieved by restricting these activities to after 0800 hours. It is further noted that these activities are of short duration and limited frequency, as processing will only take pace 1-2 weeks following each blast and the overburden removal will be required at typically intervals of two years. I would also accept the argument that as the quarry floor is lowered activities will be further shielded from nearby properties by the quarry face and the retained and new berms.

9.2.12. Blasting is to be carried out approx. once every two months. This activity will replace the previous activity of rock breaking and ripping. The further information submitted on 20/12/19 (Damian Brosnan Acoustics) sets out the differences in the emissions between these two methods of extraction. It is noted that rock breaking is more of a continuous activity which is very noisy with impulsive elements and mid-frequency noise. Blasting, which is preceded by drilling, is generally less frequent and of short duration with noise which is not intrusive in character. Blasting will be designed to comply with peak particle velocity limits which will avoid impacts of blasting on the structural integrity of adjoining property.

Features and measures to avoid, prevent, reduce or offset likely significant adverse effects on the environment

9.2.13. Existing berms are to be retained and new berms will be constructed along the boundaries of the quarry and will provide noise attenuation. Minimal gradients will be used on the pit access ramp. Implementation of best practice methods in terms of operations and machinery use will be employed to limit noise. Ongoing noise monitoring at N1-N5 monitoring locations in proximity to the nearest noise sensitive receptors.

9.2.14. Vibration and overpressure will be required to meet the requirements of the Guidelines on Quarries and Ancillary Activities 2004 and the EPA Guidelines on Environmental Management in the Extractive Industry (2006), in that vibration levels shall not exceed a peak particle velocity of 12mm/sec and air overpressure values shall not exceed 125 dB (Lin)max peak, when measured at any noise sensitive house within the surrounding area. Ongoing monitoring is proposed with advance

warning of each blast provided to the occupants of all receptors within 500m with agreement to close the quarry during equine events.

Residual Impacts

9.2.15. The implementation of the proposed mitigation measures will avoid, prevent or reduce impacts on human beings during the construction and operational phases of the development. In terms of noise, the proposed extraction works are not predicted to have an adverse impact on livestock or bloodstock on neighbouring farms and residual impacts on human beings is likely to be minimal. The residual noise impacts are set out in Table 9-9 of the EIAR, with the overall impact being considered to be slight negative. Given the considerable separation distances from noise sensitive receptors, and the proposals to modernise the extraction methods at the existing quarry, this seems reasonable.

Population and Human Health – Conclusion

9.2.16. Parties to the appeal consider that the noise and blasting will have a negative impact on their residential amenities and structural integrity of property with adverse effects on health. Furthermore, livestock and bloodstock on neighbouring farms will be adversely affected in terms of animal welfare.

9.2.17. I note that significant changes are proposed to working methods which will result in the cessation of rock ripping and rock breaking and the introduction of blasting, processing and screening of material. As the extension into agricultural lands will involve the periodic removal of overburden, this activity will also result in changes to the working methods at the site, and the relocation of the access and associated haul route will alter the relationship of the quarry with the surrounding lands. The information provided in the EIAR, as supplemented by the further information (20/12/19 and 16/03/20), indicates that the new/additional activities will generally result in overall improvements to the noise and vibration environment, and with mitigation, will result in a slight negative noise impact in the vicinity of the site. Having regard to the considerable distances between the extraction area and the nearest sensitive receptors, the screening effects of existing and proposed berms and of the quarry face, and the implementation of best practice mitigation measures, the conclusions of the noise impact assessment are accepted, and I consider that significant residual noise impacts on sensitive receptors are unlikely to arise.

9.2.18. I have considered all the information on file including written submissions made in relation to population and human health and the information contained in the EIAR. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on population and human health.

9.3. **Biodiversity**

9.3.1. Chapter 5 addresses biodiversity. In addition, an NIS accompanies the application with appropriate assessment undertaken in section 10 of this report. There is also an overlap with land, soil and water which are addressed below. I recommend that the relevant sections be read in conjunction with each other.

Receiving Environment

9.3.2. The EIAR includes a desk top study and site surveys. The chapter also notes that the site is not within or adjacent to a European Site, the nearest being The Blackwater River SAC (site code 002170) c.4.8km to the southwest.

9.3.3. A desk study was undertaken followed by a site survey carried out in May 2019. Reference was also made to a survey carried out as part of a previous application for an expansion of the quarry in November 2015. The habitats recorded are reflective of those found within a working quarry area and improved grassland and are classified as being of local importance and low value. There is some scrubland in the centre of the site which is of higher value, as well as some treelines and hedgerows along the southern and eastern boundaries. The majority of birds utilising the site are common in the vicinity. Reference is made to the previous survey in 2015 which had identified the presence of robins, starlings and a Hen Harrier. However, as this was conducted in November, no breeding bird surveys were carried out at that time. The more recent surveys did not identify the presence of any such species. No suitable habitats or evidence of the presence of otter, badger or bat were recorded on site. No bat roosts were identified. Rabbits, foxes and rodents were found to be present.

9.3.4. In a ‘Do Nothing Scenario’ extraction will continue within the existing pit with no change to the habitats and species thereon, but the improved grassland areas would

remain undisturbed. Agricultural activities would continue. On cessation of operation a restoration programme is to be carried out entailing backfilling and restoration of the site to agricultural lands.

Predicted Effects

9.3.5. The proposal entails the lateral extension of an existing quarry pit into the adjoining agricultural field which is sown with crops. Apart from the small areas of scrubland at the edge of the pit and the treeline/hedgerow at the borders, the lands consist of an arable field which is undivided with a very low level of biodiversity. It is proposed to retain most of the scrubland in the middle and to retain and reinforce the treelines and hedgerows along the boundaries. The proposed haul route will cross a small ditch by means of a culvert and will traverse agricultural fields. It is proposed to retain as much hedgerow as possible and to reinforce the existing hedgerows along the route and at the entrance. It is considered, therefore, that there will be minimal net loss of habitats, and the reinstatement and reinforcement of existing vegetation will have a positive impact.

9.3.6. The removal of scrub (WS1) could impact any avifauna or fauna that use it for shelter, feeding or roosting. The planning authority requested that the applicant retain the existing berms (which had been proposed for removal) and the area of scrubland vegetation at the edge of the pit apart from that needed for the proposed haul route. This has been accepted and it is proposed to avoid the bird nesting season for any vegetation clearance. The haul route through the area of scrubland to be removed will only be required for 5 years and will be reinstated. The area to be removed is small and does not contain any rare plants. Thus, outside of the nesting season, any loss of habitat is likely to be highly localised and of low significance.

9.3.7. The principal habitat to be removed is Arable crops (BC1) which is of low biodiversity value and will be rehabilitated after 15 years, by means of backfilling and reinstatement of agricultural use. The significance of the impact is considered to be neutral. It is also intended to rehabilitate areas of disturbed ground by backfilling to ground level and restoring agricultural use, apart from the established berms which are to be retained. This is likely to result in positive impacts.

9.3.8. There will be increased levels of noise and disturbance which may result in some local disturbance/displacement of fauna or avifauna using the existing habitats on

site. The proposal will not result in any loss or alteration to any known birds of conservation interest. The bird species that have been recorded on the site are common to the area and of local interest. The EIAR states that the sighting of Hen Harrier in 2015 is likely to have been a coincidence as there are no suitable habitats on the site and no evidence of their presence or of any nesting sites were found. I would agree that the open character of the large agricultural ploughed field and the improved grasslands together with the existing quarry pit would not be conducive to Hen Harrier. The species of fauna recorded are common and of local significance and any impacts will be temporary and of minor significance.

Features and measures to avoid, prevent, reduce or offset likely significant adverse effects on the environment

9.3.9. The mitigation measures set out in the EIAR (5.8.1) relate to restricting the potential impact of construction on breeding birds, by limiting the removal of scrub to the non-breeding bird season (Sept to February). Proposals to address avoidance of habitat loss, disturbance/displacement and monitoring including controls in terms of timing of vegetation clearing are set out in the EIAR and further information, including the habitats map and landscaping proposals. It is noted that the planning authority sought to resolve any remaining discrepancies between the various plans and documents by means of conditions, which should resolve any outstanding issues.

9.3.10. The measures to be employed to protect ground and surface water which are detailed under the heading 'Water' below in addition to measures to deal with dust under the heading 'Air and Climate' are relevant in terms of biodiversity. To avoid undue repetition, I recommend that these sections be read in tandem.

Residual Impacts

9.3.11. No significant residual impacts anticipated.

Biodiversity – Conclusion

9.3.12. I note that a 3rd party appellant raised concerns relating to the woodland to the west of the site in terms of the impact of the proposed development on ecology. I submit that the development will impact primarily on low to moderate value habitats. In view of the existing quarry activity on the site and in the vicinity, fauna identified would appear to have generally adapted to the level of disturbance arising from same and

there is no substantive reason as to why the said species will not continue to do so with the continuing activities.

9.3.13. I have considered all of the written submissions made in relation to biodiversity. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on biodiversity.

9.4. Land and Soil

9.4.1. Chapter 6 of the EIAR addresses land, soils and geology. I consider that there is an overlap with hydrology and recommend that this be read in conjunction with the section below.

Existing Environment

9.4.2. Based on the GSI regional geological mapping, the townland of Scart, including the whole quarry site, the new access road route and its immediate surroundings, is underlain by a Carboniferous age bedrock formation known as Waulsortian Limestone. Surveys carried out on behalf of the quarry owner indicate that the overall landholding is underlain by two principal rock units, with Waulsortian Formation in the southern section and limestone from the Ballysteen Formation in the northern section. Drawing 102A in Appendix 6.4.2 of the EIAR contains a map of the various rock zones. The Waulsortian Limestone formation is known to be karstified but can also be dolomitised.

9.4.3. The subject site is an extension to an existing limestone rock quarry which lies immediately to the west of the proposed extraction area. Soils and subsoils from the existing extraction area have already been removed due to previous quarrying activities. This area (c.2ha) comprises mainly dolomitised limestone (Zone 3 on Drg. 102A). The proposed extraction area (5ha) is underlain with Waulsortian limestones. The proposal to expand eastwards through the potentially lower quality limestone rock in Zone 4 (probably dolomitised rock in fault zone) will facilitate access to the better quality rock in Zone 5, which is likely to be sparingly dolomitised. No major karst features have been exposed during the excavation works within the quarry

area to date, although a site walkover identified a small cave feature in the southern part of the eastern cliff face. The limestone quality of Zone 5 is likely to be of a high-grade making it ideal for aggregate stone that can be quarried without pumping or lowering the water table and for use in concrete products. It is therefore likely to be in high demand in the local area.

9.4.4. The soil on the site is considered to have a High Importance on a local scale given its agricultural potential and well-draining fertile nature. The limestone bedrock is also considered to have a High Importance locally due to its economic resource potential and suitability for extraction. However, in geological terms, the limestone would have a Low Importance as there are no rare or unusual features associated with it.

9.4.5. The proposed activities will involve removal of the existing vegetation and thin layer of soil along the proposed access route and subsoil in the expansion area, but the excavated soil/subsoil will be retained on site and used to form landscape berms. The extraction of rock is expected to yield up to 100,000 tonnes of rock material annually with rock removed down to a depth of between 91 and 93m MOD, which is above the final floor level of the existing quarry. These areas are above the groundwater table and no excavation is proposed below the natural ground water level and no dewatering is proposed. Any subsoil that is excavated and any uneconomic rock material will be used to backfill extracted areas as part of the landscaping and closure plan.

9.4.6. In a ‘do-nothing scenario’, the quarry can continue to operate in accordance with the current registration and related conditions and following completion, a restoration programme will be undertaken. However, it would result in leaving a large volume of accessible bedrock resource of high local importance in-situ and undeveloped, which would affect the supply of materials locally and may result in sourcing materials from greater distances.

Predicted Effects

9.4.7. The potential impacts will arise from the removal of topsoil and subsoils and the excavation of limestone bedrock, which will give rise to on-site transport requirements and potential on-site sediment management issues. Potential dust generation and sedimentation of surface and groundwater due to erosion of exposed

topsoil and subsoil are likely to arise. Accidental spillages or leakages of fuel and lubrication oils from machinery are also likely to arise.

9.4.8. The removal of soils and subsoils along the new road access and new quarry area, which is considered to be a fertile, moderately to well-drained soil with locally important agricultural value, will result in a small adverse impact which would not be considered significant, and would be of medium to long term impact. Given the extensive abundance of this type of soil in the area and the that the soils/subsoils will be used in the construction of landscaping berms and in the reinstatement of the site, the impact would not be significant.

9.4.9. The extraction of the high-quality limestone rock will allow this resource to be economically developed. Although it is known to be an important geological resource, the Waulsortian Limestone is not unusual geologically and no specific heritage value has been assigned to it by GSI. Potential for the occurrence of unstable rock slopes following blasting or rock removal would pose a risk to human health and safety, rather than an environmental risk, but should be mitigated.

Features and measures to avoid, prevent, reduce or offset likely significant adverse effects on the environment

9.4.10. The long-term impacts on the land and soil are likely to be slight to negligible, but the extraction of rock is a permanent and irreversible impact. However, the temporary or short-term impacts which may arise during construction and operational phases of the development could give rise to environmental impacts which would require mitigation.

9.4.11. Mitigation measures are set out at 6.7 of the EIAR. It is noted that many of the measures are similar to those that would have been employed in the quarry site to date and would include best practice measures for the use and storage of machinery and fuels/oils. Best practice methods are also to be incorporated in terms of storage of material, stripping of material and slope angles of storage mounds, including minimisation of the areas of soil/subsoil to be excavated to facilitate the formation of the road and within each phase of quarrying.

9.4.12. It is intended to used use unconsolidated material in the construction of the berms, which will be graded and vegetated in order to limit the potential for soil erosion and suspended sediments. The use of a wheelwash and water bowsers would be used to

keep roads clean and dampen down dust. Landscaping and restoration plan is to be implemented when extraction is complete.

9.4.13. A designated person is to have overall responsibility for ensuring excavation is carried out appropriately and monitoring the performance of pollution control measures adopted.

Residual Impacts

9.4.14. The extraction of the materials is a permanent and irreversible impact. However, the soils and subsoils will generally be reused in the landscaping and rehabilitation of the site and although the soils and limestone rock material are of a good quality, they are plentiful in the area. The mitigation measures described above will reduce the potential for environmental impacts occurring during the construction and operational phases of the development.

Land and Soil – Conclusion

9.4.15. I have considered all the written submissions made in respect of land and soil. I am satisfied that any potential impacts would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects in terms of land and soil.

9.5. Water

9.5.1. Chapter 7 addresses water which is supplemented by details provided in the further information response. The Board is advised that there is an overlap with respect to land and soil in section 9.4 above and the appropriate assessment in section 10 below. I recommend that the sections be read in tandem.

Receiving Environment

9.5.2. The site of the proposed development comprises permeable till and bedrock which is free draining and there are no drainage features or water courses within its boundaries. The existing extraction area is dry, and the water table has not been breached. There is however an un-named stream within the overall landholding,

which is located approx. 700m to the northwest of the extraction area, which drains to a small swallow hole outside the landholding boundary, approx. 200m to the west.

Surface Water

9.5.3. The Ketragh River, which is a tributary of the Awbeg River, which in turn is a tributary of the River Blackwater, (Munster), forms the main drainage system in the region. The Ballyclough Stream forms part of the Blackwater Sub-catchment and joins the Blackwater River approx. 5km to the south of the site. The WFD Mapping identifies the Lisduggan North_010 watercourse (to west of site) as 'Not at Risk' and the Blackwater Munster_090 (Awbeg River Kanturk) – lower section - as 'At Risk'. The Ballyclough Stream_020 is shown as 'Under Review'. The WFD Reports for the Blackwater River 18_20 and 18_21 sub-catchments are presented in Appendix 7.2 of the EIAR.

9.5.4. The surface water drainage feature along the western boundary of the landholding will be crossed by the proposed new access road to the site. The feature runs from north to south along the landholding boundary before it turns westwards in the Southwest corner of the holding, where it ponds and drains into a karstic sinkhole feature. There was some water present during the site walkovers in January 2016 and January 2019, but little or no water at other times. A further water feature comprises a soft boggy area located approx. 200m west of the existing quarry. A shallow drain runs out of this feature in a westerly direction along an old hedge line towards the drainage ditch on the western boundary. This area is subject to ponding during periods of wet weather.

9.5.5. River flow measurements, which were undertaken in 2008 and 2009, were used to assess the impact of the proposed quarry expansion area and new access roadway on surface water flows. The results of the water budget estimations showed potential flow rates after rainfall of between 160 l/s and 200 l/s which indicated that 25%-35% of the surface water volume was being infiltrated to ground or evaporated. The proposed quarry expansion area and new access roadway represents a very small percentage of the local drainage catchment, and it is not anticipated that there will be any significant changes to the surface water runoff patterns due to the proposed development. Thus, it is predicted that there will be no significant changes to the runoff/infiltration volumes or in the surface water regime in the vicinity of the site.

Flood risk

9.5.6. The EIAR stated that the permeable well drained soils and limestone bedrock underlying the proposed quarry expansion area means that rainfall generally percolates to ground and that there is no pluvial flood risk on site. It was further stated that ground water and surface water drainage from the site is generally towards the west where there are no known flood risk issues. As such it was concluded that there would be no significant change to the local drainage regime arising from the proposed development which means that no potential flood risks were anticipated. The planning authority, however, sought reassurance regarding sections of the proposed access road which are located within indicative 100 year (1%) and 1000 year (0.1%) pluvial flood risk zones.

9.5.7. The revised Flood Risk Assessment identified two areas of the proposed road corridor where shallow pluvial flooding might occur. The first is near the small drainage ditch/stream crossing and the second is in the field near the new quarry entrance. These are flat, low-lying areas where surface water tends to pond in agricultural fields. Some of the proposed measures to address this include the construction of the road at a slightly higher level than the surrounding lands together with the permeable nature of the road surface and the placement of several land drains under the western section of the road. It is considered that the height of the new access road will ensure that it is above the potential pluvial flood levels and that the construction of the access road, together with the proposed improvements to the surface water drainage in the area, will not increase the risk of flooding in the surrounding area.

Groundwater

9.5.8. The Scart area is underlain by a Regionally Important Aquifer with potentially karstic conduit and/or fissure groundwater flows. The vulnerability of the aquifer is classified as predominately ‘Extreme – X’. The aquifer has the potential to supply very large volumes of water and there are several spring water supplies in the area. There is a public groundwater supply at Ballyclough Village, which is located approx. 1.8km to the south-east of the development site.

9.5.9. The natural (pre-quarry) groundwater level gradient is a westerly/south-westerly direction. Site specific water level data demonstrates that groundwater flow direction

follows the topography of the site and flows westwards from the high ground in the south-eastern corner of the landholding before turning south. The developer has provided a detailed hydrogeological assessment of the potential risks to Ballyclough Spring, which had been requested by the P.A. in respect of a previous planning application, (presented in appendix 7.12). It had been established that the proposed quarry expansion would not lie within the ZOC of Ballyclough Spring, and this was confirmed in further Hydrogeological Risk Assessment reports submitted to the P.A. on 20/12/19 and on 16/03/20. In terms of groundwater flow, it was further established that within the proposed quarry expansion area, the groundwater flow was from the SE high point towards the north, west and southwest. It is stated that the proposed quarry floor levels will maintain a slope from the SE corner towards the north and west and that, as a result, there will be no surface water runoff or surface water drainage in the SE corner of the quarry. Thus, the direction of flow is away from the Ballyclough Spring.

9.5.10. The ground level of the proposed quarry area is at an elevation of approx. 103m AOD at the western end, sloping from 105m AOD in the SE corner. The floor level of the existing quarry is at 88.5m AOD. The extraction of limestone bedrock will be undertaken in one bench above the groundwater table and no groundwater abstraction or pumping is proposed to be undertaken as part of the development. A series of groundwater monitoring has been carried out in respect of proposals to extend the existing quarry, with the initial records dating from 2007 comprising 14 boreholes (Golder). A further 6 boreholes were drilled in November 2015 which established a groundwater level of 79m AOD and 90m AOD in January 2016. The groundwater levels recorded in Jan. 2016 were approx. 8m to 15m higher than those recoded in the previous November. Further levels recorded in November 2016 were more similar to those recorded in November 2015 and levels recorded in January 2019 were mid-way between the November and previous January readings. It was submitted (20/12/19) that based on the site-specific data, there would be approx. 10m of unsaturated bedrock between the quarry floor and the normal water table, but even under extreme rainfall conditions, it was predicted that the quarry floor would remain above the groundwater level.

9.5.11. The P.A. expressed concern, however, regarding some of the exceptionally high winter groundwater levels recorded in January 2016 and sought further

reassurances in terms of a cushion to protect the water table. In the documents submitted on 20/12/19 and 16/03/20 it was pointed out that the high groundwater levels recorded in November/December 2015 and January 2016 were as a result of an intense rainfall event and one of the wettest winters in over 100 years. Notwithstanding this, it was stated that the groundwater levels remained below the proposed quarry floor levels, but it was acknowledged that the unsaturated zone thickness beneath the quarry floor ranges from almost zero to 10 metres.

9.5.12. The specialist hydrogeological consultant employed to undertake a risk assessment, advised that the quality of the limestone immediately to the east of the existing extraction area had more fissures and voids that the area further to the east. It is stated that the presence of fissures and voids leads to considerable variability in the predictability of groundwater levels following rainfall events. For this reason, the quarry expansion area has been designed with a corridor of excavation connecting the existing pit area with the proposed expansion area which has better quality limestone. The corridor travels through the poorer quality limestone to the better quality limestone beneath the proposed expansion area, where no evidence of voids or karst fissures were encountered. It was confirmed that the depth of excavation would maintain a minimum unsaturated depth of 5 metres above winter ground water levels, with 10 metres outside of this period.

9.5.13. In terms of groundwater quality testing, the results indicate that the water quality was generally moderate to good quality with some parameters slightly elevated. The exceedances with respect to Drinking Water Regulations values was for Nitrate and Nitrite, which were due to agricultural activity. The exceedances of the Groundwater Regulations for ortho-phosphate are also considered to be as a result of agricultural activities nearby. However, the change of use from agriculture to quarrying may help reduce the concentrations of such fertiliser parameters in the locality over time.

9.5.14. The further information submitted to the P.A. (20/12/19 and 16/03/20) which carried out a hydrogeological risk assessment of the risk to groundwater, examined issues such as surface water laden with limestone dust, hydrocarbons and other potential contaminants. The assessment indicated that there would be potential impact from large long-term leaks or significant spill, and as such it would be important not to store polluting materials on the quarry floor. However, the proposed quarry layout would address this issue. Furthermore, good quarry management would ensure that

sediment/dust laden water would be filtered out with fines being able to settle before clean water is discharged. It was confirmed that Ballyclough Spring would not be affected by any contamination even in the event of heavy rain.

9.5.15. In a 'Do-Nothing' Scenario the expansion of the quarry will not commence, which will impact the supply of rock aggregate in the local area. The land will continue to be used for intensive tillage or grassland agriculture, with the associated pollution risks of nitrate and phosphorous to the underlying aquifer.

Predicted Effects

9.5.16. The topographical character of the expansion area will be irreversibly changed due to the excavation of the subsoils and underlying bedrock. However, the site area (5ha) is relatively small in terms of the hydrogeological regime and any effects would not be significant.

9.5.17. Removal of overburden will expose subsoil to erosion and increase the potential for sediment laden run off to surface water. Dust washing off vegetation into local water courses poses a similar risk. There is also potential for pollution of surface waters via hydrocarbons/spillage on the site by reason of storage or re-fuelling of machinery or accidental leaks. Earthworks and bridge construction works in association with the construction of the new access road over the drainage ditch would increase the risk for suspended sediment to enter surface waters if carried out during wet season.

9.5.18. Increased groundwater vulnerability from the potential for contamination by either accidental leaks or spillages of chemicals, fuels, oils etc. or dust/sediment laden groundwater arising from removal of 3m overburden and the quarrying of 9m of rock.

9.5.19. The potential impacts on the water environment are, however, considered to be very low as there will be no interference with the aquifer or quarrying below the water table, there are no proposals to undertake pumping or dewatering and any changes to the local hydrological environment will be minor.

Features and measures to avoid, prevent, reduce or offset likely significant adverse effects on the environment

9.5.20. Areas where excavation of soils/subsoils within each phase as well as the surface area of exposed soil will be kept to a minimum, to prevent the release of dust in dry weather and suspended sediments during/after wet conditions.

9.5.21. Strict control of sediment/dust generation and other pollutants associated with site clearance, rock excavation, blasting, aggregate crushing, stockpiling and machinery use on site. Berms to be planted as soon as possible. Best practice in control and management on the site i.e. wheel washers and dust suppression.

9.5.22. No excavation below the water table or pumping/interference with groundwater. A buffer of an unsaturated zone of 5 metres above the winter water table will be maintained. Monitoring of the quarry excavation depth will help to ensure that the water table is not intersected.

9.5.23. Best practice methods of storage of fuels/lubricants and protocol for dealing with accidental spillages. No storage of hydrocarbons on the quarry floor. Bunding of fuel storage areas and good operational practices to ensure that the potential for accidental spillage and the risk of groundwater contamination is minimised.

9.5.24. Control of drainage from the work area during the construction of the access route and bridging of the drainage ditch/seasonal stream. This will include installation of silt fences beside the ditch and working in dry weather to minimise runoff. Road drainage will be directed to ground and not to the drainage ditch to avoid impacts from hydrocarbon spills or operational road runoff. Road will be constructed in permeable material and at a height that will avoid flood risk.

9.5.25. Environmental monitoring by suitably qualified person will be carried out daily in respect of surface water quality and monthly/annually in terms of groundwater monitoring. All staff will undertake environmental awareness and training and an EMS will be implemented involving daily checks to ensure no spillages have occurred and that all machinery is working correctly.

Residual Impacts

9.5.26. Due to the nature and scale of the works and to the site's hydrology and groundwater catchments, and as all surface water will be retained within the quarry area with no excavation below the water table, it is considered that the residual impacts are slight negative.

Water – Conclusion

9.5.27. The site of the proposed development is underlain by Waulsortian Limestone which is karstified and is designated as a Regionally Important Aquifer which has an

Extreme Vulnerability rating. However, the proposed extension (5ha) to the long-established quarry (c.2ha) will not interfere with the water table, will retain a buffer zone of 5m above winter groundwater levels and will not involve the abstraction or pumping of water. There are no surface water features within the site other than the drainage ditch to the northwest of the extraction area, which is to be bridged, and an area of soft ground to the west, and these features are remote from the extraction area. Thus, there will be no significant impact on the local hydrological regime. It is proposed to implement best practice mitigation measures to minimise the potential for any environmental effects and to limit the risk to surface and ground water features. Furthermore, regular monitoring of surface water quality and ground water levels and quality will be undertaken. There will be no impact on local water supplies as the groundwater is contained within open fractures in the bedrock, the aquifer characteristics will not be altered and as the direction of groundwater flow is away from the local public water spring.

9.5.28. I have considered all of the written submissions made in relation to water. I am satisfied that any potential impacts would be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions including monitoring conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects in terms of water.

9.6. Air and Climate

9.6.1. Chapter 8 of the EIAR addresses Air and Climate with further details provided in the further information response. I consider that there is an overlap with section 8.3 of the planning assessment above and I recommend that the sections be read in tandem.

Receiving Environment

9.6.2. The proposed development relates to an expansion of an existing quarry operation. The lands in the vicinity of the overall site are generally in agricultural use with the nearest sensitive receptors to the east and to the west of the extraction area.

9.6.3. Dust deposition monitoring was undertaken at 3 No. locations around the perimeter of the site, as indicated in Figure 8-2-1, and baseline monthly dust monitoring results

for the month of August 2007 and 8th December to 6th January 2008 are provided in Table 8-2-1. This detail was supplemented by further information with monitoring results for the period of 27th September to 29th October 2019. There have been a number of exceedances at several of the monitoring locations. A summary of the dust deposition monitoring data for the 2019 period is set out in the O'Callaghan Moran Report submitted as Further Information on 20th December 2019.

9.6.4. The levels recorded at Monitoring Stations D2 and D4 were considerably higher than the EPA Dust threshold limit of 350mg/m²/day, being stated as 4,421mg/m²/day (D2) and 25,010mg/m²/day (D4). These levels were also significantly higher than the levels recorded in 2007/2008, during which time the quarry was operational for part of the period monitored. However, the quarry was not operational when the very high readings were recorded and were explained as arising from windblown dust from ploughed fields close to the stations. Dust emissions are largely dependent on weather conditions and highly sensitive receptors are considered to be those residing within 500m of the extraction area (DoEHLG Guidance on Quarries and Ancillary Activities 2004).

9.6.5. The EPA's Air Quality Index for Health is calculated every hour. It is stated that the reading for the area on 17th May 2018 was 3 – Good (Reading of 1-3 means good air quality).

9.6.6. In a 'do-nothing' scenario the existing quarrying operations including extraction will continue within the parameters of the extant permission with no change to the prevailing air quality.

Predicted Effects

9.6.7. Extraction, screening, crushing and processing of materials, blasting, loading material onto HGV trailers, transport of materials and construction of the berms along the northern site boundaries can all give rise to dust generation and deposition. In addition, windblown dust from exposed surfaces, stockpiles, aggregates and unvegetated berms, as well as reinstatement works, will give rise to dust emissions. The main impacts are described as visual coating/soiling of property, coating of vegetation, contamination of soils, water pollution, change in plant species composition, loss of sensitive plant species, increased inputs of mineral nutrients and altered pH balances. Respirable particles (those less than 10 microns in

diameter) have the potential to cause effects on human health, depending on exposure levels.

9.6.8. Use of machinery involved quarrying activities results in greenhouse gas emissions associated with road construction and earth moving. In the operational phase, GHGs will be associated with heavy goods vehicles that will transport goods to customers and the mobile plant used in the processing (crushing and screening).

Features and measures to avoid, prevent, reduce or offset likely significant adverse effects on the environment

9.6.9. Industry best practice measures are to be incorporated including minimising drop heights, water sprays to moisten handled material/haul routes, processing of material on the quarry floor, paving of haul routes and control of vehicle speed, use of wheel wash system, water bowsers etc. Dust suppression and dust extraction systems will be fitted to machinery where appropriate. Berms in combination with tree planting will be constructed along the perimeter of the existing and proposed expansion areas of the quarry. Areas of exposed soil and berms will be vegetated as soon as possible.

9.6.10. A Dust Minimisation Plan is to be prepared prior to commencement of construction. Dust deposition monitoring points will be established at locations along the boundary to be agreed with the planning authority. Monitoring will be carried out on three occasions annually between May and September.

9.6.11. All plant and equipment will be regularly maintained to minimise exhaust emissions. Diesel engines will only be turned on when operational. HGVs are typically fitted with Catalytic Reduction systems and an additive is used to reduce nitrous oxide levels in exhaust gases.

Residual Impacts

9.6.12. Residual impact from potential sources of dust will have a Long-term Imperceptible negative impact.

9.6.13. The EIAR concluded that there would be no increase in greenhouse gas emissions from vehicular movements to and from the site which are to remain as existing. This was based on the assumption that the daily HGV movements would be equivalent to that already authorised, on the basis that the same extraction rate as previously used would be employed. Although the number of daily trips is likely to increase, as

discussed in 8.2 above, which is due to an increase in the extraction rate from 50,000t/p.a. to 72,000t/p.a. (with occasional surges in demand to 150,000t/p.a.), I note that the overall timeframe has been reduced from 32 years (S261 registration) to 15 years (currently proposed). This, in turn means that the amount of material to be extracted over the life of the quarry is likely to be less)1,080,000 tonnes) than that originally anticipated in 2005, (1,600,000 tonnes), when the quarry was registered. Thus, there will be no overall increase in emissions from HGV traffic. However, the proposed development will have an ongoing imperceptible, negative impact on climate.

Air and Climate – Conclusion

9.6.14. Parties to the appeal consider that their amenities will be adversely impacted from dust arising from the proposed extension to the existing quarry.

9.6.15. Sufficient detail has been provided to support the conclusion that the proposed development with mitigation would not result in excessive dust emissions with the preparation of a Dust Minimisation Plan proposed. A condition requiring its preparation within a specified time period is recommended should permission be granted.

9.6.16. The mitigation measures proposed are generally typical industry good practice measures, similar to those set out in the previously referenced Planning Guidelines and EPA Guidelines. They include minimising exposed surface areas, water sprays to moisten handled material/haul routes, processing of material on the quarry floor, paving of haul routes and control of vehicle speed, seeding of soil mounds etc.

9.6.17. I have considered all of the written submissions made in relation to air and climate. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on air and climate.

9.7. Material Assets

9.7.1. Traffic and Transportation is addressed in Chapter 11 and is supplemented by amended drawings and additional details submitted by way of further Information. I

refer the Board to my assessment in section 8.2 of the planning assessment above. I recommend that the sections be read in tandem.

Receiving Environment

9.7.2. The existing quarry is accessed from a local road, the L5302, which is a substandard road in terms of width and alignment, with several sharp bends and a high level of residential properties including a cluster to the east of the site. The proposed development will cease the use of this access route and provide for access directly off the L1201 with a new entrance and haul route to the west of the site. The existing quarry had a rate of extraction of 50,000 tonnes p.a., (S261 Registration QR058), which was restricted by the Board to 10 truckloads per day averaged over 3 months (interpreted as 20 roundtrips). This appears to be based on a 250-day calendar year. However, the quarry is not currently operating and there is therefore no cars or HGV traffic is associated with the quarry at present.

9.7.3. Traffic surveys were conducted in January 2019 on the L1201-57. Hourly flows were recorded for the morning and evening peak periods as shown in fig. 11.6 and 11.7 of the EIAR. The analysis of the existing road network showed it operating well below capacity for the existing and Opening Year +15 years scenarios. The current AADT on the road is 450-500 vehicles

9.7.4. The proposed extraction rate is 72,000 tonnes p.a. with provision for occasional surges in demand increasing the rate to 150,000 tonnes p.a. The lifetime of the quarry is indicated as 15 years. This rate of extraction is estimated to give rise to a daily truckload rate of 13-14 trips based on 250-277 days p.a. (depending on whether the permitted hours of operation include Saturday mornings), or 26-28 round trips during the normal course of events, rising to 27 trips (or 54 round trips) during periods of high demand. The applicant has stated that as the quarrying activity will be demand driven, it is likely that there would be days with no HGV movements and others with up to 40 movements/day. However, the traffic modelling in the EIAR was based on the worst-case scenario of an extraction rate of 150,000 tonnes p.a. to calculate peak hour traffic. This assumed 45 arrivals (5 cars and 40 trucks) and 45 departures daily. Two separate haul routes were proposed, one to the north along the R580 towards Buttevant and one to the south towards the N72 via Cecilstown and Mallow. Trips were assigned on a 50:50 basis.

9.7.5. In a ‘Do Nothing Scenario’ following the extraction of the remaining reserves the quarry would close with cessation of quarry related traffic using the existing accesses.

Predicted Impacts

9.7.6. The traffic modelling (Picady) indicates that there would be a negligible impact on the local road network during both construction and operational phases of the development. The proposal would contribute c.0.9% to morning peak flows and c.1.8% to evening peak flows on the L1201. Thus, in terms of traffic flows and the operation of the new junction at the site entrance, there would be very little impact on the capacity of the road network. However, as discussed in 8.2 above, the planning authority had raised concerns regarding the impact of the increase in the use of the local road by HGV traffic which would be significant in terms of the poor standard of the L1201.

9.7.7. The proposed change in access arrangements from the existing entrance on the L5302 to the L1201 would result in considerable improvements in terms of traffic safety and impact on the capacity of the local road network. Notwithstanding this, it is considered that the proposed development is likely to result in a significant increase in HGV traffic on the local road network, and in particular the L1201. Given the current substandard nature of the L1201, which is relatively narrow with no margins or hard shoulders, I would agree with the planning authority that it will necessitate certain upgrades to be carried out to this road. I would, therefore, concur with the proposal to attach a special contribution condition to address this matter.

Features and measures to avoid, prevent, reduce or offset likely significant adverse effects on the environment

9.7.8. The closure of the existing vehicular access off Local Road L5302 and the provision of a new access with associated new entrance and haul road will result in significant improvements in terms of impacts on the local road network and traffic safety. Although both local roads are below standard, the L1201 is far superior in terms of width, alignment and adjoining land uses, and would be more appropriate in terms of capacity and road safety. A condition prohibiting the use of the current access should be attached to any permission, should the Board be minded to grant permission.

9.7.9. Additional measures to improve vehicular and pedestrian safety along the local road are proposed, including the introduction of edge of carriageway markings, improved warning signage and installation of wheel wash facilities. Regular road cleaning is to be undertaken.

Residual Impacts

9.7.10. Vehicular movements including HGV movements will be increased beyond what has previously been generated by the existing quarry operation. However, the proposed change of access from the L5302 to the L1201 will lessen the impact on the local road network and will be well within the capacity in terms of traffic flow and junction performance. However, the increase in HGV traffic on the L1201 will necessitate upgrading works which should be addressed by means of a Special Contribution condition. Subject to the implementation of these road improvement works, the impact is not likely to be significant and is considered a positive impact in respect of the cessation of the use of the L5302.

Material Assets – Conclusion

9.7.11. Parties to the appeal raise issues in terms of the capacity of the local road network and traffic safety arising from HGV movements. As noted, proposed changes to the access arrangements will result in a safer environment than at present and will be appropriate in terms of the capacity of the road network. The proposed mitigation in terms of road cleaning and the use of wheel wash facilities will also ameliorate the impact on the road and the special contribution required by the planning authority will ensure that the road network is upgraded appropriately. Conditions requiring the provision and maintenance of adequate sightlines at the new entrance and prohibition of the continued use of the existing access would also ensure that road safety is maintained and improved.

9.7.12. I have considered all of the written submissions made in relation to material assets. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on material assets.

9.8. Cultural Heritage

9.8.1. Chapter 12 addresses archaeology and cultural heritage.

Receiving Environment

9.8.2. The site comprises an existing extraction area with a larger area proposed for an expansion of the quarry operation and a new access and haul route to be provided from the northwest across agricultural fields. The methodology included GIS mapping, desk-top and field inspection dating back to 2015 were carried out. A further field inspection was carried out in 2019. There are no National Monuments in State Care within the site boundaries. There are four Recorded Monuments within the site, including a limekiln (CO024-087) which is no longer extant. There are three ring ditches (CO024-252-254) within the larger quarry site, which were identified during the previous programme of geophysical survey and subsequent archaeological testing.

9.8.3. CO024-253 (Ring ditch 2) is located within the proposed extraction area and it is proposed to preserve this feature by record (excavation). Ring ditch 1 (CO024-252) and Ring ditch 3 (CO024-254), respectively are located approx. 20m to the east of the proposed extraction area and to the south of the existing extraction area. These two features are proposed to be preserved in situ. In addition, it is proposed to provide 20m buffer zones around these features.

9.8.4. A further ringfort CO024-088 was found (initially in 1987 and reinspected as part of the current application) which is located approx. 30m to the north-east of the proposed new access route to the quarry. The proposed access road will pass within 30m to the west of the monument, and it is proposed to plant an additional hedgerow alongside the road to screen the ringfort. Another ringfort (CO024-086) was discovered within the applicant's landholding but outside of the site of the proposed development, which is located approx. 500m to the west of the existing quarry pit. These form part of an extensive range of recorded monuments in the general vicinity, but outside of the site boundary, which indicate the potential for finding sub-surface archaeological remains in this area is quite high. The known monuments are set out in Table 112.1 (section 12.4.2.2) of the EIAR and are represented in Figure 12 (page 209).

9.8.5. There are no **Protected Structures** within the site boundary but there are six protected structures within 2km of the proposed development (set out in Table 12.2 EIAR). These include 4 recorded monuments, namely,

Ballygiblin House (CO024-084 – c.2km to west a roofless ruin). Note associated demesne and associated outbuildings are c.430m at its closest point to the proposed access. However, the southwest side of the original demesne is now occupied by large quarry and most of the remainder of the demesne is now in agricultural use. Thus, no negative visual impacts are anticipated.

Ballyclough Castle (CO024-135) and **Ballyclough Ornamental Tower** (CO-024-163) - located c.1.5km to the southeast in Ballyclough Village. The former demesne is now used as agricultural lands and the outbuildings, including the ornamental tower, have fallen into decay. Given the distances involved, no negative visual impacts are anticipated.

Former Church of Ireland (CO024-13602 – c.1.5km to southeast). Given distances involved, no negative visual impacts anticipated.

9.8.6. Eighteen structures listed in the **NIAH** are located within 2km of the site boundary, but there are no NIAH listed structures within the development boundary (Table 12.3 of EIAR). Four historic gardens are also listed, which are located between 900m and 1.4km of the site boundary (Table 12.4 of EIAR).

9.8.7. In a 'Do Nothing Scenario' extraction would continue as per the existing permission.

Predicted Effects

Archaeological impacts

9.8.8. No impacts anticipated in relation to limekiln CO024-087 as it is no longer extant.

9.8.9. The three ring ditches are sub-surface monuments, one of which (CO024-253) is within the proposed extraction area. It is stated that if this were to be preserved in situ, it would prevent access to a large volume of high-quality rock, which would impact the viability of the quarry. Thus, the extensive ground works in the area of the quarry would have direct, significant effects on this recorded monument in the absence of any mitigation measures. The remaining ring ditches within the site boundary (CO024-252 and 254) would be potentially directly impacted by groundworks, such as tracking of heavy machinery, in the absence of mitigation.

However, indirect impacts are unlikely to be significant due to their sub-surface nature.

9.8.10. The ring fort close to the proposed access track (CO024-088) would not be directly impacted, but the groundworks and movement of machinery in the vicinity of the monument have the potential to have direct significant impacts in the absence of mitigation. Indirect impacts will arise for the setting of this monument in terms of the change to the landscape, which will be slight, but also in terms of the proposed access route, which would be more significant in the absence of mitigation. There is also the potential for very significant direct impacts on unknown sub-surface archaeology within the site.

Architectural and Cultural Impacts

9.8.11. No direct impacts are anticipated as there are no recorded monuments or structures/gardens listed on the NIAH within the site boundary or in close proximity. There are a number of Protected Structures and NIAH items in the wider landscape, but no negative visual impacts are anticipated due to the distance and the ruinous state of many of the structures and/or the much altered stated of their associated demesnes and attendant grounds. No indirect impacts are therefore anticipated.

Features and measures to avoid, prevent, reduce or offset likely significant adverse effects on the environment

9.8.12. Preservation in situ is proposed for Ring Ditches CO024-252 and 254. It is proposed to establish 20m buffer zones around these monuments and no ground works or storage of materials or topsoil will be permitted within these buffer zones, which will be maintained for the life of the quarry.

9.8.13. Preservation by record will be undertaken under licence from the National Monuments Service in respect of CO024-253 (ring ditch 2). As excavation in this area is not expected until Year 7, a 20m buffer zone will be established around this monument until this time. A method statement detailing the methodology will be submitted for approval for the exposure and removal of the ring ditch and a report on the results (including specialist reports) will be submitted on completion of the excavation.

9.8.14. A 20m buffer zone will be established around CO024-088 within which no groundworks or storage of topsoil will be permitted. A hedge will be planted as part of the landscaping plan to screen the proposed access route from the monument.

9.8.15. Archaeological monitoring of all topsoil removal associated with the quarry extension and proposed access route will be carried out under licence from the National Monuments Service. A bi-annual inspection of the site will be carried out by the appointed archaeologist.

Residual Impacts

9.8.16. None anticipated.

Cultural Heritage – Conclusion

9.8.17. I have considered all of the written submissions made in relation to cultural heritage. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on cultural heritage.

9.9. Landscape

9.9.1. Chapter 10 addresses Landscape and Visual Impact.

Receiving Environment

9.9.2. The site includes an existing quarry operation although extraction is not currently on-going. The lands within the site and around the existing quarry site are in agricultural use with one off housing along the local road network, with the nearest dwellings along local road L5302 to the east. There are 8 residential properties within 500m of the site and 27 residential properties and 2 agricultural properties within 500-1000m of the site. The Landscape Character is described in the EIAR as 'gently rolling Atlantic bocage landscape with hedgerow enclosed fields and occasional copse woodland'. It is set within a broader Landscape Type of 'Fertile Plains with Moorland Ridge', which is essentially a rich agricultural landscape. This is stated as a Very High Value Landscape with Very High Landscape Sensitivity, but is not

acknowledged as such in the County Development Plan. There are no designated scenic views or scenic routes in the vicinity.

9.9.3. The topography is described as ‘gently undulating large open fields in agricultural use enclosed by stone and earth ditches and hedgerow shrubs and some mature trees’. It is considered that this is a very apt description of the site. The elevation in the south-eastern end is c.100mOD falling to c.92mOD to the west and the existing quarry pit is at c.89mOD. The area of the proposed expansion comprises a large expanse of agricultural fields on a level plateau, with good natural screening along the southern and eastern boundaries. The site is most exposed to the west, north-west and north.

9.9.4. In a ‘do-nothing’ scenario the extraction of the existing pit would continue within the parameters of the existing permission and the remainder of the site would continue in agricultural use.

Predicted Effects

9.9.5. The landscape and visual assessment included 9 no. viewpoints, the locations of which are delineated on an aerial photo accompanying the photomontages. The existing quarry is not readily visible as views are screened by the existing pit being below ground level and by natural screening and by the landscape berms that have been erected. The proposed development is for the lateral extension of the extraction area. However, the above ground visual impacts will be confined to the construction of the initial berms and the proposed access route. In the medium term, it will result in slightly negative to neutral visual impacts.

9.9.6. In the longer term, it is considered that the proposed development will be contained within the extensive landscape screening proposed and will be subsequently rehabilitated, albeit with a permanent landscape change. However, the landscape character in the vicinity has been subject to incremental change over the years with the removal of field boundaries and the introduction of quarrying activities. As many of the quarries in the general area are nearing completion, they are being rehabilitated and re-integrated into the landscape. Thus, it is considered that the proposed development, which will be rehabilitated on an on-going basis, will be consistent with the pattern of the evolving landscape in the general area.

Features and measures to avoid, prevent, reduce or offset likely significant adverse effects on the environment

9.9.7. The primary mitigation measure consists of the integration of landscaping and rehabilitation measures into the project design. There will be a parallel rehabilitation plan alongside the retention of existing vegetation, mature trees, hedgerows and mature thickets at key locations within the site and in the vicinity of the proposed access. The mitigation and rehabilitation measures will include both the existing and proposed quarry area and the proposed new access route.

9.9.8. Extensive earth berms to be planted with native species are proposed around the perimeters of the site to assist in screening the extraction area. The proposed tree planting will comprise 2,250 native trees which will be planted around the existing and proposed pit areas and on the proposed berms. Existing treelines and hedgerows will be augmented with new screen planting also. The proposed hedgerow planting at the road entrance and along each side of the access route will comprise 3,750 native trees and shrubs.

9.9.9. The EIAR (10.5.9) had indicated that the overburden would be gradually removed during the life of the quarry and used in rehabilitation. However, the planning authority requested that the overburdens areas be retained and integrated into the landscaping plan. The planning authority also sought further changes to the proposed landscaping scheme including the retention of as much of the existing hedgerow along the roadside boundary with the L1201 as possible to minimise the impact of the construction of the proposed access and entrance. The applicant has agreed to these changes and appropriately worded conditions should be attached to any permission, should the Board be minded to grant permission.

Residual Impacts

9.9.10. The retention and augmentation of existing treelines, hedgerows and vegetation on site will provide good visual screening of the proposed extraction area and the proposed access route, and will minimise the visual impact of the proposed new entrance to the site. The berms would have a positive impact in terms of providing for additional screening of the both the existing and proposed extraction areas. The rolling programme of rehabilitation as the proposed quarrying works progress will help to integrate the development into the local landscape. The long-term impacts

will be permanent but will not be significant as the rehabilitated site will be consistent with the evolving landscape in the area.

Landscape – Conclusion

9.9.11. I have considered all of the written submissions made in relation to landscape. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on landscape.

9.10. Interaction of the Above and Cumulative Impacts

9.10.1. I have considered the interrelationships between factors and whether these may, as a whole, affect the environment, even though the effects may be acceptable when considered on an individual basis. The details of all interrelationships are set out in Chapter 14. In my assessment of each environmental topic, I have considered the likelihood of significant effects arising as a consequence of interrelationship between factors. Most interactions e.g. the impact of noise and air quality on the population and human health, water and land and soil and biodiversity and land and soil are addressed under individual topic headings above. I am satisfied that effects arising as a result of interactions can be avoided, managed and/or mitigated by the measures which form part of the proposed development, mitigation measures, and suitable conditions. There is, therefore, nothing to prevent the approval for the development on the grounds of significant effects as a result of interactions between the environmental factors.

9.10.2. Cumulative impacts were assessed in each chapter of the EIAR. The total effect of the overall quarry operation, of which the proposed development forms part, has also been considered, in addition to other projects in the vicinity, which are listed in section 1.6 of the EIAR. I am satisfied that the cumulative assessment assesses the impacts of the current proposal in the context of other developments and projects.

9.11. Reasoned Conclusion on the Significant Effects

9.11.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the applicant by

way of further information and submissions made by prescribed bodies to the application and the 3rd party appeals and observations received by the Board, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows. Where appropriate the relevant mitigation measures are cited.

Population and Human Health - impacts arising from emissions of dust, noise and vibration during operation, with potential for nuisance to sensitive residential receptors proximate to the site. Such impacts are proposed to be mitigated by measures to reduce and control the emissions in the first instance and thereafter by the adoption of specific measures, including those forming part of the operation of the development including monitoring proposals. Measures include restriction of certain operations to exclude hours between 0700 and 0800 and notification of residents within 500m prior to blasting. Visual impacts will be mitigated by the use of berms and landscape screening and by the retention of as much existing vegetation as possible.

Biodiversity – there will be minimal loss of habitats and the reinstatement and reinforcement of vegetation will have a positive impact. Impacts arising from construction activities include removal of scrub and existing vegetation and impacts arising from extraction activities include noise and disturbance as well as vibration from blasting. Such impacts are proposed to be mitigated by measures to avoid habitat loss, disturbance/displacement, controls in terms of timing and location of blasting and removal of scrub. The proposed haul route will also be reinstated, and the existing vegetation will be retained as much as possible and enhanced. Monitoring is also proposed.

Land, soils and water – The design and layout of the project seeks to minimise the extraction area with the focus on the best quality rock and all topsoil and overburden will be used within the site. Excavation will maintain a buffer above the water table as the principal means of protecting the vulnerable aquifer and groundwater resource. Any surface water falling on the area will be contained within the bund of the quarry and will either evaporate or percolate to ground. Specific mitigation measures will control the risk of pollutants entering surface waters and ground water including a water management system. Surface water and groundwater monitoring of the discharge waters will be undertaken.

Landscape – increased landscaping, screen planting and earthen berms will enhance biodiversity, improve visual amenity and help to mitigate noise and air quality impacts. Thus it will interact with ecology and human beings in a positive way.

9.11.2. In conclusion, having regard to the above identified significant effects, I am satisfied that the proposed development would not have any unacceptable direct or indirect impacts on the environment, subject to the implementation of the mitigation measures and any conditions recommended in section 13 of this report.

10.0 Appropriate Assessment

10.1. Compliance with Articles 6(3) of the EU Habitats Directive

10.1.1. The requirements of Article 6(3) as related to screening the need for appropriate assessment of a project under part XAB, section 177U of the Planning and Development Act 2000 (as amended) are considered fully in this section.

10.1.2. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given. The proposed development is not directly connected to or necessary to the management of any European site and, therefore, is subject to the provisions of Article 6(3).

Background to the application

10.1.3. The application is accompanied by an Appropriate Assessment Stage 1: Screening Report and a Stage 2: Natura Impact Statement (NIS), both prepared by Cuthbert Environmental Consultants and dated May 2019, and is supported by additional information submitted as further information responses on 20/12/19 and 16/03/20. It is considered that the Stage 1 AA Screening Report was prepared in line with current

best practice guidance and provides a description of the proposed development and identifies European sites within a possible zone of influence of the development.

10.1.4. It contains a description of the proposed development, the project site and the surrounding area. It outlines the methodology used for assessing potential impacts on the habitats and species within the European Sites that have the potential to be affected by the proposed development. It predicts the potential impacts for the sites and their conservation objectives, it suggests mitigation measures, assesses in-combination effects with other plans and projects and it identifies any residual effects on the European sites and their conservation objectives.

10.1.5. The submitted Screening Report identified two European sites within a 15km radius of the site. It is stated that the distances between the appeal site and the Blackwater River SAC and Kilcolman Bog SPA respectively, are c.5km and c.12km. A number of streams were identified that flow in the direction of Blackwater River SAC including a stream located c.1km to the south of the appeal site that flows into the SAC via the Finnow Stream. Furthermore, there is the Ketragh River, located 3km to the west of the site, which flows into the Blackwater River SAC via the River Allow. However, no source-pathway-receptor link was established between the Kilcolman Bog SPA, which is c.12km distant, and this European site was therefore screened out.

10.1.6. Issues that were examined included surface water drainage, noise emissions and dust emissions. The unnamed surface water drain on the north-western boundary of the landholding was identified as a potential pathway, at times of high surface water flow, to the Ketragh River which discharges to the Blackwater River SAC (c.6km downstream). Thus, during periods of high rainfall, any surface water that leaves the site could follow this pathway to the SAC. In addition, another stream located approx. 1km to the south of the site was identified as a further potential pathway as it joins the Finnow Stream south of Ballyclough Village, before discharging to the Blackwater River SAC approx. 6km downstream from the project site.

10.1.7. The AA Screening Report identifies the potential for surface water runoff from quarry activities to be contaminated with sediments and possibly hydrocarbons, which in the absence of mitigation, could potentially cause impacts on the qualifying interests of the SAC, alone or in combination with other plans and projects. However, the Blackwater River SAC was considered to be too far removed to be affected by noise

emissions from the quarry or to experience any significant direct impacts from dust emissions. Indirect impacts by means of dust particles entering the open drain discussed above, could however, arise in the absence of mitigation.

10.1.8. The submitted Screening Statement concluded that significant effects on the Blackwater River SAC cannot be ruled out as there is potential for indirect negative impacts by way of surface water contamination.

10.1.9. An EIAR accompanies the application with further information submitted in responses to requests for same by the planning authority.

10.1.10. Having reviewed the documents and submissions I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development alone, or in combination with other plans and projects on European sites.

Screening for Appropriate Assessment

10.1.11. The project is not directly connected with or necessary to the management of a European Site and, therefore, it needs to be determined if the development is likely to have significant effects on a European site(s). The proposed development is examined in relation to any possible interaction with European sites designated Special Conservation Areas (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site in view of the conservation objectives of those sites.

Description of Site and Surroundings

10.1.12. The quarry is located approx. 1.5km to the northwest of Ballyclough village in an area of gently undulating landscape, and is set well back from the public road. The site includes an existing limestone quarry pit which is c.2ha in area and extends to a depth of c.89mOD. The remainder of the site is in agricultural use. The lands around the quarry are used for agricultural purposes, with large open fields in tillage, which are surrounded by stone ditches and tree lines. There is an area of scrub woodland in the centre of the site, which lies immediately to the east of the existing pit. The dominant habitats on site are active quarries and mines, arable crops, scrub woodland and treelines/hedgerows along boundaries. The site does not currently support habitats of ex-situ ecological value for relevant qualifying interests of any

Natura 2000 site. The ecology team undertook site visits in May 2019 and relied on previous site visits in November 2015.

10.1.13. The site is underlain by Waulsortian Limestone which is karstified in places, and is designated as a Regionally Important Aquifer with an Extreme Vulnerability rating. Quarrying activities at the site have not breached the water table. There is no evidence of karstic features within the proposed quarry expansion area. The groundwater flow direction is westwards from high ground in the southeast and then southwards. A Hydrogeological Risk Assessment (submitted to the P.A. as further information) has established that, even following an exceptionally intense rainfall event in the winter of 2015, ground water levels have remained below the existing quarry floor levels.

10.1.14. The information provided indicates that there are no watercourses within the quarry area itself and all surface water is contained within the existing quarry floor, which percolates to ground or evaporates. There is no pluvial flood risk within the existing or proposed extraction area. There are a number of streams which drain the local area towards the Blackwater River SAC, which is c.6km downstream to the south. The water features identified include an unnamed stream close to the proposed new entrance and a stream located c. 1km to the south of the proposed development. The unnamed stream, which is c.700m to the west of the proposed quarry expansion area, drains from north-east to south-west along the north-western boundary to a karst feature or swallow hole outside the landholding, which is located approx. 200m to the west of the landholding boundary. There is also an area of soft ground with a shallow drain within the landholding but outside of the development site area, which is c.200m west of the existing quarry pit.

10.1.15. A shallow pluvial flood risk was identified along the corridor of the proposed access route. Two specific areas were identified, namely at the proposed bridge crossing of the unnamed stream and in a field near the new quarry entrance, which are flat, low-lying areas, where surface water tends to pond.

10.1.16. There is an area of woodland approx. 1km to the west of the proposed site. There are several exhausted quarries in the general vicinity, including two of which are located approx. 2.2km to the southwest, which are now known as Ballyhass Lakes. These now form part of a fishing and recreational area.

Brief Description of the Development

10.1.17. The applicant provides a description of the project in Section 2 of the NIS. The development is also summarised in Section 2 of this Report. In summary, the proposed development entails the lateral extension of an existing S261 Registration quarry for the extraction of limestone at the existing Scart Quarry. The proposed extension is to the east of the existing pit and comprises an area of 5ha within a larger landholding, which will be excavated to a similar depth as the existing pit (c.89m OD). The proposed development involves a change to the extraction method to blasting, crushing and screening of aggregates. It is proposed to construct a 6m wide access route from the existing quarry area to the L1201-57 to the northwest, which is proposed to cross the un-named stream.

10.1.18. Surface water will be contained within the quarry floor where it will percolate to ground with no direct connectivity with any local watercourses. There will be no extraction below the groundwater table and no abstraction of water. Rainwater harvesting will be used to collect surface water from roofs, and this will be used to top up the wheel wash. Fuel and oil will be stored in designated bunded fuel shelters outside of the extraction area.

10.1.19. The development will include the installation of a prefabricated administration office, toilets, a parking area, wheel wash, weighbridge, covered fuel storage area, entrance signs, lighting, CCTV cameras, rainwater harvesting tank and new overground and underground power supply. These structures will be constructed to the north of the extraction areas. At the end of the 15-year term, the offices, fuel shelter, wheel-wash, weighbridge and toilets will be removed from the site and the site will be re-habilitated for return to agricultural use.

10.1.20. Landscaping will include extensive tree planting of native species and the construction of landscaping berms from unconsolidated soil material, which will be graded and vegetated. The area of hardstanding will be limited to the asphalt road and the roofs of the offices and fuel storage areas. The proposed road will have drains to the side and an ACO type drain and soakaway at the entrance to prevent surface water run-off onto the public road. The surface of the road will be composed of permeable materials, and it will be constructed at an elevation above the surrounding lands.

The following additional measures are proposed

- A buffer of between 5m and 10m will be maintained above the winter groundwater table levels.
- Any stripping operations during each phase will be delayed until immediately before the commencement of extraction of that phase in order to minimise the period of exposure of soils.
- The drill rig used by the applicants will incorporate a dust extraction facility. Accordingly, no dust impacts are expected as a result of drilling or blasting at the proposed site.
- The applicant proposes to use a mobile dust suppression unit to moisten the surfaces of stockpiles if required. The unit will be used during dry periods to keep the surface of the access road and internal haul road moist.
- Exposed soil faces on overburden mounds will be immediately grass seeded and planted in order to reduce wind erosion.

10.1.21. Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:

- Construction related uncontrolled surface water related pollution during earthworks or arising from an accidental pollution event.
- Contamination of surface water from dust, sediments and hydrocarbons during the operational phase affecting surface water quality.

Habitat loss/fragmentation and/or the disturbance of habitats and species can be ruled out on the basis of distance from a European site and the lack of any suitable habitats within the site to support species for which the sites have been designated.

European Sites

The development site is not located in or immediately adjacent to a European site. In determining the extent of potential effects of the development, the applicant took a precautionary approach in using a 15km radius around the development footprint as a potential zone of influence. It is considered that the potential for connectivity with other European Sites at distances greater than 15 km can be ruled out. The two sites

that were included in the applicant's screening exercise were Backwater River SAC and Kilcolman Bog SPA. The source-pathway-receptor model of impact prediction was employed.

A summary of European Sites that occur within a possible zone of influence of the proposed development is presented in the table below.

- Kilcolman Bog SPA (004095) is located approx. 12km to the northeast, on the far side of the N20 and Buttevant. The site is designated for the protection of water dependent bird species of Whooper Swan, Teal and Shoveler Duck. The is no ecological connection with the appeal site and there are no suitable habitats of ex-situ ecological value within the development site to support these species. The AA Screening Report concludes that there is no hydrological/ecological connection between the development site and Kilcolman Bog SPA and that given the distance between the sites, the potential for effects on the qualifying interests of this European site can be screened out. I would agree that there is no likelihood of significant effects occurring, either individually or in combination with other plans or projects, on this European Site in view of the Sites' Conservation Objectives and it can therefore be screened out.
- Blackwater River SAC (002170), which is designated for a range of habitats and species, is located approx. 6km hydrologically distant from the site. The Ketragh River is a tributary of the Awbeg River, which in turn is a tributary of the Blackwater (Munster) River, forms the main drainage system in the area. The Ketragh River is located approx. 3km to the west of the development site and flows into the Blackwater River approx. 6km to the south. The AA Screening Report identifies a possible hydrological connection to the Ketragh River by means of a seasonal (unnamed) stream, over which the proposed new access will cross. This stream is described as usually discharging to sinkholes, which is potentially linked hydrologically to the Ketragh River during periods of heavy rainfall. There are no watercourses within the quarry development area and no other watercourses within the development site other than the aforementioned unnamed stream and area of soft boggy ground, which are remote from the extraction area. The surface water within the existing and proposed extraction areas is contained within the quarry floor.

- The AA Screening Report submitted by the applicant ruled out direct impacts in terms of loss or damage to any Qualifying Features of habitats or species on the basis of the distance from the European sites. In terms of indirect impacts, it concluded that the risk of surface water contamination arises from quarrying activities such as sediment laden surface water and hydrocarbons or oils from spillages, as well as from the construction and use of the proposed access road. Notwithstanding the conclusions of the AA Screening Report, I am satisfied that the potential for likely significant effects on the qualifying interests of the Blackwater River SAC arising from quarrying activities on the site can be excluded given the absence of any water features within the quarry development area or any hydrological discharge from the quarry itself and the distance between the sites. Furthermore, there is no storage of fuels or hydrocarbons within the extraction area. However, I would accept and that there is the possibility that surface water runoff containing dust and/or contaminants arising from the construction and use of the proposed access road could reach the SAC and have effects on the qualifying interests of the site. Siltation could arise from run-off associated with earthworks in the road corridor and from bridging of the stream. The potential for effects on QI's of this Natura 2000 site cannot, therefore, be screened out and Stage II Appropriate Assessment is required in respect of the Blackwater River SAC (002170).

In combination effects

10.1.22. The Screening Report addresses the in-combination effects in section 2.2.9 of the document. This included a review of the Cork County Development Plan 2014, the Kanturk Mallow LAP 2017 and existing planning applications. It was noted that neither the CDP nor the LAP contain any policies or plans for the area that would interact with the proposed project in any significant way. A review of the planning permissions in the area highlighted a recent permission for the demolition and construction of a dwelling house (18/4899) and the construction of a cattle shed with underground slatted tank and silage slab and all associated works (16/4267).

10.1.23. Having reviewed the P.A.'s Planning Enquiry system, I would agree that the recent planning permissions in the vicinity of the site relate primarily to single dwelling

houses and to agricultural developments associated with existing farms. Any other permissions relating to other forms of development (such as a holiday home development at Ballyhass Lakes - 08/4748) are out of date and do not appear to have been implemented. The existing quarries in the vicinity are no longer operating.

10.1.24. In-combination effects have been adequately considered by the applicant. I am satisfied that the proposed development in combination with other permitted developments and plans in the area, which in themselves have been screened for AA, would not be likely to have a significant effect on any European Site.

Invasive species

10.1.25. The field surveys of the site did not identify any invasive species on the site of the proposed development. It is considered, therefore, that effects on the European sites are not likely to arise as there is no evidence of existing invasive species and no direct pathway linking such plants to the European sites.

Mitigation measures

10.1.26. No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise.

Screening Determination

10.1.27. The proposed development was considered in light of the requirements of Section 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually (or in combination with other plans or projects) could have a significant effect on European Site no. 002170 in view of the site's Conservation Objectives and Appropriate Assessment (and submission of a NIS) is therefore required.

- **AA Screening Summary Matrix**

European /Natura 2000 Site **www.npws.ie**	**Distance from proposed development/ Source, pathway, receptor**	**Possible significant effect (alone)**	**In combination effects**	**Screening conclusion**
Kilcolman Bog SPA (site code 004095)	12 km to the north-east of the site	Designated for Whooper Swan, Teal and Shoveler which are all water birds. The dominant habitats within the site do not support suitable habitat for the special conservation interests. No hydrological link. No possibility of effects due to separation distance and absence of ecological connections.	No possibility of in combination effects	Screened out for need for appropriate assessment.
Blackwater River SAC (site code 002170)	c.6km hydrologic distance to the south. The Ketragh River flows into the Blackwater River which is approx. 6km downstream of the development site. There are no watercourses within the quarry development area and there are no surface water discharges from the quarry, with no hydrological connection with the SAC. However, the unnamed	**Quarry area** - No possibility of effects from quarrying activity due to separation distance and absence of ecological connections. The dominant habitats within the site and the quarry floor do not support suitable habitat for the special conservation interests. **Access Road** - Potential for impacts to surface water quality associated with the construction and use of the proposed	Possible- requires more detailed analysis.	Possible significant effects cannot be ruled out without further analysis and assessment and the application of mitigation measures- **Appropriate assessment required**.

	stream to the north-west of the extraction area lies within the route of the proposed access road to the quarry and in periods of heavy rainfall discharges to a swallow hole which is likely to discharge to the Ketragh River, 3km to the west.	assess road: **development may result in significant effects alone.**		

Appropriate Assessment of Implications of the Proposed Development.

10.1.28. The following is an assessment of the implications of the project on the relevant conservation objectives of the European site using the best available scientific knowledge in the field (NIS). All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are examined and assessed. I have relied on the following guidance:

- DoEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service, Dublin
- EC (2021) Assessment of plans and projects in relation to Natura 2000 sites - Methodological Guidance on Article 6(3) and Article 6(4) of the Habitats Directive 92/43/EEC.

The following site is subject to appropriate assessment

Blackwater River SAC (Site Code 002170)	
Conservation Objectives and Qualifying Interests / Special Conservation Interests	**Potential Impacts**
CO – To maintain or restore the favourable conservation condition of the Annex I habitats and/or the Annex II species listed as Special Conservation Interests for this SAC. Qualifying Interests/Species of Conservation Interest: Estuaries [1130], Mudflats and sandflats not covered by seawater at low tide [1140], Perennial vegetation of stony banks [1220], Salicornia and other annuals colonising mud and sand [1310], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Mediterranean salt meadows (Juncetalia maritimi) [1410], Watercourses of plain to montane levels with Ranunculion fluitantis and Callitricho-Batrachion vegetation [3620], Old sessile oak woods with Ilex and	Direct Effects: No direct effects due to separation distance. Indirect Effects: Potential for indirect effects from surface water discharge associated with the proposed access road in the absence of site specific mitigation measures.

Blechnum in the British Isles [91A0], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Margaritifera margaritifera (Freshwater pearl mussel) [1029], Austropotamobius pallipes (White-clawed Crayfish) [1092], Petromyzon marinus (Sea Lamprey) [1095], Lampetra planeri (Brook Lamprey) [1096], Lampetra fluviatilis (River Lamprey) [1099], Alosa fallax (Twaite Shad) [1103], Salmo salar (Salmon) [1106], Lutra lutra (Otter) [1355], and Trichomanes speciosum (Killarney fern) [1421]	

10.1.29. A description of the site is set out in section 2.2.5 of the NIS with the qualifying interests set out in Table 3 and which are set out above. I have also examined the Natura 2000 data forms as relevant and the Conservation Objectives document for the site available through the NPWS website.

Identification of likely effects

10.1.30. The Blackwater River SAC has been designated for the protection of a range of riparian, estuarine and coastal habitats and species associated with the River Blackwater and its tributaries. NPWS publications highlight the specific attributes and targets for the various qualifying interests in the SAC. This European site is located approx. 6km to the south of the site and approx. 10km to the west of the site. There is no direct hydrological pathway from the development to the SAC. However, the unnamed stream is approx. 700m to the west of the extraction area and it discharges to the Ketragh River, which in turn discharges to the Blackwater River, thereby reaching the SAC. The proposed development includes a proposed access route which crosses the unnamed stream to the northwest of the site. Thus, a potential pathway via surface water exists to the European site. Pathways via land and air are ruled out due to distances involved.

10.1.31. The NIS (4.2) states that there are streams located near the site that represent a potential pathway for surface water and dust contamination to be transported towards Blackwater River SAC. It is further stated that a large quantity of

hydrocarbons could leach out of disturbed soil (particularly during periods of heavy rainfall) and infiltrate nearby drains and streams, and could potentially carry the contaminated water to parts of the blackwater SAC, and could also be accompanied by sediment from the quarry.

10.1.32. However, following a review of the surface water drainage regime for the area, including the EPA Catchment Maps (available on the EPA website) and the details provided in the EIAR, which were supplemented by further information submitted by the applicant on 20/12/19 and 16/03/20, including Hydrogeological Risk Assessments carried out by experts in this area, it is concluded that there is no surface water discharge from the existing or proposed quarry area. The surface water percolates to ground and/or is evaporated. There are no watercourses within the site other than the unnamed stream, which is to be crossed. There is no groundwater abstraction and no interference with the water table from either the existing or proposed extraction activities. The soils are free draining overlying limestone bedrock and there are no risks of flooding identified in respect of the extraction areas. The distance between the development site and the SAC is c.6km and to the nearest stream is 1km, with no obvious hydrological connectivity between the sites via this potential pathway. It is considered, therefore, that it is unlikely that there is any realistic possibility of a hydrological link between the existing and proposed extraction areas and the SAC. I do not therefore concur with the conclusions of the NIS that there is a potential pathway to the SAC via the Finnow Stream. It is noted that the planning authority's Biodiversity Officer was of a similar view (report December 2019), who was satisfied that there is no direct hydrological linkage between the quarry site itself and any streams or watercourses.

10.1.33. The main aspects of the proposed development that could adversely affect the conservation objectives of the European site include:

- Construction works involving earthworks and construction of the bridge crossing relating to the proposed access road to the quarry have the potential to generate pollutants, which could potentially cause impacts on the qualifying interests of the SAC.
- An accidental pollution event and/or the release of dust from the new access road during the operational phase could have the potential to affect water

quality via the surface water drainage via the unnamed stream which could potentially cause impacts on the qualifying interests of the SAC.

10.1.34. The introduction of sediment or dust and/or hydrocarbons into the surface water drainage system, which could arise during earthworks and bridge construction during construction, or from vehicles using the new haul route would be likely to have an adverse effect on fish species, should it reach the SAC. Sedimentation would increase turbidity and reduce the oxygen available to fish species. Impacts include delayed maturation, embryo malformation, suppressed gene expression. Reduction in fish numbers would reduce food availability for Otters which frequent the riverbanks. Freshwater pearl mussels, being filter feeders are particularly sensitive to sedimentation as they require well-oxygenated and silt-free substrate. Any increased sediment load could cause the substrate to clog, which would deprive them of oxygen and potentially cause death. Aquatic flora would also be adversely affected by sedimentation and the presence of hydrocarbons, which would reduce light and oxygen availability. It is considered, therefore, that aspects of the proposed development could result in impacts which would adversely affect the integrity of Blackwater River SAC in view of the conservation objectives of this site.

10.1.35. Sections 2.2.6-8 and 4.31 – 4.3.2 of the NIS, Section 7 of the EIAR, supplemented by further information and the Draft Construction and Environmental Management Plan, prepared detail mitigation measures to be employed, the majority of which are measures relating to the operation at the quarry including:

- The floor of the quarry will contain surface water which will either evaporate or infiltrate to ground. All rainwater will be collected from roofs and harvested and reused in the wheelwash at the entrance to the quarry area. Fuels will be stored in bunded areas and spill trays will be used for refuelling plant machinery. Best practice methods of storage of fuels/lubricants and protocol for dealing with accidental spillages.
- Overburden stripping will be limited in scale and duration with minimisation of periods of exposed surfaces/soil faces on overburden mounds. Surfaces will be grass seeded immediately and planted to avoid wind erosion. Stripping operations during each phase will be delayed until just prior to the

commencement of the extraction of the area. Drill rigs will have a dust extraction facility to avoid dust arising from blasting and drilling activities.

- Mobile dust suppression units will be used to moisten the surfaces of stockpiles and the internal haul road. Trucks will be required to use the wheelwash when departing the site. Vertical exhaust stacks will be used in trucks to prevent disturbance of ground dusts. Ongoing dust monitoring will be employed. Screening berms around the northern, western and southern sides of the quarry will reduce fugitive dust generation.
- Construction of access road, including earthworks and the bridging of the stream, will be restricted to dry weather periods. All surface water drainage arising from the access road will be directed to ground and not to the drainage ditch to avoid hydrocarbon spills and operational road runoff. Silt fences to be placed beside the ditch. To avoid pluvial flooding in the vicinity of the new road, the surface materials will be permeable, and the road will be constructed at an elevation above the surrounding lands.
- Environmental monitoring of surface water and groundwater will be undertaken in accordance with the CEMP, which will be agreed in advance of construction with the planning authority.

10.1.36. I consider that the proposed mitigation measures are clearly described, are reasonable, practical and enforceable. I am satisfied that the measures outlined fully address any potential impacts on the Blackwater River SAC arising from the proposed development and that this conclusion can be made on the basis of objective scientific information.

Cumulative and In-Combination Effects

10.1.37. The proposed development, together with the existing extraction area, will form a larger quarry operation and the cumulative impacts are fully assessed. The existing and permitted development in the vicinity of the site comprises mainly of single dwelling houses and agricultural developments associated with existing farms. The existing quarries in the vicinity are no longer operational and any permissions for redevelopment projects have not been implemented. I am satisfied that the proposed development in combination with other permitted developments and plans in the

area, which in themselves have been screened for AA, would not be likely to have a significant effect on any European Site.

10.1.38. Following the appropriate assessment and the consideration of mitigation measures, I can ascertain with confidence that the project would not adversely affect the integrity of Blackwater River SAC in view of the conservation objectives of this site. This conclusion has been based on a complete assessment of all implications of the project alone and in combination with plans and projects.

Appropriate Assessment Conclusion

10.1.39. The proposed development has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on the Blackwater River SAC. Consequently, an appropriate assessment was required of the implications of the project on the qualifying features of those sites in light of its conservation objectives.

10.1.40. Following an appropriate assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects, would not adversely affect the integrity of the European Site No. 002170 or any other European site, in view of the site's conservation objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable scientific doubt as to the absence of adverse effects. This is consistent with the findings of the submitted NIS.

10.1.41. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures.
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of Blackwater River SAC.

11.0 Recommendation

Having regard to the foregoing I recommend that permission for the above described development be granted for the following reasons and considerations subject to conditions.

12.0 Reasons and Considerations

In coming to its decision, the Board had regard to:

(a) the National Planning Framework issued by the Department of Housing, Planning and Local Government in February 2018, relating to the extractive industry including National Policy Objective 23,

(b) the provisions of the Guidelines for Planning Authorities on Quarries and Ancillary Activities issued by the Department of the Environment, Heritage and Local Government in 2004,

(c) the policies set out in the Cork County Development Plan 2014 relating to the extractive industry,

(d) the pattern of development in the area,

(e) the range of mitigation measures set out in the documentation received, including the Environmental Impact Assessment Report, Natura Impact Statement and Further Information,

(f) the planning history of the site,

(g) the submissions made in connection with the planning application and appeal.

Appropriate Assessment: Stage 1:

The Board considered the Natura Impact Statement and all the other relevant submissions and carried out both an appropriate assessment screening exercise and an appropriate assessment in relation to the potential effects of the proposed development on designated European Sites. The Board agreed with and adopted the screening assessment carried out and conclusions reached in the Inspector's report that the Blackwater River SAC (site code 002170) is the only European Site in

respect of which the proposed development has the potential to have a significant effect.

Appropriate Assessment: Stage 2:

The Board considered the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development for the aforementioned European Site in view of the site's Conservation Objectives. The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment. In completing the Appropriate Assessment, the Board considered, in particular, the following:

i. the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,

ii. the mitigation measures which are included as part of the current proposal, and

iii. the Conservation Objectives for the European Sites.

In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Sites, having regard to the site's Conservation Objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the site's Conservation Objectives.

Environmental Impact Assessment

The Board completed an environmental impact assessment of the proposed development, taking into account:

(a) the nature, scale and extent of the proposed development,

(b) the environmental impact assessment report and associated documentation submitted in support of the planning application,

(c) the submissions from the planning authority, prescribed bodies, the appellants and the observers in the course of the application, and

(d) the Inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment.

The Board agreed with the examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submissions made in the course of the application.

The Board considered, and agreed with the Inspector's reasoned conclusions, that the main significant direct and indirect effects of the proposed development on the environment are as follows:

Population and Human Health - impacts arising from emissions of dust, noise and vibration during operation, with potential for nuisance to sensitive residential receptors proximate to the site. Such impacts are proposed to be mitigated by measures to reduce and control the emissions in the first instance and thereafter by the adoption of specific measures, including those forming part of the operation of the development including monitoring proposals.

Biodiversity – impacts arising from extraction activities including noise and vibration from blasting, removal of scrub and existing vegetation. Such impacts are proposed to be mitigated by measures to avoid habitat loss, disturbance/displacement, controls in terms of timing and location of blasting and clearance of scrub and vegetation, and monitoring proposals.

Water – impacts on surface water and groundwater will be minimised by the layout and design of the extraction area which will not interfere with the water table. Impacts on surface water from the construction and use of the proposed access route. Such impacts are proposed to be mitigated by specific measures to control the quality of the discharge including a water management system with earthworks and bridge crossing works conducted in dry weather, installation of silt fences and all

water directed to ground. To avoid pluvial flooding in the vicinity of the new road, the surface material will be permeable and the road will be at an elevation above surrounding lands. Surface water monitoring of the discharge waters and ground water monitoring will be carried out.

12.1.1. In conclusion, having regard to the above identified significant effects, I am satisfied that the proposed development would not have any unacceptable direct or indirect impacts on the environment, subject to the implementation of the mitigation measures and any conditions recommended in section 13 of this report.

The Board completed an Environmental Impact Assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures set out in the Environmental Impact Assessment Report, and subject to compliance with the conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions of the Inspector. The Board is satisfied that this reasoned conclusion is up to date at the time of taking this decision.

Proper Planning and Sustainable Development:

Having regard to nature and extent of the development and to the acceptability of the environmental impacts as set out above, it is considered that, subject to compliance with the conditions set out below, the proposed lateral extension of the existing extraction area would be in accordance with the provisions of the current Cork County Development Plan, would not seriously injure the visual or residential amenities of the area, would not be prejudicial to public health and would be acceptable in terms of traffic safety and convenience of road users. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

13.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars submitted the 20th day of December 2019 and on the

16th day of March 2020, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. The duration of permission shall be for a period of 15 years from the date of this Order. The site shall be fully restored within two years of this date unless a fresh grant of planning permission has been made for continued operation.

   Reason: In the interests of clarity and the proper planning and sustainable development of the area.

3. The proposed development shall be amended as follows: -

   (a) A revised comprehensive rehabilitation and landscape plan which shall include the retention of the existing berms and tree planting along the site boundaries of the main quarry site, as shown on the landscape plans lodged on 18/07/19 and 20/12/19. These landscape features shall be retained in their entirety and in perpetuity and the berms shall not be removed, disturbed or regraded.

   (b) A sod and stone hedgerow, with hedge plants of native species and varieties, shall be reinstated along the public road at the site of the new entrance from the L-1201-57, within the first planting season following completion of quarrying operations, unless otherwise agreed with the planning authority.

   Revised drawings showing compliance with these requirements shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In the interest of the residential and visual amenity of the area and of traffic safety and convenience.

4. No extraction shall take place below the level of the water table.

   Reason: To protect groundwater in the area.

5. All mitigation and monitoring commitments identified in the Environmental Impact Assessment Report, the Natura Impact Statement and other particulars submitted with the application and as amended in the Further Information submitted on the 20th day of December 2019 and on the 16th day of March 2020 shall be implemented in full as part of the proposed development, except as may otherwise be required in order to comply with the following conditions.

   Reason: In the interest of clarity and protection of the environment during the construction and operational phases of the proposed development.

6. Surface water run-off from the new access road shall not be discharged directly to any watercourse and shall not be permitted to flow onto the public road. All such water shall be trapped and directed to a constructed percolation area with temporary settling pond as required. A detailed drainage management plan for the entrance and access road shall be submitted to and agreed in writing with the planning authority prior to the commencement of development.

   Reason: To protect water quality and prevent flooding in the area.

7. (a) The quarry and all activities occurring therein, shall only operate between 0700 hours and 1800 hours, Monday to Friday and between 0700 hours and 1400 hours on Saturdays. No activity shall take place outside of these hours or on Sundays or public holidays.

   (b) No processing (screening and crushing) machinery shall be operated or overburden removal shall be undertaken within any part of the site before 0800 hours on any day.

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

8. The removal of scrub habitat to provide access from the existing quarry pit to the new quarry site shall be carried out only between the months of September and February and under the supervision of an Ecologist. Details of the methodology to be used shall be submitted for the written agreement of the planning authority prior to the commencement of development.

Reason: In the interest of biodiversity.

9. The landscaping scheme shown on Drawing No. 103 PL3 and in the Planting Summary, as submitted to the planning authority on 20th December 2019, shall be carried out within the first planting season following substantial completion of the preparatory earthworks. In addition to the proposals in the submitted scheme, the following information shall be submitted to the planning authority

   (a) Planting proposals for the existing and proposed berms, which shall comprise native species only.

   (b) Planting proposals to mitigate the planned removal of 0.36ha of scrub woodland habitat from the site, which shall comprise native species only.

   (c) Details of long-term monitoring and maintenance for areas of new and supplementary planting.

   All planting shall be adequately protected from damage until established. Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the commencement of the development shall be replaced within the next planting season with others of similar size and species unless otherwise agreed in writing with the planning authority.

   Reason: In the interest of residential and visual amenity.

10. A comprehensive plan for the restoration of the entire quarry following cessation of the quarrying works shall be submitted to, ad agreed in writing with, the planning authority prior to commencement of development. This plan shall include proposals for re-use of the quarry and measures to ensure public safety therein. The developer shall commence implementation of the agreed site restoration plan within the area of the site within one month of cessation of extraction in this area and shall have completed this part of the plan within 12 months of commencement.

    Reason: In the interests of public amenity and public safety.

11. Vehicles transporting material to and from the site, and accessing the site, shall use the L1201 only and Heavy Goods Vehicles (HGVs) associated with the quarry operation shall not be allowed to use Local Road L5302. Access to the R580 shall be to the north along the L1201 and access to the N72 shall be to the south along the L1201 in accordance with the details of the haul routes submitted with the application. In addition, the following road safety matters as set out in the documentation received by the planning authority on the 18th day of July 2019 and on the 20th day of December 2019 shall be implemented -

    (a) Installation of wheel washes.

    (b) Recommendations of the Road Safety Audit.

    (c) Signage on either side of the entrance to warn motorist to the presence of a quarry entrance.

    Reason: In the interest of traffic safety and in order to mitigate the extent of maintenance and upgrading works of the local road network necessitated by vehicular traffic accessing the site.

12. The existing boundary hedge along the L1201 shall be retained except to the extent that its removal is necessary to provide for the entrance to the site. Sight distances of 80 metres shall be provided in each direction for a centre point 4.5 metres back from the public road edge. No vegetation or structure shall exceed 1 metre in height over the public road within the sight triangle.

Any utility poles within the sight triangle or surface manholes in front of the entrance shall be relocated to the satisfaction of the planning authority prior to the commencement of development.

Reason: In the interests of traffic safety and visual amenity.

13. All proposed screening measures, including improvements to boundaries and the provision of any fencing or berms, shall be completed prior to the commencement of extraction on the site. The timescale for the construction and planting of the berms along the boundaries of the extraction area shall be submitted to the planning authority for written agreement prior to commencement of development.

    Reason: In the interest of the residential and visual amenities of the area.

14. A buffer zone of 20 metres shall be established within the development site from archaeological monuments CO024-252, CO024-254 and CO024-088 prior to the commencement of development by a suitably qualified archaeologist. Details of the delineation, layout, fencing and signage of the buffer zones shall be submitted for agreement in writing to the planning authority prior to the establishment of the buffer zones. No construction works, stockpiling of materials, topsoil etc, or any development or landscaping shall take place within the buffer zones. No trees or plants shall be removed from the buffer zones. Following the completion of development, the buffer zones shall remain in place until the completion of the development on the site.

    Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

15. The developer shall facilitate the preservation, recording and protection of archaeological materials or features which exist within the site, with particular reference to CO024-253. In this regard, the developer shall notify the National Monuments Service and the planning authority in writing at least four weeks in advance of the commencement of development works on the site. The developer shall also comply with the following requirements :

(a) An archaeological excavation shall be carried out on the site under licence from the National Monuments Service of the Department of Culture, Heritage & the Gaeltacht of CO024-253 and a minimal area of 8 metres around it. This area shall be extended if further archaeological material is identified and should any archaeological features be identified in the monitoring following written approval for same with the National Monuments Service and the planning authority. The archaeological excavation shall be carried out prior to commencement of development or at such later date as may be agreed in writing with the planning authority.

(b) The work shall be conducted by the archaeologist in accordance with a Method Statement to be agreed with the National Monuments Services and the planning authority. The archaeologist shall advise on such measures as may be necessary to ensure that any damage to the remaining archaeological material is avoided or minimised. No ground works are to take place on the site in the absence of the archaeologist

(c) The development shall not proceed until the National Monuments Service and the planning authority have received a preliminary Archaeological Excavation Report and written permission to commence works has been issued.

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, it is considered reasonable that the developer should facilitate the preservation by record of CO024-253 and any other archaeological features or materials which may exist within it.

16. The developer shall facilitate the preservation, recording and protection of archaeological materials or features which 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 hydrological and geotechnical investigations) relating to the proposed development,

(b) Employ a suitably-qualified archaeologist who shall monitor all site investigations and other 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 and to secure the preservation and protection of any remains that may exist within the site.

17. The development shall be operated and managed in accordance with a revised Environmental Management System (EMS), which shall be submitted by the developer to, and agreed in writing with, the planning authority within three months of the date of this order. This shall include, inter alia, the following:

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

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

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

(d) Proposals for the bunding of fuel and lubrication storage areas and details of emergency action in the event of accidental spillage.

(e) Details of safety measures for the land above the quarry, to include warning signs and stockproof fencing.

(f) Management of all landscaping

(g) Monitoring of ground and surface water quality, levels and discharges, noise and air emissions.

(h) 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.

18. The noise levels generated during the operation of the quarry shall not exceed 55dBA (30 minutes LAR) when measured at the nearest noise sensitive receptor between 0800 hours and 1800 hours, Monday to Friday and between 0800 hours and 1400 hours on Saturdays, excluding public and bank holidays. Noise levels shall not exceed 45dBA (15 minute Leq) at any other time. When measuring specific noise, the time shall be any one period during which the sound emission for the quarry is at its maximum level.

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

19. All sound measurement shall be carried out in accordance with ISO Recommendation 1996:2007: Acoustics-Description and Measurement of Environmental Noise Levels as amended.

Reason: In the interests of clarity.

20. (a) The frequency of blasting shall not be more than one per month, save in accordance with any revised blasting schedule as may be approved in writing by the planning authority.

(b) Blasting operations shall take place only between 1000 hours and 1800 hours, Monday to Friday, and shall not take place on Saturdays, Sundays or public holidays. Monitoring of the noise and vibration arising from blasting and the frequency of such blasting shall be caried out at the developer's expense and by an independent contractor who shall be agreed in writing with the planning.

(c) Prior to the firing of any blast, the developer shall give notice of his intention to the occupiers of all dwellings within 500 metres of the site. An audible alarm for a minimum period of one minute shall be sounded. This alarm shall be of sufficient power to be heard at all such dwellings.

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

21. (a) Vibration levels from blasting shall not exceed a peak particle velocity of 12 mm/second, when measured in any three mutually orthogonal directions at any sensitive location. The peak particle velocity relates to low frequency vibration of less than 40 hertz where blasting occurs no more than once in seven continuous days. Where blasting operations are more frequent, the peak particle velocity limit is reduced to 8 millimetres per second. Blasting shall not give rise to air overpressure values at sensitive locations which are in excess of 125 dB (Lin)max peak with a 95% confidence limit. No individual air overpressure value shall exceed the limit value by more than 5 dB (Lin).

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

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

22. (a) Dust levels at the site boundary shall not exceed 350 milligrams per square metre per day averaged over a continuous period of 30 days (Bergerhoff Gauge). Details of a monitoring programme for dust shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Details to be submitted shall include monitoring locations, commencement date and the frequency of monitoring results, and details of all dust suppression measures.

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

Reason: To control dust emissions arising from the development and in the interest of the amenity of the area.

23. (a) The developer shall monitor and record groundwater, surface water flow, noise, ground vibration, and dust deposition levels at monitoring and recording stations, the location of which shall be agreed in writing with the planning authority prior to commencement of development. Monitoring results shall be submitted to the planning authority at monthly intervals for groundwater, surface water, noise and ground vibration.

(b) On an annual basis, for the lifetime of the facility (within two months of each year end), the developer shall submit to the planning authority five copies of an environmental audit. Independent environmental auditors approved of in writing by the planning authority shall carry out this audit. This audit shall be carried out at the expense of the developer and shall be made available for public inspection at the offices of the planning authority and at such other locations as may be agreed in writing with the authority. This report shall contain:

(i) A written record derived from the on-site weighbridge of the quantity of material leaving the site. This quantity shall be specified in tonnes.

(ii) An annual topographical survey carried out by an independent qualified surveyor approved in writing by the planning authority. This survey shall show all areas excavated and restored. On the basis of this, a full materials balance shall be provided to the planning authority.

(iii) A record of groundwater levels measured at monthly intervals.

(iv) A written record of all complaints, including actions taken in response to each complaint.

(c) In addition to this annual audit, the developer shall submit quarterly reports with full records of dust monitoring, noise monitoring, surface water quality monitoring, and groundwater monitoring. Details of such information shall be agreed in writing with the planning authority. Notwithstanding this requirement, all incidents where levels of noise or dust exceed specified levels shall be notified to the planning authority within two working days. Incidents of surface or groundwater pollution or incidents that may result in groundwater pollution, shall be notified to the planning authority without delay.

(d) Following submission of the audit or of such reports, or where such incidents occur, the developer shall comply with any requirements that the planning authority may impose in writing in order to bring the development in compliance with the conditions of this permission.

Reason: In the interest of protecting residential amenities and ensuring a sustainable use of non-renewable resources.

24. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2) (c) of the Planning and Development Act 2000, as amended, in respect of the proposed upgrading and maintenance works on local road L1201 in the vicinity of the new entrance, the junction between the L1201-57 and LP1201-31 and to the junction with the LP1203 to the south. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála for determination. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

Mary Kennelly
Senior Planning Inspector

3rd December, 2021