2

PROJECT DESCRIPTION





2 PROJECT DESCRIPTION

This Environmental Impact Assessment Report (EIAR) has been prepared to accompany an application for permission for further development of a quarry as a quarry at at Athgarrett, Philipstown and Redbog, Co. Kildare.

This EIAR has been prepared in tandem with an rEIAR to accompany an application for substitute consent for that existing quarry by the same applicant, Hudson Brothers Ltd, (HBL).

The further development of the quarry is proposed over areas directly adjacent to the main operational lands already excavated as well as within the existing quarry for the purpose of recovering the economic reserve that remains in the void. The proposed development site (application site), lies at the centre of an established landholding of located within the townlands of Athgarrett, Philipstown and Redbog.

The centre of this landholding has been the subject of historic, current and intended future extraction. The southern boundary is delineated by the Wicklow and Kildare county boundaries and the western and northern boundaries of this area are delineated by the Philipstown townland boundary. The east of the area is within the Redbog townland and delineated by field/property boundaries. This area extends to approximately 95.8 ha. and constitutes the EIA project boundary for this quarry.

The lands the subject of this EIAR (the subject lands) at approximately 95.8 ha. entirely encompasses the application area of approximately 64.0 ha. The application area holds the main pit extraction area of the quarry and a proposed northern extension (approximately 21.2 ha in total with an internal extraction area of approximately 17.7 ha) and a proposed western extension (approximately 10.2 ha in total with an internal extraction area of approximately 9.4 ha).

The reserve at this quarry is greywacke rock, overlain by sand and gravel, currently worked to an maximum depth of 188 mOD. The rock reserve is traditionally excavated by blasting and mechanical means, primarily processed by mobile plant at the working face. In this case, however, blasting has not occurred in the period since 07267 expired on 18 September 2020. Excavated sand and gravel material is mechanically extracted and transported internally to a centrally located existing administration and processing area over approximately 5 ha. that holds further processing plant (washing, screening, grading). This plant and processing area is an established part of the quarry area.

Figure 2-1 shows the regional location of the Site, whilst Figure 2-2 provides a depiction of the substitute consent application area and the EIA project boundary.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02





Figure 2-1 - Regional Site Location.

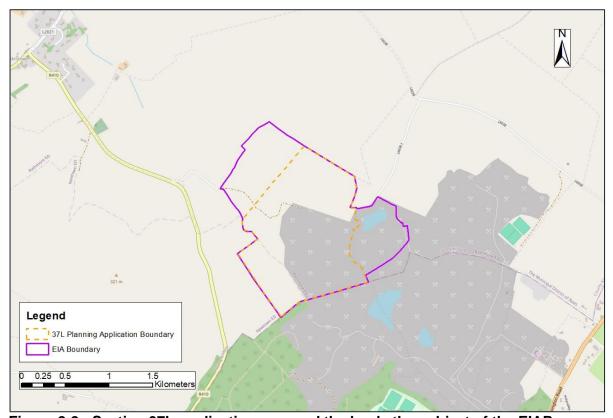


Figure 2-2 - Section 37L application area and the lands the subject of the EIAR.

SECTION 37L - EIAR Project No.: 40000328 | Our Ref No.: 40000328.R02.02 Hudson Brothers Limited



HBL are the owners and operators of a quarry and aggregate product land use site located across the counties of Kildare and Wicklow, since the 1950s, formally becoming a company in 1971.

The trans-county HBL operational facility summarily consists of: a pit, processing plant and offices at New Paddocks, Blessington, County Wicklow where the main entrance to their operation exists onto a local road that accesses the N81; and a quarry with processing plant and staff welfare facilities to the rear (north west) of their Wicklow lands over Philipstown and Redbog in Co. Kildare. Generally the facility is approximately 2 km north of Blessington, Co. Wicklow.

The HBL operation in Kildare is adjacent to other quarry and associated land uses operated by unrelated parties.

2.1 LOCATION OF SUBJECT LANDS

The EIAR project unit is located in the townland areas of Athgarrett, Philipstown and Redbog, Co. Kildare and is centered at ITM coordinates 697024, 716608, (or at 53°11'27.5"N 6°32'52.4"W).

The quarry operation is accessed from a single entry/exit point on the east of the EIA boundary (to Danker Lane). This entry/exit point leads to shared laneway (Danker Lane) and to lands owned by the client in Co. Wicklow.

The town of Blessington is located ca. 2 km south of the Site along the N81 (Figure 2-1). The lands between the subject site and Blessington town are composed of other quarry lands and agricultural land and forestry. The undulating land surrounding the Site slopes upwards in a north-westerly direction to the north of the subject site, and away in a south-easterly direction to the south of the subject site. The southern boundary of the Application Site lies adjacent to the Kildare/Wicklow county border.

The immediate character of the lands is rural in nature with a mix of aggregate industry surrounded by low density, one off roadside housing, agriculture and low density commercial development towards Blessington town.

The existing operational quarry has been in use since the early 1950's and HBL are the owners and operators of the quarry and aggregate product land that time. As such, the quarry, processing plant area and associated uses are an established feature of the landscape and the main feature of the EIA project lands.

The already extracted area occupies southern centre of the EIA project unit. The quarry has a roughly triangular shape with a north – south axis of approximately 650m meters in width, and an east – west axis of an average of 900 meters in length. That quarry and associated plant and processing area is the subject of a concurrent application for substitute consent with rEIAR. It is proposed to further developer this quarry by deepening the eastern and western sides of the current void and laterally extending that void to the north over a total application site area of 26.87 ha.

It is noted that the subject site is proximate to pieces of infrastructure:

Roads: As noted, the entry/exit point of the subject site leads to shared laneway (Danker Lane) and to lands owned by the client in Co. Wicklow. The Co. Wicklow land is accessed via the N81 National Secondary Road. At the junction with the access to the HBL, the N81 is a two-way single carriageway road with lane widths of approximately 5.5m and a hard strip of approximately 0.5m on

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



both sides of the carriageway. The N81 also provides a right turn lane for southbound vehicles entering the quarry.

Electricity: The subject site is connected to the grid by an underground medium/low voltage cable. No other underground or overhead lines traverse the subject site. Other properties around the site are serviced by medium and low voltage overhead lines which traverse the area to the west, east and north.

Water: A public mains connection services the office/canteen, control rooms and welfare facilities onsite. Water is abstracted from a pond onsite to service the water recycling tanks, maintenance shed (including welfare facility) and aggregate plant. The water from the pond that services the maintenance shed undergoes UV treatment in a dedicated unit at the shed.

Foul water is treated at the proprietary wastewater treatment system at the maintenance shed. Foulwater is collected in holding tanks at the control room and the office/canteen and is removed off-Site regularly by an appropriately qualified and permitted contractor. It is proposed to upgrade the holding tanks at the office/canteen to a proprietary wastewater treatment system, however this will be subject to a separate application process upon the successful grant of the concurrent Substitute Consent application.

A potable water network, operated by Uisce Eireann, services houses in the locality. Service mapping indicates that a 300m ductile iron main runs along the R410 west of the site and services the residential dwellings in that area. To the north east of the Site, residential dwellings are served by HDPE and uPVC mains supplies. Uisce Eireann pipelines do not traverse the subject site or lands proposed for extraction.

Gas: There is a There is a high-pressure transmission pipe located within northern section of the subject site (located outside the area of proposed extraction). Appropriate set backs have been included in the design of proposed future extraction.

2.2 PROPOSED DEVELOPMENT SITE ALREADY PART OF AN OPERATIONAL QUARRY

As noted the proposed development is the further development of a quarry as a quarry. The existing quarry and associated plant and processing area is the subject of a concurrent application for substitute consent and rEIAR.

Extraction on the EIA lands evidenced in previously submitted registration and application material to have begun in the 1950s with planning permission originally secured for quarrying in 2010 (KCC Reg. Ref. KCC 07/267 and granted by An Board Pleanála under Reg. Ref. PL09.235502 with regards to appeal of contributions).

Table 2-1 has been prepared to provide a rendition of the development of the quarry to the current time using publicly available resources; historical mapping and photography; and historic monitoring records. Environmental monitoring records made available by the developer have been utilised alongside site visits and monitoring undertaken specifically for the preparation of this EIAR and concurrent rEIAR. In addition, the applicant provided historical excitation rates and direction information.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



Table 2-1 - Summary of key events on application site

Year	Event
Early 1950's	Peter, Sean & Patrick Hudson all worked as employees in quarrying business in the Brittas, Ballymore Eustace and Blessington areas.
1955	Owen McDermott's, owner and operator interest of quarry at Philipstown Townland, Co. Kildare comes to Hudson Brothers.
1960's	William Headon owned quarry at Philipstown Co. Kildare that was taken over by Hudson Brothers.
1971	The Hudson Bros. Ltd. Company was formed (Peter, Sean & Patrick Hudson all Directors)
ca. 1982	Hudson Bros. Ltd. purchased existing quarries at Philipstown and Redbog, both located in Co. Kildare, and continued extracting at these townlands.
1986/87	Hudson Bros. Ltd. purchased existing quarries at New Paddocks, Old Paddocks and Santryhill, located in Co. Wicklow, and continued extracting at these townlands.

The planning history of the application site is summarised below and is set out in detail, in chronological order, in the accompanying planning statement.

2.3 DESCRIPTION OF SUBJECT LANDS

2.3.1 SUMMARY OF PROGRESSION OF EXTRACTION OPERATIONS TO CURRENT TIME

The Site is operated under the planning authorisation KCC Reg. Ref.: 07/267. This Application applied for:

"...permission for the continuation of aggregate extraction and processing at Philipstown and Redbog, Co. Kildare by mechanical means, blasting, aggregate processing, washing, screening, crushing, power house, control rooms, office building, portacabins/canteen, water recycling plant, lagoons, landscaping berms and all associated works. The Application Site area is ca. 57.9 ha. In size, and is the subject of Section 261 Registration Reference No. QR42'.

Permission was granted in April 2010, and in the years since the grant of the continuation of quarrying the economic downturn had struck and aggregate demand slumped due to significantly decreased demands in the construction industry. This sharp fall in demand had a direct impact on the HBL operations and resulted in lower than expected aggregate sales volumes and slower than expected extraction rates. A recovery in the economy then led to a recovery in the construction industry and its supply chains. Aggregate extraction rates then increased on the subject site.

The progression of rock extraction occurred in the centre and south-west areas of the main pit where the bedrock above the underlying groundwater table was extracted by blasting and mechanical means. The blasted/extracted rock materials were then processed on the pit floor prior to exportation from site.

Sand and gravel extraction was undertaken on materials overlying the bedrock, and predominantly located in the west and northern sections of the main pit. The extracted sand and gravel was

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



processed in the plant area to the east of the subject site. Processing included the washing and screening of materials, with an initial crushing stage for any oversized aggregate materials.

2.3.2 FUTURE EXTRACTION AND RESTORATION

The proposed development of further extraction is to be in the existing void area west of the existing processing plant area with lateral extension of the void proposed in westerly and northerly directions, (Figure 2.1). The rates of extraction predicted as part of that application has regard to the historical rates at the site.

The combined total of sand and gravel, and rock to be extracted in the proposed development is 8,708,900 m³ or ca. 13,218,200 t. Details of quantities of each resource are identified below.

Sand & Gravel

A volume of ca. 5,544,900 m³ or ca. 8,317,350 t (using a conversion factor of 1.5) of extractable sand and gravel material has been estimated for the Application Site using 3D modelling software, AutoCAD Civil 3D©.

Rock

A volume of ca. 1,960,345 m³ or ca. 4,900,860 t (using a conversion factor of 2.5) of extractable rock above the watertable has been estimated for the Application Site using 3D modelling software, AutoCAD Civil 3D©.

Annual Extraction

A 5.5 day working week operating for 50 weeks a year and a production rate of ca. 12,796 tonnes per week for sand and gravel, and ca. 7,540 tonnes per week for rock, provides an estimated extraction tonnage of ca. 639,794 tonnes per year for sand and gravel, and ca. 376,989 tonnes per year for rock, giving an approximate annual extraction of ca. 1,016,483 tonnes and a life of operations of ca. 13 years (depending on market conditions). This 13 year life-of-quarry requirement is proposed over a period of 13 to 15 years to reflect the potential external market effects and volatility in the construction industry. This volatility and sharp falls in demand was realised in the recent past with direct impacts on the HBL operations.

Restoration

A restoration proposal is included in this EIAR that is entirely within the EIA unit and is intended to be implemented once extraction proposed is complete. This restoration summarily consists of the regrading of void faces to safe inclines with a pond to be maintained in the base of the void, in keeping with similar pond features found in the surrounding landscape. Native species planting is proposed in accordance with advice from the ecology team for this EIAR. The restoration proposal is detailed in Chapter 11 of this EIAR. It is anticipated that restoration will require 24 months for plant and building removal, regrading and planting works and first planting season inspection. This two year requirement is proposed to be over a period of 2 to 3 years to reflect the potential for slippage in that programme by reason of seasonality and weather/working conditions, and demolition and removal issues or plant failure.

Operational Timeline Requested

For the avoidance of doubt, the period for which planning is sought by the Applicant is for 15 years of extraction operations, followed by 3 years to conduct the final restoration.

SECTION 37L - EIAR

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



2.4 DESCRIPTION OF THE PROJECT

2.4.1 OPERATIONAL PLAN AND RESTORATION

The activity at the existing quarry currently involves the extraction of sand and gravel, and rock (predominantly greywacke) by digging and blasting respectively, and subsequent crushing (rock), washing and screening (sand and gravel), and processing to produce aggregates. It is proposed to extend the existing quarry in both a westerly direction for the extraction of sand and gravel, and rock; and a northerly direction for the extraction of sand and gravel only, with the extraction of additional sand and gravel from the northern most part of the Site only.

The extraction of sand and gravel at the Application Site will involve the following:

- Continuation of excavation of sand and gravel using excavators;
- Continuation of washing and screening of the sand and gravel at the existing 'wet' aggregate
 processing plant (which has a 'water recirculation' system) into stockpiles of specific
 fragment sizes;
- Loading of material onto road going trucks for sale and distribution to market; and
- Trucks passing through an existing wheelwash before travelling onto the N81.

The extraction of rock at the Application Site will involve the following:

- Continuation of excavation of rock using a variety of methods, including drilling and blasting, digging and rock-breaking;
- Continuation of mobile crushing, and screening of the rock into stockpiles of specific fragment sizes on the quarry floor;
- Loading of material onto road going trucks for sale and distribution to market; and
- Trucks passing through an existing wheelwash before travelling onto the N81.

It is considered that the recovery of the valuable aggregate resources from within the Application Site will be a more environmentally sustainable option than recovering aggregates from a greenfield site elsewhere.

It is proposed to extend the existing quarry void in a phased manner. This will allow time for stripping and storage of topsoil and overburden; and the blending of material types depending on the extent of variation in the quality of the materials within the deposit at any given time. Phasing may be dependent on the quality of materials encountered and market demands. In addition, having a number of different operating faces will also facilitate this blending of materials and help to ensure efficient use of this valuable resource, however, it should be noted that not all faces identified in the plans below will be operational at any one time.

There will be no direct discharge to surface or groundwater from the quarry operations. Water laden with silt from the processing of sand and gravel will managed in a silt lagoon, which will be subsequently used in the restoration of the Site. Where practicable, overburden, and materials not suitable for sale (i.e., generated from the processing of the aggregate) will be used in the restoration of worked-out areas.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



Mobile plant maintenance activities will use a dedicated concrete hardstanding apron (with associated interceptor) – at the Maintenance Shed. Static plant or tracked excavators will be refuelled with care by appropriately trained members of staff. In addition, spill kits will be maintained on site to deal with all spills and leaks, and spill training will be provided to relevant staff members.

The proposed finished floor level for each phase will not take place below a level of at least 1 m above the highest seasonal water table level on site, as permitted in KCC Reg. Ref.: 07/267. The finished floor levels are dependent on groundwater levels and how the groundwater may fluctuate both seasonally and due to changes over the lifetime of the quarry. The proposed operational phases to be undertaken at the Application Site are presented below. Aspects of the proposed Phases may be required to be altered in line with market demands for aggregate products, and site circumstances including the quality of resources identified upon extraction of particular areas.

2.4.1.1 Operational Plan - Phase 1

It is proposed to maintain the existing fence along the length of the Application Site boundary and to maintain native hedging inside the fence. In addition, new areas for extraction will be securely fenced around their perimeter and planted with native species where appropriate to provide screening.

A buffer area will be developed around the existing pond/surface water body located to the north of the main extraction area and east of the northern lateral extension, (Figure 2-3). The area surrounding this waterbody will be planted and will extend 3-5 m surrounding the feature. The buffer will be composed of a wet woodland mix of willow and alder and the remainder of the buffer areas will be allowed to naturally colonise with aquatic and marginal plants. It is anticipated that this buffer would help significantly improve the health and biodiversity of the waterbody in comparison to the immediate adjacent agriculture/livestock operations currently surrounding the feature, and utilising the feature as a water source. The corridor of lands to the east of the northern lateral extension will be planted with native species and with species of local provenance displayed in hedgerows in the area. The approximate area of this waterbody and buffer feature is approximately 1.6 ha.

Topsoil and overburden stripped from the proposed extraction areas (Areas A, B, C, D and E) will be removed and used to construct safety/screening berms in appropriate locations to screen active working areas. A new 6 m safety/screening berm in the northeast of the lateral northern extension will be constructed to establish visual, safety and acoustic screening. Topsoil and overburden will also be used as appropriate to construct and strengthen other proposed and existing safety/screening berms running along the perimeter of the Site for similar screening (Figure 2-3). Topsoil will be stripped and stored in such a way to protect quality, integrity and also existing seed bank. Lands that are currently in agricultural use and not required for immediate extraction and site preparation shall be kept in agricultural use for as long as possible.

Quarry operations will extract sand and gravel in the north of the main pit and an access ramp will be extended from an existing haul route in the existing work area to access Area A. The ramp and haul route will progress westerly along the border of the existing main pit and Area A down to grade.

Rock will continue to be extracted in the quarry void, with overburden stripping in advance to expose these areas and provide access. The stripping of Area B in a phased manner to the west will provide access to additional sand and gravel resources initially. As each phase of sand and gravel becomes worked out in Area B, bedrock will become exposed for extraction. In this way Area B will be

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



quarried in a series of sub-phases until the perimeter of the Site is reached. It is proposed that excavations will be to a depth that is 1 m above the seasonal highest watertable.

Rock will be extracted in series of benches (7.5 m wide to allow for safety edge protection), which will be no more than 20 m high depending on ground conditions. Rock extraction will be continued using the existing site practices of drilling, blasting, digging and rock-breaking.

The stripping of topsoil and overburden in a phased manner will allow for faces to be 'opened-up' to provide for the blending of rock, and sand and gravel of variable quality. No rock is expected to be recovered from Areas C and D, as the bedrock deepens in these areas. Existing hedgerows will be remediated by the planting of additional native species. Excess topsoil and overburden will be used for phased restoration of the Site. Once constructed, the majority of screening berms will be 2 m in height. The width of the berm crest will be 2 m and the base of the berm will be 8 m wide. The berms will be planted with a mixture of native grass species and shrubs. Trees are not proposed to be planted on berms as the stored topsoil and overburden therein may be used as required for quarry restoration. As well as visual mitigation into the Site, the berms will provide acoustic screening of the site operations. If required, areas of the proposed screening berms may be left intact for the lifetime of the quarry and will be incorporated into the final restoration plan for the Site.

The security fence around the perimeter of the Site will be maintained (with warning signage) in the interest of safety to both humans and livestock. A perimeter access track will be maintained around the inside of the security fence and the screening berm.

As currently permitted, the water supply for the aggregate processing plant will continue to be sourced from the pond on the base of the pit floor. Silt settlement lagoons will be established in the southern area of the main pit, (Figure 2-3).

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



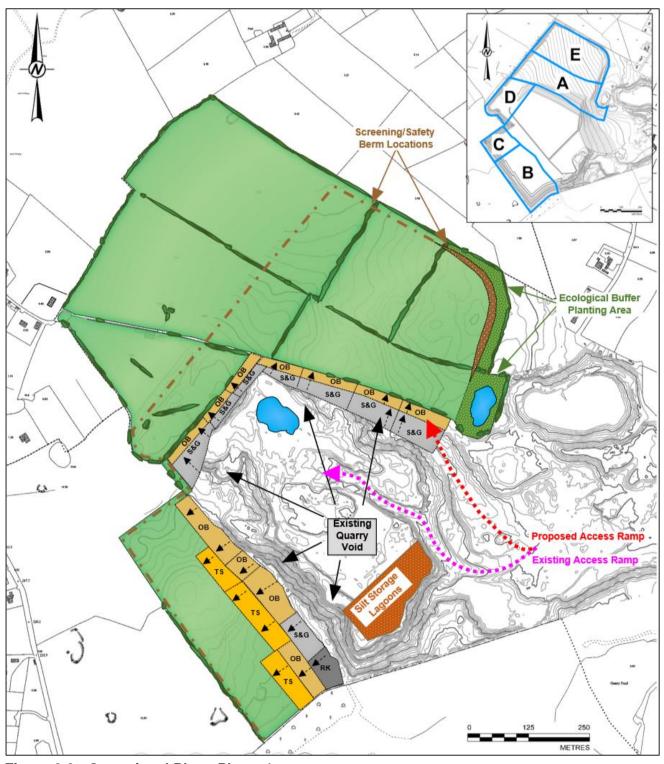


Figure 2-3 - Operational Plan - Phase 1.

SECTION 37L - EIAR Project No.: 40000328 | Our Ref No.: 40000328.R02.02 Hudson Brothers Limited



2.4.1.2 Operational Plan - Phase 2

During this phase of the development, it is proposed to continue to develop the quarry in Areas B, C and D to allow for blending of this valuable resource, with topsoil and overburden being striped ahead of the advancing faces (Figure 2-4). As identified in Phase 1, the proposed finished floor level for each phase will not take place below a level of at least 1 m above the highest seasonal water table level on site. The following quarry design criteria (based on the HSA's 'Guidelines to the Safety, Health and Welfare at Work (Quarries) Regulations 2008') were used in the design of the proposed quarry excavation:

- 3D topographical survey of the site;
- Planning boundary for the site;
- 3 m wide access track between planning boundary and outside edge of screening berm;
- 2 m high screening berm with 1 in 1.5 slopes on either side:
- Screening berm 2 m wide along crest;
- 3 m wide access track along inside edge of screening berm;
- 1 in 2 excavation slope from edge of inside access track surface to base of overburden;
- 1 in 1.5 excavation slope from base of overburden to base of sand and gravel;
- 3 m stand-off on rock-head (i.e. between base of sand and gravel slope and top of rock 'cut');
- 7.5 m wide benches with edge protection,
- 70° slope from top of rock-head to bottom of quarry face (depending on ground conditions);
- Maximum 20 m high benches where design and ground conditions allow; and
- Safety berms/edge protection should be >1.5 m or higher than the radius of the largest wheel/tyre

The stripping of Areas A and D will continue during this Phase of the project, in preparation for the extraction of sand and gravel. Stripping of topsoil and overburden will take place to the east of the Gas Main. The exact location of the Gas Main will be confirmed with Gas Networks Ireland (GNI) prior to stripping.

Further rock, and sand and gravel extraction will take place in Areas B and C.

The existing pit access ramp and proposed access ramp will be utilised depending on the extraction face in operation.

Safety/screening berms will be constructed outside the appropriate GNI exclusion zones and boundary hedgerows will be developed and left intact for the life of the quarry (and in perpetuity to continue to provide biodiversity to the Site and the local environment). Berms and planting in this area will serve to mitigate against noise and potential dust emissions from the Site, as well as offer reduced visibility of the Site from surrounding lands.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



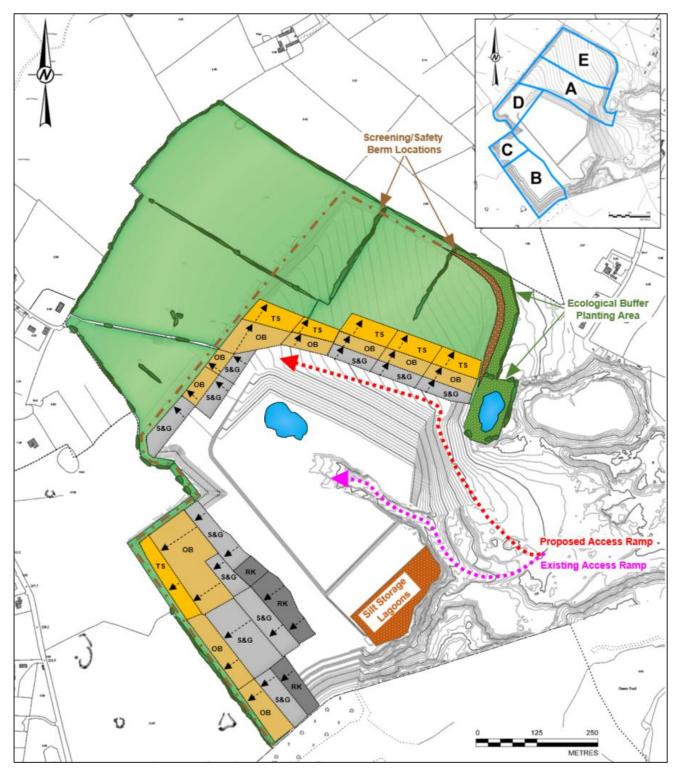


Figure 2-4 - Operational Plan - Phase 2.

SECTION 37L - EIAR Project No.: 40000328 | Our Ref No.: 40000328.R02.02 Hudson Brothers Limited



2.4.1.3 Operational Plan - Phase 3

It is proposed that during this Phase of the development, ongoing production from Area B will take place for rock, and from Areas C, and Area E for sand and gravel (Figure 2-5).

Extraction of rock will continue in Area B in a westerly direction to the Site boundary, with extraction of sand and gravel continuing in Areas C, but ceasing in Area D.

Stripping of topsoil and overburden to continue in Area E, with stripped materials used in the construction of screening berms. Surplus stripped materials from Area E will be stored in temporary stockpiles for use in the restoration on cessation of quarrying. During this Phase of the operation, Area D will undergo restoration.

Conducting these stripping and excavation works in an north and easterly direction within Area E will provide acoustic screening by the topography of the operational quarry face and will provide a reduction in noise impacts on the closest noise sensitive receptors, (see Chapter 9 Noise and Vibration). For further noise attenuation the haul truck routes will be diverted around the edges of the pit to ensure maximum topographic screening as opposed to taking a route through the centre of the voids.

Having a number of different operating faces will allow for blending of materials of variable quality from different parts of the Site and help to ensure efficient use of this valuable resource, however, as noted previously, not all faces identified will be operational at any one time. The proposed finished floor levels in this section of the site will vary due to the topography and incline of hill, however extraction in each phase will not take place below a level of at least 1 m above the highest seasonal water table level.

During this phase of the operation, the quarry faces will be pushed back to their extraction limits.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



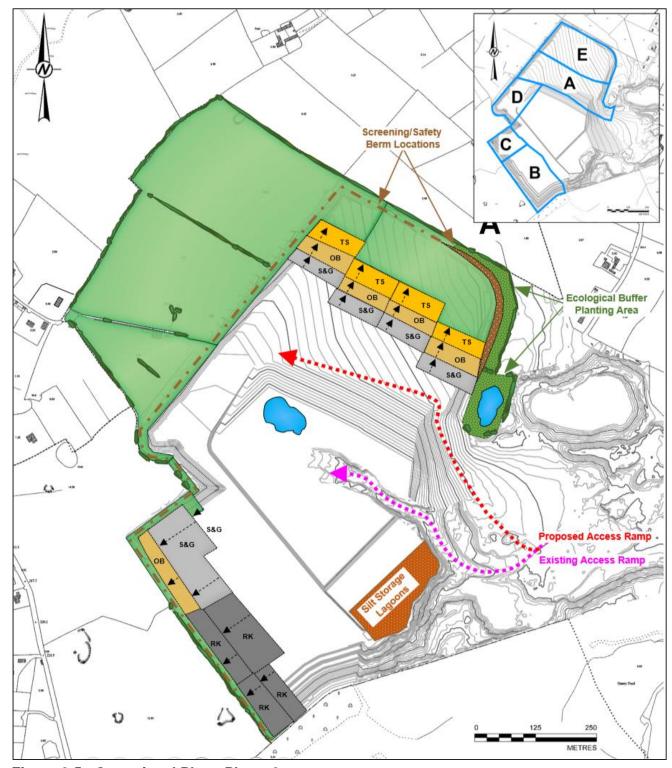


Figure 2-5 - Operational Plan - Phase 3.

SECTION 37L - EIAR Project No.: 40000328 | Our Ref No.: 40000328.R02.02 Hudson Brothers Limited



2.4.1.4 Restoration - Phase 4

Following cessation of extraction, the Site will be restored to a mixture of grassland, hedgerows, woodland and a waterbody (Figure 2-6). The Site restoration will be carried out in line with the Site Restoration Plan (submitted with this Application).

It is expected that the final restoration will be completed in 2 to 3 years following the cessation of extraction activities. The waterbody will also add to the biodiversity of the area following cessation of quarrying. The surface water waterbody will be located in the northern section of the main pit. Water is trapped by clay/silt layers in the sand and gravel deposit in this region. Similar features exist throughout the landscape to the west and north of the Site and also the Red Bog SAC. It is anticipated that this waterbody and the waterbody identified in Phase 1 will be of similar composition and complement each other in the restored landscape.

In addition, the Site will undergo planting of grassland, native tree and shrub species. Indigenous plant species will be encouraged to re-colonize worked out areas (benches) to develop unique habitats and provide for increased biodiversity in the area. A native wildflower and grassland mix will be planted on pit floors and finished sand and gravel faces (not steeper than 1(V): 2.5(H)). Steeper faces will be allowed to recolonise and will be promoted for sand martin habitats where appropriate. All seed mixes will be agreed with the local authority in advance. Agricultural grassland with hedgerow boundaries will be reinstated in the north of the Site. Hedgerow mixes will be sown on the western perimeter of the site outside the GNI wayleave. Grassland mixes will be sown within the GNI wayleave. Planting within and adjacent to the GNI wayleave will be agreed with GNI and KCC in advance.

Inter-mixed with the planting of native trees and scrubs, restoration surfaces will be seeded with native grasses and wildflowers to provide increased biodiversity. Areas for grassland restoration will be dressed with ca. 0.3 m of topsoil and re-seeded with a grass seed mixture, similar to that used on adjoining lands.

Vertical faces which remain along the southern and western part of the Site will be maintained and enhanced to promote biodiversity in terms of nesting birds such as raven (*Corvus corax*), jackdaw (*Coloeus monedula*), peregrine falcon (*Falco peregrinus*) and bats species. Bench heights will be in accordance will any current or future Health and Safety Quarry Regulations. Furthermore, attention will be given to the Environmental Protection Agency's (EPA) 2006 Guidance Document on Environmental Management in the Extractive Industries (or subsequent issues guidance) when implementing the final restoration measures.

The final depth of the pit floor will vary across the Site due to natural variations in aggregate depths and groundwater. The restoration plan has been provided below in Figure 2-6, with a more detail plan provided in Chapter 11 (Landscape and Visual). All plant, equipment and temporary structures shall be decommissioned and removed from the Site.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



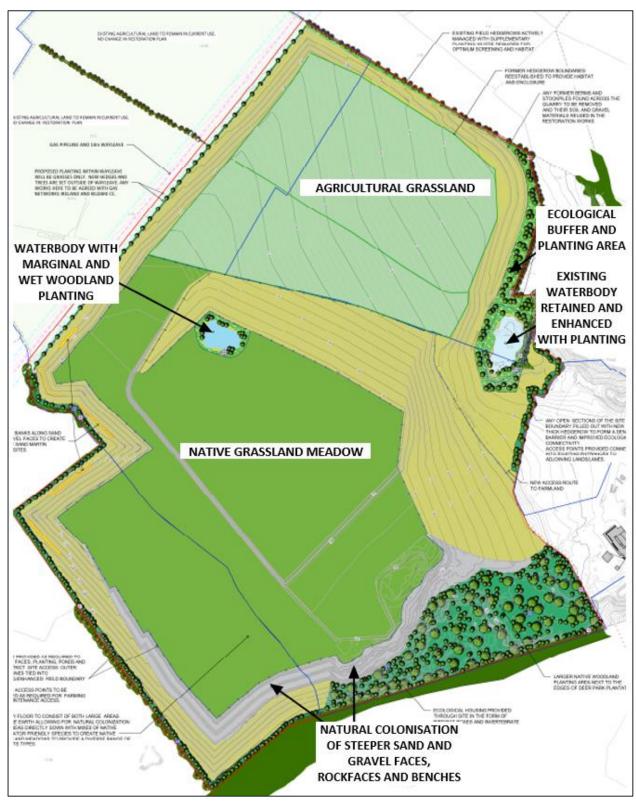


Figure 2-6 - Operational Plan - Phase 4 - Restoration. Overview of main features. Please refer to Chapter 11 (Landscape and Visual) for detailed Restoration Plan.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



2.4.2 TRAFFIC CONTROL

All traffic occurring within the Site is internal traffic using internal short informal haul routes. Excavated rock leaves the quarried faces and is transported off-site. Excavated sand and gravel leaves the extraction face and is transported to the plant area for storage or further processing before being transported off site. The proposed extracted material will be transported in the same way. The Site entrance to the applicant's Wicklow lands from the N81 and route through the shared laneway is the sole entrance for the proposed development. This entrance at the N81 thus caters for all employees, visitors and aggregate transport. Therefore it this interurban national route that accommodates the traffic arising from the current development that is proposed to be maintained in line with current average annual levels for the purposes of excavating remaining reserve at the Site.

No traffic arising from the quarry operation accesses the local road to the east of the development. HBL HGVs are required to utilise the weighbridge located in the applicant's Wicklow site.

The Traffic section of this EIAR sets down a description of the existing traffic environment of the site and the precited impact of the prosed continuation of the average annual traffic from the Site for the operational years where upon traffic generation for the quarry will cease with ad hoc traffic generation from restoration implementation.

As presented in Chapter 12.0 (Traffic and Transportation), the total daily trips associated with the quarry operation for the exportation of ca. 1,016,000 tonnes per annum accounts for 418 movements daily, 296 of which relate to HGV's (70.8%). These numbers have been broken down as follows:

- 296 daily truck movements enter and exit the site importing material, 148 inbound and 148 outbound;
- 112 staff trips daily, 56 inbound and 56 outbound; and
- 10 miscellaneous trips daily, 5 inbound and 5 outbound.

Based on supply and demand in the marketplace, the amount of trucks leaving the quarry will vary throughout the year. All materials leaving the Application Site will continue to be transported along existing internal quarry haul roads prior to existing onto the N81, via a shared laneway which leads through the client's Wicklow owned site (Figure 2-7).

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



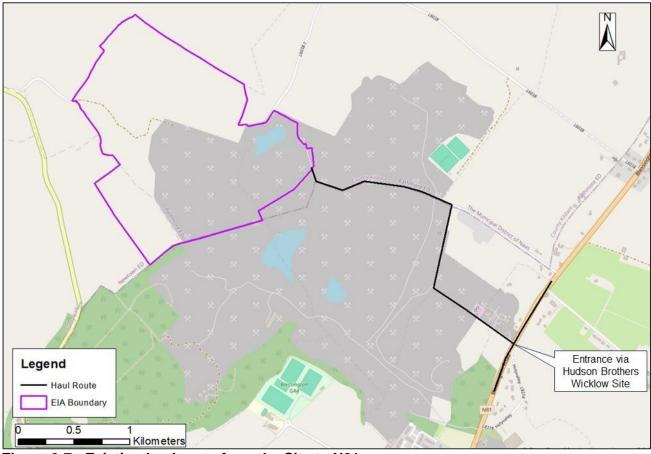


Figure 2-7 - Existing haul route from the Site to N81.

Operations at the Application Site will remain relatively consistent with previous production rates. The small increase in extraction tonnage and small decrease in HGV movements is owed to a small increase in the average HGV size used now to export the extracted aggregate from the Site.

2.4.3 HOURS OF OPERATION

For the current Application, the Applicant proposes to conduct the excavation and processing of material between 0800 hours and 1800 hours, Monday to Friday and between 0800 hours and 1300 hours on Saturdays.

The Applicant also proposes to carry out, loading and transporting of processed material between 0700 hours and 1800 hours: Monday to Friday and between 0700 hours and 1300 hours on Saturdays. The Applicant will not conduct activities on Sundays or public holidays.

2.4.4 EMPLOYMENT

Existing direct and indirect employment is attributable to the quarry. Employment levels vary in accordance with market demand and associated extraction and processing requirements. Direct employment is in the categories of plant operators, fitters, laboratory technicians, administrative staff. The Applicant seeks to maintain the current level on employment between ca. 30 to 50 employees, depending on market conditions.

The quarry operator has a fleet of haulage vehicles and drivers but some of the haulage requirements of the site are met by independent contractors who do not have their permanent work

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



place on site. This and other indirect employment will be preserved through the maintenance of existing ancillary services required for the operation of the development and in the supply chain. It is not possible to quantify the extent of the indirect employment created, however, it is expected to be in the order of 25% to 33% of direct employment, based on estimated additional jobs created in similar projects.

2.4.5 SAFETY AND SECURITY

The subject site and operations are required to meet conditions of permissions and certain statues. In particular, the relevant Health & Safety legislation (Safety, Health & Welfare at Work Act, 2005, the Mines and Quarries Act, 1965) and subsequent Quarries Regulations relating to health and safety, training, appropriate site management etc. will be complied with. Amongst these regulatory requirements are the need to keep on site and up to date Health and Safety File which records safe procedures, deviations from those procedures and accident reports.

Compliance with these requirements will persist during the proposed further development of the quarry. The operator maintains a Health and Safety File and facilitates site inspections by the health and Safety Authority (HSA) and audits.

The EIA unit is fully fenced with any agricultural entrances permanently closed and locked. The perimeter stockproof fence around the perimeter of the Site is proposed to be maintained and monitored (with warning signage) in the interest of safety to both humans and livestock. A perimeter access track will be maintained around the inside of the security fence and the screening berm.

The only vehicular entrance in operation is that from shared land which is gated. As noted in Section 2.4.2 this traffic management arrangement is to persist for the proposed further development of the quarry

There is no requirement for lighting outside of the subject lands but within the lands, certain working hours (before sunrise and after dark in winter periods) necessitate lighting that is extinguished during daylight and when the site is closed thus no external light spill occurs. This situation is to remain in the proposed development which does not require additional lighting.

2.4.6 FUEL AND CHEMICAL STORAGE

Fuel storage is in bunded fuel tanks in the plant area and in the maintenance shed, (part of the concurrent substitute consent application and within the EIA boundary). Refueling and maintenance of equipment occurs at the maintenance shed over a concrete apron with associated interceptor. Oils, chemicals and admixtures are ordered and used as needed and used oil and chemical containers are separately stored within the maintenance shed for disposal by licensed contractor.

Static plant (e.g., generators) or tracked excavators are refuelled with will be refuelled with care by appropriately trained members of staff. . In addition, spill kits are maintained on site to deal with all spills and leaks, and spill training will be provided to relevant staff members.

2.4.7 WASTE MANAGEMENT

The waste arising on site is municipal waste from staff welfare activities and is disposed of via domestic waste collection. Similarly, scrap metal arising on site is stored within a designated area at the site prior to collection by a licensed waste contractor.

SECTION 37L - EIAR

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



2.4.8 WATER

2.4.8.1 Waste Water

There exists a holding tank on site of sufficient capacity to cater for full-time site employees and contractors. It is proposed to upgrade the existing holding tank to a proprietary wastewater treatment system (Oakstown BAF 6PE), which will be the subject of a future planning application for the site.

In addition, an Oakstown BAF 6 PE wastewater treatment system is located at the maintenance shed. This system was included in the 2019 retention application KCC Reg. Ref.: 19/1230 which was initially invalidated. The location of this tank and system is incorporated on the submitted site layout. Chapter 6 (Water) of this EIAR describes this system.

2.4.8.2 Potable Water

Office / Canteen

Water for the office / canteen and control room is supplied from a public supply. This is proposed to be maintained.

Maintenance Shed Welfare Facilities

Water associated with the toilets in the maintenance shed are sourced from existing water infrastructure feeding the adjacent wash plant area, which is abstracted from a pond at the base of the quarry on site (Pond K2). This source negates the requirement for a mains water connection and the need to develop a dedicated groundwater well to service the shed's welfare facilities. An ultraviolet (UV) water purification system from Glenngorey Pumps & Plant Limited was identified as an efficient, economical and chemical-free process to safeguard water in the welfare unit of the maintenance shed. The system is wholly enclosed within a container installed adjacent to the maintenance shed.

- 1) Water is taken from the incoming supply line;
- 2) This incoming water is screened through a 50 µm filter;
- 3) Water is then stored in a 950 litre storage tank;
- 4) This water is then pumped through a 25 µm screen filter;
- 5) Following this the water undergoes softening. The water passes through a water softener system which uses Resinex KW-8 (water softening resin);
- 6) Water is then sent to the UV water purification system (SC-200/SCM-200 provides sufficient capacity for the current use); and
- 7) The water then goes on for use.

Other system details are:

- The pipe fittings used in the system are 25 mm Jason compression fittings, (these fittings are approved by the UK Water Regulation Advisory Scheme (WRAS);
- A GE 760i valve will be used for the control at the water softening stage;
- The system will be installed and maintained by Glenngorey Pumps & Plant Ltd; and

SECTION 37L - EIAR

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



The annual service of the system which will be conducted by Glenngorey Pumps & Plant Limited, includes; the replacement of the 50 μm and 25 μm filters, and the replacement of the UV bulb (which has a ca. 8,000 hour life span). The system incorporates an alarm notification to identify servicing when required.

Maintenance Shed Run-off

Water run-off from the area at the Maintenance Shed is collected on a hardstand and flows to a sump/silt-trap and then to a hydrocarbon interceptor. Run-off is then infiltrated to ground via the installed soakaway.

Processing Plant Water Management

As previously permitted, the water supply for the aggregate processing plant will continue to be sourced from a pond on the base of the existing quarry void. Water for the processing of the sands and gravels is abstracted from a pond at the base of the quarry void. The pump runs periodically on demand between 0700 and 1800 hours Monday to Friday and between 0700 and 1300 hours on Saturday. The amount of water used at the Aggregate Processing Plant is dictated by a number of variables, which include wet weather and the quality of the raw material feed. On wet days less water is required as rainwater is harvested from the yard. On days when the silt content of the raw material is high, the demand for water is higher as more water is needed to transport the silt to the lagoon. Estimated average daily water requirements for the Site are approximately 276 m³/day, consisting of ca. 225 m³/day for aggregate processing, ca. 50 m³/day for dust suppression during dry periods and ca. 1 m³/d for welfare facilities (as provided from mains supply).

No formal discharge takes place from the Site, with the majority of the water used on-site in the processing of sands and gravels in a closed circuit system. The Site uses modern recycling systems to minimise water consumption when processing sand and gravel, however top-up water is required when necessary. Silt laden water from the Aggregate Processing Plant is discharged to a silt pond (for use in future restoration).

Water is also sourced from the pond (via a water bowser) for dust suppression which is undertaken to mitigate environmental nuisances to the surrounding environment

2.4.8.3 Surface and Groundwater

There is currently no below groundwater table working nor any below. Chapter 6 (Water) of this EIAR performs a water balance for proposed quarrying and extant quarry and plant and processing areas in order to demonstrate the ability of the existing water management system of water recycling unit and silt lagoon within the substitute consent area to manage within site boundaries the surface water arising within the operational areas of the EIA project area.

As noted above and previously permitted, the water supply for the aggregate processing plant will continue to be sourced from a pond on the base of the existing quarry void. This pond is a sump for surface water that collects within the quarry void, (e.g., after rainfall).

This EIAR accompanies a proposal for the extraction of rock and sand and gravel in the main pit and in the lateral extensions to the south west and north of the quarry that has been assessed to be above the groundwater table. The eventual restoration of the site proposes to maintain the existing pond on the pit floor which is proposed to add to the biodiversity of the area following cessation of quarrying.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



2.4.9 POWER SUPPLY AND TELECOMMUNICATIONS

Power is supplied to the subject lands via the electricity network. The service maps provided by ESB indicates that the Site is connected to the grid by an underground medium/low voltage cable. Premises around the site are serviced by medium and low voltage overhead lines which traverse the area to the west, east and north.

Telecommunication transmission poles carry over ground services along the R410 and L6038-1. These lines service the ribbon residential developments situated adjacent to them. No other telecommunication lines or services were identified within the Site including telecom masts or underground services.

2.5 PLANNING HISTORY

S261 registration by KCC and WCC

Aggregate extraction and processing in the general area is an historic use with the application lands having been used for aggregate production and aggregate processing since at least the 1800s prior to Hudson's presence in the area. The current business has operated since the 1950's ie. well before 1963. Following the coming into force of section 261 of the PDA in 2004, the applicant registered their facility with both Wicklow County Council under their reg. ref. QY/43, and Kildare County Council under their reg. ref. QR/42. The applicant's operational facility was correctly and properly registered in accordance with section 261 of the PDA and both registrations related to pre 1963 quarrying.

A short time following registration of this quarry which occurred in 2005, this applicant applied for planning permission to Wicklow County Council for those components of the existing quarry that lay within that county's jurisdiction under their reg. Ref. 06/6932 and for which planning permission was granted for 25 years.

Setting aside the grant of planning permission for 25 years by WCC under their reg. ref. 06/6932, for what is essentially the administrative part of the business, the key planning decisions are as follows:

- S261 registration by KCC and WCC;
- Planning permission granted under KCC reg. ref. 07/267;
- Refusal of planning permission under KCC reg. ref. 19/1230 for a maintenance shed;
- Invalidated planning application under KCC reg. ref. 20/511 for continuation of development granted under 07/267 and extended area of quarrying extraction;
- Invalidated planning application under KCC reg. ref. 20/532 for continued use for quarrying of aggregates and ancillary plant and welfare facility; and
- The grant of leave to apply for Substitute Consent conferred on the applicant by ABP under your Reg. Ref. 211633.

Planning permission was sought and obtained by the applicant under KCC reg. ref. 07/267 and ABP ref. PL09.235502 for 10 years expiring on 18th September 2020. The applications subsequently lodged upon the expiry of that permission are identified above and are set out in further detail in the accompanying planning statement by Cunnane Stratton Reynolds Limited. The inability of this applicant to apply for retention under normal planning circumstances meant at the time that they had to apply for leave to lodge a substitute consent application which was duly granted on 1st August 2023.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



That has dictated the requirement to simultaneously lodge a substitute consent application with this s37L application.

A planning search has been undertaken of recent and extant planning permissions in the area, both within County Kildare and County Wicklow, and in particular any developments that might have cumulative impact with the subject development. The majority of relevant decisions in the area relate to one off housing and these are considered in the impact assessments contained within this document. There are no such decisions having potential cumulative impact with the proposed development.

Further detail on the planning history of the subject site and the surrounding area is contained within the planning statement accompanying the S37L planning application.

2.6 PLANNING GUIDANCE AND POLICY

2.6.1 NATIONAL PLANNING FRAMEWORK (PROJECT 2040) & NATIONAL DEVELOPMENT PLAN 2018-2027

These joint documents set out a vision for the future development of the State and support the sustainable development of rural areas by encouraging growth. National Policy Objective 23 seeks to 'Facilitate the development of the rural economy through supporting, amongst other sectors, a sustainable and economically efficient extractive industry sector, whilst at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.'

On page 78 under the heading 'Aggregates and Minerals' the importance of the aggregates and minerals sector to the Irish economy and to development in general is recognised where it stated in the NPF that:

Extractive industries are important for the supply of aggregates and construction materials and minerals to a variety of sectors, for both domestic requirements and for export. The planning process will play a key role in realising the potential of the extractive industries sector by identifying and protecting important reserves of aggregates and minerals from development that might prejudice their utilisation.

Aggregates and minerals extraction will continue to be enabled where this is compatible with the protection of the environment in terms of air and water quality, natural and cultural heritage, the quality of life of residents in the vicinity, and provides for appropriate site rehabilitation.'

2.6.2 QUARRIES AND ANCILLARY ACTIVITIES GUIDELINES FOR PLANNING AUTHORITIES 2004

In light of the commencement of Section 261 of the Planning and Development Act 2000 the Department of the Environment, Heritage and Local Government (DoEHLG) published the Quarries and Ancillary Activities Guidelines for Planning Authorities (2004). The Guidelines are intended as a practical guide to the implementation of Section 261 and to offer guidance to planning authorities in determining applications for planning permission for quarrying and ancillary activities and to land use strategies for same.

SECTION 37L - EIAR

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



Section 1.3 of the Guidelines states that:

"aggregates are an essential input to the construction industry, worth about €20 billion to the Irish Economy each year' and 'there will be a continuing need for some new or expanded aggregate quarrying operations on land to meet regional and local requirements".

The Guidelines further recognise that there is a:

"continuing need for some new or expanded aggregate quarrying operations on land to meet regional and local requirements. There is thus a need to identify and protect aggregate resource areas through the planning system, to ensure an adequate supply of aggregates to meet the likely scale of future demand, while at the same time protecting Irelands natural and cultural heritage."

The Guidelines set out the potential environmental effects of quarries and, sand and gravel pits thereby providing guidance on appropriate mitigation measures for each identified effect. Guidance is also provided on matters such as restoration and after-use. It is the intention of this EIAR document to meet these Guidelines where practicable.

2.6.3 ENVIRONMENTAL MANAGEMENT GUIDELINES – ENVIRONMENTAL MANAGEMENT IN THE EXTRACTIVE INDUSTRY (NON – SCHEDULED MINERALS) 2006

These guidelines were published by the EPA and are intended to further compliment the Guidelines which were published by the DoEHLG.

The EPA Guidelines go further than those of the DoEHLG in that they identify, in so far as is possible, all potential environmental effects of extractive industries and suggest mitigation measures for these effects. Suggestions on mitigation measures include advice on monitoring limits and methods of identifying and measuring environmental effects. These guidelines are aimed at practitioners and officers of the Council alike as they outline best practice measures and are considered in Chapters 3.0 to 13.0 of this EIAR. It is the intention of this EIAR document to meet these Guidelines where practicable.

2.6.4 REGIONAL PLANNING GUIDANCE

Eastern and Midlands Regional Assembly Regional Spatial and Economic Strategy

The Eastern and Midlands Regional Assembly (EMRA) Regional Spatial and Economic Strategy (RSES) 2019-2031 sets out regional goals and objectives deriving from the NPF.

Under the title 'Enabling and Sustaining the Rural Economy' the RSES states that 'The rejuvenation of rural towns and villages requires that appropriate job creation can be supported in rural areas. Traditional sectors such as agriculture, tourism, extractive industries and forestry are complemented by diversification in [other] sectors'. There is an explicit recognition of the need to accommodate and maintain extractive industries in the countryside.

Regional Policy Objective 6.7 also encourages extractive industry development where it states that the regional authority will:

'Support local authorities to develop sustainable and economically efficient rural economies through initiatives to enhance sectors such as agricultural and food, forestry, fishing and

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



aquaculture, energy and extractive industries, the bioeconomy, tourism, and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage.'

The need to reconcile rural based employment and activity with the needs of tourism and protecting the environment is recognised in these guidelines such as building on strengths to sustain a strong economy and support the creation of jobs and to ensure a good standard of living for all.

It is interesting to note that page 94 of the RSES indicates that Blessington is one of those towns recording the highest growth rate in the country over the 10 years prior to the adoption of the RSES at >32% but with lower levels of employment provision.

2.6.5 KILDARE COUNTY DEVELOPMENT PLAN 2023 - 2029

Chapter 9 of the Kildare County Development Plan 2023-2029 indicates that extractive industries require sensitive management. Section 9.9 (Mineral Resources and Extractive Industry) identifies the following:

- The extractive industry can only be developed where the required resources occur;
- Residential and natural amenities will be protected, pollution will be prevented, and aquifers and ground water safeguarded;
- Principles of sustainable development and environmental management;
- Aggregate resources are important to the general economy;
- The industry provides a valuable source of employment in some areas of the county;
- Environmental and landscape impact must be managed or minimised insofar as siting is based on resource locations, and the Council will protect high amenity/special/unique sensitivity areas and limit new and/or extending existing extractive industries in this area;

Rehabilitating ecology and biodiversity and restoration plans will provide for a mosaic of habitats. Infilling may be considered preferable to reverting to agricultural grassland for ecological and biodiversity purposes.

The proposal is consistent with Policy RD P8 which supports and manages appropriate future development of Kildare's natural aggregate resources in appropriate locations to ensure that there are adequate supplies to meet future needs of the county and the region consistent with the principles of sustainable development and environmental management

The following **extractive industry specific objectives** are met:

RD 042 which seeks to ensure that there is no significant impact on any Designated Site;

RD 043 that there shall be no impact on any site of Geological Importance and that the planning authority shall consult with the Geological Survey of Ireland;

RD 044 requiring AA Screening; EIAR; EcIA; detailed landscape plans indicating proposed screening for the operational life of the site; the predominant use of native plant species in proposed landscaping; detailed landscape ad quarry restoration plans; habitats and species surveys will be carried out; comprehensive site restoration plan and /or after use strategy having regard to the principles of 'Rehabilitation Ecology; and finally a transport impact assessment.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



RD 045 submission of a bond (cash deposit, bond from an insurance company or other security acceptable to the planning authority) to ensure satisfactory completion and restoration of the site.

RD 046 requiring road re-instatement work to be on-going during operations in the interests of road and traffic safety;

RD O47 protecting and safeguarding the county's natural aggregate resources from inappropriate development;

RD O48 managing the finite aggregate resources being mined to supply the future needs of the region while working to reach climate change targets;

RD 049 be consistent with the Guidelines on Quarries and Ancillary Activities; Evironmental Management Guidelines, Environment Management in the Extractive Industry (nonschedules minerals); the Archaeological Code of Practice between the DEHLG and ICF; Geological Heritage Guidelines for the Extractive Industry; and Wildlife, Habitats and the Extractive Industry Guidelines for the protection of biodiversity within the extractive industry.

RD 050 ensuring the satisfactory and sensitive re-instatement and/or re-use of disused quarries and extraction facilities where extraction has ceased and seeking consistency with the criteria set out in Section 15.9.6 of that CDP and where there is no significant or unnecessary alteration of the natural landscape and topography unless it can be demonstrated that significant landscape remodelling would enhance the landscape and/or not give rise to adverse impacts.

RD O51 requiring that quarry remediation plans provide for environmental benefit, biodiversity and re-wilding in all instances. It is noted that the 80% requirement for environmental/biodiversity may be waived at sites closer to urban areas where a significant portion of the site is being provided for sports, recreation and amenity.

The aforementioned Section 15.9.6 sets out the **requirements for assessing planning applications** under Section 261A of the PDA and in particular accordance with the previously cited guidelines as well as the requirements for impact assessment including the environmental baseline of the area in which extraction is imposed, the likely impacts and proposed mitigation measures in relation to: human health; groundwater; Natura 2000 sites, Natural Heritage Areas, proposed Natural Heritage Areas and other sites for environmental or ecological protection; flora and fauna; sensitive local receptors including residences, Areas of High Amenity, Landscape Sensitivity Areas, Key Scenic Views and Prospects, and Key Amenity Routes, all of which have been assessed in this application; landscaping, berms and screening proposals; local transport networks including haul routes, trip movements and articulated lorry heights; noise, vibration and dust emissions; and archaeological an architectural heritage of the area.

The current CDP also sets out the technical requirements of planning applications including necessary details of the of the subject development, all of which are provided in this application. We emphasise in this instance there is no blasting.

There are several **economic based policies** all of which support the subject development as an existing quarry.

RE P1 seeking to facilitate employment creation;

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



RE P2 supporting economic development in the county;

In terms of **access and transport** the following is noted by the applicants and assessed by their consultant team:

Objective TM A24 which seeks to upgrade the N81 National Secondary Road.

In terms of **biodiversity** the subject proposal is consistent with the following biodiversity based policies and objectives:

BI P1 requiring the protection and enhancement of biodiversity and landscape features by applying the mitigation hierarchy to potential adverse impacts on important ecological feature, where mitigation and/or compensation measures as appropriate. The applicant notes that opportunities for biodiversity net gain are encouraged.

BI O6 which applies the precautionary principle in relation to developments in environmentally sensitive areas, and which seeks to ensure that all potential impacts on a designated NHA or Natura 2000 site can be avoided, remedied or mitigated.

BI O7 seeking insofar as possible a biodiversity nett gain.

BI P2 seeking the maintaining or restoration of the conservation status of all designated or proposed designated sites.

BI O9 avoid development that would adversely affect the integrity of any Natura 2000 site.

BI O10 ensuring that Appropriate Assessment Screening is carried out to determine the likelihood of having any significant effect on a Natura 2000 site ether individually or in combination with other plans or projects.

In respect of **natural heritage areas**, including Red Bog NHA, and Poulaphouca Reservoir, the subject development is consistent with the following:

BI P3 ensuring that any proposal within or adjacent to any NHA is designed and sited to minimise its impact on the biodiversity, ecological, geological and landscape value of the site, particularly plant and animal species listed under the Wildlife Acts and the Habitats and Birds Directive including their habitats.

BI O12 requiring ecological impact assessment in accordance with the appropriate guidance by a suitably qualified for proposals within or adjacent to a NHA or proposed NHA to ensure that development is designed and sited to minimise impact on biodiversity, ecological, geological and landscape value of the site and particularly plant and animal species listed under the Wildlife Acts.

BI O14 minimising impact on ecological and landscape values on sites under National ad European legislation and International Agreements.

In respect of protected habitats and species the subject development accords with the following:

BI P4 ensuring development does not have a significant adverse impact, is not incapable of satisfactory mitigation on plant, animal or bird species which are protected by law.

BI O15 ensuring that there is no significant adverse impact on rare and threatened species.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



BI O16 ensuring that appropriate species and habit avoidance and mitigation measures are incorporated into all new development proposals.

BI O17 requiring a derogation licence where necessary.

BI O18 requiring developments to identify, protect and sensitively enhance the most ecological features and habitats and incorporate these into the overall open space network and making provision of local diversity.

BI O22 identifying and protecting areas of high nature conservation value (including but not limited to SAC, SPA, pNHA) and supporting landscape features which act as ecological corridors/networks and stepping-stones such as river corridors, hedgerows etc so as to minimise loss of habitats and features of wider countryside which are of major importance for wild fauna and flora.

In respect of ecologically important sites the following policy requirements are met:

BI P8 ensuring that Kildare's wetlands and watercourses are retained.

BI O49 requiring that any development within the zone of influence of listed wetland sites should be subject to EcIA and where appropriate hydrological assessment.

BO O50 protecting and conserving wetlands and resisting development that would destroy, fragment or degrade any identified wetland in the county.

BI O52 requiring preparation and submission of a hydrological report/assessment for significant developments within and in close proximity to protected raised bogs and the assessment of impact on the integrity of peatland ecosystems.

BI O55 protecting conserving and managing the character and appearance of ecological and archaeological heritage.

BI 056 preventing impact on sensitive water habitats without mitigation measures.

In the terms of geology the subject development complies with the following on geology as follows:

BI P10 maintaining and protecting the conservation of value of geological sites of national or local importance and seek sustainable management of the county's geological heritage resource.

BI O60 consulting with Geological Survey of Ireland regarding development likely to impact on Sites of Geological Importance.

BI 062 promoting, encouraging and supporting provision of access to geological and geomorphological features of interest in co-operation/consultation with landowners where practicable.

BI 063 Where appropriate support the restoration of Sites of Geological Importance (identified in Table 12.7).

BI O74 Strengthen ecological networks between urban areas to create greater linkages to Natura 2000 sites, proposed Natural Heritage Areas, parks and open spaces and the wider regional Green Infrastructure network.'

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



In respect of green infrastructure the subject development is consistent with the following:

BI O77 which seeks to integrate nature-based solutions and climate change considerations into the design, planning and implementation of development proposals at the earliest possible stage of the design process.

BI O78 which actively promotes and encourages nature-based approaches and green infrastructure solutions as viable mitigation and adaptation measures to surface water management.

In terms of **landscape character** and **landscape and visual impact** the subject site is located within an area of medium landscape sensitivity where extraction of sand, gravel and rock is shown of medium appropriateness and is *'likely to be compatible with great care'*.

The subject development is consistent with the following:

LR P1 which seeks to protect and enhance the county's landscape.

LR O2 which requires a landscape/visual impact assessment where proposals may affect landscape sensitivity factors or may affect a route or view contained within 500m of the site boundary.

LR O4 requiring retention of local landscape features.

LR O7 restricting the quarrying of sensitive sites within Landscape Character Areas and protecting and conserving ecological, archaeological, biodiversity and visual amenity surrounding quarry.

LR O8 requiring all quarrying activities and projects associated with the extractive industry comply with the relevant guidelines and legislation.

LR O12 requiring appropriate environmental assessment for any development that may impact on boglands.

LR O14 maintaining the visual integrity of the Eastern Transition Lands which have retained an upland character.

LR O15 continuing to facilitate appropriate development in the Eastern Transition Lands in an incremental and clustered manner, where feasible, that respects the scale, character and sensitivities of the local landscape, and recognising the need for sustainable economic activity within the county.

In respect of **assessing impact on designated high amenity areas** the subject development, although not within such a defined area, is consistent with the following:

LR P2 protecting High Amenity Areas from inappropriate development and reinforcement of their character, distinctiveness and sense of place in so far as this is a well-established use, and a key or determining feature of the existing and well established landscape.

LR O17 controlling development that will adversely affect the visual integrity of Areas of High Amenity by restricting incongruous structures out of scale with the landscape within the Areas of High Amenity and where they will disrupt the open nature of these areas.

LRO30 facilitating the utilisation of existing structures taking account the visual absorption opportunities provided by existing topography ad vegetation.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



LR O30 considering the need for activities that have a functional and locational requirement to be situated on elevated sites where it can be explicitly demonstrated that residual adverse visual impacts are minimised or mitigated.

LR O31 having regard to potential for screening vegetation when evaluating proposals for development within Upland Character Areas including the East Kildare Uplands.

In respect of **protected views and prospects** the following policy requirements are met in this instance:

LR P3 protecting, sustaining and enhancing the established appearance and character of all important views and prospects.

LR O32 avoiding any development that could disrupt the vistas or have a disproportionate impact on the landscape character of the area, particularly upland views and listed views. Listed views that may be affected by the subject development are not affected.

LR O33 ensuring no disproportionate visual impact or significantly interfere with or detract from scenic upland vistas when viewed from nearby areas, scenic routes, viewpoints and settlements.

LR O35 encouraging appropriate landscaping and screen planting along scenic routes.

In terms of recreation the following is complied with:

LR P4 protecting and maintaining existing recreation infrastructure in the county and supporting diversification of the rural economy.

Each of the designations, policies and objectives of the 2023 – 2029 Kildare Development Plan are reproduced in full in the accompanying planning statement undertaken by Cunnane Stratton Reynolds Limited.

2.6.6 PLANNING AND DEVELOPMENT, MARITIME AND VALUATION (AMENDMENT) ACT 2022 (COMMENCEMENT OF CERTAIN PROVISIONS) (NO.2) ORDER 2023

The Planning and Development, Maritime and Valuation (Amendment) Act 2022 (Commencement of Certain Provisions) (no.2) Order 2023 (SI 645 of 2023) provides an amendment to S37L of the 2000 Act. The amendment extends simultaneous applications for both substitute consent and future development of land from quarries only to all types of development.

Project No.: 40000328 | Our Ref No.: 40000328.R02.02



2.7 REFERENCES

Kildare County Development Plan 2023 – 2029.

Environmental Impact Assessments of Projects Guidance on the Preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU). European Commission 2018.

Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, Department of Environment, Community and Local Government, 2018.

Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EIAR) 2023.

Environmental Protection Agency, Johnstown Castle Estate, Co. Wexford, Ireland. EPA. 2017.

Circular Letter PL 1/2017 - Implementation of Directive 2014/52/EU on the Effects of Certain Public and Private Projects on the Environment (EIA Directive).

Planning and Development, Maritime and Valuation (Amendment) Act 2022 (Commencement of Certain Provisions) (no.2) Order 2023 (SI 645 of 2023).

Guidelines on the Information to be contained in Environmental Impact Assessment Reports. Environmental Protection Agency, Johnstown Castle Estate, Co. Wexford, Ireland. EPA. 2017.

Key Issues Consultation Paper - Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems, 2017.

EU Environmental Impact Assessment Directive (Council Directive 2014/52/EU).

Guidelines for the Preparation of Soils, Geology and Hydrogeology Chapters of Environmental Impact Statements. Institute of Geologist of Ireland, 2013.

Archaeological Code of Practice (Irish Concrete Federation, 2009);

Geological Heritage Guidelines for the Extractive Industry (Irish Concrete Federation, 2008).

HSA's 'Guidelines to the Safety, Health and Welfare at Work (Quarries) Regulations 2008.

Environmental Management in the Extractive Industry: Guidelines for Regulators 2006.

Environmental Code (Irish Concrete Federation, 2005).

Department of the Environment, Quarries and Ancillary Activities, Guidelines for Planning Authorities 2004.

Environmental Management in the Extractive Industry (Non Scheduled Minerals) (Environmental Protection Agency, 2002)

Project No.: 40000328 | Our Ref No.: 40000328.R02.02