ENVIRONMENTAL IMPACT ASSESSMENT For Planning Application PD/22/526

Development: Permission for development consisting of the extraction of sand, stone and gravel (site area 6.938 hectares) The development will involve the extraction of sand, stone and gravel over an extraction area of 4.90 hectares (volume to be extracted = 466.766m³ approximately) over a 10 year period, screening/processing of stone, sand and 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) (An Environmental Impact Assessment Report (EIAR) has been submitted with the planning application) at Rooskagh Townland, Bellanamullia(Bealnamulla), Athlone, Co. Roscommon.



Comhairle Contae Ros Comáin Roscommon County Council

Who

ntroduction

The Planning and Development Act, 2000 (as revised) requires environmental impact assessment of applications for development listed in Part 1 or Part 2, Schedule 5 of the Planning and Development Regulations 2001 (as amended), or in respect of sub-threshold development (in respect of Part 2), if it is determined that the development is likely to have significant effects on the environment. Part 1 of the Schedule requires EIA for quarries where the surface exceeds 25ha. Part 2 requires EIA for quarries where the extraction area is greater than 5ha, which applies in this instance.

Site description and development proposal

The subject site is located in the townland of Rooskagh just west of Bellanamullia and Monksland in south Roscommon. The site is accessed via a private road off the local (L-2025) road. There is an existing concrete manufacturing facility (Kildea Concrete) located just north of the site where associated concrete manufacturing works are in operation. It is noted that a letter of support from this company is on file as part of details lodged.

The site comprises of an existing greenfield area of agricultural land measuring c: 6.96 hectares. The land rises steeply from a level of 48m to a high point of 72m central hill where commanding view of the surrounding landscape exist. It is noted that the site is proximal to dwellings, particularly the closest one, which is c. 50m from the north western boundary. Other proximal properties are further north, west and north east of the site boundaries. There is a national school c 800m north east of the site.

Permission is sought for the following:

- The extraction of sand, stone and gravel over an extraction area of 4.90 hectares (volume to be extracted = 466,766m³ approximately)
- Screening/processing of stone, sand & gravel from the site using mobile plant,
- Construction of offices (33m²), welfare facilities (9m2),
- Well, water settlement pond (area 2,020m²),
- Weighbridge, wheel wash, entrance, set down area, car parking, truck parking, refueling pad, petrol oil interceptor, fencing, landscaping/screening, signage, lighting, wastewater storage tank for site offices
- All other ancillary works.

Environmental Impact Assessment Report

The application for the proposed development is accompanied by an Environmental Impact Assessment Report (EIAR), which:

- Describes the project and provides detailed information on the site, design, size and particular features of the proposed development;
- Describes the likely significant effects of the project on the environment;
- Describes the features of the project and/or measures envisaged to avoid, prevent, reduce, and if possible, remedy significant impacts;
- Provides a description of the main alternatives studied, and an indication of the main reasons for the choice of alternative put forward, taking into account environmental effects, and;
- Includes a non-technical summary of the above information.

The accompanying EIAR in Section 1.34 and Table 1 sets out the list of contributors and confirms that these have the appropriate qualifications, experience, and competence for their area of input. Having reviewed this, it is considered that the competencies are reasonable and consistent with the technical requirements of the EIAR.

aving regard to the foregoing in respect competencies and the technical information presented, I am satisfied that the EIAR complies with article 94 of the Planning and Development Regulations, 2001, as amended and the provisions of Article 5 of the EIA Directive 2014.

However, it should be noted that further information which was received on the 12th December 2022 and clarification received on the 27th April 2023 in relation to elements of the EIAR which was will also be assessed in detail below is required in the interest of clarity and transparency.

Examination of the Environmental Impact Assessment Report

In accordance with the requirements under Article 3(1)(a) to (e) of the EIA Directive, the assessment of the environmental effects of the development is set out below under the following headings. It is based on an examination of the information provided by the applicant, including the EIAR.

- Population and human health
- Biodiversity with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC,
- Land, soil & Geology
- Hydrology and Hydrogeology (Water)
- Air Quality and Dust
- Climate
- Noise & Vibration
- Material assets.
- Cultural heritage
- Landscape and Visual Impact Assessment
- Traffic Impact Assessment
- The Interaction of the Above.

Chapter 4 Population and human health

It is considered that both positive and negative impacts upon population and human can arise from development of this nature. Positive impacts may arise from employment associated with the extraction works (direct and indirect) that will be maintained or created as a consequence of the development.

Negative effects may potentially arise as a consequence of emissions to air (including noise, dust, odour); increase in road traffic and the risk of contamination of water. There is also the consideration of vulnerability of the project to risks of major accidents/disasters.

In terms of sensitive receptors, this is addressed in Section 4.13, which outlines the site context in relation to proximity to residential, community/educational and commercial developments.

Figure 4.1 provides a breakdown of properties within a 1.5km radius of the site identifying the following numbers properties under these headings:

Residential - 76 properties

Residential and Business Use – 11 properties

Commercial – 6 properties

ection 4.19 address mitigation measures and identifies that the pertinent measures in relation to population and human health have been identified in chapters 6, 7, 8, 10 and 14. These shall be addressed in further detail below. Maps have also been submitted showing sensitive receptors within a 500m radius.

Assessment re: Population and Human Health

This chapter had been labelled incorrectly in the EIAR submitted and had been identified as 'Chapter 2 Project Description'. In the interest of transparency and clarity this was addressed through further information and the chapter was resubmitted with the correct label.

The proposed development is situated in a rural area, however there is a surrounding residential catchment and a large national school within c800 m of the site. Concerns exist that, irrespective of mitigation measures set out and separation distances in place, further consideration needs to be given to given to the proposed development and how it can mitigate against any impacts on the local population (or human health consequentially), in the vicinity of the site. This has been dealt with in the planning assessment. Nonetheless it can be established that impacts on the local population will be of a temporary nature, as the permission sought is for ten years only. In this context, they are not considered significant and in any event can be mitigated against. In this regard there will not be significant impacts on population and human health as a result of the proposed development.

<u>Chapter 5 – Biodiversity</u>

This chapter includes an Appropriate Assessment Screening Report for the proposed development, the findings of which conclude that an Appropriate Assessment (stage 2) is not required. (Note – Roscommon County Council as the competent authority has separately carried out an AA Screening). The additional detail in this chapter addresses the relevant legislative context and national and local policies applicable. It is identified that there are 17 Natura 2000 sites within 15km of the proposed development site and these are listed in Section 3.3. The Screening has identified Castlesampson Esker the closest European Site to the application site 2.3 km away and that there is no pathway between the 2 sites.

Assessment re: Biodiversity

The findings of the AA screening report are acknowledged and as detailed RCC as the competent authority has undertaken an AA Screening and reached the same conclusion that a Stage 2 AA is not required. 17 Natura 2000 sites were identified within 15km of the proposed development site and these are listed in Table 5.4 Castlesampson SAC being the nearest 2.3km away. 6 no Natural Heritage Sites or proposed Natural Heritage Sites were recorded within 10k of the application site. Following an assessment of the proposed development and any potential relationships with European Sites, it is concluded that either alone or in combination with other plans or projects, there would be no likely significant effects on any European Sites and a Stage 2 - Natura Impact Statement is not required.

The non-technical report refers to an ecological desk study and field surveys being carried out and refers to mitigation measures proposed to offset the ecological impacts of the proposed development. While photographs of a walk over of the site have been submitted, an ecological impact assessment, a habitats map and survey of the site has not been submitted with the main body of the EIAR and this was requested as further information.

On the 12th Dec 2022 the applicant resubmitted Chapter 5: Biodiversity, which included an ecological impact assessment. This chapter addresses the relevant legislative context and national and local policies applicable.

An account of the habitats and species is provided along with associated assessment of findings of a

eld survey carried out 12th May 2021. No protected mammals were recorded on the site and no buildings suitable for roosting or hibernating bats. It was suggested that there may be trees with fissures which may be suitable for roosting bats and while these where not specifically identified it was recommended that they be retained. The report recorded no surface water features on site and therefore concluded that there was no hydrological connection between the application site and Natura 2000 sites or Natural Heritage Sites. The field survey also found no evidence of the site being of high value to mammals, foraging bats and nesting birds due to the existing level of noise in the area. The report highlight the following potential impacts:

- Habitat loss and fragmentation due to the loss of all grassland. However, this was deemed not to be of ecological significance.
- · Potential damage could occur to the roots of trees at the entrance to the site
- Disturbance of local wildlife however it was not considered to be of high significance and it would occur at a local level.
- Potential impact from dust deposition however there are no protected habitats or species recorded so this was deemed negligible.

The concluding section outlines proposed mitigation and monitoring to avoid impact on any ecological receptors within the site.

With respect to the EIAR Chapter 5 on Biodiversity, it is clear from the information submitted that the site is not a protected site nor is it adjacent to a protected one. A desk top and field survey was carried out and it was recorded that there were no protected species or habitats on site and no link hydrological link to any sensitive receptor. It is evident in this chapter that the main ecological impact will be due to the removal of grassland. Grassland however is not a protected habitat hence there are no specific conservation requirements in relation to it. It is acknowledged by RCC that it has a local significance but given that the site when exhausted will be restored to agricultural use and given the extent of grass land in the area it is considered its removal will not have significant impacts on grass land as a habitat.

Chapter 6 - Land, Soils and Geology

The EIAR identifies that predicted impacts during development and operational phase include:

- extracting the inert sediments from east to west in about five phases of totalling 466,766m,
 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.
- potential for accidental contamination of soils, bedrock and the under lying aquifer through fuel spillages.
- creation of up to 15m high quarry faces increasing risk of instability.
- potential for dust generation in dry weather and suspended sediment runoff in surface water in wet weather from the active quarry areas.

Reference is made to the return of the land to agricultural use. Reinstated land use impacts would relate to typical farming practice risks such as excessive slurry or fertiliser application.

The EIAR identifies that 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 having an adequate slope angle, benching and revegetation 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.

Section 6.4.5 addresses cumulative impacts and in this regard, references the adjoining Kildea concrete facility. This section outlines that the cumulative operational impacts of these projects are considered insignificant as the scale and footprint of the development areas is extremely small when

ompared to the soil and geological attributes which are very widespread both in a local and regional context and no significant cumulative adverse impacts are anticipated to occur.

Mitigation measures set out refer to the application of good site management practices, such as controlled refuelling of machinery, stockpiling and waste water collection. The EIAR also outlines that 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.

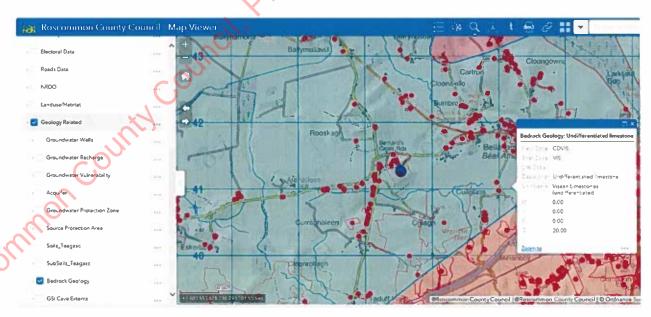
The EIAR outlines that quarried areas will be landscaped and vegetated as soon as is practical after completion to further reduce the potential for slope instability, sediment runoff and dust generation risks.

The EIAR also refers to best practice guidelines regarding environmental management and pollution control for the quarry industry, (e.g. Environmental Management in the Extractive Industry (EPA and CFI), which will be implemented for the excavation works through the development of a site specific Environmental Management Plan.

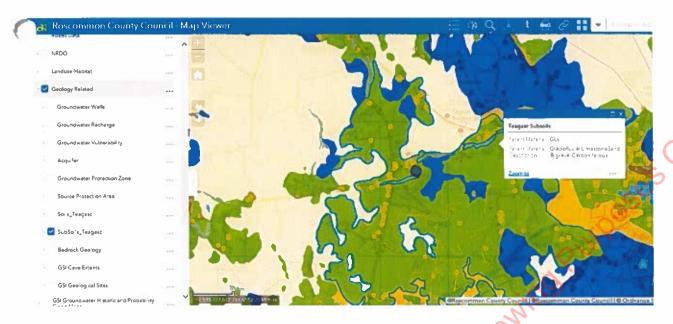
Concluding comments in Chapter 6 outline that the impact upon land and soil is considered to be negligible, although it recognises that potential for short term or brief impact such as dust occurrence or impact on soils by hydrocarbon spills on the site. It is submitted that these impacts can be either prevented or limited by incorporating the recommended mitigation measures (set out in the various chapters of the EIAR) into the development and operation phases.

Assessment re: Land Soils and Geology

The geology of site subject of this application is characterised as Undifferentiated Limestone and Glaciofluvial Limestone Sand & gravel. It is accepted by the planning authority that as a result of the excavation of soil and gravel there will be a permanent impact on the geology of the area. However, having regard to the extent of this type geology in the area relative to the application site refer to maps below it is considered that the overall impact on the geology of the area to be low.



Bedrock geology: Undifferentiated limestone



Subsoil: Glaciofluvial LimestoneSand & gravel. Carboniferous

RCC further accepts the mitigation measures put forward by the applicant to reduce/eliminate the occurrence of potential impacts highlighted in the EIAR and outlined above. However, there appears to be no monitoring programme submitted to ensure these mitigation practices are implemented. This is of particular concern with respect to slope stability, this can be conditioned in the event planning permission is granted and ultimately it is the developer's responsibility to ensure health and safety within the site.

A map/phasing plan indicating the quarry will be excavated from east to west over 5 phases has been submitted. A more detailed phasing plan and restoration of the site is required but this will not affect the outcome/conclusion of the EIA.

To conclude RCC concurs with the conclusions of Chapter 6: Land Soils and Geology which determine that the impact upon land and soil is considered to be negligible,

Chapter 7 - Hydrology and Hydrogeology (Water)

This section of the EIAR identifies that the proposed site is located in the Upper Shannon (Mid Shannon) Hydrometric Area (HA26G), as defined by the Water Framework Directive, (WFD) and Environmental Protection Agency, (EPA). The EIAR identifies that the site is located about 200m to the north of one part of the Mihanboy Stream (Water Body Code IE_SH_26M040200) and outlines that there is no direct connection between the proposed quarry area and this water body. No subsurface drainage features are recorded in the site, there are drainage ditches located c 90 m and 130m away to the east. Other than a sump for was water there will be no ground water abstractions or dewatering works.

Predicted impacts identified during the development and operational phase of the proposed development includes:

- potential for accidental contamination of the underlying aquifer through fuel spillages by plant and machinery. In terms of impact to human health the main risk identified in the EIAR relates to large volumes of fuel lost to ground from the re-fuelling of plant and machinery.
- potential for suspended sediment runoff in surface water from the active earth works areas.
 It is noted that the EIAR contends that this runoff is only internal as there is no surface water

- runoff from the site proposed as the very high permeability of the sediments will prevent surface ponding or runoff.
- 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.

In relation to onsite monitoring, the EIAR confirms that the site has four new groundwater monitoring boreholes installed and recommends that monthly water level readings are obtained so that seasonal fluctuations in the water table are quantified. It also recommends that 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 overt the long term.

In terms of mitigation measures it is outlined that 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, landscaping and seeding as soon as practicable after quarrying completion will be done to limit the potential for impact.

Reference is made to implementing best practice guidelines with regard to environmental management and pollution control for the construction industry (e.g. CIRIA guidelines), through a site specific Environmental Management Plan, (EMP).

The report outlines that cumulative impacts of this project are considered insignificant as the Kildea site is a different surface water catchment area and is also 'dry' operation with no interaction with the under lying aquifer apart from using an on-site borehole to provide wash and process water to the site. It is also states that no cumulative impacts to the water attribute are envisaged.

Long term mitigation refers to the rehabilitated site in use as agriculture pasture where good land and farm management practices will reduce the risk of water contamination associated with excessive application of fertilizers and/or slurries.

Concluding comments in this section state that following assessment regarding associated water elements of the development the magnitude of impact on these attributes is considered to be negligible.

The report submits that 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.

It is outlined that 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.

In concluding this section, reference is made in the conclusions the application of mitigation measures into the quarry development to prevent or limit impact upon hydrology and hydrogeology in the area.

Assessment re: Hydrology and Hydrogeology (Water)

Quarrying, as a consequence of loss of surface layers has the potential to impact on the underlying groundwater body. Concerns were raised in the previous application pd 21-463 regarding the protection of groundwater and particularly referred to the following:

The maintenance of the integrity of the impermeable layer at the bottom of the silt ponds,

- the disposal of effluent from the ponds in a safe manner,
- the provision of a manhole after the oil interceptor prior to discharge of effluent to the soakaway and
- the maintenance of the plant when not in use to ensure that no spillages occur which could negatively impact upon receiving waters.

The applicant proposes the use of silt ponds for the settlement of effluent from washing and screening plant. It is proposed that all effluents arising from this part of the extraction process will be collected in a settlement pond that will have an impermeable layer of soil at its base. The previous application on site had outstanding issues with respect to the design of the settlement pond and what type of impermeable layer with be provided. These now appear to have been addressed and a section through the lagoon has been submitted which identifies a waterproof water liner and a layer of impermeable soil. The Environment Section in RCC is has not raised any concern with respect to potential impact on receiving waters in their report of the 15th Nov 2022.

It is considered that the previous issues raised with respect to hydrology in PD/21/463 have been addressed in this chapter of the EIAR and with the implementation of mitigation measures proposed impacts on hydrology and Hydrogeology will be negligible.

Chapter 8 - Air Quality and Dust

A key consideration with respect to quarries and an impact upon air quality relates to dust generation and dispersal from the site due to a number of factors.

The EIAR identifies that dust generation occurs from three primary sources:

- Point sources such as operating plant and machinery
- 2. Line sources such as roads and conveyors
- 3. Dispersed Sources—such as quarry floors and stockpiles

The EIAR identifies that the main potential source of dust from the sandpit site will be from the extraction area with its associated sandpit face excavation, crushing & screening and loading & HGV movements operations.

In relation to the potential for impact on the surrounding population and human health *Quarries and Ancillary Activities Guidelines for Planning Authorities* (April 2004 – published by the DoEHLG) states that "residents living in proximity to quarries can potentially be affected by dust up to 0.5km from the source, although continual or severe concerns about dust are most likely to be experienced within about 100m of the dust source".

In terms of proximity to residential properties, where the above referenced activities will take place, the EIAR identifies that there are 22 sensitive receptors within 1km of the site.

The EIAR identifies that 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.

This element of the EIAR is furnished with a report by AONA Environmental Consulting Ltd. and it identifies the predicted impacts from the proposed development as follows:

Construction Impacts – which relates to a short-term construction phase of the development i.e. construction of the proposed site access, car parking area as well as portable offices and structures on the site. It is stated that this phase of the development will last for no more than 3 - 6 months. It is

redicted that the short-term construction phase will have a slight to minor dust impact as the area of the proposed offices is in excess of 200m from the nearest residential property and the construction works will be temporary in nature.

Section 8.4.2 deal with operational impacts and these may be summarised as follows:

Dust Emissions

The assessment considers impacts that can be expected to occur include:

- stripping of topsoil
- excavation of sand and gravel
- crushing and screening of aggregates
- transport of sand, gravel and finished products (point emissions).

The report does recognise that wind can carry dust particles well beyond the site boundaries, and fine materials from lorries can be deposited along public roads.

In terms of overarching mitigation measures regarding the foregoing operational impacts, the EIAR sets out the following:

- The site manager will have overall responsibility for ensuring that operations within the Rooskagh sandpit site comply with the requirements of any planning authorisation.
- The site will operate a suitable water bowser and will have an associated water supply to allow for dampening down of the site when windblown dust from its surface arises.
- The occurrence of potential wind-blown dust will be weather dependent but suitable facilities will be available to minimise windblown dust from the site surfaces.
- A tractor drawn water bowser will be available for use on site as and when needed.
- Although the site access road northeast of the site is up wind of operations, a fixed sprinkler system along this road will allow for dampening down when windblown dust from its surface arises.
- The dust mitigation measures will be undertaken in accordance with an Environmental Management System (EMS) and dust and air quality mitigation measures will be adhered to on site.

As outlined, the EMS for the proposed sandpit development will include dust mitigation measures as follows in relation to;

- Overburden stripping / placement management.
- Access Roads, Site Roads and Vehicles Loading Activities & Movements
- Stockpiling Operations

In relation to monitoring, reporting and periodic dust monitoring the EIAR confirms that further to general on site management 'housekeeping' dust deposition monitoring will be carried out, when the sandpit is operational, as part of the environmental monitoring programme, if deemed necessary.

Said monitoring results will be submitted to Roscommon County Council on an annual basis and if the level of dust is found to exceed the dust deposition limits (350 mg/m2/day), at the perimeter of the site, immediate action will be taken and additional mitigation measures will be incorporated to control any dust emission. A detailed methodology in relation to this is provided in this section of the EIAR.

The concluding comments outline that all relevant issues regarding significant dust arising from the proposed development over all phases i.e. construction, operational and restoration phases has been

onsidered.

The EIAR states that the potential for dust impact is limited to the immediate vicinity of the excavation activities, with the proposed dust suppression measures in operation, because of the quarried materials predominantly coarse nature. In this regard it is submitted that the potential for nuisance dust impacts is considered to be negligible at the nearest sensitive receptors.

Reference is made to dust deposition monitoring and maintaining dust deposition rates at the site boundary in proximity to the nearest residential receptors, below the recommended levels provided for in the Quarries and Ancillary Activities Guidelines for Planning Authorities (2004).

A Dust Dispersion Modelling Report which includes meteorological data has been submitted and has identified 22 sensitive human receptors within 1km of the site. There are no ecologically sensitive receptors within 2km of the site. This dust modelling report also takes into consideration the cumulative impact from the adjacent Kildea Concrete manufacturing site and planned haul routes. Concluding comments state that the impact of dust deposition concentrations in sensitive receptors locations is considered negligible and the proposed development will not result in an exceedance of the recommended dust deposition rate limit for sensitive receptors of 350mg/m² per day.

Assessment re: Air Quality and Dust

The applicant has provided a dust dispersion modelling report. This report which used Aermod dispersion modelling software predicts dust deposition rates at sensitive receptors, is specific to the proposed development and the site. It has also taken into consideration recent meteorological data and the cumulative impacts with Kildea Concrete manufacturing plant. This report concludes that the development will not result in an exceedance of the recommended dust deposition rate limit for sensitive receptors.

The Planning Authority notes the mitigations measures proposed and accepts that sand and gravel deposits possess a high moisture content which is also a mitigation factor in the generation of dust. Following an assessment of the dust impact assessment submitted and consultation with the environment section in RCC it is considered that with the implementation of mitigation measures far reaching environmental impacts from dust are negligible and significant impacts can be ruled out.

Chapter 9 - Climate

The EIAR outlines that day to day activities undertaken at the application site will contribute to greenhouse gas emissions associated with vehicles and plant operating at the pit. It acknowledges that vehicle and plant emissions cannot be eliminated but measures implemented by the operator aim to reduce emissions.

The cumulative impact of this development and its climate impact has been identified with reference to the adjoining Kildea facility as well as other quarry facilities in the vicinity.

Emissions associated with this proposed development are assessed as having a slight impact over a long-term period.

Mitigation measures outlined include:

- Strict adherence to 'good site/engineering practices' (e.g. all vehicles and plant will be switched off when not in use) which will minimise the generation of any unnecessary air emissions.
- Plant should be serviced regularly to ensure efficient fuel consumption.

- Energy audits should be undertaken at the pit in order to reduce energy requirements.
- When purchasing plant, preference should be given to plant which has low emissions.

Assessment re: Climate

Given the nature of works proposed it is inevitable that there will be emissions generated as a result of operation on site, but these are not anticipated to be of a degree that would give rise to a significant effect on the environment. The mitigation measures are considered generic yet feasible and it is noted that in terms of proposed transportation of quarried material to the adjoining facility it is reasonable to conclude that this will result in less vehicular emissions associated with the proposal.

Chapter 10 - Noise and Vibration

The identified sources of noise associated with this development are primarily related to machinery and plant operation.

The EIAR outlines that a Noise & Vibration Impact Assessment has been prepared in accordance with recognised established standards and guidelines and further makes reference to a baseline noise survey undertaken in proximity to the site on 24th May 2021, to establish the background noise levels in the area.

Figure 10.1 of the EIAR, provides detail on the Noise Monitoring Locations (NML) and Noise Sensitive Receivers (NSR) in proximity to the nearest residential properties to the Rooskagh sandpit site.

Details confirm that the measured existing background noise levels (LA90 values) recorded in the vicinity of the closest receivers to the site was approximately 48.9 dB LA90 at NML 1 and 33.5 dB LA90 at NML2. The noise monitoring data and subjective notes indicate that the existing noise levels were influenced by the Kildea facility, road traffic, birdsong, and agricultural activities.

In term of construction impacts, the EIAR outlines that a short-term construction phase will include the construction of the proposed car parking and access road to the site as well as a small portable office.

It is states that this phase of the development will last for no more than 3 - 6 months and will have a slight to minor noise impact as the area of the proposed access to the site is in excess of 220m from the nearest residential property.

Table 10.5 of the EIAR sets out predicted noise levels from the proposed the excavation, mobile crushing & screening and loading & delivery operations during each phase at the proposed site.

In relation the most proximal residential property (NSR 6), the EIAR states that the maximum predicted noise level of 51.3 dB(A) at NSR 6 to the north of the site indicates that the cumulative noise from excavation, mobile crushing & screening, and loading operations will not have a significant noise impact to properties in proximity to the site, relative to the DoEHLG noise limit of 55 dB(A) during daytime.

The EIAR confirms that there will be no blasting undertaken on site and therefore, there will be no significant vibration or air-overpressure impact as a result of the operation of the sandpit.

Mitigation measures are provided in Section 10.5 and these relate to industry norms such as:

- Restricting working hours to day time hours
- Speed limit enforcements for traffic
- · Quiet working methods and suitable plant/machinery use
- Positioning noisy plant as far as possible from noise sensitive receivers the transmission of sound can be minimised.
- Using earth mounds and/or stacks of material to act as a physical barrier between the source and the receiver.
- Noise in the sandpit space will be attenuated by the sandpit sides.
- Vehicle reverse alarms will be silenced appropriately in order to minimise noise breakout from the site while still maintaining their effectiveness
- Employees working on the site will be informed about the requirement to minimise noise.

The report also states that it is recommended that should complaints be received from nearby residential properties periodic noise monitoring will be undertaken during works to determine noise levels at noise sensitive receivers. On the basis of the findings of such noise monitoring, appropriate noise mitigation measures should be implemented to reduce noise impacts. Where excessive noise exposure levels are recorded, further mitigation measures should be employed which may include temporary screening of the nearest receiver to on-site activities.

Section 10.6 addresses noise monitoring and confirms that once operational, noise monitoring surveys will be undertaken at the site (if required). It is submitted that these noise monitoring surveys will be conducted according to ISO 1996-1, 2016 Acoustics – Description, Measurement and Assessment of Environmental Noise and with reference to the 2016 EPA publication, "Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4).

Having regard to the nature of quarry extraction works proposed, the EIAR confirms that no vibration monitoring surveys will be required.

The conclusions set out that the baseline noise monitoring surveys have been undertaken in proximity to the site and the noise prediction modelling assessment indicates that the specific noise levels from the proposed development will not give rise to any significant environmental impact and cumulatively do not exceed the guideline noise limit provided for in the DoEHLG 2004 guidance.

This chapter concludes by outlining that noise monitoring surveys to commence at the site (in the event of planning being granted) will ensure that the sandpit site activities will be operated in compliance with all relevant standards such as the DOEHLG 2004 recommended levels and in accordance with any relevant planning conditions.

Assessment Re: Noise and Vibration:

With regard to noise arising from plant/machinery/HGVs, it is noted that an agreement has been reached subject to planning permission that the Kildea facility will take large proportion of sand for use in the manufacturing of their concrete products. This will result in a short journey transfer of raw material reducing the need for HGVs to enter onto the public road network, which may reduce the impact upon surrounding residential properties in terms passing traffic.

Following an assessment of the noise impact assessment submitted and consultation with the environment section in RCC it is considered that the implementation of mitigation measures far reaching environmental impacts from noise are negligible and significant impacts can be ruled out.

hapter 11 - Material Assets

The scope of examination of material assets is provided in Section 11.2 of the EIAR in in this chapter impacts upon the following infrastructure, i.e. electricity/ telecommunications, gas, water, sewerage and waste management are assessed. Reference is also made to unplanned events, which is addressed in Section 4.17 and deals with unplanned events including fire, landslides, traffic accidents (including discharges from same), floods or equipment failure.

Cumulative impacts are addressed through reference to relevant recent applications and notes the recent solar farm south of the site (20-36). The EIAR outlines that it is unlikely that this development would have an adverse impact as a result of the proposed development.

Assessment re: Material Assets

It should be noted that material assets can also relate to other built services and infrastructure. Traffic can be included because in effect traffic consumes roads infrastructure. It is not considered that the development would give rise to a significant adverse impact upon any built services. Traffic issues have been adequately addressed in Section 14 of the EIAR. It is unlikely that the proposed development would give rise to an undue adverse impact upon the material assets set out above.

Chapter 12 - Cultural Heritage

The EIAR outlines that 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 study area identified for this project identified an area of 500m surrounding the site and the report contends that this study area was chosen to reflect an appropriate context for the development, beyond which it was considered that a development of this nature would have no direct/indirect impacts.

Desk studies and field studies were conducted to assess the subject area.

The EIAR also refers to archaeological testing with a total of 17 trenches excavated to a depth of 50cm within the extent of the overall site. The report confirms that no subsurface features of archaeological interest/potential were uncovered. Visual inspections of the topsoil during excavation and subsequent raking-through of the spoil also did not result in the recovery of any artefacts of interest.

Assessment re: Cultural Heritage

An assessment of the information provide as well as analysis of available GIS data indicates that there are no recorded monuments, features or structures listed in the Record of Protected Structures (RPS) of the Roscommon County Development Plan 2022-2028 or by the National Inventory of Architectural Heritage (NIAH) as located within the site or the proximal environs.

On that basis it is reasonable to conclude that the site is sufficiently removed from known features of cultural heritage.

Chapter 13 - Landscape and Visual Impact Assessment

The subject site constitutes an existing field and as such the proposed development will result in a significant alteration to the established landscape. The site is within LCA 35 – Brideswell Esker Belt as defined in the current Roscommon Landscape Character Assessment, which forms part of the current RCDP 2022-2028. This LCA is identified as having a moderate landscape value.

Landscape and Visual Impact Assessment (LVIA) has been prepared by Ronan MacDiarmada & Associates Ltd (RMDA) and this sets out that a desktop study and field survey of the site and receiving environment was undertaken.

The report sets out that there has been considerable quarrying activity in the area has altered the landscape and considerably and also highlights that whilst quarry pits themselves might be screened from public roads, the dust created by vehicles emerging from the quarry is clear and creates an adverse visual impact.

Two impacts are identified as arising from the development proposed:

- 1. The change to character of the landscape that arises from the excavation of the existing
- 2. The visual impact, which depends on the degree and nature of change in the visual environment.

Analysis of potential impacts states that the proposed development shall be negative initially and it is recommended to plant the landscape buffer of trees and hedge as the first activity

The EIAR states that the visual impact close to the site, on the adjoining land shall be negative, however from a distance it shall be a temporary visual impact as the trees and landscape buffer respects the natural attributes of the site. It outlines that the boundary shall be a well planted and shall provide screening in a short period which shall be a positive visual impact which shall be long term.

Assessments are provided for all the associated elements of the development as per points 1.6.3 to 1.6.7 and provides an analysis and management proposals in relation to these identified elements.

Assessment of eight visual receptors has been set out from different points surrounding the site and it is submitted that these represent the most significant and sensitive location points. As per details lodged the visual receptors are concentrated towards the north, north east and north west. There is also analysis provided from the west, south west and south east. A detailed analysis of each identified receptor is provided and this addresses the existing and proposed views as well as the visual receptor sensitivity, magnitude of change for landscape receptors, significance of effects, duration and quality of visual impact for each of the eight identified areas. These tables and the assessment of the quality of visual impact have been duly noted.

In relation to monitoring the EIAR states that a Landscape Architect shall be appointed to oversee and monitor the project at construction & operational stage and during the operational stage, the landscape shall review the state of all planting and trees for a period of 18 months, from practical completion of each stage the standard and quality of the materials and workmanship.

In relation to material assets and land the EIAR states that there are 4 no houses within 300m of the subject site and outlines that although the redevelopment of the site, initially shall be negative, the tree planting and hedgerows grow the visual impact shall be a positive impact. Concluding comments outlines that the visual impact shall be ameliorated by the existing hedgerows and trees and shall be further enhanced by the proposed landscape buffer.

Regarding population & human health it is submitted that the visual impacts will arise for residents located close to the proposed quarry and outlines that mitigation measures, namely tree and hedge planting will mitigate the impact of the quarry.

The EIAR indicates that impacts of the new buffer planting shall be positive as it reinforces the character of the hedgerows and local field systems and ultimately will have a positive visual impact.

The concluding section of this chapter of the EIAR submits that whilst the removal of the existing hedgerow and the landform in the short term will be negative, proposed landscaping over time will present a greater buffer and habitat than is currently in existence, creating a positive visual impact over the long term.

In conclusion it states that the impact upon the nature of the landscape shall be moderate to significant in the short term, with slight impacts in the long term.

Assessment re: Landscape and Visual Impact Assessment

The information regarding the perceived impact and proposed mitigation upon the landscape is duly noted, it is considered that having regard to the elevated nature of the site, the removal of the highest portion of the site will alter the character of the landscape at this location. However, the site is not located in a landscape area of exceptional value or along scenic routes or views so any impacts will be of a local nature and will not have far reaching environment consequences. It is also acknowledged that in the longer term, the site will be restored to an agricultural use, which would integrate into this setting, provided the appropriate site restoration works take place.

Notwithstanding the findings presented and the mitigation measures proposed, it is considered that scope exists to consider additional proposals, including but not limited to heightened perimeter berms with planting to aim to reduce the visual impact of works at a local level. This however can be conditioned in the event planning permission is granted.

All things considered the permission is for 10 years when the site will then be returned to agricultural use, so any visual impact will be at a local level and will be in the short term which can be mitigated against so significant impacts can be ruled out.

Chapter 14 - Traffic Impact Assessment

Traffic from the proposed development will engage with the L2025 which leads onto the R362. enters and leaves the site via the L1410. As per details provided regarding traffic generation and trip distribution it is estimated that there will be an average of 17 trips per day generated over 11 hours per day, accounting for four movements over a 1-hour period.

Analysis of existing use of the serving road network as well as future traffic growth over the lifetime of the proposed development is provided.

The assessments conclude that the existing associated road network i.e. L2025 and R362 will operate within capacity with no queues and minimal delays when the development is operational.

Assessment re: Traffic Impact Assessment

If the development operates as per the detail provided, it is anticipated that it would not give rise to an undue impact upon the receiving road network. The consultation responses from the MD Coordinator and the RCC Roads Section have not outlined significant concerns regarding the proposal and its impact upon the road network. It is noted that sightlines as per details lodged are available and in this regard should not give rise to safety concerns if maintained. A wheel wash should also serve to prevent mud and debris from vehicles leaving the site coming onto the road. Thus, having assessed the information provided and the site and road network during the course of the site inspection, it is considered the development should not give rise to an undue adverse impact upon the receiving road network.

hapter 15 - Interactions Summary

This chapter provides an assessment of the potential interactions of the foregoing sections which have been set out in the EIAR. It addresses potential interactions under the headings of biodiversity, water, air quality, noise and vibration, landscape and visual impact, traffic, cultural heritage and population and human health.

Assessment re: Interactions

The Planning Authority has considered the interrelationships between factors and whether these might as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. In essence, this section provides an integrated report of findings from the impact assessment process rather than a collection of individual assessments.

Table 15.1 provides a matrix of interactions and interrelationships under the heading outlined above. Accompanying sections addressing each heading provides detail on identified potential interactions and makes reference to the relevant chapters of the EIAR.

As per details lodged there are no significant cumulative adverse impacts on the environment. This point is noted however there is a necessity to seek further information as there is scope to address likely integrations between air quality, noise and vibration with human health further.

Conclusion on the Significant Effects

Having regard to the examination of environmental information presented in the EIAR and summarised and assessed above, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Noise impacts during construction and operational phase mitigation measures including site management, vehicles and plant, sound reduction measures and monitoring of typical noise levels are considered reasonable.
- Dust impacts during construction and operational phase mitigation measures identified including site management, use of water to dampen dust, dust monitoring has been noted.
- Landscape Impact the landscape will be altered, however in the long term, boundary planting and site restoration works are reasonable factors to consider in term of acceptable proposals, which would return the site to agricultural use. The adjoining concrete facility, along with other quarry facilities in the wider area have altered the landscape, but arguably not a degree which could be regarded as being creating a dominant landscape characteristic above and beyond the primary agricultural related landscape.
- Biodiversity impacts related to the impact of existing habitat and/or species. In terms of habitats or species, the site is not a protected site nor is it adjacent to one. Habitat clearance is mitigated by additional boundary planting, which would over time improve the site. There are no specific conservation requirements on this predominantly grassland site. As such the impact in this regard is not considered to be of a scale which would render it unacceptable.

he Reasoned Conclusion

EIA CONCLUSION

The reasoned conclusion of the competent authority on the significant effects on the environment. Having assessed the EIAR originally submitted with the application and the chapter on Biodiversity which was subsequently submitted on the 12th Dec 2023, it is the reasoned conclusion of the Planning Authority as the competent authority, that the environmental effects arising as a consequence of the proposed development have been identified and assessed to a sufficient level to be regarded as compliant with Article 94 of the Planning and Development Regulations, 2001, (as amended) and that with the implementation of mitigation measures proposed, significant adverse impacts on the environment can be ruled out.

Environmental conditions attached:

The following environmental conditions have been attached to the recommended grant of planning permission.

General environmental conditions: 1, 4, 7, 8, 9, 13, 15 Conditions pertaining to the management of dust: 7, 8, 9, 10 Conditions pertaining to the management of noise: 7, 11,12 Conditions pertaining to addressing visual impact: 2, 5, 6, 7 Conditions pertaining to the management of slope stability: 23

A description of any features and measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment.

A number of mitigation measures have been set out in the EIAR to prevent environmental impacts.

These were set out in:

Section: 4.19: Population and Health

Section 5.70: Biodiversity

Table 6.8: Land/Soils (Geology)

Section 7.5: Hydrology/Hydrogeology

Section 8.5: Air Quality and Dust

Section 9.6: Climate

Section 10.5: Noise and Vibration

Section 11.9: Material Assets

Section 12.6 Cultural Heritage

Sections 2.00, 2.1.1, 2.1.2, 2.1.3: Landscape and Visual Impact Assessment

Monitoring measures:

It is considered that in order to ensure that mitigation measures are implemented and effective in preventing adverse impacts on the receiving environment it will be a condition of planning that an environmental monitoring report shall be submitted to the planning authority on a quarterly basis (recommended Condition No. 13 refers). This report shall detail as a minimum the following: results of dust monitoring; records of ground water levels; result of ground water monitoring; records of accidental spillages occurring on site; records of noise monitoring if complete in the quarter subject to report; volumes of water abstracted from on- site well; records of removal of waste water (sewerage) from site including ultimate disposal destination.

Signed : _____

Date: 6th July 2023

Name: Paula Connaughton Job title: Executive planner

Date: 6th And West An

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