

NON-TECHNICAL SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR)

**PERMISSION FOR THE EXTRACTION OF SAND & GRAVEL
AT
ROOSKAGH TOWNLAND,
BELLANAMULLIA (BEALNAMULLA),
ATHLONE,
CO. ROSCOMMON**

Applicant:

Mr. Eamon Harney

Issued 16th September 2022

Prepared by:

Collins Boyd Engineers + Architects
Galway Road
Roscommon
F42 V344



Document Control

Document Number 22.137-EIAR-R02

Revision	Date	Prepared	Checked	Approved
PL0	16.09.2022	Various	MD	EC

PREAMBLE

SCOPE OF THE ENVIRONMENTAL IMPACT ASSESSMENT

Environmental Impact Assessment will be carried out by Roscommon County Council using the information and findings included in the EIAR. The planning and development regulations require the preparation of an EIAR and the scope has been the subject of consultation with Roscommon County Council and the Environmental Authorities

was undertaken in accordance with the current EIAR regulations as amended. These regulations provide an indication of the need for an EIAR. The proposed development requires for Environmental Impact Assessment report and the scope has been agreed with Roscommon County Council arising out of preplanning consultation in accordance with the current EIA and Planning regulations.

Each report from various topics considers the following:

- ✓ Baseline studies
- ✓ Identification of potential impacts
- ✓ Evaluation and significance of those impacts
- ✓ Mitigation measures where required

The purpose of the mitigation measures is to ensure that the development could be undertaken without creating any significant or unacceptable adverse impacts on the environment.

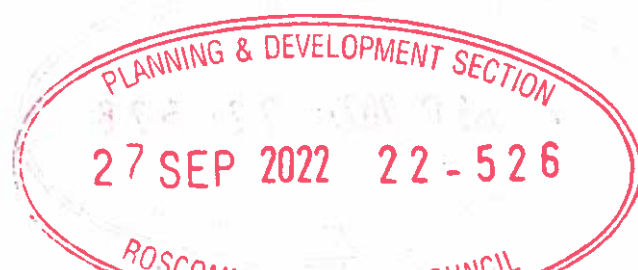


PLANNING POLICY FRAMEWORK

The subject site is within the administrative area of Roscommon County Council and the current The Roscommon County Development Plan 2022-2028 (RCDP). Our assessment demonstrates that the proposed development accords with the policies of the County development plan.

By their nature, aggregates can only be worked where they occur. The cost of haulage affects economic competitiveness in this sector and accordingly the extractive industries seek to locate in proximity to developing settlements and major existing and proposed roads, thus minimising haulage costs. Extractive industries can also give rise to detrimental environmental and residential amenity effects including traffic congestion, dust, noise/vibration, water pollution, visual intrusion and the effects on local road networks may also be significant. It is recognised extractive industry has an important function in the economy of the county and, furthermore, that the rural based nature of the quarrying/extractive industries offers opportunities for part-time farming to continue with quarrying providing valuable off-farm income. The Council recognises the importance to the economy of County Roscommon of mapping and identification of areas with aggregate potential, both in terms of cost-effective aggregates and avoiding sterilisation of resources. The Council will seek to identify the location of major aggregate deposits and will safeguard valuable un-worked deposits for future extraction. The Council seeks to ensure that the extractive and concrete products industry follows an environmental code of practice, in order to minimise potential adverse impacts on the environment and local communities. In considering development applications relating to existing or proposed quarries, the Council will take full account of; 'Quarries and Ancillary Activities: Guidelines for Planning Authorities' (DECLG, 2004). When considering quarry and associated developments, the Council will have regard to the protection of residential and natural amenities, the prevention of pollution and the safeguarding of aquifers and groundwater. The development of new quarries will be strictly controlled in areas of high landscape value, on European sites, Natural Heritage Areas (NHAs), Nature Reserves or other areas of importance for the conservation of flora and fauna, or in areas of significant archaeological potential.

- Economic Development The Roscommon County Development Plan 2022-2028 (RCDP).
- Page 69 Policies in relation to Mineral Extraction and Quarries
- Policy 3.53 Protect all known unworked deposits from development that might limit their scope for extraction.
- Policy 3.54 Ensure adequate supplies of aggregate resources to meet future growth needs of the

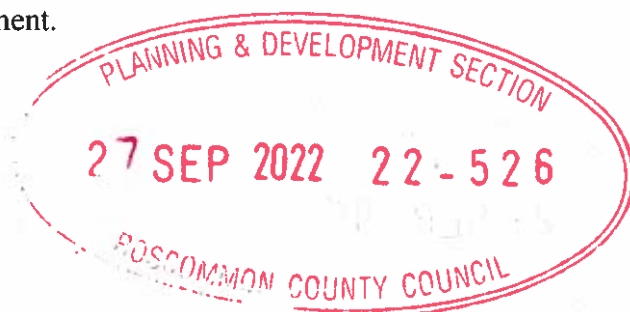


Country, facilitate the exploitation of such resources where there is a proven need and market opportunity for such minerals or aggregates, and ensure that this exploitation of resources does not adversely affect the environment or adjoining existing land uses.

- Policy 3.55 Encourage the reuse of worked out quarries for recreational, appropriate commercial, ecological, and other uses, following appropriate restoration.
- Policy 3.56 Require development proposals on or in the proximity of quarry sites, to carry out appropriate investigations into the nature and extent of old quarries (where applicable). Such proposals shall also investigate the nature and extent of soil and groundwater contamination and the risks associated with site development works together with appropriate mitigation.
- Policy 3.57 Protect areas of geomorphologic interest, groundwater and important aquifers, important archaeological features and Natural Heritage Areas from inappropriate development.
- Policy 3.58 Have regard to evolving best environmental management practice as set out in Environmental Protection Agency (EPA) Guidelines 'Environmental Management in the Extractive Industry: Non-Scheduled Minerals'
- Policy 3.59 Ensure that the extractives industry minimises adverse impacts on the road network in the area and that the appropriate cost of road improvements which are necessary to facilitate extractive industries are borne by the industry itself
- Policy 3.60 Ensure that the extraction of minerals or aggregates does not adversely impact on residential or environmental amenity of the landscape including the safeguarding of aquifers and groundwater resources.
- Policy 3.61 Ensure that all projects associated with the extractive industry carry out screening for Appropriate Assessment in accordance with Article 6(3) of the Habitats Directive, where required. Objectives in relation to Mineral Extraction and Quarries

It is important to note about the proposed development the following should be considered that there is no available sand in the region. The closest sand pits in the region are in Dunmore in County Galway and Rochfordbridge, County Westmeath. Each of these sources are outside the County of Roscommon and is at least 50 KM from Athlone.

Two separate planning permission in Athlone town has planning permission for more than 1,000 homes which both are about to commence in the near future. Many concrete plants rely on environmental Assessment.



CONTENTS

- 1. INTRODUCTION**
- 2. PROJECT DESCRIPTION**
- 3. ALTERNATIVES**
- 4. POPULATION AND HUMAN HEALTH**
- 5. BIODIVERSITY**
- 6. LAND, SOILS AND GEOLOGY**
- 7. HYDROLOGY AND HYDROGEOLOGY (WATER)**
- 8-9 AIR QUALITY AND DUST CLIMATE**
- 10. NOISE AND VIBRATION**
- 11. MATERIAL ASSETS**
- 12. CULTURAL HERITAGE**
- 13. LANDSCAPE AND VISUAL IMPACT ASSESSMENT**
- 14. TRAFFIC IMPACT ASSESSMENT**
- 15. INTERACTIONS SUMMARY**



CHAPTER 1

INTRODUCTION

Roscommon County Council, Planning Authority - Viewing Purposes Only!



1.0 INTRODUCTION

This non-technical summary supports the planning application for the extraction of sand, stone and gravel and all ancillary works at Rooskagh townland, Bellanamullia (Bealnamulla), Athlone, Co Roscommon. The planning application is being submitted by Mr. Eamon Harney the landowner who intends to lease the quarry to a competent operator to extract the sand, stone & gravel from the lands and return the lands to agricultural use on completion of the extraction. The planning application is for:

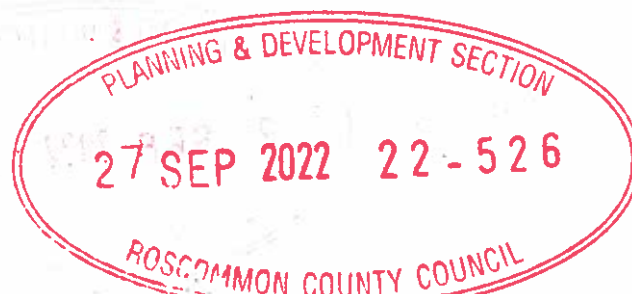
- Extraction of sand, stone & gravel.
- screening/processing of stone, sand & gravel from the site using mobile plant,
- construction of offices (33m²), welfare facilities (9m²), well, water settlement pond (area 2,020 m²), weighbridge, wheel wash, entrance, set down area, carparking, truck parking, refuelling pad, petrol oil interceptor, fencing, landscaping/screening, signage, lighting, wastewater storage tank for site offices, and all other ancillary works.
- The land will be restored to agricultural lands on the completion of the extraction of sand, stone and gravel, on lands

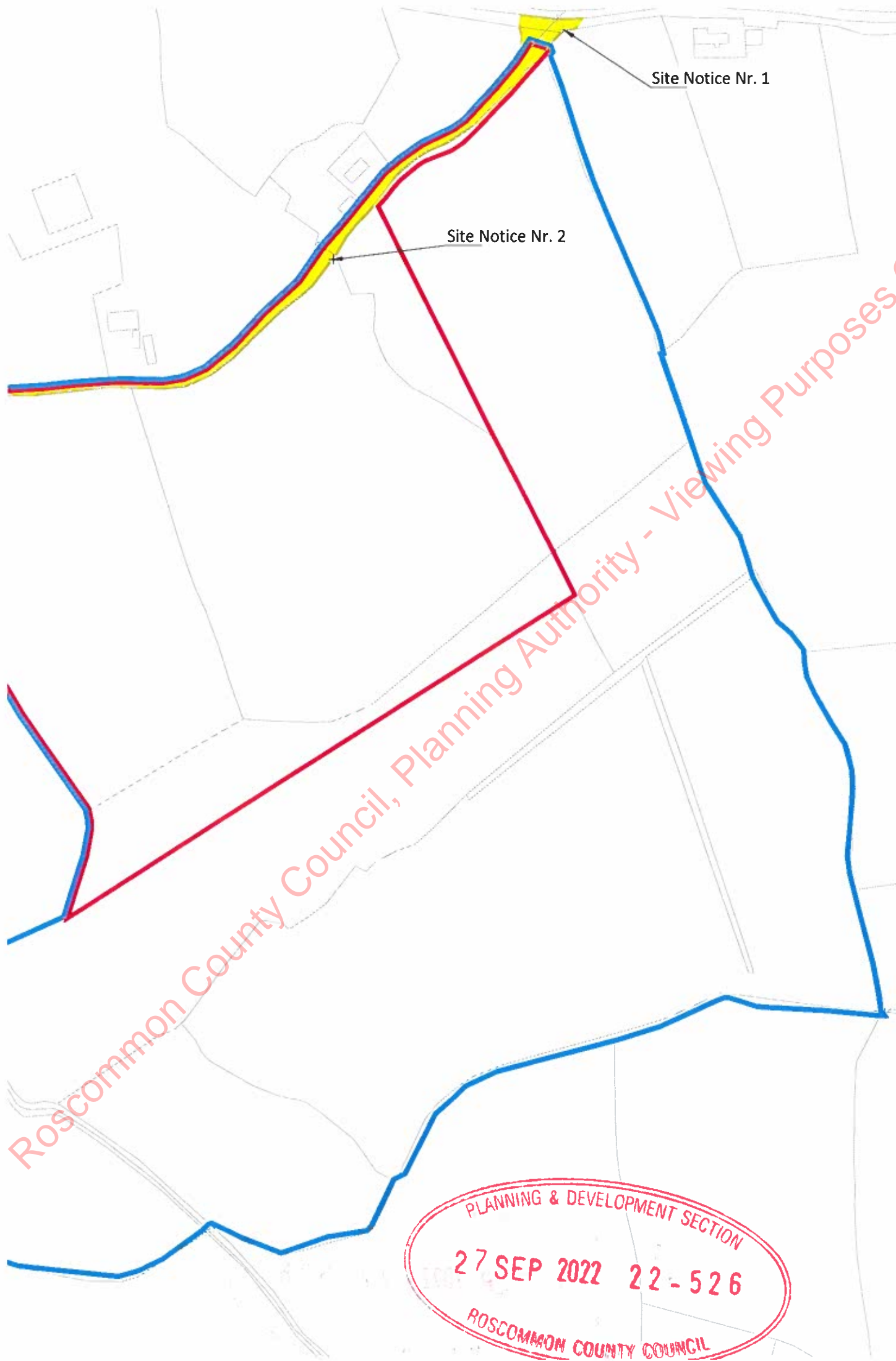
The application site is located townlands of Rooskagh townland, Bealanamullia, Athlone, Co. Roscommon. (refer to Figure 1). The ITM Coordinates for the site are 597459, 741237. The proposed development is located wholly within the red line.

The lands proposed for the extraction of sand/gravel is accessed via a private road and enters on to the L2025 which is an authorised access. The proposed access is used by the concrete plant to the north and generally lands to the south. The site occupies ground with elevations ranging between 49mOD and 72.23m OD.

The site area is surrounded by agricultural lands (improved agricultural grassland and arable), private dwellings and concrete batching plant.

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





Site Notice Nr. 1

Site Notice Nr. 2

Roscommon County Council, Planning Authority - Viewing Purposes Only

File Name
=====
v_50166

Clip Ext
=====
LLX,LLY=
LRX,LRY=
ULX,ULY=
URX,URY

Projectio
=====
Projectio
Transver

Centre F
=====
X,Y= 59

Referenc
=====
Map Ser
1:5,000
1:5,000


Data Ext
=====
Date= 2

Source I
=====
Product
=====
Version=

License
=====
Ordnanc
Use' appl
about/te

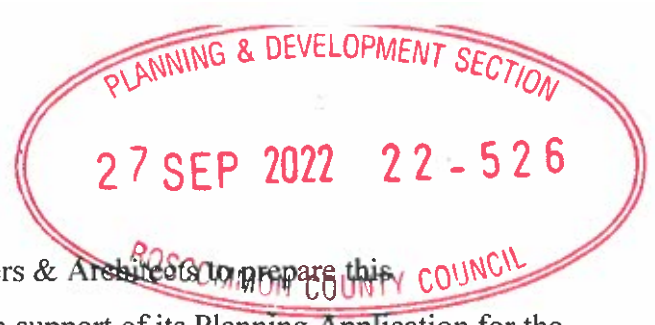
Revisio	
Rev	£
PL0	M

Client:
Eamon I


Galway
Roscor
Co.Ros
F42 V3
Phone:
Fax:
Email:

PLANNING & DEVELOPMENT SECTION
27 SEP 2022 22 - 526
ROSCOMMON COUNTY COUNCIL

Job Titl
Propos
Gravel
Bellana
Athlone



CONTRIBUTORS

Mr. Eamon Harney appointed Collins Boyd Engineers & Architects to prepare this Environmental Impact Assessment Report (EIAR) in support of its Planning Application for the proposed development at Rooskagh townland, Bellanamullia (Bealnamulla), Athlone, Co. Roscommon

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 – 1 LIST OF CONTRIBUTORS

TOPIC	CONTRIBUTOR	COMPANY
Introduction	Eamon Collins Chartered Engineer FIEI	Collins Boyd Engineers & Architects
Description of Development	Eamon Collins Chartered Engineer FIEI	Collins Boyd Engineers & Architects
Alternatives	Eamon Collins Chartered Engineer FIEI	Collins Boyd Engineers & Architects
Population and Human Health	Eamon Collins Chartered Engineer FIEI	Collins Boyd Engineers & Architects
Biodiversity	Noreen Mc Loughlin MSc	Whitehall Environmental
Land, Soils and Geology	Darragh Musgrave Senior Geo Environmental Scientist	Viridus Consulting Ltd
Water	Darragh Musgrave Senior Geo Environmental Scientist	Viridus Consulting Ltd
Air	Mervyn Keegan B.S.c M.S.c MIOA	Aona Environmental
Climate	Mervyn Keegan B.S.c M.S.c MIOA	Aona Environmental
Noise and Vibration	Mervyn Keegan B.S.c M.S.c MIOA	Aona Environmental
Material Assets	Stephen Boyd Chartered Engineer MIEI	Collins Boyd Engineers & Architects
Cultural Heritage	Martin Byrne	Byrne Mullins & Associates
Landscape	Ronan Mac Diarmada	Ronan Mac Diarmada & Associates
Traffic and Transport	Dermot Donovan	Roadplan Consulting Ltd
Co-ordination of EIA	Eamon Collins Chartered Engineer FIEI	Collins Boyd Engineers & Architects

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.

Collins Boyd Engineers & Architects have been preparing Environmental Impact Assessment reports (previously EIS) relating to quarry developments since implementation of the EIA Directive in 1990.

Roscommon County Council, Planning Authority - Viewing Purposes Only

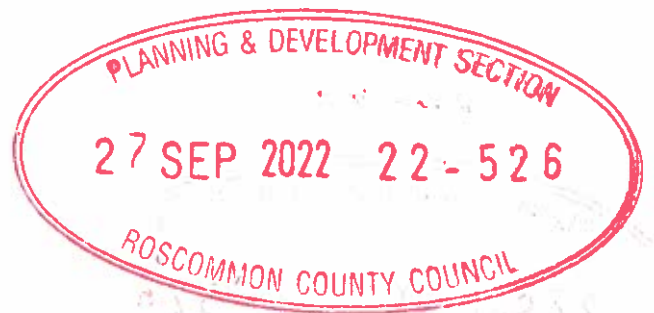


CHAPTER 2

PROJECT

DESCRIPTION

Roscommon County Council Planning Authority - Viewing Purposes Only!



2.0 PROJECT DESCRIPTION

DURATION OF EXTRACTION

An outline of the proposed extraction plan and the final ground level contours is shown in Figure 2.

MATERIAL QUANTITIES

Material	Quantity
Topsoil / Overburden	8,300 m ³
Sand & gravel	466,766 m ³

The duration of quarrying activities at the application site will largely be dictated by the rate at which approximately 466,766 m³ of material is extracted from the site. There are many factors which will influence this, including, but not limited to the:

- Prevailing economic climate and related construction industry output.
- Distance of construction projects from the facility (and scale of activity).
- Demand for quarry related products.

Considering these and other variables, calculation of intake rates and duration is not an exact science. It is anticipated that the average annual extraction rate will be 46,676 m³.

A planning permission duration of 10 years is sought for the extraction and processing period and a further 2 years to complete final restoration of the site.

SITE SCREENING

Given the location and topography of the site it is unlikely that this development will be unduly prominent given that Kildea Concrete is to the north of the site, and it will be screened as per the landscape assessment mitigation measures

REMOVAL OF TOPSOIL AND OVERBURDEN SOILS

Any topsoil and overburden from the site will be stockpiled and will be used in the restoration of the quarry in a phased basis in-order to return the application area to agricultural uses.



SITE DRAINAGE

A hydrological / hydrogeological assessment has been carried out taking into consideration the existing water regime at the site. It addresses mitigation measures to eliminate and/or minimise the potential impacts, if any, on surface water and groundwater – refer to Chapter 7 – Water.

STABILITY OF THE QUARRY

Industry standard slope angles, bench heights, and bench widths will be used for extraction operations at the site and this will be assessed in conjunction with the nature of the materials present on site.

METHOD OF EXTRACTION

The material will be extracted by means of excavators and dump trucks and no blasting will be required as the material is sand and gravel. The invert of the extraction will ensure there is a buffer of 2-3 metres above the high-water table. Rock inverts are indicated in the 4 boreholes drilled on site used to establish water table, rock levels, physical & chemical information relating to the underlying materials. This information allows the various experts make informed decisions based on science and engineering.

PROCESSING METHODS

The processing of the extracted sand & gravel, into aggregate products, will consist of crushing and screening by mobile processing plant within the application area. The operation of crushing will occur every 2 months and last for a 1–2-week period.

QUARRY WORKING HOURS

In accordance with industry guidelines quarry operations will be carried out between 8.00 – 18.00hrs Monday to Friday; or from 09.00 – 17.00 hrs Saturday. The quarry will not operate on Sundays or Bank Holidays, except in emergency situations and with the consent of the local authority.

EMPLOYMENT

The proposed development will provide employment of up to 6 people directly on-site, in addition to 40 indirect employees such as crushing contractors, HGV drivers, maintenance contractors, etc.

The development of the site is consistent with the policies set out in the National Planning Guidelines for the sector; and the Roscommon County Development plan, which recognise the requirement for:



- A secure supply of construction aggregate development of the region.
- Proven aggregate reserves need to l
- 'Best environmental management p

SITE INFRASTRUCTURE

SITE ACCESS

The quarry extraction area is accessed via shared access where all traffic will enter

SITE SECURITY

Vehicular access to the application site point to the public road. There is no other outside operational hours. At the present and/or hedgerow, fencing works will be

SITE ROADS, PARKING AND HIGHWAYS

All HGVs utilising the quarry will be accessed site from the Local Road and access the

Adequate car parking provision for employee parking is provided on site as indicated

WEIGHBRIDGE

In order to track and record the amount of aggregate directed across the proposed weighbridge infrastructure layout in Figure 3

OFFICES AND ANCILLARY FACILITIES

Ancillary facilities at the site will include toilets, re-fuelling pad. Electrical power supply. Electricity will provide the principal source of



Roscommon County Council Planning Authority - Viewing Purposes Only!

CHAPTER 3

ALTERNATIVES



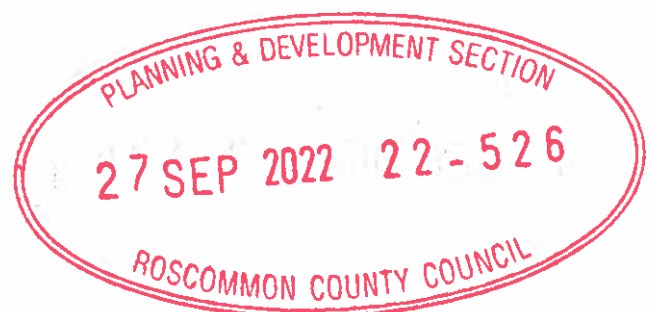
3.0 CONSIDERATION OF REASONABLE ALTERNATIVES

The landowner in deciding to proceed with the proposed development considered several alternatives. These included an examination of all the lands in his ownership, the approximately 20ha in the immediate vicinity and a further 10ha on lands to the southwest of the L2026 in Curraghaleen. This latter part is not rich in aggregates. The site chosen comprises the highest land in his ownership and it will be possible to return the land to productive agricultural use following completion of quarrying. The lands excluded from the site area relatively low lying and would not provide as big a volume of material as the selected site.

The scale of the excavation i.e., keeping the formation level of the quarry well above the water table level means that the excluded lands would be less productive, and an increased area would increase the environmental impacts.

The landowner also considered several proposals on the design of the proposed quarry and the selected option comprised 5 phases working from East to West. Among the environmental benefits from this approach is when Phase 5 is commenced 8-10 years following commencement the proposed berms and planting will be mature and well established and will therefore reduce the impacts from quarrying on adjoining properties.

The option chosen provides the applicant with a quarry that can be readily managed from an environmental perspective and will not have significant adverse impacts on adjoining properties or the environment when the mitigation measures outlined in succeeding sections are employed.



- GATEWAY
- DECIDUOUS TREE DRAWN TO SIZE
- SEWER MAINHOLE & DETAILS
- GULLY AND DETAILS
- FENCE
- ESB COVER
- EIRCOM COVER
- SPOTHEIGHT & ELEVATION
- FIRE HYDRANT
- STOP VALVES
- BUILDING
- ESB EIRCOM POLE & CABLE
- TREES TREE LINE
- DITCHLINE
- HEDGE LINE
- WALL
- EMBANKMENT
- EXTRACTION AREA
- PROPOSED TOPSOIL STOCKPILE
- PROPOSED FARMACADAM
- PROPOSED CONCRETE
- PROPOSED HARDSTANDING AREA
- PROPOSED SETTLEMENT POND
- STOCK-PROOF POST & WIRE FENCE
- 2.4m HIGH WELDED VERN FENCE
- OUTLINE OF EXTRACTION AREA
- SIGHTLINES

ORDNANCE SURVEY OF IRELAND LICENCE NUMBER
CYAL50211192 © Ordnance Ireland/Government of Ireland

For extents of site refer to
proposed site masterplan
22.137-010A

For Planning Purposes Only

- LANDOWNERSHIP IN BLUE
- SITE OUTLINED IN RED
- RIGHT OF WAY

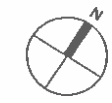
Area of Site:
69,381 Sq/m
17.2 Acres
6.938 Hectares

ITM: 597452, 741243



- Notes:
- This drawing is the copyright of Collins Boyd Engineering Ltd. It is a confidential document and must not be copied, used or its contents divulged without prior written permission.
 - DO NOT SCALE. Use figured dimensions only, if in doubt ask. All dimensions to be checked by contractor on site, any errors or discrepancies to be reported to the Architects.
 - All works to be carried out in accordance with the current building control act and building regulations.
 - Clients are obliged to forward a commencement notice to the local authority at least 14 days prior to the commencement of any works on site.
 - Consultants to be informed immediately of any discrepancies before work proceeds.

NOT FOR CONSTRUCTION



Revisions

Rev	By	Date	Description
PL0	MD	16.09.22	Issued for Planning

Viewing Purposes Only!

Roscommon County Council, Planning Authority

PLANNING & DEVELOPMENT SECTION

27 SEP 2022 22-52F

ROSCOMMON COUNTY COUNCIL

Client:
Eamon Hanley

collinsboyd
ENGINEERS & ARCHITECTS

Galway Road
Roscommon
Co. Roscommon
F42 V344

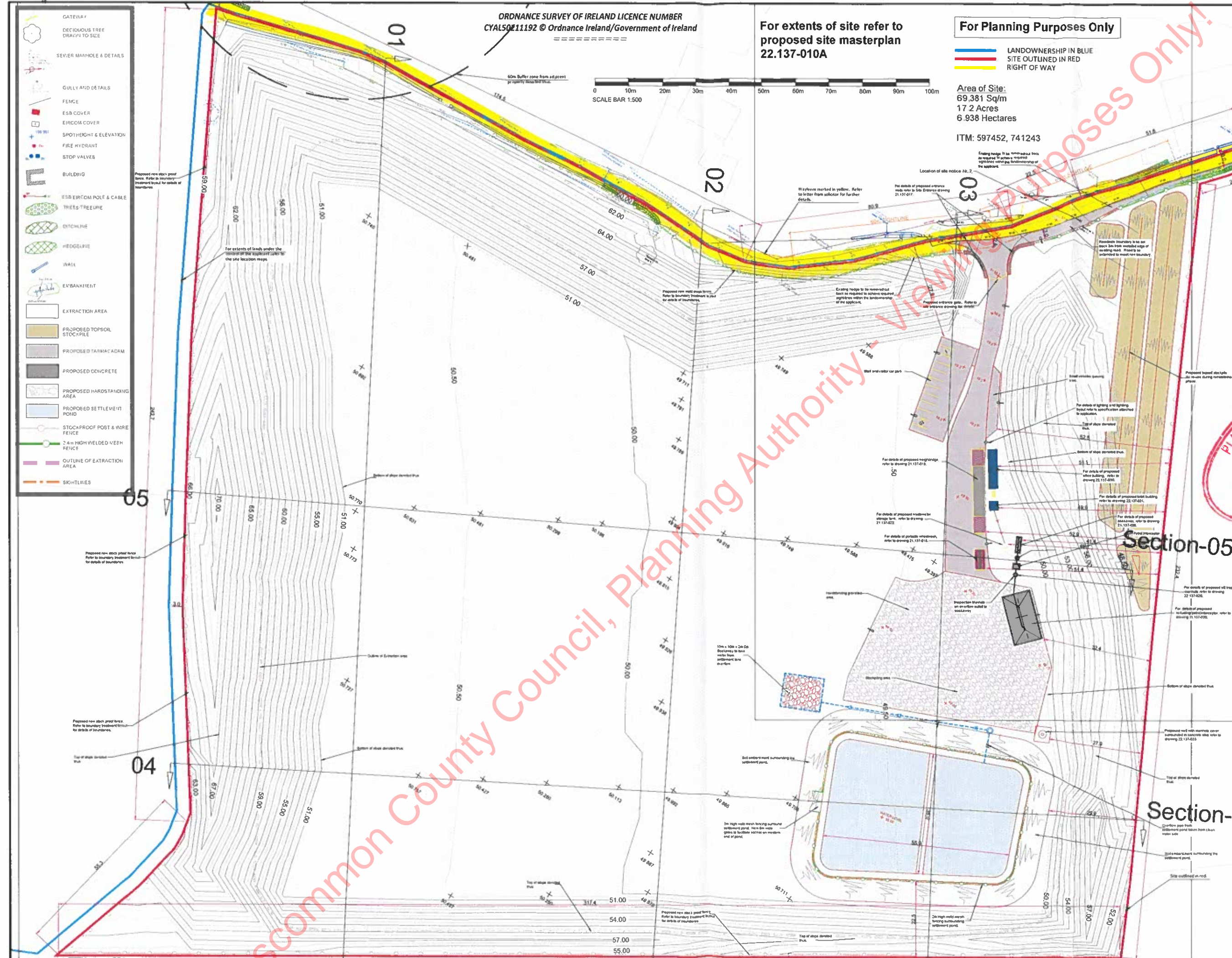
Phone: 090 6634421
Fax: 090 6634423
Email: info@collinsboydeng.com

Job Title:
Proposed Extraction of Sand, Stone and Gravel at Rooskagh Td.,
Bellanamulla (Beainamulla),
Athlone, Co. Roscommon

Drawing Title:
Proposed Site Layout Sheet 1

Status: Planning
Date: July 2022
Scale: 1:500 @ A1
Drawn by: CM

JOB No.	DRG No.	REV.
22.137	010B	PL0



Roscommon County Council, Planning Authority

Roscommon County Council, Planning Authority - Viewing Purposes Only!

CHAPTER 4

POPULATION AND HUMAN HEALTH



4.0 POPULATION AND HUMAN HEALTH

Human Health is considered and examined in the context of relevant pathways such as air quality, noise, soils, and water. The statutory limits that apply to these pathways are based in the first instance on scientific investigation and medical evidence and compliance with the relevant limits assesses the impact on human health. The EIAR shows that the proposed quarry would operate within acceptable limits. Mitigations proposed will reduce impacts by operating the quarry in accordance with good practice. The proposed restoration of the quarry will return the lands to their existing use within the medium term. There will be no waste generated from the quarrying activities. The traffic assessment shows that the road networks have the capacity to accommodate the movements generated by the proposed development.

The assessment has conducted that there will not be any significant adverse impacts on human health. There will be positive effects on employments both direct and indirect. The proposed quarry will have an overall beneficial impact on the regional economy centred around Athlone.



CHAPTER 5

BIODIVERSITY

Roscommon County Council, Planning Authority - Viewing Purposes Only!



Non Technical Summary – Chapter 5; Biodiversity

Chapter 5 of the EIAR assesses the likely significant effects on biodiversity (flora and fauna) arising out of the proposed development. Measures to mitigate the potential impacts on valued ecological features are proposed. The assessment involved a desk study and field surveys by a suitably qualified ecologist. The methodologies used to determine the value of ecological receptors, to characterise the potential impacts of the proposed development and to assess the significance of impacts and any residual effects, are in accordance with the CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Coastal, Freshwater and Marine.

An Appropriate Assessment Screening Report has been prepared and is included as a standalone report with the planning application. This AA report concludes that the proposed development, either on its own or in combination with other plans and proposals, will have no significant effects upon any Natura 2000 site.

No part of the site lies within nor is it adjacent to any area that is designated for nature conservation purposes. The site consists of one large and open field, that is characterised by a large hill at its centre. The ground is firm and well drained throughout and there are no vegetative indicators of poor drainage on the site. The dominant habitat within the application site is improved agricultural grassland (GA1) that is normally grazed by cattle. Hedgerows (WL1) and treelines (WL2) form the site boundaries. There are elements of Dry Calcareous and Neutral Grassland habitat GS1 remaining in pockets around the site, most notably the verges and on the hill. There are no watercourses or waterbodies within the proposed site. No features of significance for roosting bats are present within the proposed site. No evidence of badger setts was recorded within the proposed site. The treelines/hedgerows on site provide habitat for a common range of breeding birds. Overall, the habitats within the application site range from low ecological value to local importance-higher value. The site is likely to be of relatively low value to foraging bats and nesting birds. There was no evidence that the site is of high value to mammals.

The proposed development will involve the loss of all the grassland habitats within the site. In the absence of mitigation, treelines and hedgerows could be lost or fragmented due to root damage. This could lead to an impact upon local populations of nesting birds. There will be no impact upon roosting bats arising from the proposed development. No badger setts were recorded at the site, as such, there will be no direct impacts to badgers. The proposed development will reduce the overall open foraging area for birds, bats and terrestrial mammals.



Following the cessation of quarrying activities, the quarry will be restored for agricultural purposes. If the quarry lies undisturbed for some time, it is likely a range of calcareous plant species will colonise and areas of high biodiversity value could develop. The faces of the quarry could be colonised by species such as sand martins or bats. Undisturbed and permanent quarry ponds could become colonised with newts and frogs.

Mitigation measures have been included to avoid or offset the ecological impacts of the proposed development. All quarrying activities on site should follow current best practice guidelines, including the Geological Heritage Guidelines for the Extractive Industry produced by Geological Survey of Ireland and Environmental Management in the Extractive Industry produced by the EPA. The existing hedgerows and treelines should be protected and a buffer zone containing the Root Protection Zone of the hedgerows and treelines should be maintained. There must be no storage of machinery or topsoil in this buffer zone. This buffer zone should be managed to allow for the development of a species rich grassland habitat. Additional landscaping should be provided using native trees and shrubs. Excavated topsoil should be stored in a suitable location within the site and for the purposes of restoration, the landscape plan should be cognisant of achieving an area of high biodiversity value within the site.

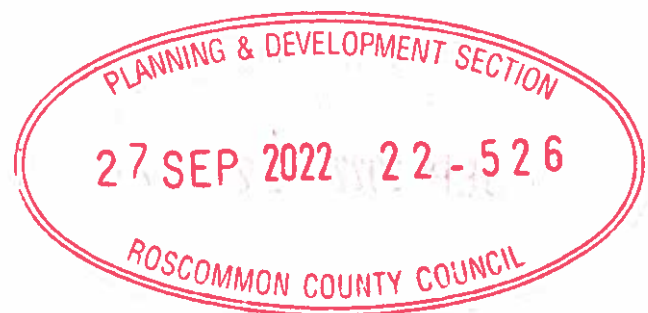
With the recommended mitigation measures, it can be concluded that the proposed development in Bealnamullia will have a neutral impact upon local ecological receptors. The creation of new habitats on the site will be a positive benefit to local ecology and with proper management of the site and its green areas in the future, then local areas of biodiversity will be allowed to develop.

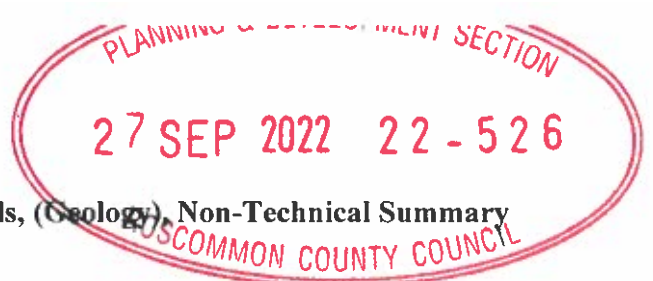


CHAPTER 6

LAND, SOILS AND GEOLOGY

Roscommon County Council, Planning Authority - Viewing Purposes Only!





Proposed Rooskagh Quarry EIAR – Land & Soils, (Geology), Non-Technical Summary

Introduction

This is the non-technical summary of the Land and Soil (Geology) Environmental Impact Assessment Reporting (EIAR) works of the proposed development of a new sand, stone and gravel aggregate quarry in the townland of Rooskagh, near Bellanamullia, (Bealnamulla), on the west side of Athlone in Co. Roscommon.

The site is in a rural, dominantly agricultural setting, with some individual residential and farm properties in the local vicinity. There is an active concrete plant operated by Kildea Concrete located immediately to the north of the site. Access is provided by a local cul de sac road that also serves the Kildea site.

The subject site of 6.96 hectares is occupied by open grassland fields, used for cattle grazing, which is located on the eastern end of a locally elevated topographical ridge. Generally, the site topography slopes from about 49mOD the eastern boundary to a maximum of 67.5m OD on the western boundary. The proposed quarry extraction area is of 4.9 hectares.

A small, raised hillock, with a height of 72m OD occupies the south-central part of the site and the ridge of high ground trends west wards from this point. The ridge represents part of the Athlone Esker System which is spread out for over 20km along a west to east orientation on each side of the River Shannon to the south of Athlone. The western part of the Athlone System, the Castlesampson Esker, located about 2.5km west of the site, is a designated Special Area of Conservation and Roscommon Geo-heritage Site.

Background information on the nature of the land, soils and geology, their characteristics and status was obtained from a wide variety of available documents and online references. Consultation was also undertaken with the relevant authorities which site walkovers and investigations were completed.

Existing Environment

The Regional Teagasc Soil mapping identifies the local area as being underlain by shallow well drained mineral soils derived from mainly calcareous parent material, (BminSW). The recent EPA/Teagasc Soil Information System (SIS) mapping identifies the Soil Association as being as being 'Mullabane (1120MB)' soils which are described as "well drained coarse loamy drift with limestones" and are very widely distributed in the Roscommon and Midland Region.

Geological Survey of Ireland (GSI) regional mapping data indicates that the subsoils in the area comprise of Glaciofluvial Basic Esker Sands & Gravels (BasEsk) derived from dominantly limestone material.

While exposures of the natural sand and gravels around site are limited the northern edges of the deposits are evident in the Kildea Concrete plant due to the recent development of a concrete laydown area. Exposed boulder clays, silts, sands and gravels are visible in cuts of up to about 10m to 12m in this area. The proposed aggregate extraction is limited to material above the natural water table and the site is to be operated as a 'dry quarry'.

The bedrock underlying the site and local area is identified as Lower Carboniferous aged Dinantian Pure Bedded Limestone (DPBL) which are comprised of shallow dipping, clean, undifferentiated Visean Shelf Limestones that were deposited in a shallow marine environment. In the study area they are likely to be a combination of clean and muddy bioclastic limestones. The bedrock is classified as a Regionally Important Aquifer with conduit karstic flow.

No lowering of the water table or dewatering is proposed for the aggregate extraction. A shallow water abstraction via a sump or small borehole is proposed to provide wash water to the site.

The site will not have any bulk fuel storage, or machinery service or truck parking areas as this infrastructure will be provided locally elsewhere.

Predicted Impacts

Predicted impacts during development and operational phase include: (1) extracting the inert sediments from east to west in a number of phases totalling 466,766m³, will decrease the depth of subsoil material over the bedrock and underlying water table which will increase the vulnerability of the aquifer to surface contamination, (2) potential for accidental contamination of soils, bedrock and the underlying aquifer through fuel spillages, (3) creation of up to 15m high quarry faces increasing risk of instability and 4) potential for dust generation in dry weather and suspended sediment runoff in surface water in wet weather from the active quarry areas. Once the land is returned to agricultural use reinstated land use impacts would relate to typical farming practice risks such as excessive slurry or fertiliser application.

The main risk to human health during the excavations would be the risk of the collapse of an exposed quarry face but this will be mitigated by have an adequate slope angle, benching and re-vegetation of the slopes. The potential for a large spill of fuel to occur will be mitigated by controlled refuelling and the storage of bulk fuels off site.

Mitigation Measures

Good site management and infrastructure, such as controlled refuelling of machinery, stockpiling, and wastewater collection will be undertaken. Quarry activities will be controlled and limited to as small an area as practical to reduce the surface area exposed to potential sediment runoff and dust generation. Quarried areas will be landscaped and vegetated as soon as is practical after completion to further reduce the potential for slope instability, sediment runoff and dust generation risks.

Best practice guidelines with regard to environmental management and pollution control for the quarry industry, (e.g. Environmental Management in the Extractive Industry (EPA and CFI), will be implemented for the excavation works through the development of a site specific Environmental Management Plan.

Impact Assessment

The sites glaciofluvial sands & gravel deposits considered to have a High Importance as an aggregate resource. They are not designated as a geological heritage or ecologically important site. The Impact Magnitude is considered to be Insignificant and generally neutral on a local level as the land area will be returned to agricultural use, (and with a flatter topography will be more farmable), once restoration works are completed. The bedrock attribute would be considered to be of Low Importance and there is proposed to be no impact or interaction with it before, during or after the quarrying operation.

Conclusion

Following the assessment of the Land and Soil (Geological) elements of the development the Magnitude of Impact on these attributes is considered to be Negligible. Some of the potential short term or brief impact such as dust occurrence or impact on soils by hydrocarbon spills on the site can be prevented or limited by incorporating the recommended mitigation measures into the development and operation phases. The identified impacts are rated to be Imperceptible.



CHAPTER 7

HYDROLOGY AND HYDROGEOLOGY (WATER)

Roscommon County Council, Planning Authority - Viewing Purposes Only!



Proposed Rooskagh Quarry EIAR – Hydrology & Hydrogeology, (Water), Non-Technical Summary

Introduction

This is the non-technical summary of the Hydrology and Hydrogeology (Water) Environmental Impact Assessment Reporting (EIAR) works of the proposed development of a new sand and gravel aggregate quarry in the townland of Rooskagh, near Bellanamullia (Bealnamulla) on the west side of Athlone in Co. Roscommon.

The site is in a rural, dominantly agricultural setting, with some individual residential and farm properties in the local vicinity. There is an active concrete plant operated by Kildea Concrete located immediately to the north of the site. Access is provided by a local cul de sac road that also serves the Kildea site.

The subject site of 6.96 hectares is occupied by open grassland fields, used for cattle grazing, which is located on the eastern end of a locally elevated topographical ridge. The proposed extraction area is 4.9 hectares in area. The site topography slopes from about 49mOD the eastern boundary to a maximum of 67.5m OD on the western boundary and there are no surface water drainage features on the site as all rainfall percolates to ground.

The nearest watercourse is the Mihanboy Stream which is located about 200m away from of the southern boundary of the site. A number drainage ditches are present along the field boundaries about 100m away to the east and 75m away to the south with the land in-between consisting of level fields with no drainage features.

Background information on the local water attributes, (hydrology and hydrogeology), their characteristics and status was obtained from four site investigation boreholes installed on the site, as well as a wide variety of available documents and online references. Consultation was also undertaken with the relevant authorities by the project engineers.

Existing Environment

The Rooskagh Quarry is located in the Upper Shannon (Mid Shannon) Hydrometric Area (HA 26G), as defined by the Water Framework Directive, (WFD) and Environmental Protection Agency, (EPA). HA 26G is divided into three Sub-Catchments and the site area is within the HA Identity Code 26G_2 Shannon Upper_SC_100 catchment. The site is located about 200m to the north of one part of the Mihanboy_010 Stream (Water Body Code IE_SH_26M040200). There is no direct connection between the proposed quarry area and this water body.

The Mihanaboy water body (EPA segment code 26_318) flows east, north-east wards, joining with other branches of the Mihanboy_010 water body before connecting with the Cross River (Cross Roscommon_030) on the south side of Bellanamullia (Bealnamulla). The Cross River meets the River Shannon South of Athlone.

The water quality status of the Mihanboy Stream and Cross River systems is rated by the EPA as 'Moderate Status' and 'At Risk' of not meeting its required High Status due to hydromorphological impacts within the catchment area. These primarily relate to peat extraction/drainage and farming land use pressures within the catchment area.

The sand and gravel deposits that occur in the local area around Rooskagh were formed by fluvio-glacial outwash processes which created the Athlone Esker Ridge system, of which the site is a small part of. These types of deposits are widespread in the locality and wider Midlands Region.



Proposed Rooskagh Quarry EIAR – Hydrology & Hydrogeology, (Water), Non-Technical Summary

The bedrock underlying the site and local area is identified as Lower Carboniferous aged Dinantian Pure Bedded Limestone (DPBL) which are comprised of shallow dipping, clean, undifferentiated Visean Shelf Limestones which were deposited in a shallow marine environment. In the study area they are likely to be a combination of clean and muddy bioclastic limestones. The bedrock is classified as a Regionally Important Aquifer with conduit karstic flow. No lowering of the water table or dewatering is proposed for the aggregate extraction. A shallow sump or well into the groundwater is proposed to provide wash water to the site.

The quarry infrastructure will include a wash plant and wheel wash which will both minimise water use through recycling. A wash water settlement pond will be created in the south eastern corner of the site which will also store water for re-use and prevent any discharges.

Predicted Impacts

Predicted impacts during the development and operational phase of the proposed aggregate quarry at Rooskagh include: 1) potential for accidental contamination of the underlying aquifer through fuel spillages by plant and machinery, 2) potential for suspended sediment runoff in surface water from the active earth works areas – however this runoff is only internal as there is no surface water runoff from the site proposed. The very high permeability of the sediments will prevent surface ponding or runoff.

The sites topography will be lowered by the development of the quarry which will reduce the runoff potential of the site, however this won't change the characteristics of the site too much as there is little evidence of runoff occurring in the sites natural state. The decrease in subsoil thickness over the bedrock will increase the risk for surface contamination to impact the aquifer as it will reduce the thickness of sediment over the bedrock. The retention of at least 3m of unsaturated material over the water table under the site will still protect the aquifer to some degree and will not change the GSI vulnerability risk classification of the site.

The wastewater from the sites welfare facility is to be collected into a large sealed tank for storage prior to removal off site for disposal to a licensed water treatment facility.

The main risk to human health would be considered to be from large volumes of fuel lost to ground from the re-fuelling of plant and machinery. The likely hood of these risks occurring is very low as fuel management and re-fuelling locations will be controlled and there will be no bulk fuels storage on site.

Mitigation Measures

Good site management and infrastructure such as water recycling equipment. Pond storage, wastewater disposal off-site combined with good earthworks management such as limiting active quarry areas and landscaping and seeding as soon as practicable after quarrying completion will be done to limit the potential for sediment runoff, dust generation and compaction by machinery.

Best practice guidelines with regard to environmental management and pollution control for the construction industry (e.g. CIRIA guidelines), will be implemented for the proposed development through a site specific Environmental Management Plan, (EMP).

For the long term rehabilitated site use as agriculture pasture - good land and farm management practices will reduce the risk of water contamination due to the over application of fertilizers or slurries.



Proposed Rooskagh Quarry EIAR – Hydrology & Hydrogeology, (Water), Non-Technical Summary

Impact Assessment

The local Mihanboy Watercourse is considered to have a Low Importance as it is a small stream of moderate quality and low sensitivity. The stream a good distance (>200m) from the site and there are no drainage systems going off site and no risk of uncontrolled runoff or surface water leaving the site and getting to a local drain, due to the distance, flat topography and high ground permeability. The potential Impact Magnitude on the surface water regime is considered to be Negligible as no longterm adverse effects are identified and short term risks can be controlled and successfully mitigated.

The underlying aquifer has a High Importance with a potential Impact magnitude on the groundwater considered to be Negligible as no longterm adverse effects are identified and any short term risks can be successfully mitigated.

Monitoring

The site has four new groundwater monitoring boreholes installed. It is recommended that monthly water level readings are obtained so that seasonal fluctuations in the water table are quantified and the final floor level of the western end of the quarry is kept at least 3m above the high, (winter), groundwater level.

Annual sampling of two or three of the boreholes is recommended so that the groundwater quality can be monitored over the long term.

Conclusion

Following the assessment of the Water elements of the development the Magnitude of Impact on these attributes is considered to be Negligible.

There is no risk to local surface water from sediment runoff or storm waters due to the distance the site is from any drainage features and the permeability of the ground.

The use of groundwater from a shallow sump on the site will not be significant enough to influence the local water levels or aquifer potential. Water use will be minimised by re-cycling and re-use on site.

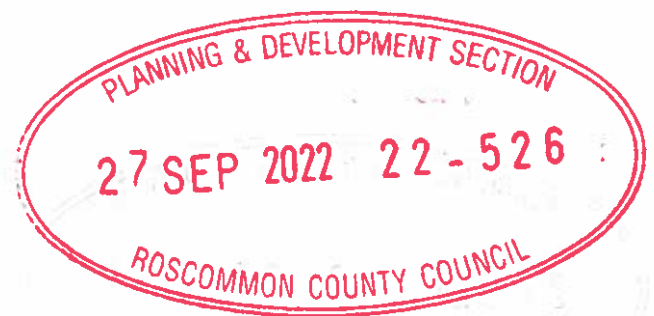
Some of the potential impacts to the aquifer such as, the loss of hydrocarbons to ground can be prevented or limited by incorporating the recommended mitigation measures into the quarry operation. The identified impacts are rated to be Imperceptible.



CHAPTER 8-9

AIR QUALITY AND DUST, CLIMATE

Roscommon County Council, Planning Authority - Viewing Purposes Only!



NON-TECHNICAL SUMMARY

AIR QUALITY & DUST

The background air quality in the area of the development is of very good quality and the site is located in 'Zone D' as denoted by the EPA.

During the operation of the proposed quarry there will be the potential for an air quality and dust impact due to the nature of the proposed extraction, mobile crushing & screening, stockpiling operations and associated traffic movements.

An assessment of the potential air quality & dust impact has been undertaken with reference to the Quarries and Ancillary Activities Guidelines for Planning Authorities (April 2004) as published by the Department of the Environment, Heritage and Local Government and cognisance to the Guidance on the Assessment of Mineral Dust Impacts for Planning (May 2016 (v1.1)) as published by the Institute of Air Quality Management (IAQM).

The Quarries and Ancillary Activities, Guidelines for Planning Authorities states that following with regard to the control of dust;

"There are currently no Irish statutory standards or EPA guidelines relating specifically to dust deposition thresholds for inert mineral/aggregate dust. (See, however, the Air Quality Standards Regulations 2002 for measurement standards). There are a number of methods to measure dust deposition (such as the Frisbee method) but only the German TA Luft Air Quality Standard relates a specific method (i.e. Bergerhoff) of measuring dust deposition with dust nuisance. On this basis it is recommended that the following TA Luft dust deposition limit value be adopted at site boundaries near quarry developments:

Total dust deposition (soluble and insoluble): 350 milligram per square metre per day (when averaged over a 30-day period).

Best practice dust control measures should be proposed by the applicant".

On the basis of the above, the following limits apply to the operation of the quarry and associated manufacturing activities and will continue to apply during the proposed development;

Total dust deposition (soluble and insoluble): 350 mg/m²/day (when averaged over a 30-day period).

On the basis of the predicted traffic flows, an Air Quality Impact Assessment due to traffic generated by the development is not required. This is on account of the relatively low traffic flows that will be generated by the proposed quarry development and the fact that the project is not within an Air Quality Management Area (AQMA) and the existing local air quality is of good quality. This conclusion is based on the guidance outlined in the Land-Use Planning & Development Control: Planning For Air Quality (January 2017).

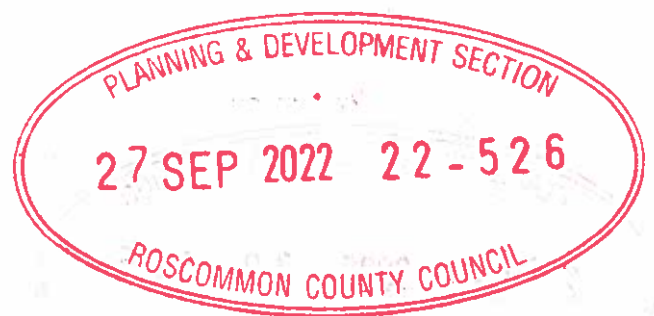
Appropriate dust mitigation measures have been outlined and these will be employed to minimise operational dust impacts.



CHAPTER 10

NOISE AND VIBRATION

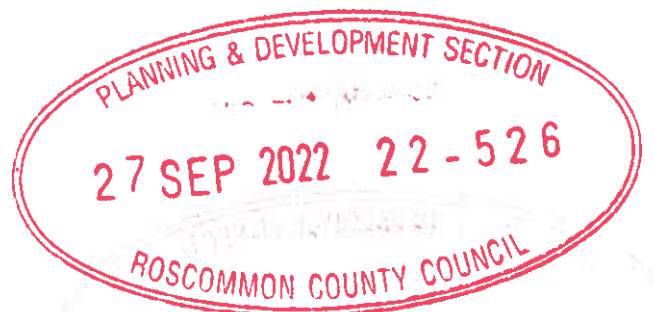
Roscommon County Council, Planning Authority - Viewing Purposes Only!



Roscommon County Council, Planning Authority - Viewing Purposes Only!

CHAPTER 11

MATERIAL ASSETS



11.0 MATERIAL ASSETS

The EPA guidelines in relation to EIAR (2017) describe material assets as built services and infrastructure. Roads and traffic are dealt with elsewhere and this section examines built services and waste management.

The site is located off the L2025 west of Bealanamullia in Rooskagh Td. The area is typical of rural Roscommon with dispersed housing and farm buildings. Notably there is a dwelling and a concrete batching plant immediately to the north of the site and a school 1.3km to the east. The site is bounded otherwise by grazed agricultural land.

The proposed development intends to use existing services for the duration of extraction, water service already on site, electricity and telecommunications coverage is good in the area. There are existing WWTP to the north, it is unlikely the proposed development will impact on their operation. There will be no waste generated directly by quarrying any waste generated from offices or maintenance of plant and vehicles will be collected by an approved waste collector for disposal/ recycling off site.

It is considered that the proposed development will not result in significant effects on material assets and no mitigation other than waste collection is proposed.



CHAPTER 12

CULTURAL HERITAGE

Roscommon County Council, Planning Authority - Viewing Purposes Only!





ROOSKAGH

Cultural Heritage

Non-Technical Summary

Cultural Heritage is defined by UNESCO as “the legacy of physical artefacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations” (www.unesco.org/new/en/cairo/culture/tangible-cultural-heritage). The Heritage Act (1995) contains a list of various aspects of heritage, including archaeological monuments and objects, architectural heritage, fauna, flora, geology, heritage gardens and parks, heritage objects, inland waterways, landscapes, monuments, seascapes, wildlife habitats, and wrecks. In terms of the present project, Cultural Heritage is assumed to include all humanly created features on the landscape, including portable artefacts, which might reflect the prehistoric, historic, architectural, engineering and/or social history of the area.

The Cultural Heritage components of the study comprise the results of a survey and evaluation of selected sites of archaeological and architectural heritage architectural potential within, and in the immediate environs of, the proposed development area. The work generally consists of the results of a paper survey and field inspection. In addition, in terms of Archaeological Heritage, a programme of intrusive Archaeological Testing was undertaken.

The subject development site forms parts of the townland of Rooskagh, in the civil parish of St. Peters and barony of Athlone South (O.S. 6-inch map: Roscommon Sheet 51). The *Placenames Commission* (www.logainm.ie) notes that the Irish form of the townland name has yet to be confirmed although the *Ordnance Survey Parish Notebooks* (1837) state that it may derive from *Rúscadh* – ‘ferny or marshy land’.

There are no significant historical events associated with the subject lands, which contained a house and outbuilding in the 1830s; historic mapping indicates that one of these structures had been demolished by the 1890s, with the other removed by the 1910s. An overgrown laneway along the northern boundary formed part of the public road from at least the 1830s, but was replaced by the existing public road network by the 1890s. The subject site formed part of a much larger landholding owned by The Incorporated Society For Promoting Protestant Schools in Ireland from 1850 to the early 20th century; the lands were leased to various tenants during this time. The existing boundary wall along the northern extent of the site incorporates a former entrance/access feature from the overgrown laneway; these boundary features are of mid-late nineteenth century and will be retained as part of the development proposals. Consequently, it is considered that in terms of Local History, no impacts of any significance are likely to occur as a result of the development proposals.

There are no previously identified monuments or features of archaeological interest located within, or in the immediate environs of, the subject proposed development lands and no surface features of potential were noted by cartographic and aerial photographic interest or by a comprehensive surface reconnaissance survey of the subject lands and immediate environs.

The closest archaeological monument/site to the extent of the lands is a Cist (SMR No: RO051-105; Creagh Td), located approx. 340m to the south; in addition there is a Redundant Record site (SMR No: RO051-020) located approx. 285m to the south. Neither of these monuments is included in the statutory established Record of Monuments and Places (RMP), which was published for County Roscommon in 1997. A programme of Archaeological Testing was undertaken within the extent of the subject proposed development lands in early-June 2021. A total of seventeen test trenches, varying in length from 50m – 160m, were excavated within the extent of the site. In summary, the results from the trenches were largely similar. The topsoil comprised moderately compact mid-brown silty clay, with moderate pebbles and cobbles dispersed randomly throughout; it was 100mm – 350mm in depth (deepest along northern, southern and eastern bases of sloping ground). For the greater area of the site, this lay directly upon firm, naturally-derived' orange/brown gravelly sandy-clay, grey gravelly sandy-clay, grey sand or orange/brown sand, all representing geologically-derived subsoils ; the topsoil lay upon light orange/brown or light grey firm marly clays in the north-western area of the site. No subsurface features of archaeological interest/potential were uncovered. Visual inspections of the topsoil during excavation and subsequent raking-through of the spoil did not result in the recovery of any artefacts of interest. Consequently, is considered that the archaeological potential of the proposed development lands is of an extremely low or negligible level and unlikely that development of the lands will cause any direct impacts to any monuments or features of archaeological heritage interest and/or potential and that no further archaeological interventions are required.

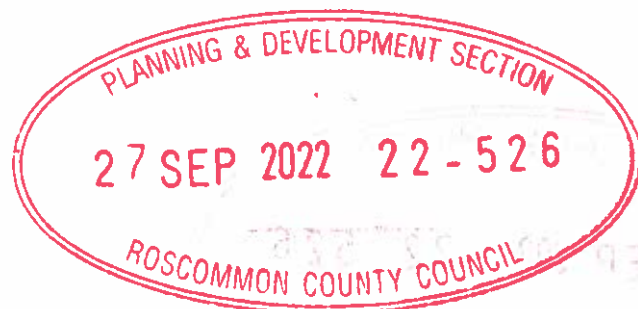
There are no structures listed in the Record of Protected Structures (RPS) of the Roscommon County Development Plan 2014-2020 or by the National Inventory of Architectural Heritage (NIAH) as being located within the site or wider Cultural Heritage Study Area. Consequently, it is predicted that the proposed development will not cause any impacts with respect to any structures or features of architectural heritage interest.



CHAPTER 13

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

Roscommon County Council, Planning Authority - Viewing Purposes Only!





13.0 Non-Technical Summary

The development of the quarry in Rooskagh Td., Bellanamullia (Bealnamulla), Athlone is in keeping with the character of the area, with a number of similar quarries in the locality.

The proposal combines the coherency of quarry development and respects the character of the adjoining land use in the area.

It is set back from the road and provides extensive screening in the form of native planting.

It shall have a positive impact on the field systems, reintroducing hedgerows and trees that shall bring a renewed habitat to the locality. The addition of this landscape buffer is significant and will increase the biodiversity in the area. This a welcome addition and can shall be planted to operations in the quarry.

The location of the quarry adjacent to the concrete plant is ideal, minimising the impact upon the environment. By keeping the quarry beside the plant, it reduces truck journeys and the necessity for structures to be constructed to service the quarry.

All the necessary infrastructure is present in the current concrete plant.

The development shall provide a coherent production and extraction of materials by virtue of the location. It is providing an opportunity to provide a new habitat that shall host a greater range of biodiversity than the current field system.

The quarry shall not detract from the local landscape as the manner of the landscape mitigation shall screen it from public view. It shall extend the lifetime of the existing plant by providing readily available raw material for the production of concrete material.

The quarry shall provide local employment in the extraction process and guarantee the source of material for the concrete plant, and by extension provide concrete products to the construction industry.

The positive social impact from the production of material for housing shall, provide jobs in the construction industry and houses for people for many years to come.



References

- Roscommon City County Development Plan 2014-2020
- Landscape Character Assessment of County Roscommon - Roscommon City County Development Plan 2014-2020
- Record of Protected Structures - Roscommon City County Development Plan 2014-2020.
- Advice Notes on Current Practice in the preparation of Environmental Impact Statements (1995)
- Guidelines on the Information to be Contained in Environmental Impact Statements (2002).
- Revised Guidelines on the information to be contained in Environmental Impact Statements Draft (September 2015)
- Guidelines On the Information to Be Contained in Environmental Impact Assessment Reports Draft (August 2017)
- Landscape Institute and Institute of Environmental Management & Assessment (2013). Guidelines for Landscape and Visual Impact Assessment.
- Planning and Development, Act 2000, as amended.
- EPA EIAR Guidelines (August 2017)

PLANNING & DEVELOPMENT SECTION

27 SEP 2022 22 - 526

ROSCOMMON COUNTY COUNCIL

CHAPTER 14

TRAFFIC AND TRANSPORT ASSESSMENT

Roscommon County Council, Planning Authority - Viewing Purposes Only!



MATERIAL ASSETS – Traffic

Material Assets considers physical resources in the environment which may be of human or natural origin. Material assets of human origin include built services and infrastructure such as traffic infrastructure, potable water supply, wastewater discharge, electricity and gas supply.

This section provides a non-technical summary of the traffic-related impacts associated with the development.

A standalone Traffic and Transport Assessment was prepared by Roadplan Consulting. Classified traffic turning counts were undertaken to obtain an accurate representation of the traffic volumes and movements in the vicinity of the development. An uplift of 21% was applied to the surveyed traffic flows to take account of suppression in travel associated with Covid-19. The percentage used was determined by reference to the data of a nearby TII automatic traffic counter. Transport Infrastructure Ireland (TII) traffic growth factors were applied to this data to estimate future year flows.

The development flows to and from the site were calculated based on information received from the applicant on the proposed future activity at the site. Quarry extraction is to be 870,000 tonnes over 10 years, an average rate of 90,000 tonnes per annum, resulting in 15 loads (20t) per day from the development. The daily HGV trips associated with the quarry operation is therefore estimated to be 15 two-way trips. The development will directly employ approximately 4 full time staff so it is predicted that there will be an additional four two-way trips generated associated with staff travel.

The distribution of generated traffic is assumed to mirror the pattern observed for existing arrivals and departures which is that on average over the day 75% of traffic arrives from the R362 and departs in that direction.

The Local Road L2025 is a single carriageway varying in width from approximately 5.5m to 6m and is marked with a centreline and edge lines and, as such, has sufficient capacity for current and predicted traffic flows. Junction capacity analysis was undertaken for the quarry access and the existing R362 / L2025 priority junction for the current year, 2021, the opening year, 2022, and the future assessment years 2027 and 2032 (TII's "Traffic and Transport Assessment Guidelines" recommend the assessment of traffic in the Opening Year, the Opening Year +5 years and the Opening Year +15 years. In this case the however, the extraction is predicted to be completed within a 10-year period). The analysis concludes that both junctions assessed currently operate within capacity over all time periods except that the R362 / L2025 T-junction operates above its practical at present (and in future years) during the daily period of school opening time (between 09:00 and 09:15) as a result of school traffic associated with the Cluain na Cille National School U-turning at the junction. The exceedance of capacity during this short period will occur whether the proposed development occurs or not, and the impact of the development on the occurrence of queues and delays at the junction over this short period is predicted to be low. At all other times of the day the junction is predicted to operate within capacity over all the assessment years. The quarry access onto the L2025 is predicted to operate within capacity throughout the day for all assessment years.

The quarry access has adequate sightlines for exiting drivers and measures are provided within the layout of the development to cater adequately for the movement and turning of heavy vehicles.

In summary, traffic movements associated with the proposed development during its operational phase are low and the impacts on the capacity of the receiving road network are predicted to be small.

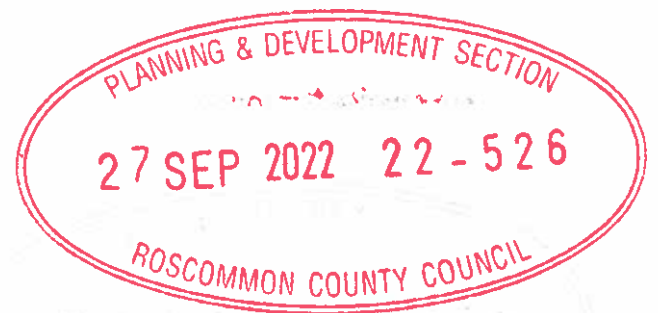


CHAPTER 15

INTERACTIONS

SUMMARY

Roscommon County Council, Planning Authority - Viewing Purposes Only!



15.0 INTER-RELATIONSHIP OF THE FOREGOING.

It is considered that all the significant areas have been reviewed in detail and any likely impacts have been recorded and mitigation measures proposed where applicable.

All interactions have been discussed in the relevant Sections and where appropriate in greater detail within the individual Specialist Reports held as Appendices.

Roscommon County Council, Planning Authority - Viewing Purposes Only

