

SECTION 13: MATERIAL ASSETS - SITE SERVICES

Table of Contents

List of Figures	1
List of Tables	1
13 MATERIAL ASSETS – SITE SERVICES.....	2
13.1 Introduction	2
13.2 Methodology.....	2
13.3 Existing Environment	2
13.3.1 Residential Buildings	3
13.3.2 Geological Resource.....	3
13.3.3 Land Resource	4
13.4 Utilities and Services	5
13.4.1 Water	5
13.4.2 Wastewater.....	5
13.4.3 Electricity.....	5
13.5 Impact Assessment	5
13.5.1 Residential Buildings	5
13.5.2 Geological Resource.....	5
13.5.3 Land Resource	6
13.5.4 Public Utilities	6
13.5.5 Groundwater and Water Supplies	6
13.5.6 Scenic Routes	6
13.6 Mitigation Measures.....	6
13.7 Residual Impacts	6
13.8 References	6

List of Figures

Figure 13.1: Site Location in Relation to Local Dwellings	3
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List of Tables

Table 13.1: Natura 2000 Sites within the Zone of Influence	4
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13 MATERIAL ASSETS – SITE SERVICES

13.1 Introduction

This section of the remedial Environmental Impact Assessment Report (rEIAR) evaluates the impact of the proposal on Material Assets – Site Services. They may be of either human or natural origin and the value may arise for either economic or cultural reasons.

The assessment is made by an examination of the material assets of the area and any potential impact that the proposed quarrying activities may have on existing surface water, water supply, foul drainage and utility services in the vicinity of the site as well as identifying proposed mitigation measures to minimise any impacts.

The material assets considered in this chapter of the rEIAR include Surface Water Drainage, Foul Drainage, Water Supply, Power, Gas and Telecommunications. These are resources that are valued and are intrinsic to the area.

13.2 Methodology

The information for the assessment of the impacts of the subject site was obtained from:

- The Environmental Protection Agency (EPA) May 2022– ‘*Guidelines on the information to be contained in Environmental Impact Assessment Reports*’
- The Environmental Protection Agency (EPA) 2017 – ‘*Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports*’
- The Environmental Protection Agency (EPA) 2015 – ‘*Draft Advice Notes for Preparing Environmental Impact Statements*’
- Donegal County Council 2018 – ‘*Donegal County Development Plan 2018-2024*’
- The Environmental Protection Agency (EPA) 2006 – ‘*Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals)*’
- Site Visits

The material assets which have been identified as being within and adjacent to the site and which may be directly affected by the activities undertaken are addressed below. The EPA ‘*Guidelines on the information to be contained in Environmental Impact Assessment Reports*’ (EPA May 2022), states that the material assets should be addressed under the headings of:

- Built Services
- Roads and Traffic (see Section 12 *Material Assets Traffic*)
- Waste Management

There is an element of cross-over between this section and certain other sections. Some of the areas listed above are dealt with under the relevant sections of the rEIAR, for example Impacts on Geological Heritage have been dealt with in Section 7 *Land, Soils and Geology*. Road damage is dealt with under Section 12 *Material Assets – Traffic*. Designed Landscape is dealt with under Section 15 *Landscaping & Restoration*. Archaeological Heritage, Folklore, Architecture and Monuments have all been dealt with in Section 14 *Cultural Heritage*.

13.3 Existing Environment

The subject site is located within the townlands of Trentamucklagh, St. Johnston, County Donegal. The quarry is served by the L-5414 which is a local secondary road and is in good condition. This road leads directly onto the L-1264-4 which is a local primary road. St. Johnston is located approximately 4km East of this road junction. The site is surrounded by improved agricultural land, upland grassland, native woodland and an area of commercial forestry.

The subject site has previously been the subject of an application for Substitute Consent which was lodged on 21st January 2013, following from the S261A review of the quarry by Donegal County Council. The site covers an area of 9.92 hectares which includes the extracted area of 7.69 hectares, the area cleared of overburden, areas where overburden has been stockpiled for later reuse, weighbridge, redundant offices, proposed wheelwash and the settlement lagoon area as well as the access road from the local road to the quarry.

13.3.1 Residential Buildings

The quarry is situated in a sparsely populated rural area with sporadic once off housing, the closest occupied dwelling is approximately 120m Southwest of the subject site. There is also a dwelling situated approximately 190m from the subject site on the L-5414-1 local secondary road on the approach to the quarry. Figure 13.1 shows the site location in relation to local dwellings within 500m radius.

Figure 13.1: Site Location in Relation to Local Dwellings



(This map was created using QGIS)

13.3.2 Geological Resource

The area is underlain by meta-sedimentary rocks which are assigned to the Lough Foyle Succession of the Dalradian. Most of the rocks in the Lough Foyle Succession belong to the Argyll Group and the Southern Highland Group of Middle to Upper Dalradian age, and the rocks were originally deposited about 600 to 700 million years ago. (See chapter 7 for full detail on site geology). There are no County Geological Sites near the application site. The nearest County Geological Site is Lough Swilly (IGH site code ND015) located approximately 8km to the north-west of the application site. The geological features of interest of Lough Swilly are the long wide fjord bordered by high bold cliffs in the north, passing to gentler coastal slopes and shallow flats in its southern reaches.

13.3.3 Land Resource

There are no undisturbed soils left on site. Almost all ground has been stripped of soil for excavation or for the creation of haul roads or other site infrastructure. Pre-development there would have been three classifications of soils on the application site available from the GSI website.

A large portion of the site would have been categorised as Amin SW which is described as a shallow well mineral soil (mainly acidic). A significant proportion of the site would have been classified as Amin PD which is described as a poorly drained mineral soil (mainly acidic). A small portion of the site in the southwest would have been categorised as Amin DW which is described as deep well drained mineral soil (mainly acidic). Many of the soils stripped from the site to facilitate extraction were used to create the screening berms which surround the site.

The subject site is located on the upper western slopes of a small hill, the summit of which lies immediately south of the site at approximately 140 mOD. The highest point of the site is along the southeast boundary where the vegetated berms are at 136 mOD. The boundary between the application site and the quarry to the north is a rocky ridge at approximately 133 mOD. The lowest point of the site is the quarry deck at approximately 106 mOD. A significant promontory remains in the centre of the site at approximately 125-129 mOD. Drainage is to the quarry void and to Settlement Ponds 1 & 2. There is one outflow from the site to the north where discharge is to a tributary of the St. Johnston Stream.

The Natura 2000 sites occurring within 15km of the subject site are listed in Table 13.1 and are screened for possible threats from the proposed development. pNHA sites are not a designated Natura 2000 sites but pNHA sites are still offered protection under planning legislation which requires that planning authorities give recognition to their ecological value¹.

Table 13.1: Natura 2000 Sites within the Zone of Influence

Site Name	Site Code	Distance from Subject Site	Avenue of Connectivity to Subject Site	Significant Threat Possible (Y/N)
<i>River Finn SAC</i>	002301	3.83 km E	Through surface water run-off, potential for indirect effects.	Y
<i>River Foyle and Tributaries SAC</i>	UK0030320	4.76 km E	Through surface water run-off, potential for indirect effects.	Y
<i>River Foyle, Mongavlin to Carrigans pNHA</i>	002067	3.83 km E	Through surface water run-off, potential for indirect effects	Y
<i>Lough Swilly SAC</i>	002287	7.36 km NW	Through surface water run-off, potential for indirect effects.	N
<i>Lough Swilly SPA</i>	004075	7.36 km NW	Through surface water run-off, potential for indirect effects.	N
<i>Lough Swilly Including Big Isle, Blanket Nook & Inch Lake pNHA</i>	000166	7.36 km NW	Through surface water run-off, potential for indirect effects.	N

¹ National Parks and Wildlife Services - <https://www.npws.ie/protected-sites/nha>

Site Name	Site Code	Distance from Subject Site	Avenue of Connectivity to Subject Site	Significant Threat Possible (Y/N)
<i>River Swilly Valley Woods pNHA</i>	002011	12.11 km NW	No avenue for direct effects or indirect effects.	N
<i>Port Lough pNHA</i>	000180	7.05 km NE	No avenue for direct effects or indirect effects.	N
<i>Feddyglass Woods pNHA</i>	001129	5.68 km S	No avenue for direct effects or indirect effects.	N

A separate Natura Impact Statement (NIS) has been prepared for this planning proposal.

13.4 Utilities and Services

13.4.1 Water

In the past water requirements for the office, canteen and toilet facilities were supplied by pump from the nearest groundwater sump. There are currently no requirements for welfare water on site as the welfare facilities are provided offsite. There is no washing of quarry product. Water is required for dust suppression in periods of prolonged dry weather and water is required for the proposed wheel wash. Dust suppression water and water for the proposed wheel wash is supplied from the settlement ponds within the site. The subject of water for the site is covered in detail in Section 8 *Water*.

13.4.2 Wastewater

A septic tank system and associated percolation area had been in place until approximately 2015. The system has since been decommissioned and removed from site. Welfare facilities are now provided at the applicant's dwelling house a short distance off site. Wastewater treatment is via septic tank and percolation area at this dwelling.

13.4.3 Electricity

Currently there is no ESB connection or telecommunications connection to the site. All office work related to the quarry is carried out at the applicant's dwelling some 200m south of the site entrance gates. A site office was located at the quarry entrance some time ago but has now been abandoned.

13.5 Impact Assessment

13.5.1 Residential Buildings

The main potential impacts on residences from the existing and proposed development would be associated with the landscape and potential noise as a result of day-to-day quarrying activities. The proposed development has not resulted in a significant increase of traffic from the quarry. Noise, vibration and air emissions have been recorded as being below the recommended guideline values at the nearest dwellings. Proposed management measures, in relation to quarrying activities, are detailed in various sections of this rEiAR. These measures will aid in reducing the impact of the quarrying activity. Regular environmental monitoring of noise, vibration and dust emissions will be carried out in order to ensure the development is compliant in relation to the levels set.

13.5.2 Geological Resource

By its nature, the existing quarry has resulted in the loss of the geological resource which cannot be replaced. However, the extracted material is being supplied to the local construction market which consists of both private and public sector developments thereby contributing to the local, regional and national economy.

13.5.3 Land Resource

The removal of bedrock material and the altering of the topography of approx. c.9.9 Ha within the quarry site is inevitable in causing the loss of some habitat in the past. As a mitigation measure against the loss of habitat, a full restoration plan is outlined in section 15 of this rEIAR which further highlights measures which will be taken to offset the impact on biodiversity. Loss of habitat within the site post mitigation has been assessed as imperceptible (see Section 6 and 15 of this rEIAR).

13.5.4 Public Utilities

It is unlikely the existing quarry has negatively impacted on the availability or quality of public utilities in the local area. The planned development is not likely to add to the demand for public utilities in the local area.

13.5.5 Groundwater and Water Supplies

It is unlikely planned development will impact on the demand for public utilities in the local area.

13.5.6 Scenic Routes

No focal points or views listed in the Donegal County Development Plan 2018-2024 are located in the vicinity of the quarry and subject site. Therefore, no impact is predicted.

13.6 Mitigation Measures

Mitigation Measures are detailed in the relevant sections of this rEIAR to ameliorate impacts on Material Assets – Site Services (see Sections 6-10 for all relevant mitigation measures).

13.7 Residual Impacts

No residual impacts are envisaged.

13.8 References

Central Statistics Office, www.cso.ie

Ordnance Survey of Ireland, www.osi.ie

The National Parks and Wildlife Service, www.npws.ie

Geological Survey of Ireland, www.gsi.ie

County Donegal Development Plan 2018-2024 www.donegalcoco.ie