May 2025

Appropriate Assessment – Stage 1: Screening Report

Application for Continuation of the Murrens Quarry

On behalf of

J.J. Flood & Sons Manufacturing Limited

Murrens Quarry, Oldcastle, Co. Meath

MALONE O'REGAN ENVIRONMENTAL

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Appropriate Assessment – Stage 1: Screening Report
Application for Continuation of the Murrens Quarry
J.J. Flood & Sons Manufacturing Limited
Murrens Quarry, Oldcastle, Co. Meath

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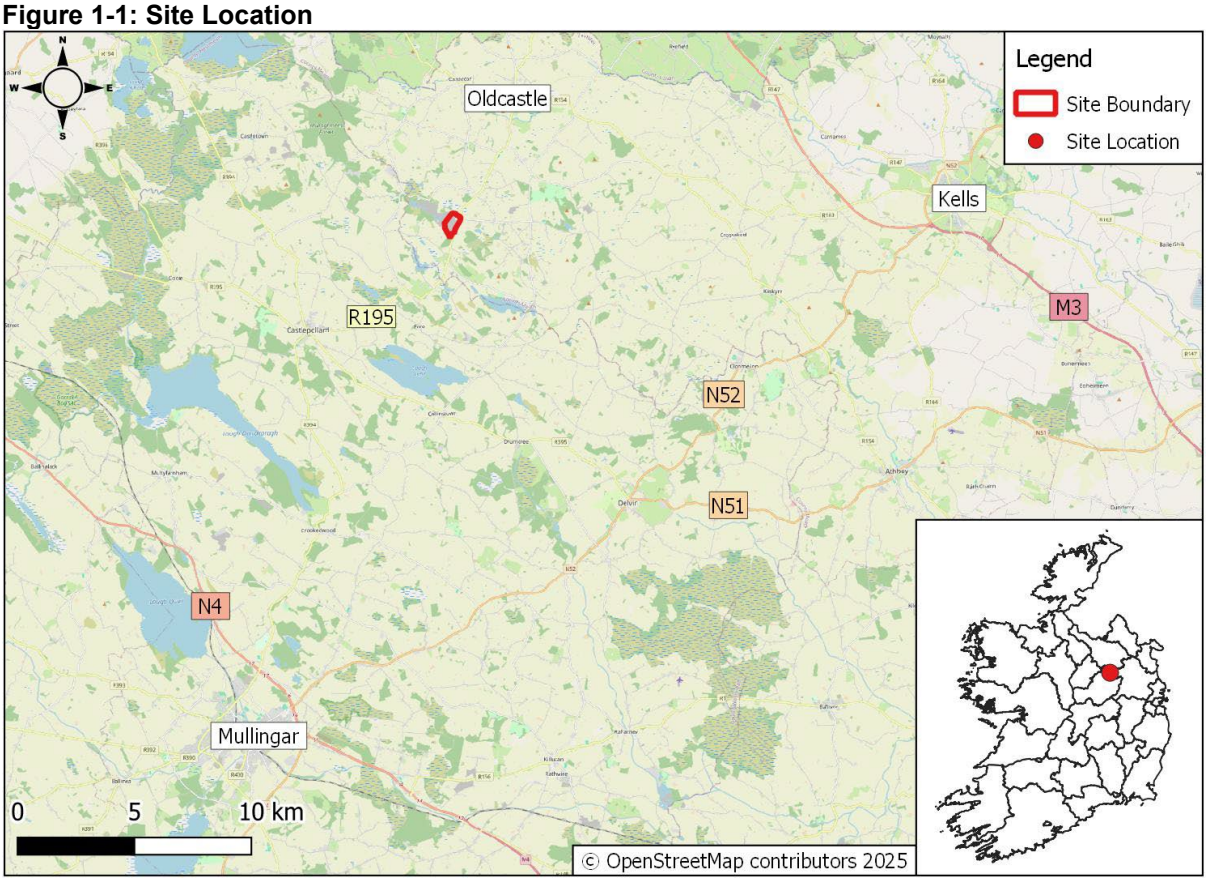
1 INTRODUCTION

Malone O'Regan Environmental ('MOR Environmental') was commissioned by J.J. Flood & Sons (Manufacturing) Limited ('the Applicant') to undertake an Appropriate Assessment Screening Report ('AA') to assess the potential adverse effects, if any, of the proposed continuation of quarrying activities, site preparation works, extension of exaction activities into a greenfield area and restoration works ('the Proposed Development') at Murrens Quarry, Oldcastle, Co Meath (ITM OS Reference 652523 774771) on nearby sites with European conservation designations (i.e., Natura 2000 sites).

The Proposed Development will be located on a site that is circa ('ca.') 40.12 hectares ('ha') in size and is located within the townland of Murrens, Oldcastle, Co. Meath, ca 5.5km south of the town of Oldcastle and ca. 7.3km north of the town centre of Castlepollard to the South and in shown in Figure 1-1 ('the Site'). This assessment relates to the land used for excavations and processing of aggregate, along with adjoining lands integral to the operations within the Site.

The purpose of this assessment was to determine the appropriateness, or otherwise, of the proposed works in the context of the conservation objectives of European Designated sites through the research and interpretation of the best scientific, geographic and engineering knowledge. This report seeks to determine whether the Proposed Development will, on its own or in combination with other plans / projects have a significant effect on the integrity of European Designated sites within a defined zone of influence of the Site. This AA has been prepared without considering measures intended to avoid or reduce an impact on a European Designated site.

Figure 1-1: Site Location



1.1 Background

The Applicant operates a gravel pit and soft rock quarry, known as Murrens Quarry, south of Oldcastle in County Meath. The quarry is recognised as having pre-1963 origins.

Substitute Consent is being sought under Section 177E of the Planning and Development Act, 2000, as amended, to regularise a ca. 40.12 ha area of land within the Applicant's landholding which has been subjected to gravel and soft rock extraction and processing. The application for Substitute Consent was submitted to An Bord Pleanála ('ABP') on the 31st March 2025, case number ABP-322189-25.

Following on from the submission of the Substitute Consent application, this application has been prepared in support of a planning application for future development and restoration of the same quarry.

1.2 The Applicant

David Flood is the director of J.J. Flood & Sons Manufacturing Limited, a company based in Oldcastle, County Meath. Under his leadership, the company has continued to thrive in the manufacturing sector.

J.J. Flood & Sons Manufacturing Limited was established on 4th October 1994. The company operates out of Carnaross, Kells, Co. Meath, and has maintained a strong presence in the industry for over three decades. The company is known for its commitment to quality and innovation in manufacturing, which has helped it build a solid reputation in the market.

J.J. Flood & Sons Manufacturing Limited continues to be a key player in the manufacturing sector locally and regionally.

They specialise in the manufacture of concrete products for construction purposes, which broadly includes:

- Concrete Blocks: Used in various construction projects for building walls and foundations;
- Paving Products: Includes concrete paving stones and slabs for outdoor spaces; and,
- Aggregates: Sand, gravel, and other aggregates used in construction and landscaping.

Activities at the Site involve the extraction of stone, its processing, grading, washing, and short-term storage.

1.3 Background

Murrens Quarry was registered under Section 261 of the Planning and Development Act, 2000, in 2005 and was given the reference QY35, with Meath County Council ('MCC') issuing 23 conditions for its operation in 2007. These conditions were imposed under S261(6)(a)(i), which is restricted to pre-1963 developments that, when greater than 5 ha, are unlikely to cause significant environmental impact.

The Site has a substantial history of quarrying activities, with accepted pre-1963 origins. Previous relevant planning applications for the Site are listed in Table 1-1 below:

Table 1-1: Previous Planning Applications on the Site

Planning Reference	Applicant	Development	Decision	Grant Year
MCC Planning Ref: 971223	J.J. Flood	New Entrance	Granted (Conditional)	1997

Planning Reference	Applicant	Development	Decision	Grant Year
MCC Planning Ref: 98967	J.J. Flood and Sons Ltd.	To construct an MV E.S.B. sub-station in existing quarry.	Granted (Conditional)	1999

1.4 Statement of Authority

This report was reviewed and approved by Mr. Dyfrig Hubble, Associate Director - Ecologist. Dyfrig is a full member of the Chartered Institute of Ecology and Environmental Management ('CIEEM'). Dyfrig has over 18 years' experience working in the ecological consultancy sector, including habitat surveys and appraisals and specialist protected species surveys in support of Appropriate Assessments.

1.5 Regulatory Context

The following guidance documents were adhered to for the preparation of this AA report:

- Office of Public Relations ('OPR') Practice Note PN01, *Appropriate Assessment for Screening for Development Management,* The Office of the Planning Regulator [1];
- *Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, European Commission [2];
- *Guidelines for Ecological Impact Assessment in the UK and Ireland*, Chartered Institute of Ecology and Environmental Management [3];
- *Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC,* European Commission [4];
- *Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities*, DoEGLH [5]; and,
- *Appropriate Assessment under Article 6 of the Habitats Directive; Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10*, DoEGLH [6].

This AA was prepared in accordance with and in compliance with the following legislation:

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna, better known as "The Habitats Directive". This provides the framework for legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. The Habitats Directive was transposed into Irish law by the Planning and Development Act 2000 (as amended) and the European Communities (Birds and Natural Habitats) Regulations (S.I. 477 / 2011) (as amended) [7].

For completeness, the Planning and Development Act 2000 (as amended) states that "*European site*" means:

a. A candidate site of Community Importance ('cSCI');
b. A site of Community Importance ('SCI');
c. A Special Area of Conservation ('SAC');
d. A candidate Special Area of Conservation ('cSAC'); or,
e. A Special Protection Area ('SPA').

These are Special Areas of Conservation ('SACs') designated under the Habitats Directive and Special Protection Areas ('SPAs') designated under the Conservation of Wild Birds Directive (79/409/EEC as amended 2009/149/EC) (better known as "The Birds Directive"). The Birds Directive was also transposed into Irish law through the Planning and Development Act 2000 (as amended) and S.I 477 / 2011 [7].

Article 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment:

> *"Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public".*

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. First, the project should aim to avoid any negative impacts on European sites by identifying possible impacts early in the planning stage and designing the project in order to avoid such impacts. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If the project is still likely to result in adverse effects, and no further practicable mitigation is possible, it must be rejected unless it follows the process established under Article 6(4). If the project is required for imperative reasons of overriding public interest ('IROPI') test under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effects.

1.6 Stages of Appropriate Assessment

There are four distinct stages to undertaking an AA as outlined in current European Union ('EU') and Department of Environment, Heritage and Local Government ('DoEHLG') guidance:

Stage 1: Screening

This process identifies the potential impacts of a plan or project on a Natura site, either alone or in combination with other plans and projects and considers whether these impacts are likely to be significant. If potentially significant impacts are identified the plan or project cannot be screened out and must proceed to Stage 2.

Stage 2: Appropriate Assessment

Where potentially significant impacts are identified, an assessment of the potential mitigation of those impacts is required; this stage considers the appropriateness of those mitigation measures in the context of maintaining the integrity of the Natura 2000 sites. If potential significant impacts cannot be eliminated with appropriate mitigation measures, the assessment must proceed to Stage 3.

Stage 3: Assessment of Alternatives Solutions

This process examines alternative ways to achieve the objectives of the plan or project that avoid adverse impacts on the integrity of the Natura 2000 site if mitigation measures are deemed insufficient.

Stage 4: Imperative Reasons of Overriding Public Interest ('IROPI')

Assessment where no alternative solution exists for a plan or project and where adverse impacts remain. This includes an assessment of compensatory measures, where in the case of projects or plans, can be considered necessary for IROPI.

2 SCREENING FOR APPROPRIATE ASSESSMENT

Screening determines whether Appropriate Assessment is necessary by examining:

1. Whether a plan or project can be excluded from AA requirements because it is directly connected with, or necessary to, the management of a European Designated site; and,
2. Whether the project will have a potentially significant effect on a European Designated site, either alone or in combination with other projects or plans, in view of the site's conservation objectives.

Screening involves the following:

i) Description of a plan or project;

ii) Identification of relevant European Designated sites and compilation of information on their qualifying interests and conservation objectives;

iii) Assessment of likely effects – direct, indirect, and cumulative – undertaken on the basis of available information as a desk study or field survey or primary research as necessary; and,

iv) Screening Statement with conclusions.

2.1 Methodology

2.1.1 Determining Zone of Influence

The starting point for this assessment was to determine the Zone of Influence. The Zone of Influence ('ZoI') comprises the area in which the Proposed Development may potentially affect the conservation objectives (or qualifying interests) of a European Designated site.

Guidance in Appropriate Assessment of plans and projects in Ireland notes that a distance of 15km is recommended for the identification of relevant European sites [5]. However, guidance from the NPWS recommends that the distance should be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects (cumulative) [6]. For some projects, the distance could be greater than 15km, and in some cases, less than 100m.

The definition of the zone of influence for the proposed works includes evaluating the following:

- Identification of the European Designated sites that are situated within, in close vicinity or downstream within the zone of influence of the Proposed Development;
- Identification of the designated habitats and species and Conservation Objectives for the identified European Designated sites;
- Identification of the environmental conditions that stabilise and increase the qualifying interests of the European Designated sites towards favourable conservation status;
- Identification of the threats / impacts – actual or potential that could negatively impact the conservation objectives for the European Designated sites;
- Identifying the activities of the proposed works that could give rise to significant adverse impacts; and,
- Identification of other plans or projects for which in combination impacts would likely have significant adverse effects.

2.1.2 Source-Pathway-Receptor Model

European Designated sites are only at risk from significant effects where a source-pathway-receptor link exists between a Proposed Development and European Designated sites. This can take the form of a direct impact (e.g. where the Proposed Development is located within / in close vicinity to the boundary of a European Designated site), or an indirect impact where impacts outside of the European Designated site but affect ecological receptors within (e.g. impacts to water quality which can affect estuarine habitats at a distance from the impact source).

The likely effects of the Proposed Development on any European Designated site have been assessed using a source-pathway-receptor model. A source-pathway-receptor model is a standard tool used in environmental assessment [8, 9]. The model comprises:

- A *source*: any potential impacts from the Proposed Development, e.g. the runoff of sediment / construction pollution;
- A *pathway*: the means or route by which a source can affect the ecological receptor; and,
- A *receptor*: the qualifying interests and / or special conservation interests of the European Designated sites.

In order to establish the ZoI of the Proposed Development works, the likely key environmental impacts / changes associated with the Proposed Development were determined having regard to the project characteristics set out in Section 3.3 of this report. The ZoI for various potential impact pathways are discussed in Section 4.1.

2.1.3 Desk Based Studies

A desk-based review of information sources was completed, which included the following sources of information:

- Review of aerial maps of the Site and surrounding area;
- The National Parks and Wildlife Service ('NPWS') website was consulted with regard to the most up-to-date details on conservation objectives for the European Designated sites relevant to this assessment [10];
- The National Biodiversity Data Centre ('NBDC') website was consulted on 20th January 2025 with regard to species distributions [11];
- The Environmental Protection Agency ('EPA') Maps website was consulted to obtain details about watercourses in the vicinity of the Site [12]; and,
- The Meath County Council Planning Portal to obtain details about existing / proposed developments in the vicinity of the Site [13]: and,
- The Department of Housing, Local Government and Heritage's planning portal – the National Planning Application Database was reviewed to obtain details about existing / proposed developments in the vicinity of the Site.

2.1.4 Field Survey

An initial Site walkover was undertaken on 16th January 2025 by two suitably qualified and experienced MOR Environmental Ecologists. This survey was undertaken to assess the extent and quality of habitats present on the Site and to identify any potential ecological receptors associated with the European Designated sites. A further Site walkover was undertaken on 2nd May 2025 by two suitably qualified MOR Environmental Ecologists to ensure the most up-to-date information was available for this report.

The habitat survey was undertaken for the Site utilising the Heritage Council's – '*A Guide to Habitats in Ireland'* [14]. This is the standard habitat classification system used in Ireland and includes both a desk-based and field-based assessment.

The assessments were extended to also identify the potential for these habitats to support other features of nature conservation importance, such as species afforded legal protection under either Irish or European legislation.

An updated walkover and habitat assessment of the Site was undertaken on 2nd May 2025 by two suitably qualified and experienced MOR Environmental Ecologists to ensure that all survey data remained current.

2.1.4.1 Survey Limitations

No survey limitations were encountered.

3 DESCRIPTION OF THE PROPOSED DEVELOPMENT

3.1 Site Context and Description

The Site lies in the townland of Murrens, Oldcastle, Co Meath (ITM 652523 774771) and covers an area of ca. 40.7 ha. The Site is bounded to the west by a quarry operated by BD Flood Ltd. and to the east by the R195 road. The Site is bounded to the north and south by agricultural and forested land.

The Site is situated ca. 5.5km south of the town centre of Oldcastle and ca. 7.3km northeast of the town centre of Castlepollard, which are connected by the regional road R195, which passes along the eastern boundary of the Site.

The R195 runs in a north-to-south direction and connects to the R194 west of Virginia town, ca. 14.5km to the north of the Site. The R195 immediately to the east of the Site provides the primary transport route for Heavy Goods Vehicles ('HGVs') accessing and egressing the Site.

The lands around the Site are primarily agricultural with scattered single-dwelling developments along the regional road and the access road into the Site. The western boundary of the Site is shared with an adjoining quarry development, with an embankment of untouched ground separating the two developments. To the south is a forested area.

The Site covers the majority of the land holding. The Site primarily comprises exposed gravel deposits and bedrock, with the main processing area located centrally. The water usage within the Site consists of a series of settlement ponds located in the north of the Site and a settlement canal located adjacent to the main processing area. No water is discharged off site. Refer to Figure 3-1.

Figure 3-1: Site Boundary

3.2 Watercourses within the Vicinity of the Site

As per EPA maps, there are no designated watercourses or waterbodies within located within the Site.

Within the wider area, there are a number of loughs and watercourses. The closest EPA-designated hydrological feature to the Site is the Bane South (Lough), which is located ca. 305m north of the Site. This lough is linked to the Moylagh River, which flows in a north / north westerly direction into the Rathmea River, which discharges into numerous loughs.

It should be noted that a number of loughs located within the White Lough, Ben Loughs and Lough Doo SAC are located within 875m to the South of the Site. These loughs are not hydrologically linked to the Site.

Under the Water Framework Directive ('WFD') 2000/60/EC, the EPA classifies the status and the risk of not achieving good water quality status for all waterbodies in Ireland [12]. According to the river waterbody WFD 2013-2018, the water quality within the Rathmea and Moylagh is considered to be 'good,' and the status of these rivers is considered 'not at risk' [12].

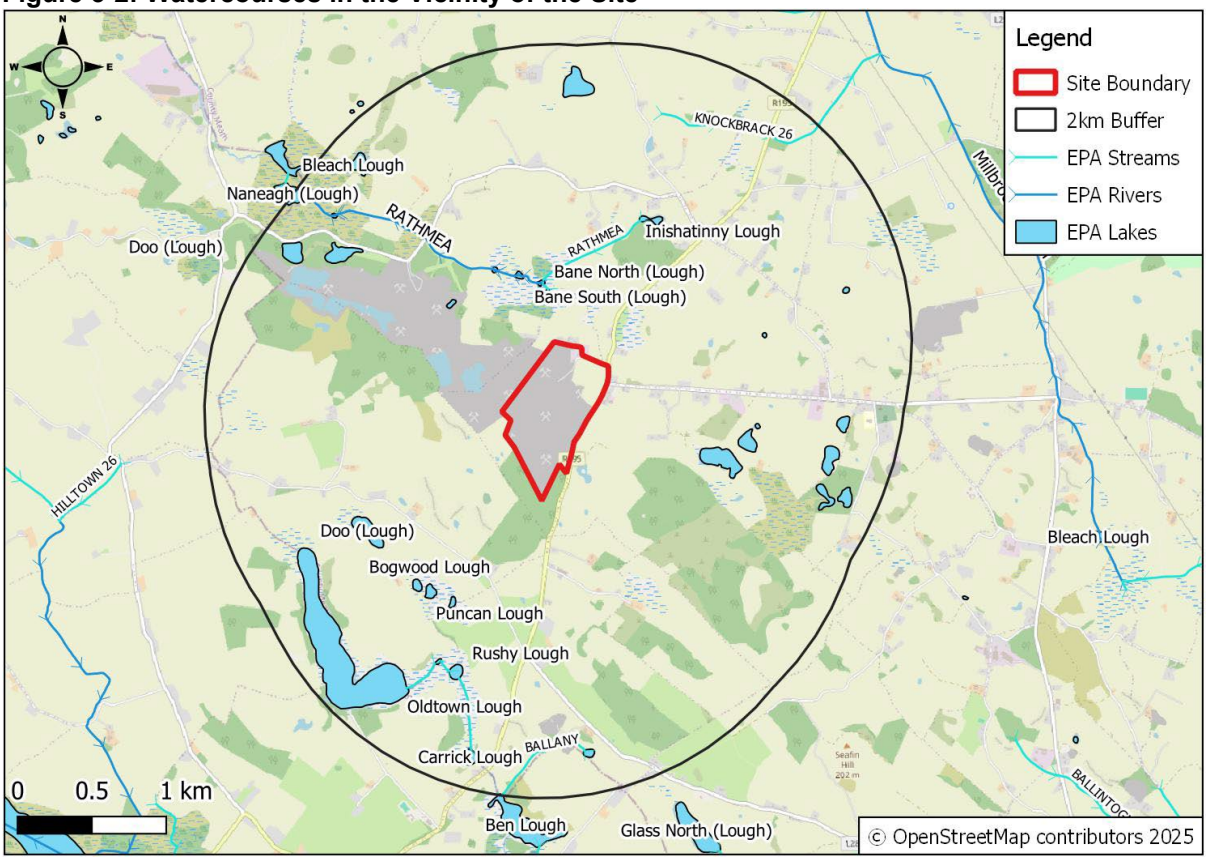
In addition, under the WFD 2000/60/EC, all lake waterbodies with areal extents over 0.5km^2, or less than 0.5km^2 but located within a protected area, are assessed under the WFD. As such, the Bane South (Lough) is less than 0.5km^2 in size and is not located within a protected area; hence, it is not assessed under the WFD. Furthermore, a number of the loughs located within the White Lough, Ben Loughs and Lough Doo SAC are also less than 0.5km^2 and therefore are not assessed under the WFD. However, Doo Lough and Ben Lough are considered to have '*good*' water quality, and their risk status is currently under '*review*' [12]. In addition, the Annagh Lough or White Lough is considered to have a '*high*' water quality status, and the risk status of this lough is currently under '*review*' [12].

The EPA website does not provide information on the status and risk of the Bane South Lough, the Bane North Lough, Deerpark Lough or Goohertys Lough. However, we are assuming a similar status and risk profile to the Rathmea and Moylagh rivers due to their inter-connections, as outlined above and as illustrated in Figure 3-2 below.

The majority of the Site and the northern section of the study area is located within the Upper Shannon 26F WFD catchment, whereas the south of the Site and the southern section of the study area is located within the Boyne 07 WFD Catchment. The north of the Site and the majority of the northern section of the study area is located within the Inny (Shannon)_SC_010 WFD sub-catchment and the Inny_020 WFD river sub-basin. The south of the Site and the majority of the southern section of the study area is located within the Deel (Raharney)_SC_010 WFD sub-catchment and the Lough Lene-Adeel Stream_010 WFD river sub-basin. A portion of the western section of the study area is located within the Inny (Shannon)_SC_020 WFD sub-catchment and the WFD Glore (Westmeath)_010 river sub-basin.

The location of the key surface water features in the vicinity of the Site are illustrated in Figure 3-2 below.

Figure 3-2: Watercourses in the Vicinity of the Site



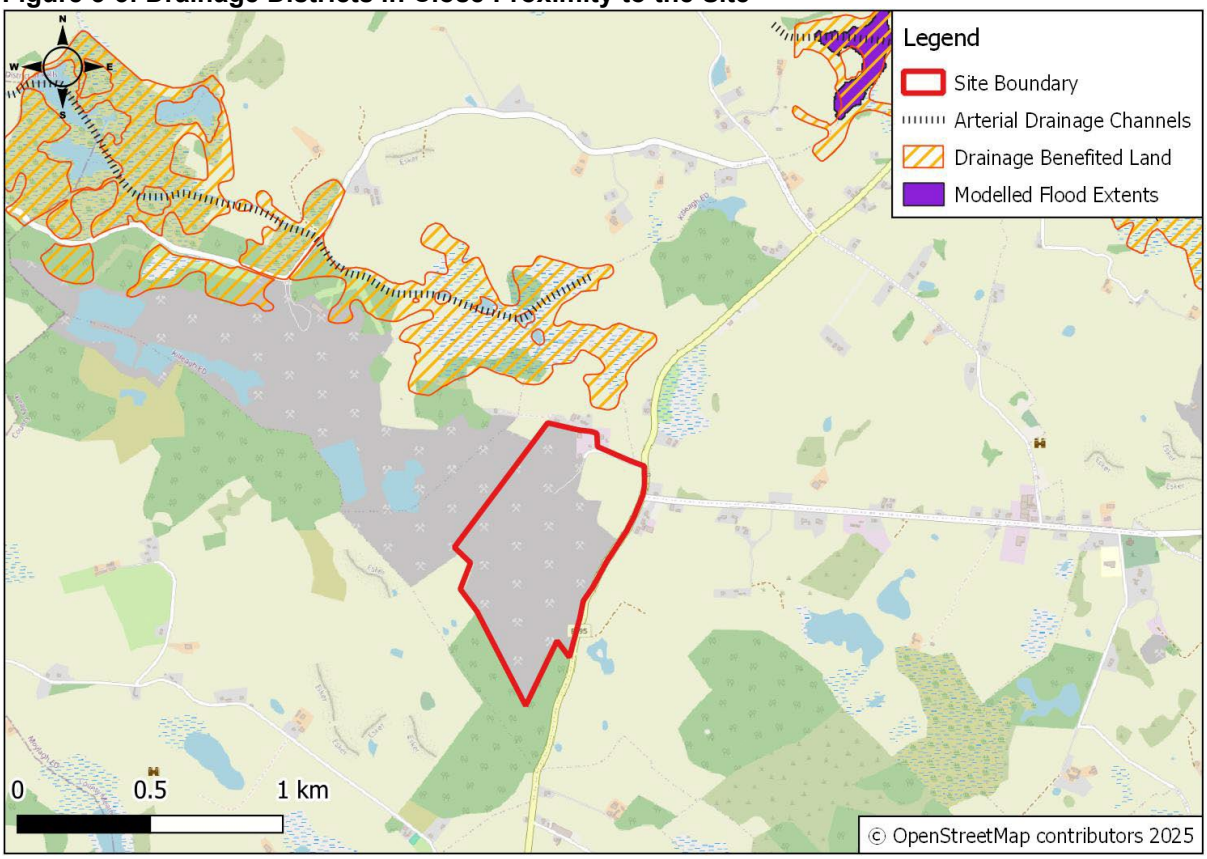
3.2.1 Drainage Ditches

The Office of Public Works ('OPW') Flood Maps identifies Drainage Districts, Arterial Drainage Schemes and Benefited Areas [15]. Arterial Drainage Schemes were works that were carried out under the Arterial Drainage Act, 1945 to improve land for agriculture and to mitigate flooding. The Benefited land identifies land that was drained as part of the Drainage District with the aim to improve land for agriculture and to mitigate flooding.

The OPW has not identified any drainage ditches onsite that are part of Drainage Districts or Arterial Drainage schemes, nor has the OPW identified any Benefited Areas within the Site.

The OPW Flood Maps have identified the River Rathmea, located ca. 400 m north of the Site, as part of an Arterial Drainage Scheme (Ref: C61/2/1), and Benefited lands under this scheme have been identified ca. 95m north of the Site. Please see Figure 3-3 below. However, it should be noted that the benefited lands and the River Rathmea are not located within the Site boundary and no drainage ditches were identified onsite.

Figure 3-3: Drainage Districts in Close Proximity to the Site



3.3 Proposed Development

The works required for the Proposed Development will have three distinct stages:

- Stage 1 – Site preparation;
- Stage 2 – Site operation; and,
- Stage 3 – Restoration.

Unlike a greenfield development or extension, the majority of the Site is already exposed and prepared for operational works. As such, soil stripping under Stage 1 Site preparation will only be relevant to the greenfield elements located on the northeastern boundary. However, within the proposed works areas, several ponds are present, and preparation works will also include for the development of new ponds within the Site, to enable the closure of these existing ponds.

Similarly, Stage 3 Restoration works will commence within areas of the Site where future reserves are not sought and will run in tandem with Stage 2 Operational Activities elsewhere on the site.

Stage 2 Site Operations will be subdivided into specific phases, covering the removal of existing stockpiles and the deepening of the quarry in two distinct areas within the Site.

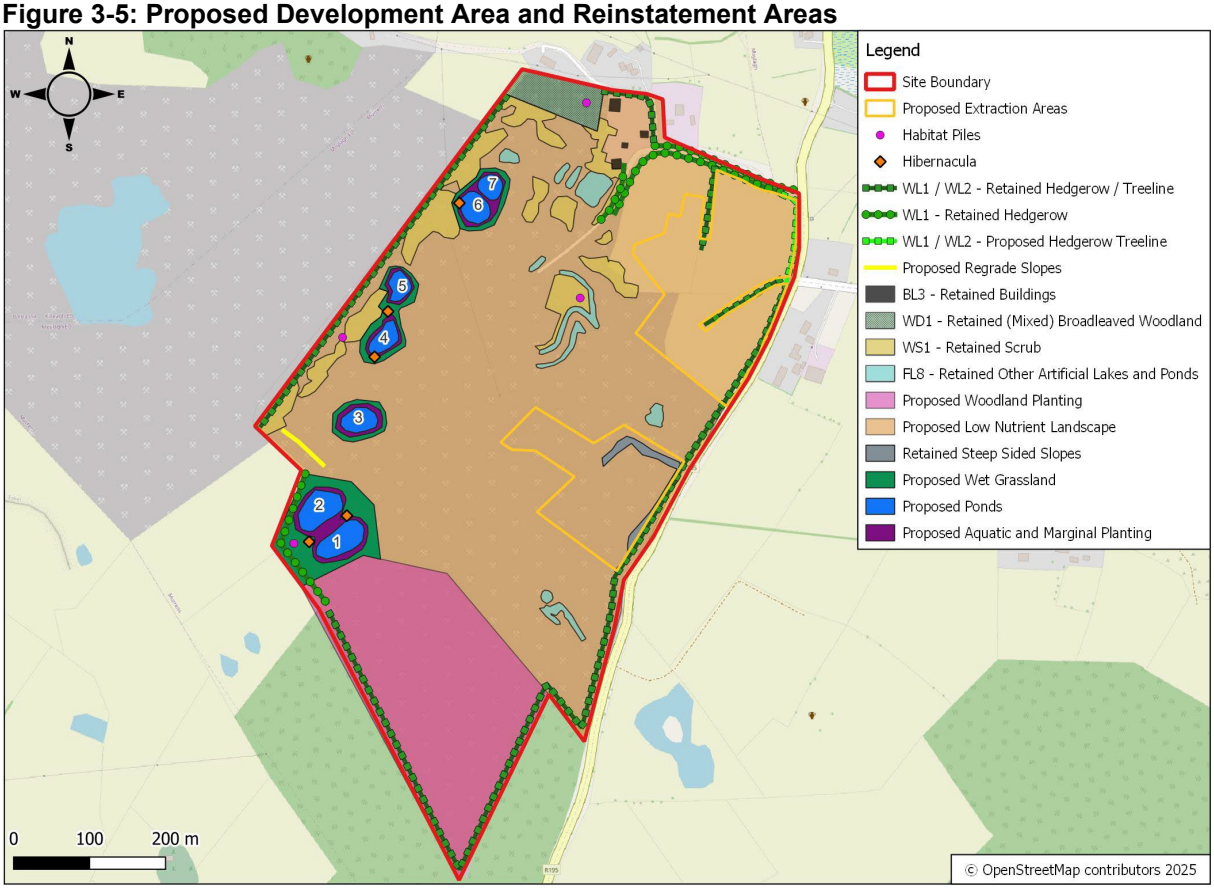
The Proposed Development will consist of the following works:

- Future extraction in designated areas as shown in Figure 3-4 below;
- Continued use of the current operational facilities on the Site, e.g. buildings, machinery, roadways, the settlement canal and the settlement ponds; and,

- Restoration works in the south and west of the existing Site as shown in Figure 3-5 below.

Figure 3-4: Future Extraction Areas

Figure 3-5: Proposed Development Area and Reinstatement Areas



3.3.1 Development Phasing

The Proposed Development will be split into three stages, as described below. Works related to individual stages will occur simultaneously.

3.3.1.1 Stage 1 – Phase 1 – Pond Construction

Prior to the commencement of aggregate extraction within areas where existing ponds are located, replacement ponds will be constructed within the areas proposed for immediate reinstatement. Any protected species present within the existing ponds will be transferred to the newly constructed ponds under appropriate licensing, if required, prior to any excavation works taking place.

3.3.1.2 Stage 1 – Phase 2 - Site Preparation

Prior to the commencement of aggregate extraction, the Site must be prepared accordingly. This stage will include the preparation of a grassland area at the northeastern section of the Site for aggregate processing activities. Works will include stripping of topsoil and excavation of sand and gravel subsoils. It should be noted that the topsoil will be stripped under supervision by a suitably qualified archaeologist.

The Site preparation works will be undertaken by the Applicant and will include the following:

- Vegetation clearance where necessary; and
- Removal of topsoil.

The quarry is currently secured with boundary fencing and an established site entrance to the north. Fencing that encompasses the Site will include safety signage at regular intervals to

ensure personnel approaching the Site can clearly understand the dangers associated with activities at the Site.

Furthermore, the general infrastructure required for the Proposed Development is currently in-place within the quarry. The Proposed Development will utilise existing ancillary infrastructure, thereby reducing the potential effects associated with the site preparation phase.

The existing treelines in the northeast of the quarry will be untouched and have been excluded from the future extraction area presented in Figure 3-5.

3.3.1.3 Stage 2 – Phase 1 Stockpile removal

Removal of existing aggregate stockpiles throughout the Site will also take place and will be a gradual process based on aggregate demand. Stockpiles within areas to be reinstated will be removed first and the land will be prepared for reinstatement following this. Should aggregate demand reduce for any reason, stockpiles which are currently stored in areas to be reinstated will be moved to the Proposed Development area of the quarry so there is no time delay in carrying out the reinstatement works.

3.3.1.4 Stage 2 - Phase 2 – Extension and Levelling of Quarry Floor in the North of the Site

After the completion of site preparation works (Stage 1), extraction activities will continue at the Site within designated areas, as shown in Figure 3-5. The designated extraction area in the north of the quarry will include:

- Continued excavation of viable sand and gravel aggregate within the existing quarry footprint;
- Extension of the quarry into the field to the northwest of the Site;
- Levelling of the excavation area to a maximum depth of 119 metres above ordnance datum ('mOD'); and,
- Storage of sand and gravel aggregate stockpiles within the designated working area of the quarry.

3.3.1.5 Stage 2 - Phase 3 – Deepening and Levelling of Quarry Floor in the East of the Site

After the completion of site preparation works (Stage 1), extraction activities will continue at the Site within designated areas, as shown in Figure 3-5. The designated extraction area in the east of the quarry will include:

- Continued excavation of viable rock aggregate within the existing quarry footprint;
- Levelling of the excavation area to a maximum depth of 119mOD; and,
- Storage of rock aggregate stockpiles within the designated working area of the quarry.

Plant used as part of the Phase 2 and Phase 3 works will include the continued use of existing machinery onsite, such as the washing plant and associated water management system, the mobile screening and crushing plant, excavators with breakers and shovels and loading shovels.

3.3.1.6 Stage 3 – Phase 1 – Immediate Reinstatement / Restoration

Immediate restoration of sections of the existing Site footprint will be carried out as part of the Proposed Development. This will take place predominantly in the south and west of the existing quarry Site. Works will be carried out in designated reinstatement areas of the existing quarry footprint where stockpiles have been removed and no further activity (i.e. stockpile

storage and excavation) will be taking place. Hence, any immediate restoration works will be carried out outside of the future extraction and operational activities areas and in line with the restoration plan submitted in support of this planning application (refer to Figure 3-5).

There are currently a number of stockpiles of soil which have been stored onsite for restoration purposes. During the immediate restoration works, these will be spread across the designated reinstatement areas to provide a thin soil layer over the existing ground. The importation of clean, uncontaminated soil will likely be required as part of this stage of the project. The volume of imported soil will not affect overall traffic numbers at the Site. It will occur when reduced deliveries of aggregate from the Site to the market are occurring. The imported soils will be inert by-product material only and are required to achieve the restoration goals.

Restoration works to be carried out immediately and in tandem with the Stage 1 and Stage 2 works described above, including the creation of various habitats and restoration of the quarry habitat to a low-nutrient landscape. The habitats to be created include:

- Ponds and wetland areas in the southwest and west of the existing quarry Site;
- Wet meadows around the ponds;
- A woodland in the south of the existing quarry Site; and,
- A low nutrient habitat across the south and west of the existing quarry Site.

3.3.1.7 Stage 3 – Phase 3 – Future Reinstatement / Restoration

Restoration for the remainder of the Site will be undertaken following completion of the operational stage of the Proposed Development. This will take place predominantly in the centre, north and east of the Site and in line with the restoration plan submitted in support of this planning application.

All plant equipment will be removed from the Site. Buildings and associated utility infrastructure shall remain in place to accommodate potential future development opportunities.

Any future stockpiles of soil which will be stored on Site for restoration purposes will be spread across the Proposed Development area to provide a thin soil layer over the ground. The importation of clean, uncontaminated soil will likely be required as part of this phase of the restoration works.

The Site will be restored to a low-nutrient habitat which is expected to develop into a species-rich, semi-natural grassland community.

3.3.2 Proposed Development Project Goals

The goals associated with each stage and within the phasing of each stage will change. These are outlined below.

3.3.2.1 Construction Stage – Stage 1

The construction stage of the Proposed Development will include the following goals:

- Vegetation clearance, removal of topsoil and preparation of new land for excavation activities; and,
- Construction of new ponds, preparation of land for reinstatement works within designated areas of the existing quarry footprint and reinstatement works within these areas as per the reinstatement plan (refer to Figure 3-5 above).

3.3.2.2 Operational Stage – Stage 2

The Site is a well-established quarry operation. The Proposed Development will operate in a similar manner to past extraction activities at the Site. This includes continued use of existing plant and machinery, excavation and stockpiling of newly excavated aggregate in a similar manner to how aggregate has previously been stockpiled, and exportation of material off site in volumes which are in line with tonnage volumes previously reported.

The operational stage of the Proposed Development will include the following goals:

- Phase 1 – removal of stockpiles across the Site;
- Phase 2 – extraction of viable sand and gravel aggregate and levelling of the extraction area to 119mOD; and,
- Phase 3 – extraction of viable rock aggregate and levelling of the extraction area to 119mOD.

Crushing / Screening and Stockpiling of Aggregate

The sand, gravel and rock aggregate will be collected by either a front-end loader or dumper and transported to the fixed washing plant, which will remain at its current location. The plant will screen the aggregate into pre-selected sizes / grades and generate stockpiles of the graded aggregate through a mechanical process.

Export of Material

Aggregate will be exported from the Quarry by HGVs. Table 3-1 below provides an overview of the existing maximum permitted daily trips from HGVs associated with the quarry, as well as movement associated with light vehicles such as cars and vans. The Proposed Development will operate within these numbers.

Table 3-1: Summary of Existing Daily Trips

Type of Traffic	Daily Trips		
	Arrivals	Departures	Total
Exported Quarried Material (HGVs)	16	16	32
Staff (LVs)	9	9	18
Total	25	25	50

3.3.2.3 Restoration Stage – Stage 3

The restoration stage of the Proposed Development will involve the reinstatement of the quarry. This will include the future excavation areas and the operational areas of the quarry. The reinstatement plan submitted as part of the substitute consent application (ABP Reference Number: 322189-25), and presented in Figure 3-5, will be modified to accommodate additional pond development arising from the loss of existing ponds in the proposed extraction areas. The restoration plan will also be supported with inert non-waste soil imported from suitable off-site locations to supplement the historic soil stockpiled on the site and the soils removed from the proposed approximately 1.02ha field to be stripped in the northeast.

The Restoration Plan submitted as part of this application (see Figure 3-5) supersedes the previous restoration plan for the quarry as submitted to An Bord Pleanála under case file ABP-322189-25.

The Site will be made safe and engineered to enable a biodiverse habitat to develop. This will involve the following works:

- Removal of all plant and equipment;
- Boundary fencing will be inspected and improved where necessary to prevent unauthorised access; and,
- It is proposed to maintain the hardstanding area adjacent to the Site offices for light industrial use. The use of this area will be subject to securing the necessary planning permission for a change of use when quarry works are complete.

The Restoration Plan will provide a mosaic of habitats onsite, refer to Figure 3-5 for context.

3.3.2.4 Scale of the Proposed Development

The existing area of the Site is ca. 40.12ha in size. As part of the Proposed Development, a portion of the Site will be reinstated while the remaining portion of the Site will continue to be used for quarrying activities. The reinstated area will cover ca. 21ha, and the area undergoing quarrying activities will be ca. 18ha in size. The field to the northeast of the existing Site, which will be excavated for sand and gravel aggregate, is ca. 1.02ha in size. Therefore, the future quarrying activities will cover an area of 19ha.

It is proposed to export aggregates in line with the current exportation figures, which will result in no increase to the operations of the Site. Between March 1998 and March 2025, exports averaged 194,323 tonnes per year. The volume of exported material will be dependent on market conditions.

The proposed operational life for the development is 20 years, which includes ongoing and final restoration work but excludes maintenance work afterwards. No quarrying or heavy machinery will be required beyond year 18. The Proposed Development will be completed in a phased manner.

3.3.3 The Site and Associated Activities

The Site has sufficient infrastructure to support the Proposed Development. See below for details of key infrastructure elements.

3.3.3.1 Working Hours

Operational hours associated with the Site are:

- Monday to Friday 07:00 – 19:00;
- Saturday 07:00 – 14:00; and,
- Sunday & Public Holidays closed.

3.3.3.2 Staffing Numbers

Peak employment at the Site totalled to ca. 26 persons from 2007-2008. The Site currently employs ca. nine full-time onsite employees, reflecting the subsistence operations pending regularisation and prospective permission.

3.3.3.3 Drainage

Surface water run-off is collected in the onsite canal settlement system and settlement lagoons located in the centre and the northern section of the Site. Water is pumped from the settlement pond system at the north of the quarry floor to the screening plant in the centre of the Site, which is then collected at the settlement canal and pumped back to the northern settlement pond.

3.3.3.4 Fuel and Oil Storage

Fuel is stored at the northern section of the Site and dispensed directly into the plant and vehicles or transported by mobile bowsers to the plant onsite. The Applicant uses regulated suppliers to transport fuel to the Site, who either dispense directly into the plant or into fuel storage tanks.

Fuel is stored within two purpose-built bunded tanks adjacent to a garage / maintenance shed building. All on-site mobile plant and equipment are refuelled on the concrete plinth next to the fuel garage by trained personnel, with suitable drip trays and easy access to emergency spill kits.

Oils and other maintenance liquids are stored in the main site garage close to the northern Site boundary, on hard-standing, in barrels and other bunded / double-skinned / drip tray containers.

Any oil or lubricant changes or routine servicing of wheeled or tracked plant are undertaken within suitable garage facilities. HGVs and other non-site vehicles are refuelled off-site. Site fuel storage is, thus, principally for fuelling operational plant, excavators and loading shovels.

3.3.3.5 Wheel Wash

The wheel wash is comprised of a concrete-lined depression and an overhead sprinkler system, which is located north of the canal settlement system. Water is pumped from the northern settlement system to the wheel wash, and washings are filtrated back to the settlement system. The wheel wash is routinely maintained.

3.3.3.6 Water Supply

Wastewater for onsite amenities (kitchen, toilets, sinks, etc.) is treated privately onsite. The wastewater is collected through a wastewater pipeline network and directed toward a septic tank and percolation area in the north of the Site.

Potable water used for office facilities, including faucets and toilet facilities, is obtained from a small onsite well in the northern section of the Site.

The water used for processing on the Site is part of a water recycling system and is retained entirely within the Site. There are no discharges off-site associated with the Proposed Development. Three settlement ponds and a settlement canal are located within the north-central area of the Site and are part of the water treatment system implemented onsite. Water is pumped from the settlement ponds to the washing plant, and sediment-laden water from the plant is directed into the settlement canal, which slowly flows by gravity in a winding manner to encourage the settlement of fines out of suspension. The water then flows by gravity to the settlement ponds via an underground pipe. These settlement ponds allow for more sediment to fall out of suspension and settle before the water is recycled and pumped back to the washing plant.

3.3.3.7 Landscape Screening

The boundary of the Site consists of a high bank with fencing and or hedging on top, separating the quarry from the local road network and neighbouring fields. To the north and south, the land-use is largely agricultural and forestry. The north quarry is partially visible from the R195 along the eastern boundary when approaching from the north and south.

Another quarry and processing plant is located at the western boundary of the quarry, run by BD Flood which is ‘substantially comprised of lands which were once part of the Flood family lands from which both quarries originated.

The northern, western and southern boundaries consist of hedging and field boundaries at the original ground level, with aggregate faces on the quarry side. The eastern boundary which is

adjacent to the R195 consists of fencing and hedgerow. Quarry operations are visible on the road that goes through the northern section of the Site.

3.3.3.8 Safety and Security

Stockproof posts and wire fencing are in place around the perimeter of the Site. On the access road, a warning sign has been erected to warn people about the potential health and safety risks associated with quarries. There are gates at the access point to the quarry on the local L68185 road. The Site includes internal lighting and has monitored security.

3.3.4 Utilities

The quarry has existing telecommunications, an ESB substation (MCC Planning Reference: 98967) and an existing potable water supply that serves office facilities. Foul water for the office is collected and treated in a septic tank before it goes to a soakaway.

There is an ESB substation located in the northern section of the Site that provides mains electricity for site operations.

3.3.5 Receiving Waters

There are no receiving waters for the Proposed Development. As described above, there is a closed loop water system onsite which consists of a series of pumped pipe networks and settlement lagoon and canal system. No water monitoring is carried out at the Site and the Proposed Development does not require any form of water discharge licence.

4 IDENTIFICATION OF EUROPEAN DESIGNATED SITES

In accordance with the European Commission Methodological Guidance [18] a list of European Designated sites that can be potentially affected by the Proposed Development has been compiled. Guidance for Planning Authorities prepared by the Department of Environment, Heritage and Local Government [5] states that defining the likely zone of impact for the screening and the approach used will depend on the nature, size, location and the likely significant effects of the project. The key variables determining whether or not a particular European Designated site is likely to be negatively affected by a project are:

- The physical distance from the Site to the European Designated site;
- The presence of impact pathways;
- The sensitivities of the ecological receptors; and,
- The potential for in-combination effects.

All SPAs and SACs within 15km have been considered to assess their ecological pathways and functional links. As acknowledged in the OPR guidelines [1], few projects have a zone of influence this large; however, the identification of European Designated sites within 15km has become widely accepted as the starting point for the screening process. For this reason, all SPAs and SACs within 15km have been identified for consideration as part of the screening.

There are 11 European sites located within 15km of the Site - these are identified in Figure 4-1 and Table 4-1.

Figure 4-1: European Designated sites within 15km of the Site

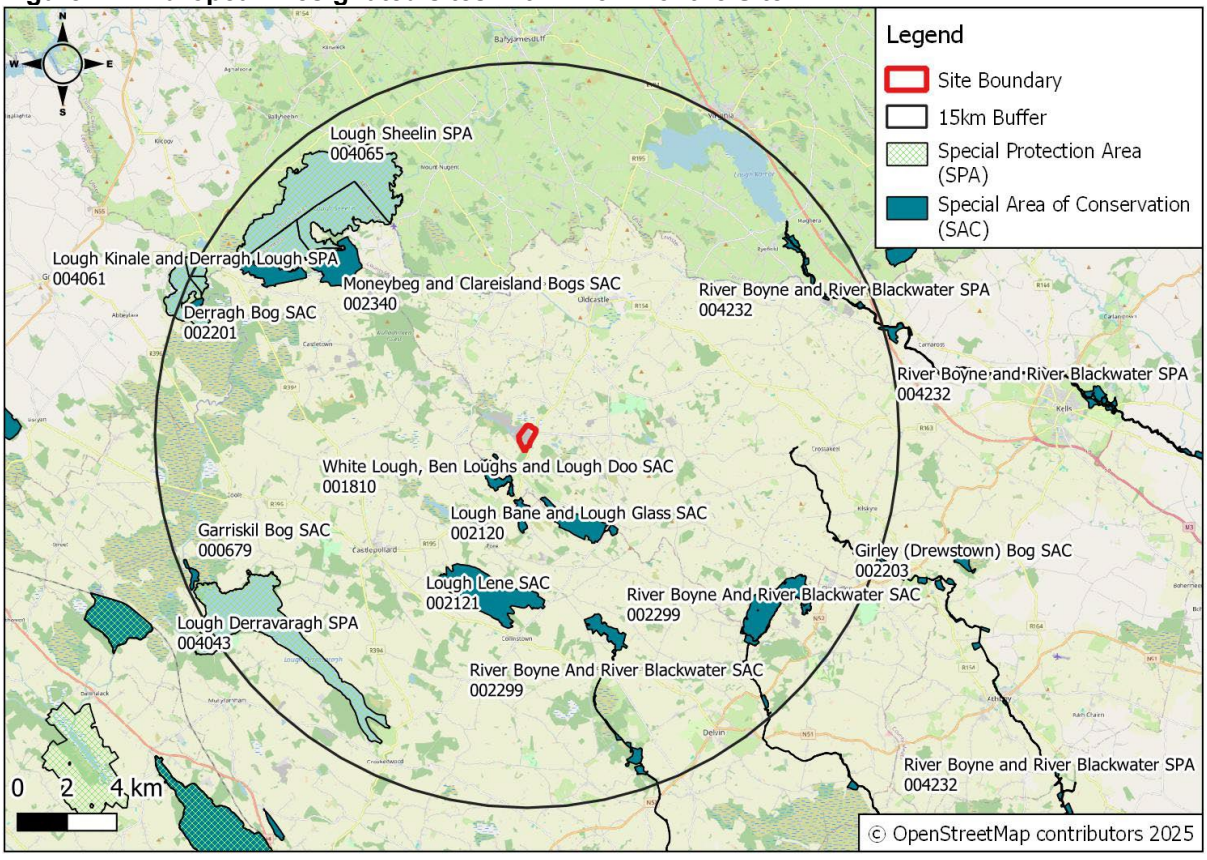


Table 4-1: European Designated Sites within 15km of the Site

Site Name	Code	Distance (km)	Direction from the Site
Special Areas of Conservation ('SAC')			
White Lough, Ben Loughs and Lough Doo SAC	001810	ca. 0.8km	SW
Lough Bane and Lough Glass SAC	002120	ca. 2.0km	SE
Lough Lene SAC	002121	ca. 5.1km	SE
River Boyne and River Blackwater SAC	002299	ca. 7.2km	SE
Moneybeg and Clareisland Bogs SAC	002340	ca. 9.2km	NW
Derragh Bog SAC	002201	ca. 13.9km	NW
Garriskil Bog SAC	000679	ca. 14.0km	SW
Special Protection Area ('SPA')			
Lough Sheelin SPA	004065	ca. 9.9km	NW
Lough Derravaragh SPA	004043	ca. 11.2km	SW
River Boyne and River Blackwater SPA	004232	ca. 12.3km	NE
Lough Kinale and Derragh Lough SPA	004061	ca. 13.3km	NW

4.1 Identification of European Designated Sites within ZoI

The ZoI comprises the area in which the Proposed Development may potentially affect the conservation objectives (or qualifying interests) of a European Designated site. The definition of ZoI for the proposed works evaluated multiple factors as outlined in Section 2.1 and discussed below. Please note that the extent of ZoI differs for different environmental aspects, e.g. air, water, etc.

4.1.1 Habitat Loss / Degradation

The following section provides details of the field-based assessments that were undertaken for the Site on the 16th January and 2nd May 2025. A description of the habitats and features of ecological significance are outlined below and illustrated in Figure 4-2.

Active Quarry and Mines (ED4)

This habitat was the dominant habitat within the Site. During the survey, steep quarry faces and exposed rock were key features of this habitat.

Given the level of disturbance from quarry works and ongoing stockpile removal works, minimum vegetation was present within this habitat. However, a number of herbaceous plant species were recorded including selfheal (*Prunella vulgaris*), creeping thistle (*Cirsium arvense*), dandelion (*Taraxacum spp.*), oxeye daisy (*Leucanthemum vulgare*), buttercup (*Ranunculus spp.*), black medic (*Medicago lupulina*), white clover (*Trifolium repens*), scarlet pimpernel (*Anagallis arvensis*), yarrow (*Achillea millefolium*), fringed willowherb (*Epilobium ciliatum*), thyme-leaved speedwell (*Veronica serpyllifolia*), coltsfoot (*Tussilago farfara*), hogweed (*Heracleum sphondylium*), bird's-eye pearlwort (*Sagina procumbens*), sycamore saplings (*Acer pseudoplatanus),* wild strawberry *(Fragaria vesca) and* common birds-foot trefoil (*Lotus corniculatus*).

Grass species were also noted within this habitat, including perennial ryegrass (*Lolium perenne)*, creeping bent (*Agrostis stolonifera*) and Yorkshire fog (*Holcus lanatus*). In addition, young gorse (*Ulex europaeus*) was noted within this habitat in less disturbed areas.

Buildings and Artificial Surfaces (BL1)

This habitat was located in the northern part of the Site and included buildings such as the Site office and storage sheds. An access road also connected the Site to the R195 regional road from this area.

Vegetation was noted recolonising the road margins, which included dandelion, mouse-ear hawkweed (*Pilosella officinarum*), and Yorkshire fog.

Recolonising Bare Ground (ED3)

Areas of recolonising bare ground were noted within the main quarry area. These habitats were primarily identified on undisturbed stockpiles within the Site. This habitat was most prominent in the northeast and extended down the central area to the southeast. Over time, these stockpiles have naturally been recolonised by vegetation.

The following species were identified within the recolonising bare ground onsite: mouse-ear hawkweed, dandelion, oxeye daisy, unidentified sphagnum moss species, common hogweed (*Heracleum sphondylium*), yarrow, fringed willowherb, coltsfoot, nettle (*Urtica dioica*), creeping buttercup (*Ranunculus repens*), hairy bittercress (*Cardamine hirsuta*), bramble (*Rubus fructicosus*), common chickweed (*Stellaria media*), bull thistle, broad-leaved dock (*Rumex obtusifolius*), white clover, daisy (*Bellis perennis*), tansy ragwort (*Jacobaea vulgaris*), apple tree(*Malus spp*.), giant horsetail (*Equisetum telmateia*), hedge bindweed (*Calystegia sepium*) and common milkwort (*Polygala vulgaris*) and cleavers (*Galium aparine*).

Grasses, such as creeping bent, Yorkshire fog and orchard grass (*Dactylis glomerata*) were also identified growing within this habitat. In addition, immature willow (*Salix spp*.), hawthorn (*Crataegus monogyna*) and sycamore (*Acer pseudoplatanus*) trees were identified scattered throughout the recolonising bare ground onsite. Butterfly bush (*Buddleja davidii*) was also noted in this habitat.

Improved Agricultural Grassland (GA1)

This habitat was present in the north-east corner of the Site, with its northern boundary adjacent to the Site access track. It was bounded to the north by managed hedgerow, to the west by hedgerow / treeline, to the south by an earth bank and to the east by hedgerow / treeline.

The following species were noted within the grassland: Perennial rye grass (*Lolium perenne*), buttercup, creeping bent, hawks-beard (*Crepis spp.),* dandelion, yarrow, white clover, ribwort plantain (*Plantago lanceolata*), broad-leaved dock, ragwort, thistle (*Circium spp*.), hairy willowherb (*Epilobium hirsutum*) and hogweed. Some bramble was noted encroaching from hawthorn saplings.

Earth Banks (BL2)

Earth banks were located in the northeastern region of the Site, forming field boundaries within and bordering the Site. An earth bank was also located in the southwest corner of the Site.

The earth banks were covered in ruderals, weeds and grasses. The following species were noted in this habitat: Yorkshire fog, dandelion, thistle, bramble, yarrow, common hogweed, daisy, bull thistle, tansy ragwort, willow saplings, butterfly bush, nettle, white clover, ribwort plantain, creeping bent, gorse, creeping buttercup, orchard grass, broad-leaved dock, colts-foot, hawksbeard (*Crepis spp*.), and hairy willowherb.

Hedgerow / Treeline (WL1 / WL2)

Hedgerows / treelines and managed hedgerows were identified onsite during the field survey.

Hedgerows / treelines bordered the eastern, southern and western boundaries of the Site. In addition, a small section of hedgerow/treelines was present along the northern boundary of the Site. The dominant species identified within these linear habitats were hawthorn, sycamore, ash (*Fraxinus excelsior*) and hazel (*Corylus avellana*).

The understorey of the hedgerow / treelines comprised of bramble, dandelion, hogweed, broadleaved dock, gorse, nettle, tansy ragwort, buttercup, ivy (*Hedera helix*), young holly (*Ilex acquifolium*), wild carrot (*Dacus carota*), hart's-tongue fern (*Asplenium scolopendrium*), dog rose (*Rosa canina*), box-leaf honeysuckle (*Lonicera niteda*), silvergreen byrum moss (*Bryum argenteum*), bracken (*Pteridium aquilinum*) and grasses included creeping bent, Yorkshire fog and perennial ryegrass.

Managed hedgerows were located within the northern portion of the Site, at the entrance to the quarry. These managed hedgerows ran along both sides of the access road and extended down to the weighbridge. These hedgerows primarily consisted of Monterey cypress (*Cupressus macrocarpa*). A section of young hawthorn hedgerow was located in the southwest portion of the Site.

Mixed Broadleaved Woodland (WD1)

This habitat was found mainly in the northwestern corner of the Site. The species identified within this habitat included: sycamore, honeysuckle, ash, gorse, willow*,* elder *(sambucus nigra),* hawthorn and cotoneaster *(cotoneaster spp.).*

Scrub (WS1)

This habitat was found mainly in the western portion of the Site. However, scattered scrub was also identified within the central region of the Site.

The scrub habitats onsite comprised gorse, willow, holly and sycamore. An understory of brambles, dandelion, ash saplings, creeping bent, bracken, hogweed, clover, horsetail (*Equisetum arvense*), ribwort plantain, common rush (*Juncus effusus*), ground ivy (*Glechoma hederacea*) and black cottonwood (*Populus trichocarpa*) was recorded in these areas. Butterfly bush was also recorded in scrub habitats onsite.

Other Artificial Lakes and Ponds (FL8)

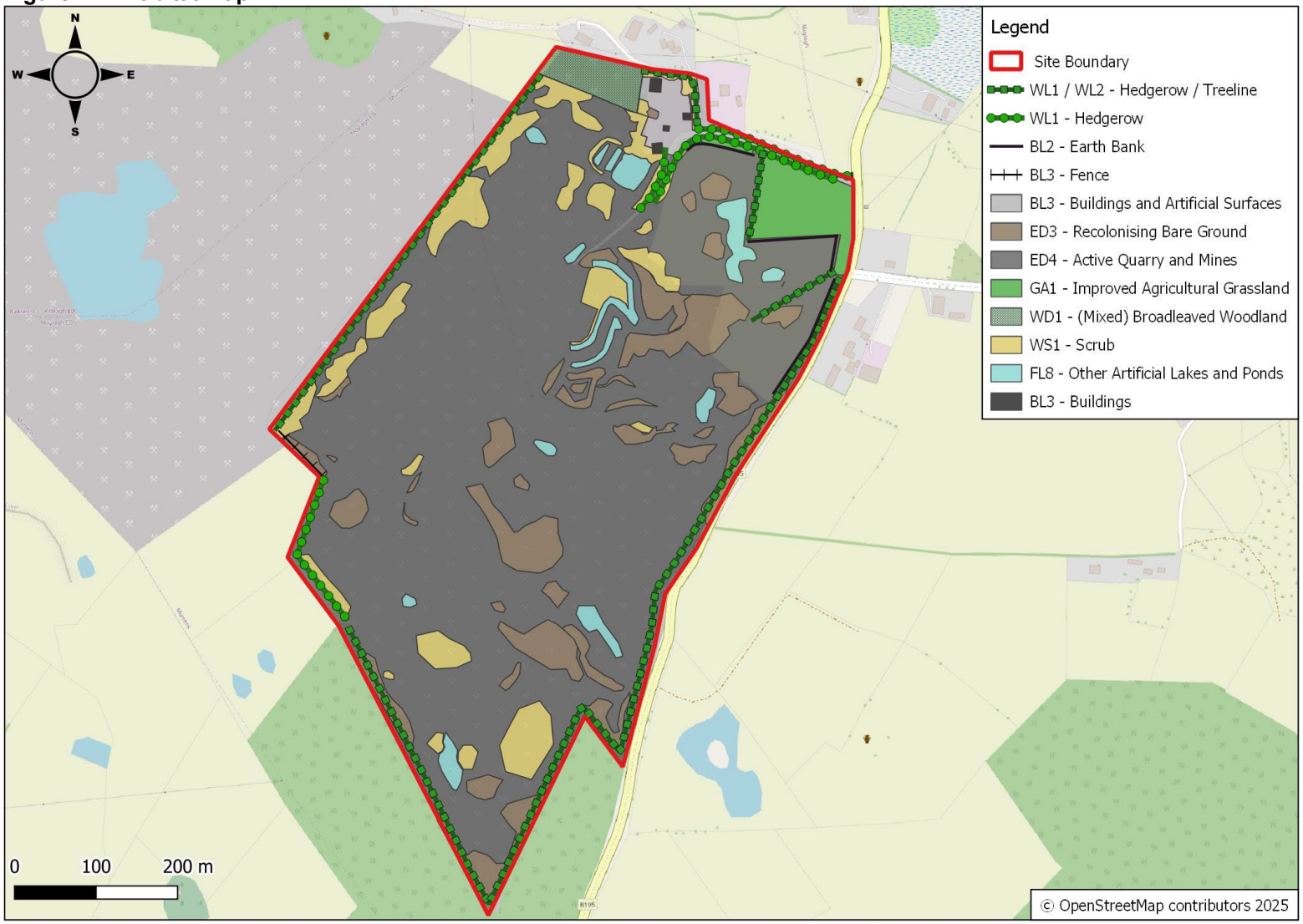
A number of ponds were located within the Site. The majority of these ponds appeared to be seasonal, pluvial surface water ponds. No botanical species were noted within these ponds. See Figure 4-2 for the location of these ponds.

However, the onsite looped water settlement system utilised three settlement ponds and a settlement canal. These features were located within the north-central area of the Site at the time of the survey and formed part of the water treatment system implemented onsite.

Species identified around these waterbodies included common rush, bog bullrush (*Schoenoplectiella mucronata*), broadleaf cattail (*Typha latifolia*), shield fern (Polystichum setiferum), knapweed (*Centaurea nigra*), duckweed (*Lemna minor*), hawthorn saplings, willow, bramble, ribwort plantain, horsetail, thistle and nettle.

In addition, one invasive species was recorded in this habitat, butterfly bush.

Figure 4-2: Habitat Map



Evaluation of Potential Habitat Loss / Degradation

The Site is not located within or directly adjacent to any European Designated sites. The closest European Designated site is the White Lough, Ben Loughs and Lough Doo SAC, ca. 800m south of the Site. However, there are no impact pathways linking the Site to this SAC. Furthermore, the *Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.* [3140] habitat designated for this SAC is not located onsite.

During the surveys, no designated habitats were identified onsite. The Site is predominantly comprised of active quarry and common habitats associated with a rural landscape (agricultural grassland, scrub, hedgerow / treelines, small ponds, etc.).

Therefore, given the lack of designated habitats onsite and the distance separating the Site from any European sites, the Proposed Development will not result in any direct or indirect loss or degradation of designated habitats.

4.1.2 Water Quality Impairment

Potential water quality impacts would typically be associated with the release of sediment and other pollutants to surface water during the Construction and Operational Phase of the Proposed Development. Therefore, the ZoI would be considered to include the receiving waterbodies adjacent to and downstream of the Site during the construction phase within 5km.

As outlined in Section 3.3, the existing onsite looped water settlement system utilises three settlement ponds and a settlement canal located within the north-central area of the Site, which are part of the water treatment system implemented onsite. Therefore, there is no hydrological connection between the Site and any nearby watercourses. Furthermore, there were no drainage ditches located within the Site nor within the proximity of the Site. The Proposed Development will continue to utilise the existing onsite looped water settlement system, and there will be no offsite discharge of water.

The hydrogeological assessment conducted for the Site as part of the Environmental Impact Assessment Report ('EIAR'), prepared in support of this application, concluded that the groundwater flow direction under the Site is in a south-to-north direction. Therefore, the flow direction is away from the nearest European Designated sites, and there is no hydrogeological connection between the Site and any European Designated sites.

Furthermore, groundwater samples were collected as part of this assessment on the 27th of January 2025 by MOR Environmental and analysed by Element Ltd. The data were compared to Groundwater Regulations 2010 (S.I. No. 9 of 2010) as amended and Surface Water Regulations 2009 (S.I. No. 272 of 2009) as amended. There were no exceedances of the threshold values stated in the regulations, indicating the groundwater underneath the Site is of good quality status.

It can therefore be objectively concluded that there will be no likely significant effects on the White Lough, Ben Loughs and Lough Doo SAC, the Lough Bane and Lough Glass SAC, the Lough Lene SAC, the River Boyne and River Blackwater SAC, the Moneybeg and Clareisland Bogs SAC, the Derragh Bog SAC, the Garriskil Bog SAC, the Lough Sheelin SPA, the Lough Derravaragh SPA, the River Boyne and River Blackwater SPA and the Lough Kinale and Derragh Lough SPA without taking mitigation measures into account and as such these European sites have been screened out from further consideration.

4.1.3 Air Quality Impairment

According to the Institute of Air Quality Management ('IAQM') Guidelines, potential adverse effects from dust arising from construction to ecological receptors occurs within 50m of a construction Site [19] or 50m of the route(s) used by construction vehicles on the public highway of up to 250m from the Site entrance [23]. In addition, potential adverse effects from

mineral dust on ecological receptors can occur within 250m of dust-generating activities from sand / gravel quarries [24]. In addition, potential adverse effects from mineral dust to ecological receptors from hard rock quarries can occur within 400m of dust-generating activities [24].

Although the Proposed Development will not constitute a mineral operation, many activities traditionally associated with mineral extraction will occur as part of the Proposed Development, such as:

- Site preparation / restoration (working soil and overburden);
- Materials handling;
- Sand and gravel extraction by mechanical means; and,
- Transportation.

Therefore, taking a precautionary the ZoI for air quality impairment was established for a 400m buffer of the Site.

The nearest European site is the White Lough, Ben Loughs and Lough Doo SAC, ca. 800m south of the Site. Therefore, there are no European sites located within the ZoI for air quality impairment. As such, it can be concluded that no impacts associated with dust will occur as a result of the Proposed Development, given the distance separating the Site from the European sites.

4.1.4 Noise / Disturbance

Noise from the construction activity has the potential to cause disturbance to resting, foraging and commuting qualifying species of the European Designated sites.

Individual species will provoke different behavioural responses to disturbances at different distances from the source of disturbance.

- Transport Infrastructure Ireland (formally the National Roads Authority) has produced a series of best practice planning and construction guidelines for the treatment of certain protected mammal species (i.e. otter), which indicate that disturbance to terrestrial mammals would not extend beyond 150m [20]; and,
- Studies have noted that different types of disturbance stimuli are characterized by different avifaunal reactions; however, in general, a distance of 300m can be used to represent the maximum likely disturbance distance for waterfowl [21].

The ZoI for noise / disturbance is therefore established as the Site with a 300m buffer.

The Moneybeg and Clareisland Bogs SAC, the Derragh Bog SAC and the Garriskil Bog SAC are designated for habitats and not for any species. Therefore, there is no potential for any noise / disturbance impacts to these European sites.

Furthermore, the White Lough, Ben Loughs and Lough Doo SAC, the Lough Bane and Lough Glass SAC and the Lough Lene SAC are all designated for *Hard oligo-mesotrophic waters with benthic vegetation of Chara spp*. [3140] and *Austropotamobius pallipes* (White-clawed Crayfish) [1092]. Therefore, given the distance separating the Site from these European sites, the lack of hydrological connection and the lack of in-river works taking place at the Site, it is considered that there is no potential for any noise / disturbance impacts to these European sites.

Although the River Boyne and River Blackwater SAC is designated for otter and the Lough Sheelin SPA, the Lough Derravaragh SPA, the River Boyne and River Blackwater SPA and the Lough Kinale and Derragh Lough SPA are designated for a number of wetland bird species, these European sites are all located over 7km from the Site. Therefore, given the distance separating the Site from these European sites and the lack of an impact pathway, it

is considered that the Proposed Development will not result in any disturbances on any designated species.

4.1.5 Invasive Species

No high-impact invasive species (including those that are regulated under the European Union (Invasive Alien Species) Regulations 2024 (S.I. No. 374/2024) [22]) were recorded within the Site.

The only invasive species identified onsite was butterfly bush. However, this medium impact species is not regulated under the European Union (Invasive Alien Species) Regulations 2024 (S.I. No. 374/2024) [22].

Additionally, the Site is not located within or directly adjacent to any European sites. Furthermore, given the lack of impact pathways connecting the Site to any European site and the distance separating the Site from any European sites, it is considered that the Proposed Development will not result in any unintentional introduction of invasive species to any European site.

4.2 ZoI Conclusion

The Site is not located within or directly adjacent to any European Designated sites; however, the boundaries of 11 are located within 15km from the Site.

Given the distance separating the Site from the European Designated sites and the lack of impact pathways, it is considered that the Proposed Development will not result in adverse effects on the White Lough, Ben Loughs and Lough Doo SAC, the Lough Bane and Lough Glass SAC, the Lough Lene SAC, the River Boyne and River Blackwater SAC, the Moneybeg and Clareisland Bogs SAC, the Derragh Bog SAC, the Garriskil Bog SAC, the Lough Sheelin SPA, the Lough Derravaragh SPA, the River Boyne and River Blackwater SPA and the Lough Kinale or the Derragh Lough SPA. These sites have therefore been screened out from further consideration.

4.3 Conservation Objectives

European and national legislation places a collective obligation on Ireland and its citizens to maintain areas of favourable conservation status designated as candidate Special Areas of Conservation. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

According to the EU Habitats Directive, favourable conservation status of a habitat is achieved when:

- Its natural range, and the area it covers within that range, is stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and,
- The conservation status of its typical species is favourable as defined below.

The favourable conservation status of a species achieved when:

- Population data on the species concerned indicate that it is maintaining itself;
- The natural range of the species is neither being reduced nor likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Conservation objectives for all identified Natura 2000 SAC sites are as follows:

> *'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and the Annex II species for which the SAC has been selected.'*

Conservation objectives for all identified Natura 2000 SPA sites are as follows:

> *'To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.'*

5 SCREENING AND ASSESSMENT OF POTENTIAL IMPACTS

Using professional experience, guidance and judgement, the following factors have been taken into account in identifying potential significant impacts on the identified European Designated sites:

- Distance from any European Designated site;
- Qualifying Interests;
- Special Conservation Interests;
- Conservation Objectives;
- The nature of the onsite habitats;
- The location of the Site; and,
- The scale and disturbance of the Proposed Development.

Based on these factors, no potential significant impact has been taken forward for further consideration. This is based on the available information from field and desk-based assessment as outlined in Section 4.

Overall, the screening exercise did not identify any other factors that could result in any direct or indirect loss or disturbance to any of the Annex I habitats or Annex I or II species for which the European Designated sites are designated. It can be stated that the Proposed Development will not cause:

- Any reduction in the area of the habitat or European Designated site;
- Direct or indirect damage to the physical quality of the environment of any European Designated site;
- Any serious or ongoing disturbance to species or habitats for which any European Designated site is designated; or,
- Direct or indirect damage to the size, characteristics or reproductive ability of populations any European Designated site.

On the basis of the Source-Pathway-Receptor ('SPR') risk assessment principle, there is no ecological or functional link between the Proposed Development and any European Designated sites.

5.1 Analysis of 'In-Combination' Effects

The Habitats Directive requires competent authorities to make an appropriate assessment of any plan or project which is likely to have a significant effect alone or in combination with other plans and projects.

As described above, the proposed work alone is unlikely to have any direct or indirect adverse effects on any of the European sites located within 15km of the Site.

A review of the Meath County Council Planning ePlan website did not identify any current or previous granted plans or projects in the immediate vicinity that are considered likely in combination with the Proposed Development to result in significant impacts on European sites [13].

A review of the Meath County Council Planning ePlan website did not identify any current granted plans or projects within the Site. However, there were:

- MCC Ref: 971223:

  - Decision: Granted 08/12/1997;
  - Description: '*New entrance'.*
- MCC Ref: 98967:
  - Decision: Granted 09/12/1999;
  - Description: '*To construct an MV E.S.B. sub-station in existing quarry'.*
- MCC Ref: KA802993:
  - Decision: Granted 18/08/2009;
  - Expiration Date: 17/08/2014;
  - Description: '*An extension of the existing sand & gravel pit over an area of 4.4 hectares'.*

In addition, the majority of nearby planning permissions are related primarily to one-off dwellings and light manufacturing (MCC Ref: 24315) [13]. It is considered unlikely that the Proposed Development and these planning permissions would result in any in-combination effects on significant impacts on biodiversity, given the small-scale nature of the permissions granted.

However, one planning application was permitted directly to the south of the Site:

MCC Ref: KA141129 & ABP Ref: PL.17.245257

- MCC Decision: Granted 07/07/2015;
- Expiration Date: 15/12/2036;
- Description: '*The development will consist of: Extension of the existing sand & gravel pit (Quarry Ref: QY24) to include: an extraction area of c.23.9 hectares; perimeter landscaped screening berms; all other associated site works/ancillary activities; and restoration to a beneficial agricultural & ecological after-use within an overall planning application area of c.28.5 hectares. This planning application will be accompanied by an Environmental Impact Statement (EIS). Significant further information/revised plans submitted on this application'.*

As part of this application, a screening for Appropriate Assessment concluded that the proposed extension of quarrying operations was not likely to have any impacts on the Natura 2000 network.

This permission was appealed to An Bord Pleanála ('ABP'), and according to ABP's Inspector's Report, the Inspector concluded:

> *'Overall, it is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on White Lough, Ben Loughs and Lough Doo SAC (Site Code: 001810), or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.'*

ABP granted this permission on the 16th December 2016.

It is considered unlikely that the Proposed Development will have any cumulative impacts on any European sites in the context of the existing infrastructure and associated activities taking place at the Site.

This statement is supported by:

I. The distances and intervening lands separating the Site from European sites; and,

II. The lack of impact pathways and any hydrological connection between the Site and any European sites.

Taking the above into account, it is concluded that there will not be any significant in combination contribution by the Proposed Development to possible adverse effects on any European sites.

6 SCREENING CONCLUSIONS AND STATEMENT

The screening process has examined the details of the Proposed Development and has considered the potential for causing adverse effects on European sites and their qualifying features of interest within a 15km radius of the Site.

11 designated sites - the White Lough, Ben Loughs and Lough Doo SAC, the Lough Bane and Lough Glass SAC, the Lough Lene SAC, the River Boyne and River Blackwater SAC, the Moneybeg and Clareisland Bogs SAC, the Derragh Bog SAC, the Garriskil Bog SAC, the Lough Sheelin SPA, the Lough Derravaragh SPA, the River Boyne and River Blackwater SPA and the Lough Kinale and Derragh Lough SPA are located within a 15km radius of the Site. However, given scale and localised nature of the Proposed Development, and the lack of impact pathways between the Site and European sites, as described in Section 4 and Section 5, it can be concluded that the Proposed Development will not result in any significant impacts either directly or indirectly on the conservation objectives or status of the listed European sites and will not result in the direct loss or disturbance of any Annex I habitats and / or Annex II species for which the European sites are designated.

In conclusion, activities associated with the Proposed Development either alone, or in combination with other projects or land uses, will not have any direct or indirect significant effects on the conservation objectives of any European sites.

Accordingly, the progression to Stage 2 of the Appropriate Assessment process (i.e., preparation of a Natura Impact Statement) is not considered necessary.

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