

# CHAPTER 1

## INTRODUCTION

Lagan Materials Ltd.

Aghamore Near, Aghamore Far and Carrownamaddoo townlands, County Sligo

EIAR – Recommencement and Deepening of Existing Quarry and Associated Processing Area

May 2021

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## INTRODUCTION

- 1.1 This Environmental Impact Assessment Report (EIAR) provides supporting information to accompany a planning application to Sligo County Council submitted by Lagan Materials Ltd. in respect of their existing quarry and processing area at Aghamore Near, Aghamore Far and Carrownamaddoo townlands, Co. Sligo.
- 1.2 The application site extends to c. 22.5 hectares – refer to Figures 1.1 and 1.2.
- 1.3 The proposed development being applied for under this current planning application is shown on **Figure 2-1** and is similar to that previously granted under Sligo County Council Ref. No 02/271 and will consist of:
- Recommencement of quarry operations within the previously permitted quarry extraction area (c. 10.9ha);
  - Deepening of the previously permitted quarry area by 2 no. extractive benches from c. -21m OD to -50m OD;
  - Recommencement of aggregate processing (crushing and screening) within the existing processing area, located to the east of the local road that bisects the site;
  - The provision of a settlement lagoon (c. 2,830m<sup>2</sup>);
  - The provision of 2 no. wheelwashes;
  - The Provision of a double stacked portacabin office;
  - The Provision of a wastewater treatment system;
  - Additional stockproof / trespass proof boundary fencing;
  - All within an application area of c. 22.5 Ha.
- 1.4 The application is made in accordance with the requirements of the Planning and Development Regulations 2001-2015 (as amended).

## Background

- 1.5 A Planning Application was submitted to Sligo County Council (Plan File Ref. No. 18/345: ABP Ref. 305821-19) in August 2018 for similar development to that proposed as part of this application. In October 2019 Sligo County Council granted planning permission for the development (subject to 23 no. conditions). 2 no. third party appeals of the decision by Sligo County Council to grant permission for the proposed quarry development were made to An Bord Pleanala (ABP-305821-19).
- 1.6 An Bord Pleanala refused permission for the proposed development on the 30<sup>th</sup> June 2020 for the following 2 no. reasons:

1. *On the basis of the information provided with the planning application and the appeal, including the Natura impact statement, the Board is not satisfied that the proposed development either individually, or in combination with other plans or projects would not adversely affect the integrity of Lough Gill Special Area of Conservation (Site Code: 001976), Cummeen Strand Special Protection Area (Site Code: 004035), Cummeen Strand/Drumcliff Bay (Sligo Bay) Special Area of Conservation (Site Code: 000627), Ballysadare Bay Special Protection Area (Site Code: 004129) and Ballysadare Bay Special Area of Conservation (Site Code: 000622), in view of the conservation objectives of these sites. The Board noted, in particular, the absence of information in relation to the impact of reduced groundwater resulting from dewatering arising from the proposed development and to the cumulative impacts of the proposed development and the adjacent associated processing area. In such circumstances, the Board is precluded from granting permission.*
2. *Notwithstanding local planning policy supporting quarrying on the site, having regard to the nature, scale and extent of the proposed development, and the inadequacy of information to comprehensively identify and demonstrate the cumulative impacts on the environment of the proposed development and the adjacent associated processing area, in particular in relation to water quality and biodiversity, it is considered that, in the absence of such adequate information, the proposed development could be detrimental to receiving freshwater habitats and could be prejudicial to public water supplies sourced from Lough Gill and could lead to loss or disturbance of habitat and/or species in the adjacent associated processing area. It has not, therefore, been demonstrated that the proposed development would not be prejudicial to public health and be contrary to the proper planning and sustainable development of the area.*

1.7 The Applicant, and their advisors, have reviewed Sligo County Council's decision, An Bord Pleanála's decision and associated Inspectors Report. This revised planning application and EIAR has been prepared to comprehensively address the reasons for refusal stated by the Board.

## Additional Information Provided

1.8 A heading titled 'Additional Information' has been provided, where relevant, in each Chapter of this EIAR to identify the additional surveys / site investigations, field work and assessments that have been carried out to address the previous reasons for refusal associated with Plan File Ref. No. 18/345 / ABP Ref. 305821-19.

1.9 In summary, the following additional information has been included with this application to address the previous reasons for refusal:

- The processing area where aggregate processing (crushing and screening) will be undertaken (located on the eastern side of the local road that bisects the site) is included within the planning application area and has been fully assessed in the EIAR and NIS;
- An updated hydrogeological assessment has been undertaken by TMS Environment Ltd. that includes the following:
  - A detailed description of Sligo's regional hydrological and hydrogeological regimes and Karst features has been provided from Suzanne Tynan of Tynan Environmental;

- In response to the Irish Water response to scoping, Dr. Pamela Bartley of Hydro-G Hydrogeological & Hydrological Consulting was invited to assist in the impact assessment for the potential threat posed to the Public Water Supply Sources (PWSS's) abstracted each day from Lough Gill;
  - Dr. Pamela Bartley of Hydro-G Hydrogeological & Hydrological Consulting was also contracted by Lagan to carry out a peer review of the Water Chapter of the EIAR;
  - Installation of 6 additional boreholes within the quarry area;
  - Installation of 5 new boreholes within the processing area;
  - Installation of dataloggers (level loggers) in the new wells to monitor groundwater levels;
  - Further surface water and groundwater sampling;
  - A geophysical survey of the existing quarry floor and land to the northeast of the quarry was carried out;
  - Two biological assessments of the Aghamore Stream have been carried out;
  - Proposed water management plan for the processing area.
- A Natura Impact Statement (NIS) has been prepared to assess the impact of the proposed development, including the cumulative impacts of the quarry and the associated processing area on designated sites.
  - This Environmental Impact Assessment Report has been updated to comprehensively assess the cumulative impacts on the environment of the quarry and the associated processing area, with particular regard to water quality and biodiversity.
  - In addition to the quarry and associated processing area, the cumulative impact assessment includes the asphalt production plant which is located within the landholding.

## THE SITE

### Site Location

- 1.10 The lands which are the subject of this application comprise c. 22.5 hectares and are located in the townlands of Aghamore Near, Aghamore Far and Carrownamaddoo, Co. Sligo (refer to Figure 1.1). The proposed development is located wholly within the existing quarry and associated processing area (located on the eastern side of the local road that bisects the application site) and no lateral extension of the development is proposed.
- 1.11 The application site is located near two regional roads, the R287 to the South and the R284 to the East. The site occupies ground with elevations ranging between -21m OD (Quarry Floor) and 34m OD. The lower quarry floor is currently at -21 m OD, with the previous planning permission (Plan File Ref. No 02/271) authorising extraction to -34.5m OD. The application area forms the existing

quarry area, along with the associated processing area located on the eastern side of the local road that bisects the application site. The processing area occupies ground with elevations at c. 15 mOD.

## Site Description

- 1.12 The quarry operation will comprise of the extraction of limestone using conventional blasting techniques and the processing (crushing and screening) of the fragmented rock using mobile plant and equipment to produce aggregates.
- 1.13 The application site relates to the quarry extraction area, as previously permitted under Planning Ref. No. 02/271, and the processing area located on the eastern part of the application site. Activities on the eastern part of the landholding commenced in the 1950's, with a further planning permission being granted for these lands and associated plant in 1965 (Plan File Ref. No. 285).
- 1.14 Material extracted from the quarry area will be processed within the quarry void using mobile processing plant and transported to the processing area for further processing using mobile processing plant. The processed material will then be stockpiled pending transport off-site to the local and regional market or used in the existing asphalt plant.
- 1.15 Existing ancillary facilities at the site include the weighbridge & weighbridge office and a garage / workshop. These facilities are located within the processing area on the eastern part of the application site.
- 1.16 An existing asphalt plant is located adjacent to the processing area – refer to Figure 1.2.
- 1.17 Concrete production was historically carried out at the site by the previous owner and operator, CEMEX (ROI) Ltd. (Cemex). This activity ceased in 2014 and the concrete production plant located within the landholding is now obsolete. The applicant does not intend to undertake concrete production at the site and as such this activity has not been assessed as part of the cumulative impact assessment within the relevant chapters of the Environmental Impact Assessment Report that accompanies this planning application. The cumulative impact assessment includes the quarrying activities, processing activities and asphalt production activities.

## Site Access

- 1.18 The site is located in close proximity to Sligo Town, being approximately 5 km southeast and is accessed by the R284 and the R287 regional roads via the Drumiskabole crossroads and the Aghamore crossroads respectively.
- 1.19 The quarry and the processing area are located on opposite sides of a local road. Material from the quarry will be transported by dump trucks to the processing area via an existing access that forms a crossroads with the access to the quarry.
- 1.20 There is a second separate access to the processing area used mainly by HGV traffic delivering processed material to market and for staff accessing the site. This access has been improved with road widening and upgrade works being made under Plan File Ref. No. 02/271 (see Condition no. 9).

- 1.21 All HGV traffic accesses and egresses the site via site office / weighbridge / wheelwash (proposed).

## Surrounding Land-Use

- 1.22 The quarry area is surrounded by agricultural lands (improved agricultural grassland and arable). There are numerous industrial uses within 1 km of the quarry.
- 1.23 Residences within the general area consist of one-off rural houses, farmsteads with some ribbon development along the local road network – refer to EIAR Chapter 4 Population and Human Health.

## THE APPLICANT

- 1.24 The applicant, Lagan Materials Limited ('Lagan'), is part of Breedon Group plc. Breedon is a public company with ordinary shares traded on the Alternative Investment Market (AIM). Throughout the UK and Ireland, the company employs approximately 3,000 people and operates 2 cement plants, 70 quarries, 40 asphalt plants, 200 ready-mixed concrete plants, 9 concrete and clay products plants, 4 contract surfacing businesses, 6 import/export terminals and 2 slate production facilities.
- 1.25 Lagan and the wider Breedon Group are fully committed to sustainability and social responsibility. This commitment is one of the six pillars of the company's growth strategy, as publicised in their most recent Annual Report. In September 2020 the company made a commitment which aims to achieve net zero carbon emissions by 2050.
- 1.26 In June 2020, the company appointed their first Group Head of Sustainability, who has retained responsibility for developing and implementing an effective sustainability strategy to shape the Group's practices and performance, ultimately improving the sustainability of their operations, products and services.
- 1.27 The company has a "Sustainability Working Group", which aims to ensure that the company can sustain long-term success, ensuring positive social, environmental and/or economic impact through their actions and activities. The Sustainability Group assists the company's Executive Committee in its oversight of the company's compliance with applicable legal and regulatory requirements in relation to sustainability and in monitoring the decisions and actions of management in achieving the company's aspiration to be a sustainable organisation.
- 1.28 The company recently published new policy statements covering the key pillars of sustainability including Environment, Biodiversity, Social Responsibility, Health, Safety & Wellbeing and Responsible Resource Use. The policy statements are enclosed in Appendix 1.1.

## EIA SCREENING

- 1.29 Part 1 and Part 2 of Schedule 5 of the Planning and Development Regulations 2001 (as amended) set out the forms of development that require an environmental impact assessment report (EIAR).
- 1.30 Paragraph 19 of Part 1 of Schedule 5 states that the following form of development requires an EIA

*"Quarries and open-cast mining where the surface of the site exceeds 25 hectares.*

1.31 Paragraph 22 relates to changes or extensions. It states:

*“Any change or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any set out in this Annex.”*

1.32 Paragraph 2 of Part 2 of Schedule 5 refers to extractive industry and part (b) of that section states that the following requires an EIA

*“Extraction of stone, gravel, sand or clay, where the area of extraction would be greater than 5 hectares.”*

1.33 In addition, paragraph 13(a) of Part 1 requires EIA in respect of:

*“Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension refer to in Part 1) which would:-*

- i. result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule and*
- ii. result in an increase in size greater than –  
25 per cent, or  
an amount equal to 50 per cent of the appropriate threshold,  
whichever is the greater.*

1.34 The proposed development relates to the recommencement of operations and deepening of an existing quarry within an application area of c. 22.5 ha, which also includes the existing processing area. The extraction area of the quarry is greater than 5 hectares. On this basis the extraction area of the quarry exceeds the area stated under Part 2, and an EIAR is therefore required.

## EIA SCOPING

1.35 In preparing this Environmental Impact Assessment Report a Pre-planning Consultation document was issued to the following NGOs and stakeholders in September 2020 (refer to Table 1.1 (summary) and Appendix 1.2 for responses):

- Sligo County Council (Planning and Environment Sections);
- Development Applications Unit at the Department of Culture, Heritage and the Gaeltacht;
- An Taisce;
- An Chomhairle Oidhreachta (The Heritage Council);
- Inland Fisheries Ireland;
- Geological Survey of Ireland;



- Environmental Protection Agency (EPA);
- Transport Infrastructure Ireland (TII);
- Uisce Éireann/Irish Water;
- Health Service Executive (HSE).

1.36 Pre-planning consultation meetings were held between officials of Sligo County Council and representatives of SLR Consulting and Lagan Materials Ltd. on:

- 4<sup>th</sup> September 2020;
- 19<sup>th</sup> November 2020;
- 7<sup>th</sup> November 2020.

**Table 1 - 2**

**Pre-Submission Consultation Responses to the Consultation Letter Issued 29<sup>th</sup> September 2020  
– refer to Appendix 1.2 for full consultation responses**

<b>Consultee</b>	<b>Date of Response</b>	<b>Response/Issues Raised</b>	<b>Chapter of the Revised EIS Where Issues Raised are Addressed</b>
<b>Dept. of Tourism, Culture, Arts, Gaeltacht, Sport and Media</b>	<b>30<sup>th</sup> November 2020</b>	<ul style="list-style-type: none"> <li>• Consult the NPWS website;</li> <li>• Recommendations for completing the EIAR are provided, specifically in relation to Ecology surveys;</li> <li>• It is recommended that a Construction Management Plan is provided;</li> <li>• Recommendations for carrying out an Appropriate Assessment are provided.</li> </ul>	<b>Chapter 2 (Project Description) and Chapter 5 (Biodiversity) and the Natura Impact Statement</b>
<b>Geological Survey of Ireland</b>	<b>15<sup>th</sup> October 2020</b>	<ul style="list-style-type: none"> <li>• There are no County Geological Sites (CGS) in the vicinity of the quarry. With the current plan, there are no envisaged impacts on the integrity of current CGSs by the proposed development.</li> <li>• The quarry is underlain by a 'Regionally Important Aquifer – Karstified (conduit)'. The Groundwater</li> </ul>	<b>Chapter 6 (Land Soils and Geology) and Chapter 7 (Water)</b>

- Vulnerability map indicates the area covered is variable. We would therefore recommend use of the
- Groundwater Viewer to identify areas of High to Extreme Vulnerability and 'Rock at or near surface' which can be used to inform appropriate mitigation measures.
- We recommend using the Geological Survey Ireland's [GWFlood](#) tools.
- We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.
- Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out.

**Transport Infrastructure Ireland (TII)** 20<sup>th</sup> October 2020

The developer should have regard, *inter alia*, to the following;

- identify the methods/techniques proposed for any works traversing/in proximity to the national road network in order to demonstrate that the development can proceed complementary to safeguarding the capacity, safety and operational efficiency of that network.
- Consultations should be had with the relevant Local Authority/National Roads Design Office with regard to locations of existing and future national road schemes.
- Clearly identify haul routes proposed and fully assess the network to be traversed.
- Traffic and Transport Assessment be carried out in accordance with relevant guidelines.
- TII Standards should be consulted to determine the requirement for Road Safety

		<p>Audit (RSA) and Road Safety Impact Assessment (RSIA).</p> <ul style="list-style-type: none"> <li>The developer, in conducting Environmental Impact Assessment, should have regard to TII Environment Guidelines that deal with assessment and mitigation measures for varied environmental factors and occurrences. In particular;</li> <li>TII's Environmental Assessment and Construction Guidelines, including the <i>Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes</i> (National Roads Authority, 2006),</li> <li>The EIAR should consider the Environmental Noise Regulations 2006 (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority.</li> </ul>	
Sligo County Council	4 <sup>th</sup> September 2020	<ul style="list-style-type: none"> <li>10 year permission</li> <li>Consultation with Irish Water, Inland Fisheries Ireland and NPWS required;</li> <li>Follow on consultation required.</li> </ul>	Refer to Chapters 2, 5 and 7.
Inland Fisheries	1 <sup>st</sup> December 2020	<ul style="list-style-type: none"> <li>This site is directly hydrologically connected to Lough Gill Special Area of Conservation;</li> </ul> <p>The assessment of potential impacts should include the following:</p> <ul style="list-style-type: none"> <li>Water quality</li> <li>Surface water hydrology and Ground water hydrology</li> <li>Fish spawning and nursery areas</li> <li>Passage of migratory fish</li> <li>Areas of natural heritage importance including geological heritage sites</li> </ul>	Refer to Chapter 5, Chapter 7 and the Natura Impact Statement.

- Biological diversity
- Ecosystem structure and functioning
- Sport and commercial fishing and angling
- Amenity and recreational areas
- Sediment transport

The following information / assessment will also be required:

- hydrological impacts of any proposed dewatering of the quarry and subsequent discharge to the Aghamore Stream must be assessed – including an assessment of the erosion and sediment regime within the channel and the impact on the salmonid spawning substrate downstream;
- Impact of proposed discharge on flooding in the area;
- Demonstrate that there will be no negative impact on the Aghamore stream.

Information in relation to the proposed site infrastructure, Planning History, in combination effects and invasive species is also requested.

Irish Water	7 <sup>th</sup> January 2021	<ul style="list-style-type: none"> <li>• All risks shall be mitigated to the IW lake source to ensure there is no net loss of water to the lake and the water quality is not impaired;</li> <li>• clearly demonstrate there is no net loss of water to the lake and that the water quality is not impaired and that appropriate mitigations are in place to ensure protection of the drinking water source;</li> <li>• There are a number of comments and queries relating to hydrogeology and water quality &amp; treatability and the risks to IW which need to be addressed ahead of any planning application.</li> </ul>	Refer to Chapter 7 and the Natura Impact Statement.
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- 1.37 Other consultations and informal discussions held by contributors in undertaking their environmental impact assessments are detailed in the specialist environmental chapters of the EIAR, together with details of relevant archives and documentation held by state agencies and organisations.

## DIFFICULTIES ENCOUNTERED WITH EIAR COMPILATION

- 1.38 This Environmental Impact Assessment Report was compiled on the basis of published regional and local data and site-specific field surveys. No difficulties were encountered in compiling the required information.

## ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR)

- 1.39 An Environmental Impact Assessment Report (EIAR) *“means a statement of the effects, if any, which the proposed development, if carried out, would have on the environment”*. As such, it is a systematic analysis and assessment of the potential effects of a proposed project on the receiving environment.
- 1.40 The principal objectives of an Environmental Impact Assessment Report are to:
- Identify and / or predict the significant effects impacts of a development.
  - Identify what mitigation measures should be incorporated into the development to eliminate or reduce the perceived impacts.
  - Interpret and communicate the above information on the impact of the proposed development, in both technical and non-technical terms.
  - Assist the Local Planning Authority in the decision making process with respect to the associated planning application.

### Format of the Environmental Impact Assessment Report (EIAR)

- 1.41 To facilitate clarity, this EIAR has been prepared in accordance with the Environmental Protection Agency (EPA) Guidelines (Draft – May 2017). The EIAR is sub divided into fifteen parts. As an overview, they comprise of:

#### **Chapter 1: Introduction**

- 1.42 An introduction to the development and a brief explanation of the aims and format of the EIAR. It also identifies the various professional consultants who have contributed to this EIAR and the screening / scoping process carried out.

#### **Chapter 2: Project Description**

- 1.43 Chapter 2 provides:

- details of the physical characteristics of the whole project, including, where relevant, demolition works, the land-use requirements during construction and operation as well as other works that are integral to the project;
- the main characteristics of the operational phase of the project e.g. nature and quantity of materials and natural resources;
- an estimate, by type and quantity, of the expected residues and emissions produced during the construction, operational and restoration phases of the proposed development.

### **Chapter 3: Reasonable Alternatives**

- 1.44 Chapter 3 provides a description of the reasonable alternatives studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

### **Chapters 4 - 15**

- 1.45 These Chapters provide detailed information on all aspects of the existing (baseline) environment, identifies, describes and presents an assessment of the likely significant impacts of the proposed project on the environment, recommends mitigation and monitoring measures to reduce or alleviate these impacts and describes the residual impacts and conclusions. They are grouped under the following Chapters:

- Chapter 4: Population and Human Health
- Chapter 5: Biodiversity
- Chapter 6: Land, Soils and Geology
- Chapter 7: Water
- Chapter 8: Air
- Chapter 9: Climate
- Chapter 10: Noise and Vibration
- Chapter 11: Material Assets
- Chapter 12: Cultural Heritage
- Chapter 13: Landscape
- Chapter 14: Traffic and Transport
- Chapter 15: Interactions

- 1.46 The associated references, plates, figures and appendices are provided at the end of each Section 1 – 15.

- 1.47 A “Non-Technical Summary of the Environmental Impact Statement”, incorporating all of the above chapters, is provided as a separate and self-contained document.

## CONTRIBUTORS

- 1.48 Lagan Materials Ltd. appointed SLR Consulting Ireland to prepare this Environmental Impact Assessment Report (EIAR) in support of its Planning Application for the proposed development at Aghamore Near, Aghamore Far and Carrownamaddo townlands, Co. Sligo.
- 1.49 The contributors who have assisted in the preparation of this EIAR are identified in **Table 1-1** below. Each contributor has the appropriate qualifications, experience and competence for their topic.

**Table 1 - 3**  
**List of Contributors**

TOPIC	CONTRIBUTOR	COMPANY
Introduction	Peter Kinghan BSc, Dipl. Env. Eng., MiM, MSCSI, MRICS	SLR Consulting Ireland
Description of Development	Peter Kinghan MiM, BSc, Dipl. Env. Eng., MSCSI, MRICS	SLR Consulting Ireland
Alternatives	Peter Kinghan MiM, BSc, Dipl. Env. Eng., MSCSI, MRICS	SLR Consulting Ireland
Population and Human Health	Peter Kinghan BSc, Dipl. Env. Eng., MiM, MSCSI, MRICS	SLR Consulting Ireland
Biodiversity	Nic Faulks BSc (Hons) MSc MCIEEM	SLR Consulting Ireland
Land, Soils and Geology	John Kelly PhD, PGeo, EurGeol	SLR Consulting Ireland
Water	Craig O'Connor MSc PGeo EurGeol	TMS Environment
	Pamela Bartley PhD, MSc, BEng, Dipl.	Hydro-G
	Suzanne Tynan MSc, BSc	Tynan Environmental
Air	Aldona Binchy MSc. (Eng)	SLR Consulting Ireland

TOPIC	CONTRIBUTOR	COMPANY
Climate	Aldona Binchy MSc. (Eng)	SLR Consulting Ireland
Noise and Vibration	Aldona Binchy MSc. (Eng)	SLR Consulting Ireland
Material Assets	Peter Kinghan BSc, Dipl. Env. Eng., MiM, MSCSI, MRICS	SLR Consulting Ireland
Cultural Heritage	Dr. Charles Mount M.A., Ph.D.	Consultant
Landscape	Anne Merkle MSc, Dipl. Ing (FH) MILI	SLR Consulting Ireland
Traffic and Transport	Alan O'Reilly Chartered Engineer, BA, BAI, MSc, RSA Cert Comp, MIEI	PMCE Consultants
Co-ordination of EIA	Peter Kinghan MiM, BSc, Dipl. Env. Eng., MSCSI, MRICS	SLR Consulting Ireland

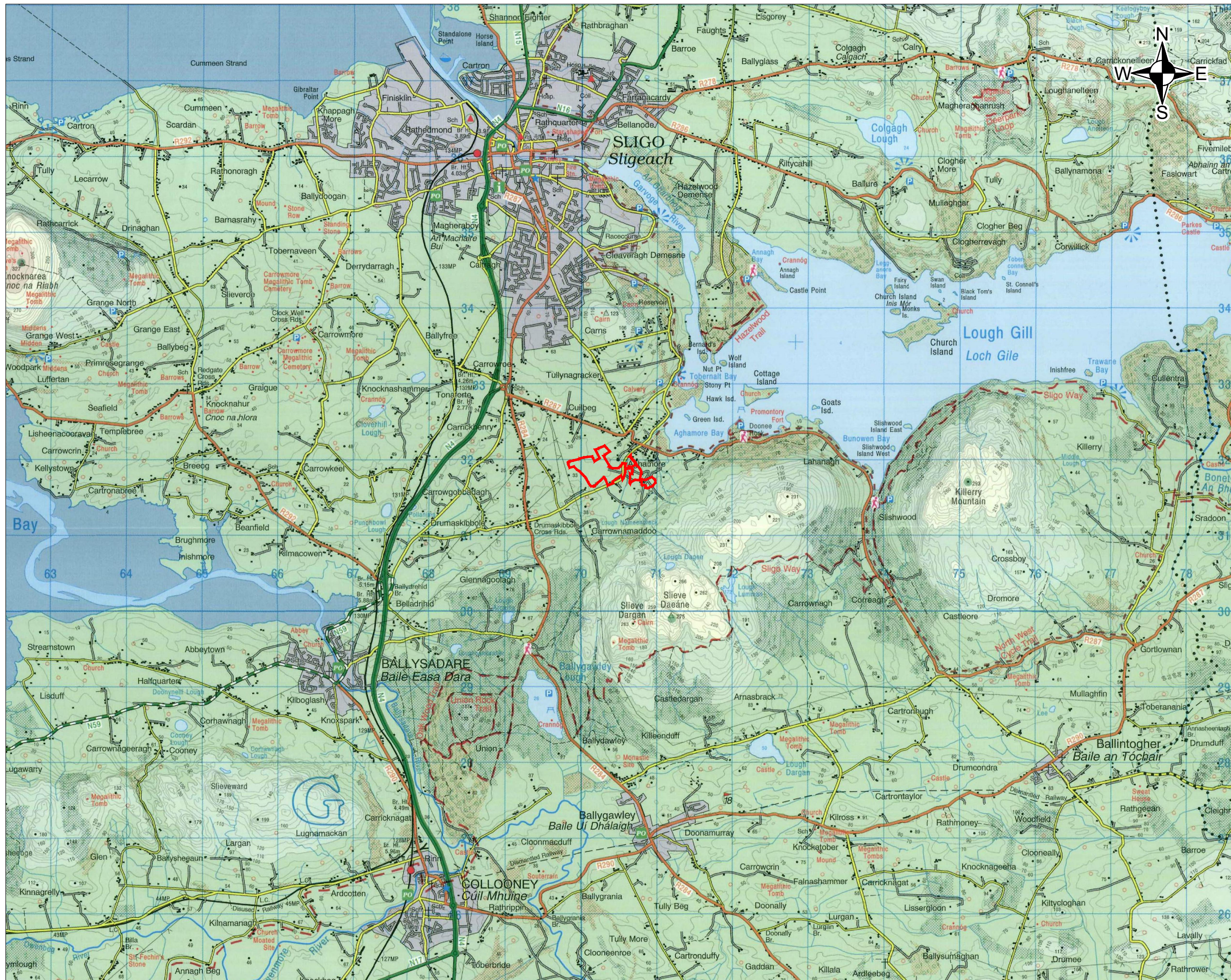
- 1.50 Each contributor has been fully briefed about the proposal and the background to it. They have also visited the site and are familiar with the local environment.
- 1.51 In addition to the contributors above, the previous planning application and associated documentation (EIAR, NIS, FI Responses and ABP submissions), An Bord Pleanála's Inspectors Report, Order and Direction along with this EIAR and associated Planning Application and NIS have been reviewed by David Mulcahy Planning Consultants Ltd.
- 1.52 SLR Consulting Ireland, formerly John Barnett and Associates, have been preparing Environmental Impact Assessment reports (previously EIS) relating to Quarry developments since implementation of the EIA Directive in 1990.



## FIGURES

Figure 1-1  
Site Location Map

Figure 1-2  
Existing Site Layout



NOTES

1. EXTRACT FROM 1:50,000 O.S DISCOVERY MAP NO. 25
2. ORDNANCE SURVEY IRELAND LICENCE NO. CYAL50167032 (C) ORDNANCE SURVEY IRELAND / GOVERNMENT OF IRELAND

LEGEND




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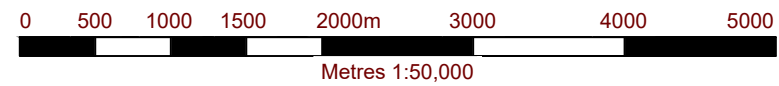
LIMESTONE QUARRY AND AGGREGATE PROCESSING YARD  
 AGHAMORE NEAR, AGHAMORE FAR AND  
 CARRONAMADDOO TOWNLANDS, CO. SLIGO

SITE LOCATION

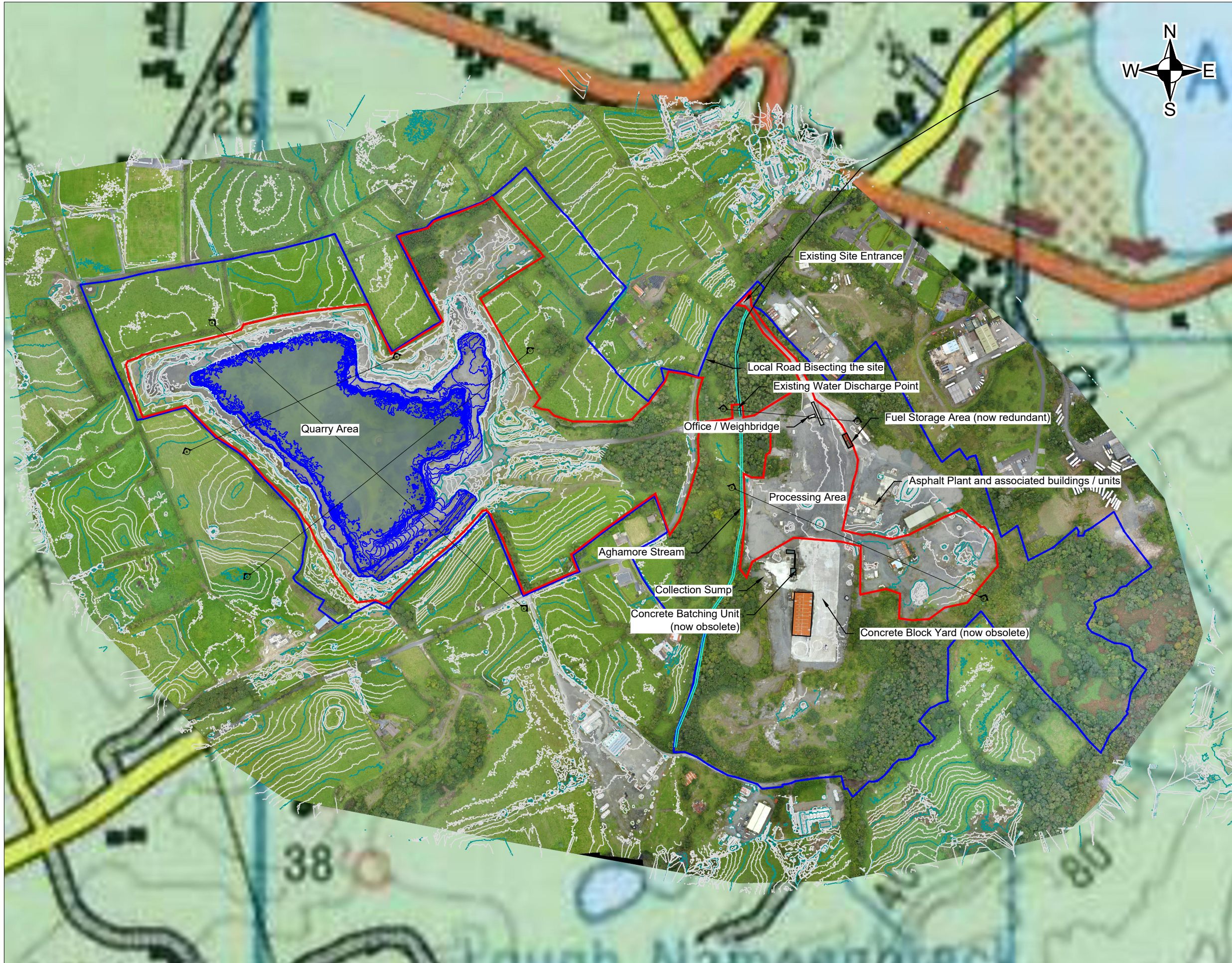
FIGURE 1.1

Scale 1:50,000 @ A3

Date MAY 2021

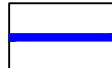




501.00584.00019.EIAR Figure 1.1.Rev.0.dwg



**NOTES**  
 1. ORDNANCE SURVEY IRELAND LICENCE NO. CYAL50167032 (C) ORDNANCE SURVEY IRELAND / GOVERNMENT OF IRELAND  
 2. AERIAL PHOTOGRAPHY CARRIED OUT BY SLR CONSULTING SEPTEMBER 2020

**LEGEND**

	LAND OWNERSHIP
	APPLICATION AREA (c. 22.5 Ha.)
	CROSS SECTION LOCATION - REFER TO DRAWING 6



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**EXISTING SITE LAYOUT**

**FIGURE 1.2**

Scale 1:5,000 @ A3	Date MAY 2021
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## APPENDICES

Appendix 1.1: Policy Statements

Appendix 1.2: Preplanning Consultation Responses



MAKING A MATERIAL  
DIFFERENCE



# Biodiversity

## POLICY STATEMENT

DECEMBER 2020

*Kingfisher fish pass  
at Cavenham Quarry -  
photo by Colin Mayes, Driver*

# Biodiversity Policy Statement

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**We are committed to operating our business in a manner which seeks to protect and enhance biodiversity across all our operational sites through the development and implementation of well-designed biodiversity management plans and rehabilitation plans. We recognise that the delivery of nature based solutions supports the long-term sustainability of our operations.**

## To support our commitment, we will:

- comply with applicable legislation and regulations;
- seek to protect and enhance biodiversity at all operational sites, delivering a net gain in biodiversity, wherever possible;
- wherever applicable or practicable, ensure the value of nature and biodiversity is considered in our decision-making processes;
- provide appropriate training resources to increase our awareness and understanding of biodiversity;
- identify and develop partnerships with conservation organisations and other key stakeholders at national, regional and local levels to ensure biodiversity opportunities are understood and realised;
- implement a systematic approach in identifying, categorising and prioritising operational sites where biodiversity opportunities exist;
- develop biodiversity management plans for those operational sites where biodiversity opportunities have been identified;
- develop rehabilitation plans that consider the needs and expectations of our stakeholders whilst working to protect ecosystems, biodiversity and habitats to maximise our contribution to nature conservation;
- set objectives and targets for biodiversity management and site rehabilitation;
- monitor, review and report our performance annually against agreed KPIs and industry best practice to drive continuous improvement;
- ensure all data reported is externally verified by a recognised, accredited body;
- communicate our biodiversity achievements through appropriate channels in order to keep our stakeholders updated on progress.

## The Board of Breedon Group is responsible for:

- ensuring an overall biodiversity policy is in place for the Group;
- overseeing the biodiversity performance of each division within the Group;
- the adequate provision of resources and management arrangements to ensure the effectiveness of the policy.

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## Each Business Director and Functional Head is responsible for:

- setting objectives and targets that relate to the significant biodiversity aspects associated with the business and monitoring and reporting on their effectiveness through a programme of management review;
- ensuring that effective resources, arrangements, training and management controls to deliver these objectives and targets are established and implemented across the operations of the business;
- ensuring implementation, communication and compliance with all Group, legal and regulatory requirements at a local level.

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## It is the responsibility of everyone who works for the Company to:

- comply with this policy and its associated arrangements as an integral part of their day-to-day duties;
- identify and highlight potential opportunities to protect and enhance biodiversity across our operations.

**We will bring this policy to the attention of our colleagues, supply chain partners and relevant interested parties; and review it on an annual basis.**



**Pat Ward, Group Chief Executive**  
December 2020



# Environment

## POLICY STATEMENT

SEPTEMBER 2020

# Environment Policy Statement

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**We are committed to operating our business in a sustainable manner, seeking to protect the environment, prevent pollution, mitigate our environmental impacts on surrounding communities and improve sustainable development.**

## To support our commitment, we will:

- maintain a robust certified environmental management system, with appropriate policies and procedures that provide a framework to manage risks and to deliver improvements in compliance, competency and sustainable performance;
- comply with all applicable legal and regulatory requirements and codes of practice;
- assess the environmental impacts of our operations and transport fleet and develop effective mitigation plans and controls to monitor, minimise or prevent pollution and environmental harm;
- set objectives and targets and monitor and measure performance regularly to ensure continual improvement and sharing of best practice;
- reduce carbon emissions through optimising energy efficiency, and, where practicable, the use of alternative and renewable energy sources.
- use resources appropriately and sustainably and, where possible, substitute primary resources with alternative materials;
- adopt the waste hierarchy of waste prevention, reuse of materials, recycling, co-processing and energy recovery to minimise waste disposal and maximise productivity;
- use water efficiently, recycle where possible and responsibly manage water discharges;
- develop products that contribute towards improved quality and sustainability in the built environment over their life cycle;
- develop rehabilitation and restoration plans that consider the needs and expectations of our stakeholders and, where feasible and relevant, work to protect ecosystems, biodiversity and habitats to maximise our contribution to nature conservation;
- engage with our operations' local communities and stakeholders and use local sourcing for products and services where practicable;
- maintain effective communications with our wider stakeholders, encourage dialogue and investigate, monitor and report on our environmental performance;
- comply with the requirements of ISO 14001, ISO 50001 and BES 6001 at applicable sites, and commit to implement ISO 14001 at all relevant newly acquired operational locations within 12 months of commencement of operations.

## The Board of Breedon Group is responsible for:

- ensuring an overall environment policy is in place for the Group;
- overseeing the environmental performance of each division within the Group;
- the adequate provision of resources and management arrangements to ensure the effectiveness of the policy.

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## Each Business Director and Functional Head is responsible for:

- setting objectives that relate to the significant environmental aspects associated with the business and monitoring and reporting on their effectiveness through a programme of management review;
- ensuring that effective resources, arrangements, training and management controls to deliver these requirements are established and implemented across the operations of the business;
- ensuring implementation, communication and compliance with all Group and legal requirements at a local level.

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## It is the responsibility of everyone who works for the Company to:

- comply with this policy and its associated arrangements as an integral part of their day-to-day duties.

**We will bring this policy to the attention of our employees, supply chain partners and relevant interested parties, and review it at least annually to ensure it is appropriate for the business.**



**Pat Ward, Group Chief Executive**  
September 2020





MAKING A MATERIAL  
DIFFERENCE



# Health, Safety and Wellbeing

**POLICY STATEMENT**

SEPTEMBER 2020

# Health, Safety and Wellbeing Policy Statement

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**We are committed to preventing injuries and work-related ill-health by achieving and maintaining the highest standards of health, safety and wellbeing, through continuous improvement and the promotion and sharing of good practice.**

## To support our commitment, we will:

- ensure that health, safety and wellbeing are core to our business and considered in all business decisions;
  - conduct all our activities in a manner designed to eliminate hazards and reduce our health, safety and wellbeing risks;
  - provide a safe and healthy working environment for colleagues, contractors and all persons who may be affected by our activities;
  - comply with all applicable health, safety and wellbeing legislation, codes of practice and industry standards;
  - comply with the requirements of ISO 45001, and commit to implement ISO 45001 at all relevant newly acquired operational locations within 12 months of commencement of operations;
  - ensure that our independently assessed safety management system is continually improved to provide a solid framework for the ongoing management of risk;
  - provide policies, procedures and suitable control measures for health, safety and wellbeing risks arising from our activities;
  - set and review objectives and targets to achieve continual improvement in health, safety and wellbeing performance;
  - provide regular training and coaching to ensure that our colleagues are competent and properly equipped to carry out their work safely;
  - engage and consult with colleagues and business partners on health, safety and wellbeing matters and ensure participation and involvement in our health and safety management system;
  - empower colleagues to challenge unsafe behaviour and conditions and stop work that is unsafe;
  - report our health, safety and wellbeing performance, including the annual publication of our injury frequency rates as Group KPIs;
  - support and enable employees to become more active in and around work, to make healthy lifestyle choices and to create a workplace environment that promotes the mental wellbeing of all employees.
- 

## The Board of Breedon Group is responsible for:

- ensuring that an overall health, safety and wellbeing policy is in place for the Group;
- overseeing the health, safety and wellbeing performance of each division within the Group;
- the adequate provision of resources and management arrangements to ensure the effectiveness of the policy.

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## Each Business Director and Functional Head is responsible for:

- setting objectives that relate to the significant health, safety and wellbeing aspects associated with the business and monitoring and reporting on their effectiveness through a programme of management review;
- ensuring that effective resources, arrangements, training and management controls to deliver these requirements are established and implemented across all operations of the business;
- reporting the health, safety and wellbeing performance of the company and ensuring compliance with and communication of all Group, legal and other requirements at a local level;
- demonstrating a visible commitment to health, safety and wellbeing, leading by example and actively engaging with their teams on this.

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## It is the responsibility of everyone who works for the Company to:

- comply with this policy and its associated arrangements as an integral part of their day-to-day duties, never compromising on safety;
- report risks and take appropriate action to ensure the health, safety and wellbeing of themselves and others.

**We will bring this policy to the attention of our employees, supply chain partners and relevant interested parties, and review it at least annually to ensure it is appropriate for the business.**



**Pat Ward, Group Chief Executive**  
September 2020

# Circular Economy

**POLICY STATEMENT**

DECEMBER 2020

# Circular Economy Policy Statement

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**We are committed to the principles of the circular economy and the responsible use of resources, and will seek to minimise waste and maximise the reuse and recycling of materials throughout our operations.**

## To support our commitment, we will:

- comply with applicable legislation and regulations;
  - ensure that waste is not deposited in a manner that is likely to cause pollution or harm to health;
  - optimise the use of water and ensure prudent management;
  - seek to maximise resource use in line with the waste hierarchy of waste prevention, reuse, recycling, co-processing and energy recovery;
  - ensure that waste material is reused or recycled wherever practicable, with consideration to life cycle assessment;
  - endeavour to use resources appropriately and sustainably and, where practicable, seek to substitute primary resources with alternative materials;
  - seek to maximise the use of alternative fuels and raw materials in cement manufacture, where practicable, by enhancing mutually beneficial relationships with external industries;
  - enhance product lifespan, and reduce wastage, by ensuring optimum initial product quality and design;
  - promote innovation in product design to prioritise sustainable development and responsible resource use and minimise carbon footprint;
  - seek to ensure that our colleagues and our contractors comply with applicable waste management rules and legislation by having a clear induction, communication and reporting procedure;
  - promote the development and use of sustainable and responsibly sourced materials;
  - look for opportunities to optimise the use of raw materials and promote the principles of the circular economy across our value chain;
  - monitor, review and report our performance against agreed KPIs and industry best practice to drive continuous improvement;
  - comply with the requirements of ISO 14001 and BES 6001 at accredited sites.
- 

## The Board of Breedon Group is responsible for:

- ensuring an overall circular economy policy is in place for the Group;
- overseeing the circular economy policy performance of each division within the Group;
- the adequate provision of resources and management arrangements to ensure the effectiveness of the policy.

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## Each Business Director and Functional Head is responsible for:

- setting objectives and targets that relate to the significant circular economy aspects associated with the business and monitoring and reporting on their effectiveness through a programme of management review;
- ensuring that effective resources, arrangements, training and management controls to deliver these objectives and targets are established and implemented across the operations of the business;
- ensuring implementation, communication and compliance with all Group, legal and regulatory requirements at a local level.

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## It is the responsibility of everyone who works for the Company to:

- comply with this policy and its associated arrangements as an integral part of their day-to-day duties;
- identify and highlight potential opportunities for the responsible use of resources and to minimise waste and maximise the reuse and recycling of materials throughout our operations.

**We will bring this policy to the attention of our colleagues, supply chain partners and relevant interested parties; and review it on an annual basis.**



**Pat Ward, Group Chief Executive**  
December 2020



# Energy and Carbon

## **POLICY STATEMENT**

DECEMBER 2020

*Sunrise at Solar farm  
at Naunton Quarry -  
photo by Alex Light,  
Quarry Management Trainee*

# Energy and Carbon Policy Statement

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**We recognise that climate change is one of the greatest challenges currently facing humanity and we are committed to operating our business in a manner that ultimately eliminates its contribution to global warming by seeking to mitigate our climate change impacts through industrial innovation and the application of industry best practice.**

**To support our commitment, we will:**

- comply with applicable legislation and regulations;
- create and maintain a robust energy and carbon data collection and reporting system, that provides the data required to assess performance, identify opportunities for progress and to deliver improvements in performance;
- set targets for the short and medium-term with a goal of achieving carbon neutrality by 2050;
- monitor and measure performance regularly to ensure continual improvement and sharing of best practice;
- report annual climate-related emissions data and ensure that the reported data is externally verified by a recognised, accredited body;
- seek to reduce carbon emissions through optimising energy efficiency and, where practicable, the use of alternative and renewable energy sources;
- regularly audit operations for energy efficiency opportunities and implement cost-effective solutions;
- use resources appropriately and sustainably and, where practicable, substitute primary resources with alternative materials;
- actively seek out partners for collaboration in order to further research and develop innovative solutions to reduce the climate change impact of our business;
- seek to develop products that contribute towards improved quality and sustainability in the built environment over their life cycle;
- communicate, through a transparent system of disclosure, our products' whole life benefits to allow our customers to deliver optimal, low-carbon solutions that help mitigate and adapt to climate change;
- engage with our suppliers and contractors to reduce impacts associated with the products and services we buy;
- actively engage with trade and public bodies to develop and implement good practice;
- endeavour to transition our operational fleets from traditional combustion engines to alternative forms of energy and, through collaboration with suppliers, make our fleets more efficient through new technology;
- actively seek to engage colleagues in carbon and energy efficiency;
- comply with the requirements of ISO 50001 at accredited sites.

- ensuring an overall energy and carbon policy is in place for the Group;
- overseeing the energy and carbon performance of each division within the Group;
- the adequate provision of resources and management arrangements to ensure the effectiveness of the policy.

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**Each Business Director and Functional Head is responsible for:**

- setting objectives and targets that relate to the significant energy and carbon aspects associated with the business and monitoring and reporting on their effectiveness through a programme of management review;
- ensuring that effective resources, arrangements, training and management controls to deliver these objectives and targets are established and implemented across the operations of the business;
- ensuring implementation, communication and compliance with all Group, legal and regulatory requirements at a local level.

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**It is the responsibility of everyone who works for the Company to:**

- comply with this policy and its associated arrangements as an integral part of their day-to-day duties;
- identify and highlight potential opportunities to reduce energy consumption or to improve efficiency of Group operations.

**We will bring this policy to the attention of our colleagues, supply chain partners and relevant interested parties; and review it on an annual basis.**



**Pat Ward, Group Chief Executive**  
December 2020



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**The Board of Breedon Group is responsible for:**



# Social Responsibility

## POLICY STATEMENT

DECEMBER 2020

*Young volunteers experience  
an archaeological dig  
at Hope Cement*

# Social Responsibility Policy Statement

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**We have a history of acting in a responsible and ethical manner, and of being actively and positively present in the communities where we operate. This statement reflects the commitment embedded in our core purpose that guides our business: To make a material difference to the lives of our colleagues, customers and communities.**

## To support our commitment, we will:

- comply with applicable legislation and regulations;
- maintain a comprehensive code of business conduct incorporating the principles of internationally proclaimed human rights;
- establish a systematic dialogue process with stakeholders;
- seek to minimise the impact of our activities on, whilst maximising their benefit to, the environment, our colleagues and local communities;
- endeavour to integrate social responsibility considerations into our business decisions;
- foster a fair culture within a respectful, supportive workplace, providing an environment in which colleagues can thrive;
- promote flexible work practices where appropriate to encourage a healthy work-life balance;
- provide our colleagues with new skills for the future and their own personal development;
- nurture a culture of success based on honesty and integrity;
- create a working environment free of bullying, harassment, victimisation and unlawful discrimination, promoting dignity and respect for all, and where individual differences and the contributions of all colleagues are recognised and valued;
- promote and foster diversity through the principles of equal opportunity of employment and reward regardless of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race (including colour, nationality, and ethnic or national origin), religion or belief, sex (gender) and sexual orientation;
- seek to create employment opportunities within the communities that we work in;
- contribute to the social and economic development of the communities in which we operate through community engagement and employee volunteering;
- develop community engagement plans in all relevant locations, to help us understand and address local concerns and take responsibility for the potential impact of our activities;
- apply fair competition law rules, ensuring our customers obtain the best products and services at a fair price;
- adopt a responsible sourcing approach which ensures that our businesses are equipped to deal with the challenges of implementing and managing a sustainable supply chain;
- procure goods and services locally where appropriate and practicable;
- provide our customers with adequate information about the functional, environmental and safety performances of our products;
- monitor issues material to our social performance, recognising ISO 26000 as a reference document, and publicly report on performance to ensure continual improvement.

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## The Board of Breedon Group is responsible for:

- ensuring an overall social responsibility policy is in place for the Group;
- overseeing the social responsibility policy performance of each division within the Group;
- the adequate provision of resources and management arrangements to ensure the effectiveness of the policy.

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## Each Business Director and Functional Head is responsible for:

- setting objectives and targets that relate to the significant social responsibility associated with the business and monitoring and reporting on their effectiveness through a programme of management review;
- ensuring that effective resources, arrangements, training and management controls to deliver these objectives and targets are established and implemented across the operations of the business;
- ensuring implementation, communication and compliance with all Group, legal and regulatory requirements at a local level.

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## It is the responsibility of everyone who works for the Company to:

- comply with this policy and its associated arrangements as an integral part of their day-to-day duties;
- identify and highlight potential opportunities to act in a responsible and ethical manner in our operations and to make a material difference to the lives of our colleagues, customers and communities.

**We will bring this policy to the attention of our colleagues, supply chain partners and relevant interested parties; and review it on an annual basis.**



**Pat Ward, Group Chief Executive**  
December 2020





**An Roinn Turasóireachta, Cultúir,  
Ealaíon, Gaeltachta, Spóirt agus Meán**  
Department of Tourism, Culture,  
Arts, Gaeltacht, Sport and Media

Your Ref: Lagan Materials Quarry

Our Ref: G Pre00196/2020 (Please quote in all related correspondence)

SLR Consulting Ireland  
7 Dundrum Business Park  
Windy Arbour  
Dublin  
D14 N2Y7

Via email: [pkinghan@slrconsulting.com](mailto:pkinghan@slrconsulting.com)

Re: Re: Notification to the Minister for Culture, Heritage and the Gaeltacht under the Planning and Development Act, 2000, as amended.

**Re: Limestone quarry (recommencement and deepening); Aghamore Near, Aghamore Far and Carrownamaddoo townlands, Co. Sligo**

A chara

I refer to correspondence to the Department of Culture, Heritage and the Gaeltacht on 29<sup>th</sup> of September received in connection with the above.

Outlined below are heritage-related observations/recommendations co-ordinated by the Development Applications Unit under the stated heading.

### **Nature Conservation**

The Department refers to the correspondence received on the 29<sup>th</sup> September 2020, in relation to your request for observations, on the preparation of the EIAR for the proposed continued use and deepening of an existing limestone quarry at Aghamore Near, Aghamore Far and Carrownamaddoo townlands, Co. Sligo, on behalf of Lagan Materials Ltd.

This submission is made in the context of this Department's role in relation to nature conservation. The observations have been divided into:

1. Matters relating to the EIAR;
2. Matters relating to Appropriate Assessment;
3. Comments relating to the sites in question;

These observations are intended to assist you in identifying potential conflicts that may arise in relation to European sites, other nature conservation sites, and biodiversity and environmental protection, in general, within and outside the study area. Data collected and

### **Aonad na nIarratas ar Fhorbairt**

*Development Applications Unit*

### **Oifigí an Rialtais**

*Government Offices*

**Bóthar an Bhaile Nua, Loch Garman, Contae Loch Garman, Y35 AP90**

Newtown Road, Wexford, County Wexford, Y35 AP90



surveys carried out in future in connection with this proposed development may raise other issues that have not been considered here. Therefore observations are not exhaustive and are made without prejudice to any recommendation that may be made by this Department in the future.

The National Parks and Wildlife Service (NPWS) website has recently been updated and should be consulted with regard to the impact of planning and development on nature conservation. The following link gives extensive details on the standards and content NPWS expect from applications: <https://www.npws.ie/development%20consultations>. In addition, the [www.npws.ie](http://www.npws.ie) website should be consulted for data on protected species, maps of designated and proposed nature conservation sites and for a full descriptions of the sites. Additional specific data requests may be required for protected species and surveys which have been carried out by the NPWS.

### **Matters relating to the EIAR:**

#### **Baseline data**

Other sources of habitat and species information beyond those already identified and the standard NPWS data request include (but are not be limited to): Article 12 and 17 reports under the Birds and Habitats Directives, the National Biodiversity Data Centre ([www.biodiversityireland.ie](http://www.biodiversityireland.ie)), Inland Fisheries Ireland ([www.fisheriesireland.ie](http://www.fisheriesireland.ie)), BirdWatch Ireland ([www.birdwatchireland.ie](http://www.birdwatchireland.ie)), Irish Raptor Study Group, Golden Eagle Trust and Bat Conservation Ireland ([www.batconservationireland.org](http://www.batconservationireland.org)). In assessing the habitats within the proposed site reference (but are not limited to) should be made to Fossitt (2000)<sup>1</sup> and where habitats are considered to correspond to Annexed habitats in the EC Habitats Directive, the EC interpretation manual should be referenced including additional sources, for example with respect to Grasslands<sup>2</sup>, Woodlands<sup>3</sup>, and 91E0 Alluvial Woodlands<sup>4</sup>.

#### **Ecological survey**

With regard to scoping for an EIAR for a proposed development, in order to assess impacts on biodiversity, fauna, flora and habitats; an ecological survey should be carried out of the proposed development site including the route of any associated feeder roads, drains, pipelines or cables etc. necessary for the construction and operational phases. Any improvement or reinforcement works required for access and transport anywhere along any

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<sup>1</sup> A Guide to Habitats in Ireland, Fossitt(2000)

<sup>2</sup> O'Neill, F. et al. (2013). The Irish semi-natural grasslands survey 2007-2012. Irish Wildlife Manuals, No. 78, NPWS

<sup>3</sup> Perrin, P. et al (2008). National survey of native woodlands 2003-2008. Volume II: Woodland Classification. NPWS.

<sup>4</sup> Daly, O.H., O'Neill, F.H. & Barron, S.J. (in prep.) The monitoring and assessment of four EU Habitats Directive Annex I woodland habitats. Irish Wildlife Manuals, No. XX. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Dublin.



proposed access route(s) should be included in the EIAR and subjected to ecological impact assessment with the inclusion of mitigation measures, as appropriate.

Where ex-situ impacts are possible survey work may be required outside of the development sites. Such surveys should be carried out by suitably qualified persons at an appropriate time of the year depending on the species, habitat or technical investigation required. The EIAR should include the results of the surveys and detail the survey methodology and timing of such surveys.

It is expected by this Department that best practice will be adhered to with regard to survey methodology and if necessary non Irish methodology adapted for the Irish situation. In addition, survey data provided should be up to date.

The EIAR should cover the whole project, including construction, operation and, if applicable, restoration or decommissioning phases. Alternatives examined should also be included in the EIAR. Inland Fisheries Ireland should be consulted with regard to fish species if applicable. For information on Geological and Geomorphological sites, the Geological Survey of Ireland should be consulted.

Specific reference should be made to the National Biodiversity Action Plan. Any losses of biodiversity habitat associated with this proposed development (including access roads and drainage etc.) such as woodland, scrub, hedgerows and other habitats should be mitigated and compensated for. In addition, Annex 1 habitats which occur outside the Natura 2000 network are also important in terms of biodiversity conservation. The presence of any Annex I habitats outside the network should be given due consideration as part of the consideration of biodiversity matters generally for the proposed development. The loss of Annex 1 habitats outside SACs should be avoided wherever possible.

In order to assess impacts it may be necessary to obtain hydrological and/or geological data. Any impact on water table levels or groundwater flows may impact on wetland sites some distance away. The EIAR should also assess cumulative impacts with other plans or projects if applicable. Where negative impacts are identified suitable mitigation measures should be detailed as appropriate.

#### Hedgerows and related habitats

Hedgerows and uncultivated vegetation should be maintained where possible as they form wildlife corridors and provide areas for birds to nest in; hedgerow trees may provide roosting places for bats. Badger setts may be present. Hedgerows also provide a habitat for woodland flora. The EIAR should provide an estimate of the length of any hedgerow that will be lost. Where it is proposed that trees or hedgerows will be removed there should be an equal level of compensatory planting of native species in mitigation incorporated into the EIAR. Where possible, the removal of hedgerows, trees and uncultivated vegetation should take place outside of the nesting season (i.e. March 1st to August 31st).



### Watercourses and wetlands

Wetlands (including Fens & bogs) and Watercourses are important areas for biodiversity. Hydrogeological connections should be assessed at an early stage and ground and surface water quality should be protected during construction and operation of the proposed development. Ground Water Dependent Terrestrial Ecosystems (GWDTE's) should be assessed in the study area. In addition, any watercourse or wetland impacted on should be surveyed for the presence of protected species and species listed on Annexes II and IV of the Habitats Directive.

For example, these species could include otters (*Lutra lutra*), which are protected under the Wildlife Acts and listed on Annexes II and IV of the Habitats Directive, salmon (*Salmo salar*) and Lamprey species listed on Annex II of the Habitats Directive, and White-clawed Crayfish (*Austropotamobius pallipes*) which are protected under the Wildlife Acts and listed on Annex II of the Habitats Directive, Frogs (*Rana temporaria*) and Newts (*Trituris vulgaris*) protected under the Wildlife Acts and Kingfishers (*Alcedo atthis*) protected under the Wildlife Acts and listed on Annex I of the Birds Directive (Council Directive 79/409 EEC). One of the main threats identified in the threat response plan for otter is habitat destruction<sup>5</sup>. A 10m riparian buffer on both banks of a waterway is considered to comprise part of the otter habitat. Therefore any proposed development should be located at least 10m away from a waterway.

### Flood plains

Flood plains, if present, should be identified in the EIAR and left undeveloped to allow for the protection of these valuable habitats and provide areas for flood water retention (green infrastructure). If applicable the EIAR should take account of the guidelines for Planning Authorities entitled "The Planning System and Flood Risk Management" and published by the Department of the Environment, Heritage and Local Government In November 2009.

### Bats

Bat roosts may be present in trees, buildings and bridges. Bat roosts can only be destroyed under licence under the Wildlife Acts and derogation under the Birds and Natural Habitats Regulations and such a licence may only be given if suitable mitigation measures are implemented. Any proposed migratory bat friendly lighting should be proven to be effective. Surveys for bat species should be included within the quarry and processing sites.

### Alien invasive species

The EIAR should also address the issue of invasive alien plant and animal species such as Japanese Knotweed, and detail the methods required to ensure they are not accidentally Introduced or spread during survey and or construction. Information on alien Invasive species In Ireland can be found at <http://invasives.biodiversityireland.ie/> and at <http://invasivespeciesireland.com/> .

### Bird surveys

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<sup>5</sup> see [https://www.npws.ie/sites/default/files/publications/pdf/2009\\_Otter\\_TRP.pdf](https://www.npws.ie/sites/default/files/publications/pdf/2009_Otter_TRP.pdf)



Survey methodologies should follow best practice and if necessary be modified to reflect the Irish situation. When survey results are being presented in an EIA it is important that best practice is followed and that the full survey methodology, including dates and times are detailed. Furthermore, it is expected that bird survey data should be presented in context and records should be supported by basic environmental data such as hourly estimates of visibility, glare arc's, cloud cover and precipitation during vantage point(VPs)and walk over survey periods. Results for species need to be referenced back to the overall populations and their dynamics; as in some cases even a small risk to a population of a species could be considered significant.

#### Impact assessment

The impact of the proposed development on the flora, fauna and habitats present should be assessed with particular regard to:

Natura 2000 sites, i.e.:

- Special Areas of Conservation (SAC) designated under the EC Habitats Directive (Council Directive 92/43/EEC)
- and Special Protection Areas (SPA) designated under the EC Birds Directive (Directive 2009/147 EC),

other designated sites, or sites proposed for designation such as,

- Natural Heritage Areas;
- proposed Natural Heritage Areas;
- Nature Reserves;
- Refuges for Fauna or Flora designated under the Wildlife Acts 1976 to 2012;
- species protected under the Wildlife Acts including protected flora;

'Protected species and natural habitats', as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008 including

- Birds Directive - Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur);
- Habitats Directive - Annex I habitats, Annex II species and their habitats;
- Annex IV species and their breeding sites and resting places (wherever they occur);
- important bird areas such as those identified by Birdlife International, features of the landscape which are of major importance for wild flora and fauna, such as those with a "stepping stone" and ecological corridors function, as referenced in Article 10 of the Habitats Directive;



- other habitats of ecological value in a national to local context (such as those identified as locally important biodiversity areas within Local Biodiversity Action Plans and County Development Plans);
- Red data book species;
- and biodiversity in general.

Complete project details, including Construction Management Plans (CMPs), need to be provided in order to allow an adequate EIAR and appropriate assessment to be undertaken, there should be no lacunae. Applicants need to be able to demonstrate that CMPs and other such plans are adequate and effective mitigation supported by scientific information and analysis and that they are feasible within the physical constraints of the site. The positions, locations and sizes of construction infrastructure and mitigation such as settlement ponds, disposal sites and construction compounds may significantly affect European and other designated sites, habitats and species in their own right and could have an effect for example on drainage, water quality, habitat loss, and disturbance. If these are undetermined at time of the assessment all potential effects of the development on the site are not being considered.

#### Construction Management Plans

Construction Management Plans should contain sufficient detail to avoid any post construction doubt with regard to the implementation of mitigation measures, timings and roles and responsibilities for same. There can be no doubts or lacunae regarding what is required for mitigation, pre-commencement surveys and or licencing requirements.

Construction work should not be allowed to impact on water quality and measures should be detailed in the EIAR to prevent sediment and/or fuel runoff from getting into watercourses which could adversely impact on aquatic species. See EIAR; Flood Plains for details with regard to flooding risk.

Inland Fisheries Ireland (IFI) should be consulted with regard to impacts on fish species and the applicant may find it useful to consult their publication entitled "Planning for watercourses in the urban environment" which can be downloaded from their website.

#### Cumulative and ex situ impacts

A rule of thumb often used is to include all European sites within a distance of 15km. It should be noted however that this will not always be appropriate. In some instances where there are hydrological connections a whole river catchment or a groundwater aquifer may need to be included. Similarly where bird flight paths are involved the impact may be on an SPA more than 15 km away.

Other relevant Local Authorities should be consulted to determine if there are any projects or plans which, in combination with this proposed development, could impact on any European sites.



### Post construction monitoring

The applicant should not use any proposed post construction monitoring as mitigation to supplement inadequate information in the assessment. Please refer to Circular Letter PD 2/07 and NPWS 1/07 on this issue<sup>6</sup>.

The EIAR process should identify any pre and post construction monitoring which should be carried out e.g. raptor monitoring, hydrological monitoring. Monitoring results should be made available to the NPWS or IFI as appropriate and copied to this Department and provided to the National Biodiversity Data Centre.

It is important to note again that unless post decision consultation with NPWS is specifically stated as a condition of planning, NPWS has no post consent role. However, regional staff are available for liaison regarding any associated licencing requirements and or new information arising for specific species of concern.

**Note:** any significant change to mitigation may require amendment and where a licence has expired; there will be a need for new licence applications for protected species.

### Licenses

It should be noted that the European Habitats Regulations of 1997 have been revoked and that Part 6 of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended (Regulation 51) is now the relevant part dealing with the protection of flora and fauna.

Species protected under sections 21, 22 and 23 of the Wildlife Acts should be considered in the EIAR and whether there are any impacts on other protected species or their resting or breeding places, such as on protected plants, badger setts or birds' nests. They will also need to be cognisant of Article 5 (d) of the Birds Directive. As outlined already and for that reason vegetation, including hedges and trees, should not be removed during the nesting season (i.e. March 1<sup>st</sup> to August 31<sup>st</sup>).

In order to apply for any such licenses or derogations as mentioned above the results of a survey should be submitted to the National Parks and Wildlife Service of this Department. Such surveys are to be carried out by appropriately qualified person/s at an appropriate time of the year. Details of survey methodology should also be provided. Should this survey work take place well before construction commences, it is recommended that an additional ecological survey of the development site should take place immediately prior to construction to ensure no significant change in the findings of the baseline ecological survey has occurred. If there has been any significant change, mitigation may require amendment and where a licence has expired, there will be a need for new licence applications for protected species.

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<sup>6</sup> <https://www.npws.ie/development-consultations>



### **Matters relating to AA:**

Please note that in relation to European sites particular emphasis is placed in our observations on the adequacy of data, information and analyses available in the NIS, and on the implications of the proposed development for the conservation objectives and integrity of the European sites affected. This is because an appropriate assessment must contain complete, precise and definitive findings and conclusions with regard to the implications of a proposal for the conservation objectives and integrity of a European site(s).

In order to carry out the Appropriate Assessment screening, and/or prepare a Natura Impact Statement (NIS), information about the relevant European sites including their conservation objectives will need to be collected. Details of designated sites and species and conservation objectives can be found on <http://www.npws.ie/>. Site-specific, as opposed to generic, conservation objectives are now available for many sites. Each conservation objective for a qualifying interest (QI) is defined by a list of attributes and targets and is often supported by further documentation. Where these are not available for a site, an examination of the attributes that are used to define site-specific conservation objectives for the same QIs in other sites can be usefully used to ensure the full ecological implications of a proposal for a site's conservation objective and its Integrity are analysed and assessed. It is advised, as per the notes and guidelines in the site-specific conservation objectives that any reports quoting conservation objectives should give the version number and date, so that it can be ensured and established that the most up-to-date versions are used in the preparation of Natura Impact Statements and in undertaking appropriate assessments.

The Departmental guidance document on Appropriate Assessment is available on the NPWS web site at <https://www.npws.ie/development-consultations> and in the EU Commission guidance entitled "*Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*"<sup>7</sup>

CJEU and Irish case law has clarified some issues and should also be consulted when considering the implications of the proposed development with regard to European sites.

### **Further to the above general comments please find below specific observations relating to the study area in question.**

The Department would like to highlight the potential for impacts to wetland habitats and designated Natura 2000 sites which should be included in the assessments, not limited to, but including for example, Lough Gill Special Area of Conservation (SAC [site code 001976], adjacent to the study area for this project. The following recommendations are

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[http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura\\_2000\\_asses\\_en.pdf](http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_asses_en.pdf)





required in order to assess whether the proposed project will negatively impact on the conservation objectives of Lough Gill SAC and any other Natura 2000 site.

The Department recommends that the assessments should include all the associated operations of both the quarry and processing site, for example, dewatering, tailing, sediment ponds and drainage and establish whether any of these operations are connected with the ecology of Lough Gill i.e. the surveys should not be confined to the proposed sites. Specifically, the additional investigations outlined in the Hydrogeological section of the EIAR scoping document are welcomed but should also include investigations outside of the proposed development site to establish if there is connectivity with Lough Gill.

The Department notes that while the hydrogeological investigations proposed will aid establishing the evidence of connectivity between the proposed site and Lough Gill, it is recommended that a concurrent investigation of the lake water levels is also carried out, to determine whether any of the Qualifying Interest (QI) habitats within the relevant SACs/SPAs receive groundwater flows from the proposed development site and that these are identified in the assessments. Evidence of the delineation of the catchments; connected springs and seepages are required for these assessments. Furthermore, the Department recommends that a water balance test should be conducted to establish whether significant amounts of groundwater will be removed from the quarry.

The Department advise that pre – consent ground investigations, data gathering infrastructure or testing that take place in a location that may affect an ecological feature (e.g. NHAs/ pNHA's and European sites SACs and SPAs), may require consent (i.e. are not exempted development) from the planning authority and/or the Ministers consent from NPWS/DHLGH.

The Department notes the previous EIAR survey evidence of peregrine falcon using the proposed quarry site. The Department recommends that a data request is submitted to NPWS for any records, including frequency of use, of peregrine falcon in the area and other birds of prey.

The EIAR should also include an assessment of the following habitats and species groups' specific to the proposed development site which include; semi natural grasslands, butterflies, and orchids. Consideration should be given in the EIAR relating to any proposed restoration plan in managing these habitats and species post operation of the proposed development.

#### **General guidance and useful references;**

1. *'Best Practice guidance for Habitat Survey and Mapping'* by George F Smith, Paul O'Donoghue, Katie O'Hora and Eamon Delaney, 2011. The Heritage Council.
2. The Departmental guidance document on Appropriate Assessment which is available on the NPWS web site at <https://www.npws.ie/protected-sites/guidance-appropriate-assessment-planning-authorities>



3. The EU Commission guidance entitled '*Assessment of plans and projects significantly affecting Natura 2000 sites, Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*' which can be downloaded from  
[http://ec.europa.eu/environment/nature/natura2000/management/guidance\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm)
4. The EU Commission notice - c(2018) "*Managing Natura 2000 sites The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*".  
[https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/EN\\_art\\_6\\_guide\\_jun\\_2019.pdf](https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/EN_art_6_guide_jun_2019.pdf)
5. '*Interpretation Manual of European Union Habitats*', version EUR 28, 2013.  
[http://ec.europa.eu/environment/nature/legislation/habitatsdirective/docs/Int\\_Manual\\_EU28.pdf](http://ec.europa.eu/environment/nature/legislation/habitatsdirective/docs/Int_Manual_EU28.pdf)

You are requested to send further communications to the Development Applications Unit (DAU) at [manager.dau@chg.gov.ie](mailto:manager.dau@chg.gov.ie), or to the following address:

The Manager  
Development Applications Unit (DAU)  
Government Offices  
Newtown Road  
Wexford  
Y35 AP90

Is mise, le meas

**Diarmuid Buttimer**  
**Development Applications Unit**



Peter Kinghan  
SLR Consulting Ireland  
7 Dundrum Business Park  
Windy Arbour  
Dublin D14 N2Y7

15 October 2020

**Re: Pre-Planning – Proposed Deepening of an Existing Limestone Quarry at Aghamore Near, Aghamore Far and Carrownamaddoo Townlands, Co. Sligo**

**Your Ref: n/a**  
**Our Ref: 20/239**

Geological Survey Ireland is the national earth science agency and has datasets including Bedrock Geology, Quaternary Geology, Geological Heritage Sites, Mineral deposits, Groundwater Resources, Geohazards and the Irish Seabed. These comprise maps, reports and extensive databases that include mineral occurrences, bedrock/mineral exploration groundwater/site investigation boreholes, karst features, wells and springs. Please see our [website](#) for data availability and we recommend using these various data sets, when undergoing the EIAR, planning and scoping processes. Geological Survey Ireland should be referenced to as such and should any data or geological maps be used, they should be attributed correctly to Geological Survey Ireland.

Dear Peter,

With reference to your email dated 29 September 2020, concerning the proposed deepening of an existing limestone quarry at Aghamore Near, Aghamore Far and Carrownamaddoo townlands, Co. Sligo, Geological Survey Ireland (a division of the Department of Environment, Climate and Communications) would like to make the following comments.

**Geoheritage**

Geological Survey Ireland is in partnership with the National Parks and Wildlife Service (NPWS, Department of Culture, Heritage and Gaeltacht), to identify and select important geological and geomorphological sites throughout the country for designation as geological NHAs (Natural Heritage Areas). This is addressed by the Geoheritage Programme of Geological Survey Ireland, under 16 different geological themes, in which the minimum number of scientifically significant sites that best represent the theme are rigorously selected by a panel of theme experts.

County Geological Sites (CGS), as adopted under the National Heritage Plan are now included in County Development Plans and in the GIS of planning departments, to ensure the recognition and appropriate protection of geological heritage within the planning system. CGSs can be viewed online under the Geological Heritage tab on the online [Map Viewer](#). The audit for Co. Sligo was completed in 2004 and full details of the report can be found [here](#). **Our records show that there are no CGSs in the vicinity of the quarry.**

With the current plan, there are no envisaged impacts on the integrity of current CGSs by the proposed development. However, if the proposed development plan is altered, please contact Clare Glanville ([Clare.Glanville@gsi.ie](mailto:Clare.Glanville@gsi.ie)) for further information and possible mitigation measures if applicable.



## Groundwater

Groundwater is important as a source of drinking water, and it supports river flows, lake levels and ecosystems. It contains natural substances dissolved from the soils and rocks that it flows through, and can also be contaminated by human actions on the land surface. As a clean, but vulnerable, resource, groundwater needs to be understood, managed and protected.

Through our [Groundwater Programme](#), Geological Survey Ireland provides advice and maps to members of the public, consultancies and public bodies about groundwater quality, quantity and distribution. Geological Survey Ireland monitors groundwater nationwide by characterising aquifers, investigating karst landscapes and landforms and by helping to protect public and group scheme water supplies.

With regard to Flood Risk Management, there is a need to identify areas for integrated constructed wetlands. **We recommend using the GSI's National Aquifer, Vulnerability and Recharge maps on our [Map viewer](#) to this end. The quarry is underlain by a 'Regionally Important Aquifer – Karstified (conduit)'. The Groundwater Vulnerability map indicates the area covered is variable. We would therefore recommend use of the Groundwater Viewer to identify areas of High to Extreme Vulnerability and 'Rock at or near surface' which can be used to inform appropriate mitigation measures.**

Our [GW Flood](#) project is a groundwater flood monitoring and mapping programme aimed at addressing the knowledge gaps surrounding groundwater flooding in Ireland. The project is providing the data and analysis tools required by local and national authorities to make scientifically-informed decisions regarding groundwater flooding. **Although primarily focused on karst areas, this may provide information to benefit the proposed quarry deepening. We recommend using the Geological Survey Ireland's [GW Flood](#) tools found under our programme activities to this end.**

With regards to Climate Change, there is a need to improve the monitoring capacity of groundwater levels in Ireland so that the potential impacts of climate change can be monitored and assessed. In this context the GSI has established the GWClimate project in January 2020. GWClimate will 1) establish a long-term strategic groundwater level monitoring network and 2) develop modelling and analytical approaches for evaluating the impacts of Climate Change to Irish groundwater systems. **Further information can be found on the [Groundwater flooding page](#) of the Groundwater Programme.**

## Geohazards

Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides are the most prevalent of these hazards. Geological Survey Ireland has information available on past landslides for viewing as a layer on our [Map Viewer](#). Geological Survey Ireland also engages in national projects such as Landslide Susceptibility Mapping and GW Flood Groundwater Flooding. We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.

## Guidelines

The following guidelines may also be of assistance:

- Department of Environment, Heritage and Local Government, 2004. Quarries and Ancillary Activities, Guidelines for Planning Authorities.
- Environmental Protection Agency, 2006. Environmental Management in the Extractive Industry: Non-Scheduled Minerals.
- Geological Survey of Ireland - Irish Concrete Federation, 2008. Geological Heritage Guidelines for the Extractive Industry.
- Institute of Geologists of Ireland, 2013. Guidelines for the Preparation of the Soils, Geology and Hydrogeology Chapters of Geology in Environmental Impact Statements.



### **Other Comments**

Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. Should any significant bedrock cuttings be created, we would ask that they will be designed to remain visible as rock exposure rather than covered with soil and vegetated, in accordance with safety guidelines and engineering constraints. In areas where natural exposures are few, or deeply weathered, this measure would permit on-going improvement of geological knowledge of the subsurface and could be included as additional sites of the geoheritage dataset, if appropriate. Alternatively, we ask that a digital photographic record of significant new excavations could be provided. Potential visits from Geological Survey Ireland to personally document exposures could also be arranged.

The data would be added to Geological Survey Ireland's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to Beatriz Mozo, Land Mapping Unit, at [Beatriz.Mozo@gsi.ie](mailto:Beatriz.Mozo@gsi.ie), 01-678 2795.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to contact me ([Trish.Smullen@gsi.ie](mailto:Trish.Smullen@gsi.ie)), or my colleague Clare Glanville ([Clare.Glanville@gsi.ie](mailto:Clare.Glanville@gsi.ie)).

Yours sincerely,

Trish Smullen  
**Geoheritage Programme**  
**Geological Survey Ireland**

### **Preplanning consultation for Lagan quarry at Aghamore in Co. Sligo:**

The quarry and processing area at Aghamore lie adjacent to the Aghamore Stream which flows into Lough Gill. This stream provides salmonid spawning and nursery habitat in its lower section. This stream also provides habitat for eel which is a critically endangered species. The lower section of the Aghamore stream forms part of the Lough Gill Special Area of Conservation which is designated for the protection of Atlantic salmon, white-clawed crayfish and lamprey species. This site is therefore directly hydrologically connected to the Special Area of Conservation. IFI request that the following comments are taken into consideration within the EIAR, NIS and planning application for this site:

There is a potential impact from this development on a number of elements of the aquatic habitat including damage to the aquatic and associated riparian habitat, pollution of waters, introduction of non-native species and interference with upstream and downstream movement of aquatic life. The assessment of these impacts should include the following:

- Water quality
- Surface water hydrology and Ground water hydrology
- Fish spawning and nursery areas
- Passage of migratory fish
- Areas of natural heritage importance including geological heritage sites
- Biological diversity
- Ecosystem structure and functioning
- Sport and commercial fishing and angling
- Amenity and recreational areas
- Sediment transport

IFI have concerns in relation to excavations below the site groundwater level and the potential for the pollution and contamination of groundwater. Information on the method of quarrying and the use of explosives should be provided.

Significant levels of dewatering may be required. The hydrological impacts of any proposed dewatering of the quarry and subsequent discharge to the Aghamore Stream must be assessed. This must include an assessment of the erosion and sediment regime within the channel and the impact on the salmonid spawning substrate downstream of this site. The impact of any proposed discharge may have on flooding of the adjacent local road or the R287 must be assessed. Flooding can wash pollutants such as sediment, hydrocarbons etc. into watercourses and put channels under pressure from drainage works and habitat damage.

Responsibility for the protection and/or improvement of ecological status of watercourses under the Water Framework Directive must also be taken into account. The Aghamore Stream has been designated poor ecological status in the River Basin Management Plan and this must be improved to

good ecological status to comply with the directive. It must be demonstrated that there will be no negative impact, including hydrological or morphological, as a result of this development that will prevent or delay the achievement of this objective. Assimilative capacity calculations must be shown for any discharge to groundwater or surface waters. Details of the water discharge licence for the site should be provided.

The IFI guidance document “Requirements for the Protection of Fisheries Habitat during Construction and Development work” should be followed and is available at [www.fisheriesireland.ie/Fisheries-management/fisheries-management.htm](http://www.fisheriesireland.ie/Fisheries-management/fisheries-management.htm)

In the case that a wheel wash is required, the wheel wash use a water recycling system with no direct discharge to the adjacent stream.

An assessment must be carried out of any on-site wastewater treatment system and details of this assessment provided.

The full planning history of the site should be clearly outlined.

Potential impacts of this development must be considered in combination and with existing land use practices and developments within the area.

There must be no spread of invasive species as a result of this development. A survey for the presence of invasive species must be carried out and if found on site a management plan must be drawn up. Biosecurity measures may also be required for equipment and machinery used on site. IFI provide a number of guidance documents on invasive species including a Bio-security Protocol which are available at: <http://www.fisheriesireland.ie/Research/invasive-species.html>

IFI requires further consultation on this development in due course and looks forward to hearing from you in this regard.

07/01/2020

**Uisce Éireann**  
Bosca OP 6000  
Baile Átha Cliath 1  
Éire

**Irish Water**  
PO Box 6000  
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**T: +353 1 89 25000**  
**F: +353 1 89 25001**  
**[www.water.ie](http://www.water.ie)**

### **Purpose of the document**

The document details initial pre planning assessment of the proposed development by Lagan Bitumen for continued use, operation and deepening of the existing permitted quarry at Aghamore Near and, Carrownamaddoo Townlands, Co. Sligo.

### **Pre Planning Context**

Irish Water have a responsibility to ensure that all its customers receive a safe and secure supply of drinking water. Irish Water demonstrates safe drinking water by compliance monitoring in accordance with the Drinking Water Regulations. However, to ensure drinking water is secure, Irish Water have adopted the Drinking Water Safety Plan approach put forward by the World Health Organisation and endorsed by the EPA in risk assessing and managing its source water.

### **Pre Planning Consultation**

It is expected that all risks shall be mitigated to the IW lake source to ensure there is no net loss of water to the lake and the water quality is not impaired. The applicant, therefore, is required to clearly demonstrate there is no net loss of water to the lake and that the water quality is not impaired and that appropriate mitigations are in place to ensure protection of the drinking water source.

There are potential impacts to surface water and groundwater in the vicinity of the quarry which is located at/close to a river catchment boundary, a lake, a sizeable public water supply from the lake, and in a karst aquifer.

With respect to the hydrogeology there are a number of comments and queries provided below that may help determine risks to IW which need to be addressed ahead of any planning application. It might be advisable that the applicant makes enquiries to GSI in relation to the hydrogeology and karstification.

With respect to the water quality and treatability there are a number of comments and queries provided below that may help determine risks to IW which need to be addressed ahead of any planning application.

### **Clarifications required and comments to be addressed as part of any planning application**

- There is a significant groundwater component to the quarry operation. Given that the quarry occurs on a mapped surface water catchment boundary it is not clear where the groundwater is coming from, as the EIAR suggests it is in a low permeability area.
- It is difficult to predict the future dewatering requirements. It is possible that the deepening could intersect major conduits.



- It is indicated in the EIAR that the Aghamore stream 'all but dries up' in dry weather. Is it ephemeral? Note that the EIAR also predicts that there will be no reduced baseflow. This needs clarity. Is this the case below the quarry discharge location? It would be helpful to draw a schematic cross section of winter and summer groundwater levels (current/predicted) from west of the quarry through to the lake.
- Does the quarry discharge provide a net discharge back to the water environment? If the quarry drawdown has shifted a catchment boundary west, is there a net addition to the water environment to L. Gill?
- To what extent has the dewatering changed the river catchment boundaries and what is the cone of depression? The Zone of influence/ Cone of depression (EIAR, Fig 7.22) could be shown in relation to the regional flow system. The water levels in private wells should be shown as well as the water levels in the monitoring wells.
- What is the regional groundwater flow pattern? Fig. 7.18 (EIAR) suggests that the topographic contours were used to infer groundwater flow directions which is inappropriate in a karst setting. Apart from a few nearby water courses there is a general lack of surface water drainage. The EIAR suggests that this is/was a groundwater divide though this is an assumption based on WFD surface water catchment boundaries. The tracing in this aquifer underscores the variability in karst. Fig. 7-16 indicates wells, water levels from these and other wells may provide evidence on the water table.
- The information and assessment on the aquifer hydraulic properties seems to suggest that MW3 is not representative in terms of representing the aquifer as a whole. However, it is these 'exceptions' that point at the inherent hierarchical nature of the connected fractures, fissures and conduits. And there is a significant amount of groundwater being pumped, indicative of a transmissive karst aquifer. There are recorded karst features, dye tracing, and a cursory look at the 6 inch sheets suggests that there are possibly sinking streams in the vicinity of the application.
- The predicted radial influence assumes no fractures but MW3 is a significant fracture. To what extent does this and other aspects of the karst aquifer influence the assumptions around radial flow? The information points to the anisotropy.
- The information on the karstification is limited and citing the GSI Karst database should be accompanied with an acknowledgement that the database is not exhaustive. As indicated above there are possibly some sinking streams nearby.
- In relation to the karst, there has been some limited tracing done in the aquifer which demonstrates the velocities, the permeability, and how the groundwater flow direction is counter to what one might assume.
- The groundwater volume being pumped is recorded as 2.8MI/d in the EPA register. The information around the groundwater being pumped and the overall stormwater/water management needs to be clearly described. It would be useful to include a simple water balance to cross check the area needed to provide the groundwater based on the groundwater recharge.
- It is indicated in the pre planning scoping document that there will be additional boreholes and sampling. The source in this instance is a lake waterbody and loadings are critical in that it is possible material will settle out of suspension for possible resuspension in much higher

concentrations during stratification. Water Treatment Plants are designed to treat raw water of a particular character that accounts for a range of contaminants present in source water. The information provided by the applicant indicate elevated concentrations of BOD and heavy metals associated with the activity. Contaminants from industry have the potential to alter the water quality of the lake and hence its treatability. The water quality character of the lake cannot be negatively impacted by the development proposal. Water quality character and dynamics of the lake must be considered by the applicant and addressed in any planning application.

### **Additional Pre Planning Considerations**

The following aspects of Water Services would be in scope of any EIAR and should be fully addressed as part of any planning application;

- Any up-grading of water services infrastructure that would be required to accommodate the development.
- In relation to a development that would discharge trade effluent – any upstream treatment or attenuation of discharges required prior to discharging to an IW collection network
- In relation to the management of surface water; the potential impact of surface water discharges to combined sewer networks & potential measures to minimise/stop surface waters from combined sewers
- Any physical impact on IW assets – reservoir, drinking water source, treatment works, pipes, pumping stations, discharges outfalls etc. including any relocation of assets. IW does not permit development to impact on assets and/or drinking water sources nor any impairment of water quality of drinking water sources.
- Any potential impacts on the assimilative capacity of receiving waters in relation to IW discharge outfalls including changes in dispersion /circulation characterises
- Any potential impact on the contributing catchment of water sources either in terms of water abstraction for the development (and resultant potential impact on the capacity of the source) or the potential of the development to influence/ present a risk to the quality of the water abstracted by IW for public supply.
- Where a development proposes to connect to an IW network and that network either abstracts water from or discharges wastewater to a “protected”/sensitive area, consideration as to whether the integrity of the site/conservation objectives of the site would be compromised.
- The develop/operator shall comply with the Water Framework Directive and River Basin Management Plan objectives to ensure that the development will not negatively impact on the water quality of source/receiving waters during both construction and operational phases
- The developer/operator shall meet the requirements of EIA Directive 2014/52/EU
- The developer/operator shall comply with the requirements of the Groundwater Directive, Article 6(1) of Directive 2000/60/EC
- In the interest of Public Health and Environmental Sustainability the developer/operator will comply with best practice Groundwater Protection Schemes set in the GSI Groundwater Protection Schemes.

All necessary mitigation measures in relation to any of the above to protect and maintain access to Irish Water infrastructure and water sources shall be undertaken and incorporated into the

development proposal, as part of planning application, to ensure public water services and sources are protected and access is maintained

## Peter Kinghan

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**From:** INFO <Information@tii.ie>  
**Sent:** Tuesday 20 October 2020 14:22  
**To:** Peter Kinghan  
**Subject:** RE: Preplanning Consultation

Dear Mr. Kinghan,

Transport Infrastructure Ireland (TII) acknowledges receipt of your pre-planning consultation request in respect of the above proposed project, received by email on the 29 September 2020.

National Strategic Outcome 2 of the National Planning Framework includes the objective to maintain the strategic capacity and safety of the national roads network. It is also an investment priority of the National Development Plan, 2018 – 2027, to ensure that the extensive transport networks which have been greatly enhanced over the last two decades, are maintained to a high level to ensure quality levels of service, accessibility and connectivity to transport users.

The issuing of this correspondence is provided as best practice guidance only and does not prejudice TII's statutory right to make any observations, requests for further information, objections or appeals following the examination of any valid application referred.

The approach to be adopted by TII in making such submissions or comments will seek to uphold official policy and guidance as outlined in the Spatial Planning and National Roads Guidelines for Planning Authorities (2012). Regard should also be had to other relevant guidance available at [www.TII.ie](http://www.TII.ie).

With respect to application and EIAR Scoping issues, the recommendations indicated below provide only general guidance for the preparation of EIAR, which may affect the national road network. The developer should have regard, *inter alia*, to the following;

1. As set down in the Spatial Planning and National Roads Guidelines, it is in the public interest that the national road network continues to serve its intended strategic purpose. The EIAR should identify the methods/techniques proposed for any works traversing/in proximity to the national road network in order to demonstrate that the development can proceed complementary to safeguarding the capacity, safety and operational efficiency of that network.
2. Consultations should be had with the relevant Local Authority/National Roads Design Office with regard to locations of existing and future national road schemes.
3. Clearly identify haul routes proposed and fully assess the network to be traversed. Separate structure approvals/permits and other licences may be required in connection with the proposed haul route and all structures on the haul route should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal load proposed.
4. Where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site with reference to impacts on the national road network and junctions of lower category roads with national roads. The Authority's Traffic and Transport Assessment Guidelines (2014) should be referred to in relation to proposed development with potential impacts on the national road network. The scheme promoter is also advised to have regard to Section 2.2 of the TII TTA Guidelines which addresses requirements for sub-threshold TTA.
5. TII Standards should be consulted to determine the requirement for Road Safety Audit (RSA) and Road Safety Impact Assessment (RSIA).
6. Assessments and design and construction and maintenance standards and guidance are available at [TII Publications](#) that replaced the NRA Design Manual for Roads and Bridges (DMRB) and the NRA Manual of Contract Documents for Road Works (MCDRW).

7. The developer, in conducting Environmental Impact Assessment, should have regard to TII Environment Guidelines that deal with assessment and mitigation measures for varied environmental factors and occurrences. In particular;
- TII's Environmental Assessment and Construction Guidelines, including the *Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes* (National Roads Authority, 2006),
  - The EIAR should consider the Environmental Noise Regulations 2006 (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see *Guidelines for the Treatment of Noise and Vibration in National Road Schemes* (1<sup>st</sup> Rev., National Roads Authority, 2004)).

Notwithstanding any of the above, the developer should be aware that this list is non-exhaustive, thus site and development specific issues should be addressed in accordance with best practice.

I trust that the above comments are of use in your EIAR preparation.

Yours sincerely,

**Michael McCormack**  
Senior Land Use Planner



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**From:** Peter Kinghan <pkinghan@slrconsulting.com>  
**Sent:** Tuesday 29 September 2020 12:51  
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**Subject:** Preplanning Consultation

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Dear Sir / Madam

Please find attached a Preplanning Consultation document in relation to the following development:

- Local Authority: Sligo Co Co;
- Applicant: Lagan Materials Ltd.;
- Proposed Development: Limestone quarry (recommencement and deepening);
- Address: Aghamore Near, Aghamore Far and Carrownamaddoo townlands, Co. Sligo

We look forward to your response.

Regards  
Peter

and state governments. As a flexible, full-service organisation we are open for business and will continue to operate and deliver advice and services to our clients wherever possible and in line with government guidance.



## Peter Kinghan

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