13 Material Assets

13.1 Introduction

This remedial Environmental Impact Assessment Report (rEIAR) has been prepared to accompany a substitute consent application for a disused quarry (the 'Project') at Coolsickin or Quinsborough, Monasterevin, Co. Kildare (the 'Application Site' or 'Site'). The Project is located within the administrative boundary of Kildare County Council, (KCC).

This chapter of the rEIAR has been prepared by WSP Ireland Consulting Ltd (WSP) and addresses the direct and indirect significant effects, if any, on material assets located in the vicinity of the Site, which have occurred, or which are occurring or which can reasonably be expected to occur because the Project, the subject of the application for substitute consent, was carried out.

Material assets are comprised of the physical resources in the environment, which may be of human or natural origin. The objective of the assessment contained in the following sections is to ensure that these assets have been used in a sustainable manner with respect to operations at the Site.

Material Assets in the vicinity of the Site comprise of built services and infrastructure, such as surface water drainage, roads, traffic, telecommunications, electricity, gas and water supply infrastructure, waste infrastructure, and geological resources.

This chapter has been prepared by Rab Kassie Sheeran (MSc, BSc, PGCE-Sci; 3+ years experience; AssocMCIWM) and Dr Rhian Llewellyn (MGeol, PhD; 10+ years' experience; PIEMA, Adv. Dip. Environmental and Planning Law).

13.1.1 Technical Scope

This assessment has been made with guidance from the 'Guidelines on the information to be contained in environmental impact assessment reports', published by the EPA in May 2022. The guidelines were drafted by the EPA with a view to facilitating compliance with EIA Directive (2014/52/EU).

The 2022 guidelines suggest that the material assets assessment covers the topics: built services, roads and traffic and waste management. The following subheadings are suggested under which to arrange issues concerning 'Built Services'; "Electricity, Telecommunications, Gas, Water Supply Infrastructure, Sewerage".

Having regard to the above guidance, particularly the 2022 EPA guidelines, and the characteristics and context of the lands that are the subject of this application, this rEIAR chapter aims to identify the likely significant effects that the Project may have on built services and waste management. These include:

- Electricity network utilities;
- Gas infrastructure;

- Telecommunications;
- Local water supplies and foul water network;
- Surface water drainage infrastructure; and
- Waste management infrastructure.

Roads and traffic have been assessed in Chapter 11 of this rEIAR.

Geological resource has been assessed in Chapter 5 of this rEIAR.

13.1.2 Geographical and Temporal Scope

Historical arial mapping and documentation held by Kildare Country Council indicates extraction of aggregates within the Application Site is estimated to have commenced within 2000 and the operation had ceased within 2006. Accordingly, the baseline for this rEIAR has been set to 01 January 2000, and the rEIAR process has assessed environmental impacts from that date to 31 December 2006 (see Chapter 2 Project Description for detail). This assessment period equates to approximately six years and is identified as 'short-term' duration (those lasting one to seven years sensu EPA 2022).

The geographical study area for the assessment covers the physical extent of the EIA boundary for the Site as shown in Figure 13-1 and the assessment area has been extended as appropriate to identify the relevant material assets surrounding the Project. In the context of this rEIAR, the Substitute Consent Application Site boundary[1] is located entirely within the EIA Boundary and contains lands which form the historical extraction area and quarry working areas (i.e. the historical stockpile areas). The Substitute Consent Application Site boundary is shown in Figure 13-1 (overleaf).

[1] The term 'Application Site' refers to lands within the Substitute Consent Application Site boundary.

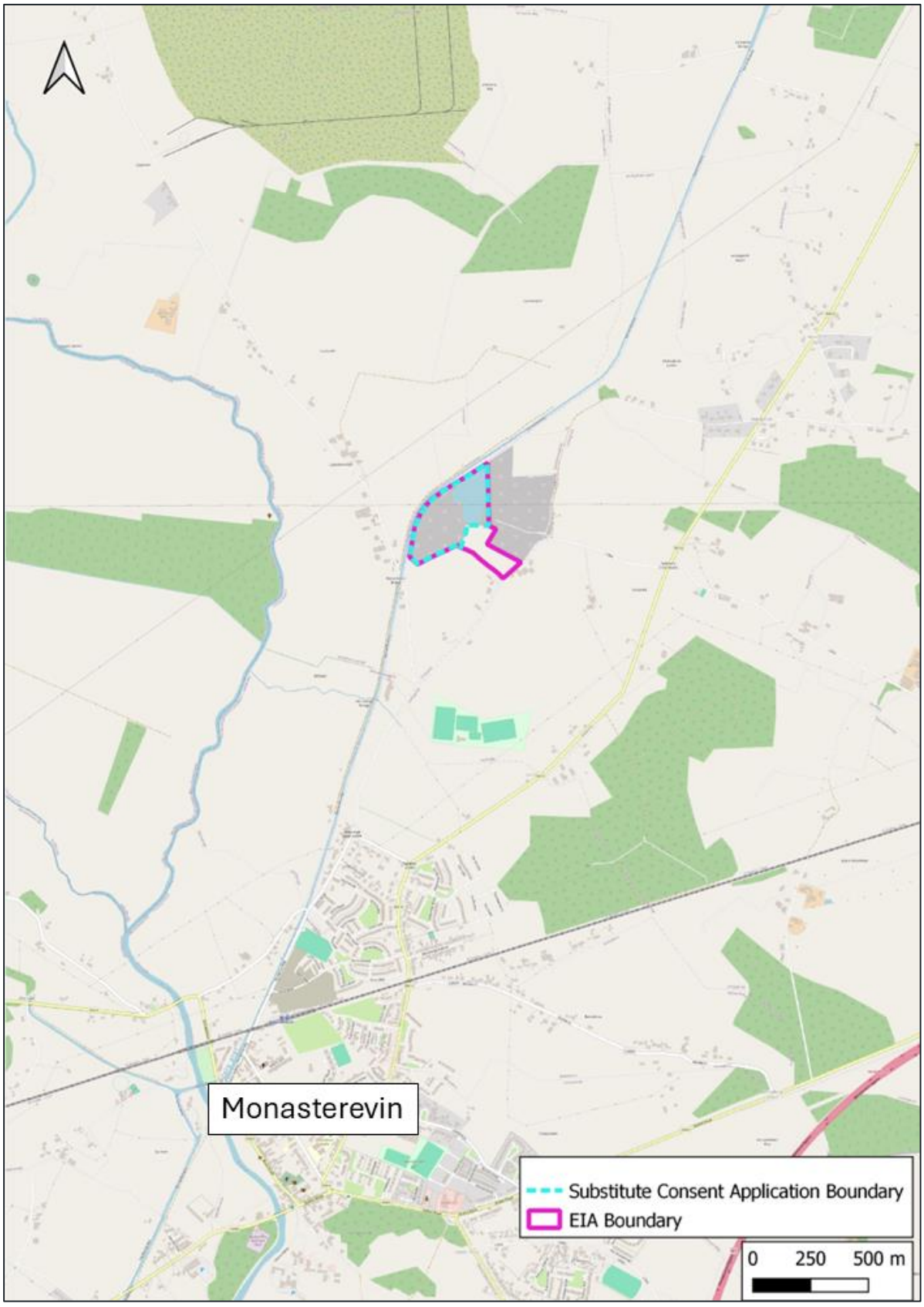


Figure 13-1 - Site location

13.1.3 Project Description Summary

The Project seeking substitute consent consists of extraction of sand, gravel and rock over an area of 7.87 ha through blasting, mechanical excavation and rock breaking along with aggregate processing and stockpiling. The Project was operational between the years 2000-2006.

A full project description is presented in Chapter 2 (Project Description).

13.2 Legislative and Policy Context

13.2.1 Legislation

Annex IV of the amended EIA Directive (2014/52/EU) requires that the developer provides a description of the factors (specified in Article 3(1)) which are likely to be significantly affected by the project, including a study of the potential impacts to material assets.

The 2014/52/EU Directive was transposed into Irish law through European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI No. 296 of 2018) which amended the Planning and Development Act, 2000, and the Planning and Development Regulations, 2001. This rEIAR has been produced in accordance with these relevant legislative requirements and Statutory Instruments.

13.2.2 Relevant Policies and Plans

- The Kildare County Development Plan (CDP) 1999 is the strategy document for County Kildare which covers most of the temporal scope of this assessment period. The key policies and objectives of this plan are listed in Section 2.5.1 of the Project Description (Chapter 2).
- The Kildare CDP 2005-2011 was adopted on 18 May 2005 and covers the temporal scope from this date to 31 December 2006. The key policies and objectives of this plan are listed in Section 2.5.2 of the Project Description (Chapter 2).

13.2.3 Relevant Guidance

This assessment has been made with guidance from the ‘Guidelines on the information to be contained in environmental impact assessment reports’, published by the EPA in May 2022.

13.3 Assessment Methodology and Significance Criteria

As identified in Chapter 1 (Introduction) of this rEIAR, a common framework of assessment criteria and terminology has been used based on the EPA’s draft Guidelines on the Information to be Contained in EIARs (EPA, 2022). This common framework follows a ‘matrix approach’ to environmental assessment which is based on the characteristics of the impact (magnitude and nature) and the value (sensitivity) of the receptor.

The assessment reported below is based on the common framework described in Chapter 1 of this rEIAR. It has been assumed that the value (sensitivity) of the material assets is no

greater than Medium, which equates to ‘Medium or high importance and rarity, regional scale, limited potential for substitution’ (see Table 1.4 of Chapter 1). This sensitivity has been assumed given the importance of the assets to users surrounding the Project, and their sensitivity to potential disruption from the impaired use.

A description of the significance categories used is provided in Table 12-1. Effects that are either **Large or Profound are considered to be Significant**, and effects that are **Moderate, Slight or Imperceptible are considered to be Not Significant.** How the level of effect is determined, based on the environmental value and magnitude of impact, is explained in Chapter 1.

Table 13-1 - Significance categories and typical descriptions.

Significance Category	Typical Description
Profound	An effect which obliterates sensitive characteristics. Only adverse effects are usually assigned this level of significance. These factors are key issues in the decision-making and consent process. These effects are generally, but not exclusively, associated with sites or features of international, national or regional importance which are likely to suffer a most damaging impact and loss of resource integrity. However, a major change in a site or feature of local importance may also be included in this significance category.
Large	An effect which, by its character, magnitude, duration or intensity alters a significant proportion of a sensitive aspect of the environment. These can be beneficial or adverse effects and are considered to be very important issues which are likely to be substantial in the decision-making process.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends. These are beneficial or adverse effects which may be important but are not likely to be central to decision-making or consent. The cumulative effects of these factors may influence consent or decision-making if they should lead to an increase in the overall adverse effect on a particular resource or receptor.
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities. These beneficial or adverse effects may be raised as local factors. They are unlikely to be critical in the decision-making process but are important in enhancing the subsequent design of the project.

Significance Category	Typical Description
Imperceptible	An effect capable of measurement but without significant consequences. No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

13.4 Baseline Conditions

The application Site is located in the townland of Coolsickin or Quinsborough in Co. Kildare. Extraction of aggregates from the landsite is estimated to have commenced not before the beginning of 2000 and to have ceased by December 2006 as indicated on aerial mapping and KCC held planning files for the Site (See Chapter 2 Project Description).

13.4.1 ESB Network Utilities

One service map was received from ESB in May 2024 detailing the layout of underground and overhead ESB lines on-site and in the locality covering an area of 500 m from the EIA boundary. The received service maps have been provided in Appendix 13A.

The service map provided by ESB indicate that the Site is traversed by the grid via an overground high voltage lines that are supported by poleset no. 74 within the Application Site (Figure 13-2 and Appendix 13A).

Figure 13-2 - Poleset no. 74

Overground medium voltage lines supported by poles are located in a southeast to northwest orientation in the western area of the Application Site. Poles no. 10 and no. 11 are mapped within the Application Site (see Appendix 13A).

A low voltage overhead cable is mapped along the L7049 Local road that the most southern section of the EIA Boundary abuts (see Appendix 13A).

13.4.2 Gas Supply

A service map was received from Gas Networks Ireland (GNI) in May 2024 detailing the gas networks within the EIA boundary. GNI infrastructure (e.g. pipelines) are not mapped as present within the study area. This GNI service map has been included in Appendix 13B.

13.4.3 Telecommunications Network

Service maps have been sourced from the open eir Civil Engineering Infrastructure Service online mapping request portal and show the telecommunications network on-site and in the locality covering an area of 500 m from the EIA boundary. These maps indicate that transmission poles carry over ground services:

- along the Grand Canal – Barrow Line, which runs to the north and northwest of the Application Site,
- along the local roads to the east and south of the Application Site, These lines service the residential developments situated adjacent to them, and
- within lands to the east of the Application Site.

The map indicates a transmission line is present within the EIA boundary in the northern section of the Application Site. However, this infrastructure was not observed to be present within the Application Site during a walkover carried out on 8 March 2024.

13.4.4 Local Water Supplies and Sewerage Infrastructure

Service infrastructure details were received from Uisce Éireann on May 2024 covering the EIA boundary area. This information indicated that the site does not require water take from public water infrastructure.

There is no evidence from arial imagery, KCC held planning report, and a site walkover conducted in 8 March 2024 of infrastructure requiring a water connection or sewage connection being present onsite. Nor are there public records or site observations of historical abstraction boreholes/wells present onsite.

Given the scale and nature of extraction operations and associated works it is assumed water requirements would have been relatively low and would likely have been served by an offsite water source.

Uisce Éireann data (2025) indicates that no public sewerage infrastructure is present within the EIA boundary. Given that there is no evidence of infrastructure onsite during the assessment period that would require a sewage connection, it is assumed no sewerage connection was present.

13.4.5 Surface Water Drainage Infrastructure

There are no existing public surface water networks within the Site. Topography of the Application Site promotes surface watershed to the north and north-west where run of it is collected in a ditch that runs broadly parallel to the south of the towpath.

Internal haulage routes within the EIA boundary are comprised of compacted aggregates which are unlike to significantly impede infiltration of rainwater to ground. No evidence of hard surfaces (e.g. concrete pads) have been observed on arial imagery or the 8 March 2024 walkover of the lands within the EIA boundary so no drainage associate for such structures would have been required.

13.5 Characteristics of the Project

A detailed Project Description has been provided within Chapter 2 of this rEIAR.

13.6 Potential Effects

The main potential impacts and associated effects that have been considered in the assessment relate to the following:

- Activities or events that might have impacted electrical services and utilities for surrounding users;
- Activities or events that might have impacted telecommunications networks for surrounding users;
- Activities or events that might have impacted surface water drainage networks surrounding the Application Site;
- Activities or events that might have impacted water supplies and services for surrounding users; and,
- Activities or events that might have impacted waste water networks for surrounding users

These potential impacts during the assessment period are considered and assessed in the following sections.

As there is no GNI infrastructure within the Site area and no premises in the surrounding area are serviced by GNI infrastructure, impacts to gas supply infrastructure have been scoped out of this assessment.

Given the nature of the Project, the potential for waste generation is considered likely to have been limited. Non economically valuable overburden was stockpiled onsite. Economically valuable material (e.g. aggregate) would have likely been used for construction sector developments. No evidence of broken plant or commercial waste was observed on the 8 March 2024 walkover so it is assumed any broken plant or equipment was removed from the Application Site and disposed of at a suitable facility. Given the predicted volume and types of plant used it is considered there would have been no adverse impacts to third-party waste facilities and so waste management has been scoped out of this assessment.

Activities that might have impacted geological resources are assessed in Chapter 5 Land Soil and Geology.

Potential effects on geological resources are assessed in Chapter 5 Land Soil and Geology.

Potential effects on associated with the change of land-use caused by the Project are addressed in Chapter 5 Land Soil and Geology.

Potential effects on water quality and quantity of supply for groundwater users are addressed in Chater 6 Water.

Potential effects on roads & traffic are addressed in Chater 12 Traffic and Transportation.

Given the nature of the rEIAR and the Substitute Consent process the potential impacts of a 'Do Nothing' scenario if the Project were not operating during this period have not been considered.

13.6.1 ESB Network Utilities

The Project has not utilised electricity supplies to the Site. Previous extraction activities did not result in any significant impacts to the quality or availability of electrical utilities to the surrounding users. A working buffer zone appears to have been utilised around the poleset no. 74 supporting the high voltage lines (see Figure 13-2) and the pole set remains insitu at the time of writing.

The magnitude of effect from the Project on the local electricity supply during the assessment period is therefore considered to have been Negligible and the level of effect is predicted to be Imperceptible and **Not Significant**.

13.6.2 Telecommunications Network

The telecommunications network has not been connected to the Application Site (see Appendix 13C). No additional telecommunications have been set up.

The Project has not required the movement or relocation of telecommunications lines or other infrastructure. The magnitude of effect of the Project on the telecommunications network during the assessment period is considered to have been Negligible and the level of effect is predicted to be Imperceptible and therefore **Not Significant**.

13.6.3 Local Water Supplies and Sewerage Infrastructure

Residential properties local to the Site, utilise both private and public water supplies. These residential dwellings use domestic septic tanks systems for wastewater.

The Application Site is not connected to public water supply infrastructure and there is no evidence groundwater abstraction has taken place. The magnitude of effect of the Project on the local water supply and sewerage infrastructure is considered to have been Negligible and the level of effect is predicted to be Imperceptible and therefore **Not Significant**.

13.6.4 Surface Water Drainage Infrastructure

There are no existing public surface water networks within the Site and rainfall is not impeded for infiltrating to ground by the Development. Surface water runoff to the ditch to the south of the canal towpath is considered to have had a 'Negligible' impact on surface water drainage infrastructure capacity.

Therefore level of effect is predicted to have been Imperceptible on surface water drainage infrastructure and therefore **Not Significant**.

13.6.5 Evaluation of Initial Impacts and their Effect Significance

Table 12-2 – Evaluation of Initial Impacts and their Effect Significance

Receptor	Sensitivity	Source of Impact/Description of Change	Impact Magnitude	Level of Effect
Electrical Infrastructure / Utilities	Medium	Disruption to electrical supplies as a result of site activities.	Negligible (adverse)	Imperceptible
Telecommunication Infrastructure / Utilities	Medium	Disruption to telecommunications networks as a result of site activities.	Negligible (adverse)	Imperceptible
Water Supplies	Medium	Impacts to quality of surrounding water supplies (groundwater well users) from quarrying activities on Site.	Negligible (adverse)	Imperceptible
Surface Water Drainage Infrastructure	Medium	Impacts to surface water drainage infrastructure from activities on Site.	Negligible (adverse)	Imperceptible
Wastewater Networks	Medium	Impacts or impairment of local wastewater networks as a result site activities or contributions.	Negligible (adverse)	Imperceptible

13.7 Remedial Measures and Monitoring

No remedial measures have been identified in this chapter of the rEIAR. Other measures which may be required are detailed separately in the below chapters of this rEIAR:

- Chapter 6 – Water;
- Chapter 7 – Air Quality;
- Chapter 9 – Noise and Vibration;
- Chapter 11 – Landscape and Visual Impact; and
- Chapter 12 – Traffic and Transportation.

No monitoring is proposed for material assets as part of this retrospective assessment.

13.8 Residual Effects

The assessment concludes that the Project did not give rise to significant adverse effects on material assets within or outside of the Application Site during the assessment period. In all cases the residual effect is **Not Significant**.

13.9 Cumulative Effects

Given the nature of the Project and the limited material asset infrastructure present at and proximate to the Application Site, it is considered that there have been **no cumulative effects** with other permitted / under construction third-party developments.

13.10 Difficulties Encountered

Mapping information on public infrastructure was not available for the assessment period. Current mapping data from providers (e.g. ESB, eir, GNI, Uisce Éireann) was reviewed in conjunction with 2024 site walkover observational data, and KCC held planning records to infer baseline site conditions at 1 January 2000 and existing conditions at 31 December 2006. Considering recent infrastructure within the assessment allows for a 'worst case' assessment to be carried out and therefore it is considered no significant difficulties were encountered with regards to ensuring a robust assessment.

13.11 References

EPA (2022) Guidelines on the information to be contained in Environmental Impact Assessment Reports.

Gas Networks Ireland (2021) Code of Practice for Working in the Vicinity of the Transmission Network.

Kildare County Council, Kildare County Development Plan (CDP) 1999.

Kildare County Council, Kildare County Development Plan (CDP) 2005-2011.

Kildare County Council (2012) Section 261A Assessment

Uisce Éireann (2025) Mapping Portal Data

Appendix 13A

ESB Mapping

ESB Networks

TITLE:

20240517-080_A0

COLOUR CODE:

- BLACK - 38KV & HIGHER VOLTAGE OVERHEAD LINES
- GREEN - MV(10KV/20KV) OVERHEAD LINES
- BLUE - LV (400V/230V) OVERHEAD LINES
- CYAN - 38KV & HIGHER VOLTAGE UNDERGROUND CABLE ROUTES
- RED - MV/LV (10KV/20KV/400V/230V) UNDERGROUND CABLE ROUTES

DATE: 17-May-2024

** SCALE: 1:2500

** SCALE WHEN PRINTED ON AN A0 PAGE
XY COORDINATES DISPLAYED IN IRISH GRID COORDINATE SYSTEM

WARNING

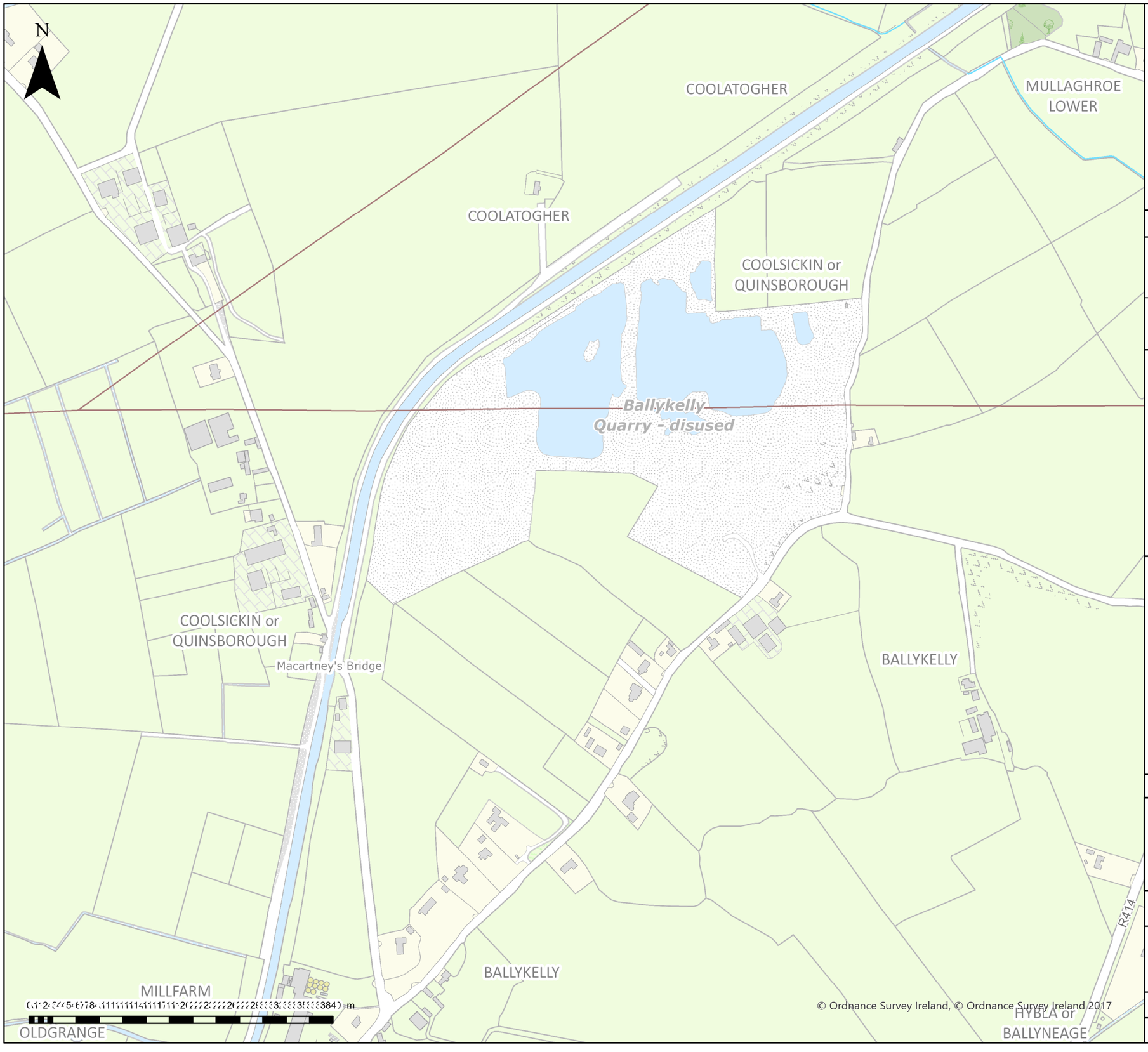
THIS MAP INDICATES THE APPROXIMATE LOCATION OF ESB TRANSMISSION (400KV, 220KV, 110KV, 38KV) AND DISTRIBUTION (20KV, 10KV, 230V/400V) UNDERGROUND CABLES AND OVERHEAD LINES IN THE GENERAL AREA OF THE PROPOSED WORKS. ESB NETWORKS TAKES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE MAP. IT IS THE USER'S RESPONSIBILITY TO INDEPENDENTLY VERIFY THE INFORMATION AND THE LOCATION OF UNDERGROUND CABLES AND OVERHEAD LINES. LOW VOLTAGE (230V/400V) SERVICE CABLES (E.G. HOUSE SERVICES, FACTORY/SHOP SERVICES, PUBLIC LIGHTING LAMP SERVICES, ETC) ARE NOT INCLUDED BUT THEIR PRESENCE SHOULD BE ANTICIPATED. THE DEPTHS OF UNDERGROUND CABLES MUST NEVER BE ASSUMED. ADDITIONAL MORE DETAILED INFORMATION IS AVAILABLE FOR HIGH VOLTAGE TRANSMISSION UNDERGROUND CABLES (38KV, 110KV, 220KV, 400KV) FROM THE LOCAL ESB NETWORKS TRANSMISSION REPRESENTATIVE - SEE ATTACHED LIST FOR CONTACT DETAILS OR CALL 1800 372 757. NO WORK SHOULD BE CARRIED OUT IN THE VICINITY OF 38KV OR HIGHER VOLTAGE UNDERGROUND CABLES WITHOUT PRIOR CONSULTATION WITH ESB NETWORKS. BEFORE ANY MECHANICAL EXCAVATION IS UNDERTAKEN, THE ACTUAL LOCATION OF ALL UNDERGROUND ELECTRICITY CABLES MUST BE ESTABLISHED AND VERIFIED ON THE SITE USING:
(A) UP-TO-DATE MAP RECORDS; (B) CABLE LOCATER EQUIPMENT OPERATED IN BOTH POWER AND RADIO MODES;
(C) CAREFUL HAND DIGGING OF TRIAL HOLES USING 'SAFE DIGGING PRACTICE'. REFER ALSO TO 'HSA CODE OF PRACTICE FOR AVOIDING DANGER FROM UNDERGROUND SERVICES'. ESB TAKES NO RESPONSIBILITY FOR AND SHALL BEAR NO LIABILITY, HOWSOEVER ARISING, IN RELATION TO ANY DAMAGE, INJURY/DEATH OR LOSS OF SUPPLY AS A RESULT OF DAMAGE OR INTERFERENCE WITH ITS NETWORKS.

ESB NETWORKS HAS ISSUED THIS MAP AS A PDF DOCUMENT. IF VIEWING A PAPER VERSION OF THIS MAP, THE VIEWER MUST ENSURE THAT IT HAS BEEN PRINTED IN COLOUR TO FIT TO AN A0 (OR LARGER) PAGESIZE AND THAT EACH OF THE COLOURS INDICATED ON THE COLOUR CODE LEGEND ABOVE ARE CLEAR AND DISTINCT FROM EACH OTHER TO MAINTAIN A CORRECT REPRESENTATION OF THE ELECTRICAL NETWORK INFORMATION.

PLEASE NOTE THAT THERE ARE: HIGH VOLTAGE (38KV AND HIGHER VOLTAGES) OVERHEAD LINES AND UNDERGROUND CABLES ON THIS MAP. IF YOU INTEND WORKING, OR UNDERTAKING DEVELOPMENT WITHIN A CORRIDOR EXTENDING 40 METRES ON EITHER SIDE OF ANY HIGH VOLTAGE OVERHEAD LINES OR WITHIN A CORRIDOR EXTENDING 5 METRES ON EITHER SIDE OF ANY HIGH VOLTAGE UNDERGROUND CABLES YOU MUST CONTACT THE DESIGNATED PARTIES (PLEASE SEE ENCLOSED SHEET) IN ADVANCE OF THE WORKS

Appendix 13B

Gas Networks Ireland Service Mapping



Important Safety Notice: Damage to gas pipelines can result in serious injury or death. Gas network information is provided as a general guide. The exact location and depth of medium or low pressure distribution gas pipes must be verified on site by carrying out necessary investigations, including, for example, hand digging trial holes along the route of the pipe. Service pipes are not generally shown but their presence should always be anticipated.

High pressure transmission pipelines are shown in red. If a transmission pipeline is identified within 10m of any intended excavations then work must not proceed before GNI has been consulted. The true location and depth of a transmission pipeline must be verified on site by a representative of GNI. Contact can be made through 1800 427 747.

All work in the vicinity of the gas network must be completed in accordance with the current edition of the Health and Safety Authority publication, 'Code of Practice For Avoiding Danger From Underground Services' which is available from the Health and Safety Authority (0818 289 389) or can be downloaded at www.hsa.ie.

- Aurora Telecom Duct
- Aurora Telecom Sub Duct
- Aurora Telecom Inserted Gas Pipe

Aurora TELECOM

Aurora Telecom Queries - 01-8926166 (Office Hours)
Aurora_Network_Queries@gasnetworks.ie
Aurora Telecom Emergency Only 1800 427399 / 01 2030120

- Transmission Pipe (High Pressure)
- Transmission Pipe (Construction Issue)
- Distribution Pipe (Medium Pressure)
- Distribution Pipe (Low Pressure)
- Service Pipe (Medium Pressure)
- Service Pipe (Low Pressure)
- Strategic Pipe (Medium Pressure)
- Strategic Pipe (Low Pressure)
- Inserted
- Abandoned Pipe

C=?	Cover (depth in metres)		Pressure Monitor
CP	CP Test Point		Protection (Slabbing)
	End Cap		Protection (Sleeve)
	Hot Tap		Reducer
	Installation		Service Terminator
	Valve		Tee
	Mains Verification**		Transition

** Please contact GNI on 1800-427747 for specific information

DIAL BEFORE YOU DIG 1800 42 77 47
In Emergency call 1800 20 50 50 Gas Networks Ireland

Gas Networks Ireland

GAS NETWORK INFORMATION

Description: test

Location: 663455,713025

Plot Date: 15/05/2024 08:30	Scale: 5000 @ A3
Plotted By: 6951	Ref ID: *6951_15052024083035*

Appendix 13C

eir Mapping

A3

Quarry

Quarry

open eir Civil Engineering Infrastructure Service

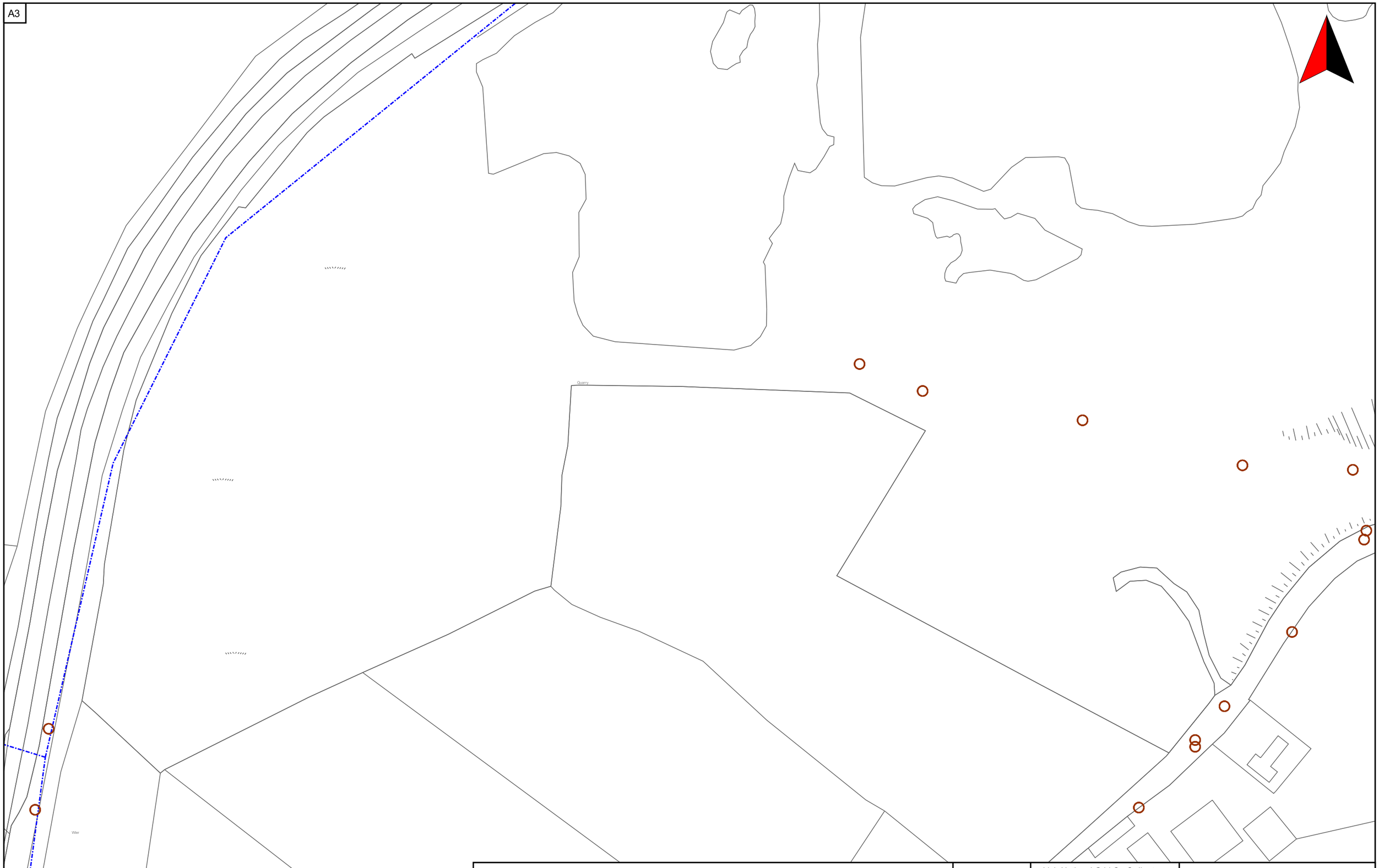
Scale: 1:1500

Irish National Grid Co-Ordinates
Centre XY: 263576 m, 213168 m

Date
15/05/2024

Smallworld
Powered by GE

A3



open eir Civil Engineering Infrastructure Service

Scale: 1:1500

Irish National Grid Co-Ordinates
Centre XY: 263520 m, 213018 m

Date
15/05/2024

Smallworld
Powered by GE

A3

Quarry

Wier

Wier

Wier

Macartney's

Bridge

open eir Civil Engineering Infrastructure Service

Scale: 1:1500

Irish National Grid Co-Ordinates
Centre XY: 263472 m, 212876 m

Date
15/05/2024

Smallworld
Powered by GE