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INTRODUCTION

- 4.1 This chapter of the EIAR addresses the impact on local population and human health of the proposed sand and gravel extraction development in Naul townland with restoration returning the site to a long-term beneficial agricultural after-use. For further detail of the proposed development and the application site context, refer to Chapter 2 of this EIAR.
- 4.2 The extraction and processing operations at the application site are expected to continue for a period of up to 11 years, based on an extraction rate of c. 120,000 tonnes per annum, which is considered relatively small in comparison to typical mineral extraction developments. Allowing for 1 year to complete final restoration works, a total duration of 12 years is sought for the entire project.
- 4.3 The overall land interest is located c. 750m northwest from the centre of Naul village on the northern side of the Delvin River. The Delvin River provides the county boundary between Meath and Dublin, with the village of Naul located within Dublin (Fingal administrative area) and the planning application site located in County Meath. It is located within the townland of Naul, and in the Electoral Division of Stamullin, refer to **Figure 4-2**.
- 4.4 The R108 regional road passes to the east of the application site and runs from Dublin city centre to Drogheda, passing through Santry, Ballyboughal and Naul. The R122 passes to the south of the application site and runs from Balbriggan to the east, through Naul before turning south and meeting up with the R108 at St Margaret's to the west of Dublin airport. Access to the national road network is via the local road network and the R122 regional road which provides access to both the M1 and M2 motorways.
- 4.5 The application site comprises existing agricultural lands to the west of the R108 regional road. There is no existing extractive activity at the application site but there has historically been sand and gravel extraction in the general area.
- 4.6 The existing permitted concrete batching facility to the east of the R108 is currently operated by the applicant with the requisite raw aggregate materials currently being imported to the site from external locations (Annagor near Drogheda c. 20km north and Ballynamona near Summerhill c. 40km southwest). The concrete batching plant does not fall within the red line planning application area. For the purposes of preparing a robust EIA assessment, the concrete batching plant is cumulatively assessed with the proposed extraction development where relevant throughout the EIAR.
- 4.7 The application site is located within a predominantly rural landscape. Within the surrounding area, land use is primarily agricultural, comprising a mix of grassland and tillage uses, together with some isolated and one-off housing and ribbon development, principally along the local road network. The small village of Naul is located c. 400m southeast, although associated facilities on the outskirts of the village (such as the local GAA grounds) are closer to the site.
- 4.8 A number of existing residential properties are located close to the application site. The nearest properties to the proposed extraction area are to the west, along the local L10703 road. There are also a number of properties located adjacent to the site entrance and the existing concrete batching plant, along the regional road R108 to the east of the application site. The housing pattern in the vicinity of the application site is shown on **Figure 4-1**, which shows the majority of residences to the north and west of the site.

Scope of Work / EIA Scoping

- 4.9 The 2022 EPA guidelines in relation to the preparation of EIAR¹ note the following in respect of population and human health:
- assessment of land-use planning and demographic issues or detailed socio-economic analysis is not generally required;
 - economic development or settlement patterns are only relevant if they give rise to new development and associated effects;
 - human health should be considered in the context of the relevant environmental topics addressed by the EIAR;
 - the effects on human health via relevant pathways (such as air, soil and water) should be considered in the context of accepted standards for exposure, dose or risk; and
 - other health and safety issues are addressed under other EU directives.
- 4.10 The Institute of Environmental Management and Assessment (IEMA) issued two new guidance documents in 2022 on the assessment of human health within EIA as follows:
- Effective Scoping of Human Health in EIA; and
 - Determining Significance for Human Health in EIA.
- 4.11 Section 1.11 of the IEMA Guidance on the Effective Scoping of Human Health in EIA recommends that if there is not potential for likely significant population effect, human health should be scoped out of the EIA. The guidance makes clear that the topics of population and human health are separate technical topics. The assessment of socio-economic conditions addressed through the topic of 'Population' provides baseline information on which an assessment of sensitivity of human health can be made, therefore it is considered appropriate that both topics are covered within this chapter.
- 4.12 **Table 4-1** of this chapter sets out an initial review of the wider determinants of health identified within the guidance on scoping of human health and how these have the potential to be impacted by the proposed development. The initial assessment within **Table 4-1** provides a framework in order to focus the assessment of human health impacts on areas of most relevance.
- 4.13 This Chapter of the EIAR presents baseline information on population (including employment, amenity and community resources) and assesses likely impacts as a result of the proposed development. This facilitates an assessment of the potential impacts on human health where there is a potential for this to be impacted as identified within **Table 4-1**.

¹ Environmental Protection Agency (2022). *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports*. Environmental Protection Agency, Johnstown Castle Estate, Co. Wexford.

Table 4-1
Wider Determinants of Health and Proposed Development

Categories	Wider Determinants of Health	Commentary
Health related behaviours	Physical activity	No changes likely as a result of proposed development
	Risk taking behaviour	No changes likely as a result of proposed development
	Diet and nutrition	No changes likely as a result of proposed development
Social environment	Housing	Increased supply of aggregates has potential to support increased housing supply
	Relocation	Not relevant, no relocation proposed
	Open space, leisure and play	No changes likely as a result of proposed development
	Transport modes, access and connections	No changes likely, using existing accesses/routes
	Community Safety	No changes likely, boundaries of application site will be kept secure
	Community identity, culture, resilience and influence	Short term changes to existing agricultural land use
	Social participation, interaction and support	Not relevant to application site/proposed development
Economic environment	Education and training	Not relevant to application site/proposed development
	Employment and income	Proposed development will be a source of employment within the local area
Bio-physical environment	Climate change mitigation and adaptation	Potential for aggregates from site to contribute to developing infrastructure in line with national planning / Decreased CO ₂ emissions from removing HGV traffic currently hauling aggregates to the existing concrete batching facility
	Air quality	Potential for air quality impacts from HGV use and dust from activities on site
	Water quality or availability	Potential for contaminants in, run-off to, impact on surface water and/or groundwater
	Land quality	Removal of minerals, overburden
	Noise and vibration	Potential for impacts from site activities
	Radiation	Potential exposure to radon gas
Institutional and built environment	Health and social care services	No changes likely as a result of proposed development
	Built environment	Increased supply of aggregates has potential to support enhancements to wider infrastructure
	Wider societal infrastructure and resources	Increased supply of aggregates has potential to support enhancements to wider infrastructure

- 4.14 On the basis of the EPA guidelines, the scope of this chapter of the EIAR is limited to a consideration of population, employment, amenity and human health in the context of the specialist environmental topics addressed by this EIAR.

Consultations / Consultees

- 4.15 Following a review of published development plans and a site survey, it was considered that there was no requirement for any further formal external consultations to be carried out in respect of population and human health for the purposes of this assessment. There was however significant consultation with other specialist contributors to this EIA Report.
- 4.16 In preparing the previous planning application (P. Ref. AA191263), a pre-planning consultation meeting was held between officials of Meath County Council and the applicant on the 2nd August 2019 at the offices of the Planning Authority. As the site is adjacent to the Meath-Dublin border, pre-planning consultation was also carried out with Fingal County Council at the time.
- 4.17 Although this planning application is for development broadly covering the same development as applied for previously under P. Ref. AA191263, owing to the lapse in time between planning applications, a further formal pre-planning meeting was held with Meath County Council Planning Department via Teams on the 30th May 2024. The ways in which the proposed development had been redesigned in response to feedback obtained during the previous planning process and the refusal reasons by An Bord Pleanála were outlined to MCC officials.
- 4.18 Separate consultations were held with the Roads Section on the advice of the MCC planner and this is discussed in EIAR Chapter 14 Traffic.

Contributors

- 4.19 This chapter of the EIAR was prepared by Lynn Hassett who is an EIA co-ordinator with a BSc in Applied Ecology (2000) and a MSc in Environmental Impact Assessment (2001). She has over 16 years of experience of EIA across the not-for-profit, public and private sectors in the UK and Ireland. She has worked on both the review of EIA on behalf of planning authorities assessing applications and in the production of them to support planning applications being lodged. She is a Practitioner member of the Institute of Environmental Management and Assessment, which she is a member of since 2001. She is also a Full Member of the Institution of Environmental Sciences, which she joined in 2023.
- 4.20 She has worked on numerous extractive industry and other sector planning applications and EIARs. She has experience in both the project management of EIA as well as preparation of generalist assessments such as Population and Human Health and Material Assets.

Limitations / Difficulties Encountered

- 4.21 No limitation or difficulties were encountered in the preparation of this chapter of the EIAR.

REGULATORY BACKGROUND

Legislation

- 4.22 There is no specific legislation relevant to this section of the EIAR. However, the information provided within this chapter is informed by:
- Section 37D and 171A of the Planning and Development Act, 2000 (as amended);
 - Section 94 and Schedule 6 of the Planning and Development Regulations, 2001 (as amended); and
 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.

Guidance and Technical Standards

- 4.23 This chapter of the EIAR has been prepared on the basis of the Guidelines on the Information to be contained in Environmental Impact Assessment Reports by the EPA (2022).
- 4.24 There are no technical standards relevant to this chapter of the EIAR. Technical standards, if any, that are relevant to each pathway (noise, air, water, etc.) are addressed elsewhere in this EIAR.
- 4.25 The framework for human health protection is predominantly set out within World Health Organisation Guidelines and Limits.
- 4.26 The WHO works worldwide to promote health, keep the world safe, and serve the vulnerable. Their goal is to ensure that a billion more people have universal health coverage, to protect a billion more people from health emergencies, and provide a further billion people with better health and well-being. It has a wide remit, from setting limits to prevent danger to human health, to providing responses to health emergencies, and promoting health and wellbeing.
- 4.27 The Institute of Public Health is an organisation that informs public policy to promote health and wellbeing and reduce health inequalities in Ireland and Northern Ireland. It has previously provided comments on draft legislation on EIA and has been represented on the working group for the IEMA guidance on human health in EIA. It has its own guidance on stand-alone Health Impact Assessments² (HIAs), however, the guidance is clear that EIA does not have to adopt all the HIA methods and tools. The IPH has set its Strategic Objectives 2020-2025 in order to be able to fulfil this role to its best potential in informing public health policy. The Institute supports the national implementation of the UN Sustainable Development Goals, including SDG3, which focuses on good health and wellbeing.
- 4.28 The Healthy Ireland Framework was launched by the Irish Government in 2013, with a focus to deliver a vision where 'everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is valued and supported at every level of society and is everyone's responsibility'. The Healthy Ireland Strategic Action Plan 2021-2025 identifies 6 themes to deliver the vision and identifies relevant government departments as well as specific implementation actions. A network of Healthy Cities and Counties is intended to be developed to deliver the Framework at a local level. The HSE has published the Health Services Healthy Ireland Implementation Plan 2023-2027, which will transition to six HSE Health Regions. These regions are intended to assist development of population-based service planning to ensure the alignment of hospital and community healthcare services at a regional level based on defined populations and their local needs, and to build on advances being made on Health and Wellbeing improvements being promoted through the HSE.
- 4.29 The Healthy Ireland Framework is delivered within each local authority area through the Local Community Development Committee (LCDC). The Healthy Ireland Fund Local Strategy for Meath County Council (in which the application site itself is located) provides the framework for promoting health and wellbeing in the County. The two keys areas for priority are identified as improvements in positive mental health and reduction in death from chronic diseases. The Healthy Meath Newsletter is a resource which signposts to various health and wellbeing events / programmes / information happening across Meath each month.
- 4.30 The settlement of Naul, directly southeast of the application site is located in the adjacent Fingal County Council in North County Dublin. The Healthy Fingal Strategic Plan provides a roadmap for

² <https://www.publichealth.ie/reports/health-impact-assessment-guidance-manual>

improving health in Fingal, based on five key areas of healthy eating/active living; mental health and wellbeing; tobacco; alcohol; and sexual health.

Planning Policy and Development Control

- 4.31 The Meath County Development Plan (MCDP) 2021-2027³ is the statutory plan detailing the development objectives/policies of the authority, covering the application area. The Fingal County Council boundary is located within 50m to the south of the application area, across the Delvin River, and the Fingal Development Plan 2023-2029⁴ was therefore also checked. Those policies/objectives, with relevance to this assessment, are listed below.

County Meath

- 4.32 Chapter 9 Rural Development of the MCDP states the following goal for the County:
- "To encourage the continued sustainable development of rural communities without compromising the physical, environmental, natural and heritage resources of the County."*
- 4.33 Meath contains a variety of natural resources such as building raw materials in the form of sand, gravel, stone reserves including high purity limestones and shale used in cement and magnesia manufacture, and base metal deposits. The MCDP recognises the importance of the extractive industry in relation to employment and economic development, as well as the need to exploit such resources in an environmentally sound and sustainable manner.
- 4.34 Section 9.11 of the MCDP refers to the contribution of mineral resources to the county's rural economy and states it is the goal of the Development Plan:
- "To facilitate adequate supplies of aggregate resources to meet the future growth needs of the County and the wider region while addressing key environmental, traffic and social impacts and details of rehabilitation."*
- 4.35 The council policies in relation to the **extractive industry** as set out in section 9.11 of the CDP include:
- Policy **RD POL 21**
- "To ensure that projects associated with the extractive industry carry out screening for Appropriate Assessment in accordance with Article 6(3) of the E.C. Habitats Directive, where required."*
- Policy **RD POL 22**
- "To facilitate the exploitation of the county's natural resources and to exercise appropriate control over the types of development taking place in areas containing proven deposits, whilst also ensuring that such developments are carried out in a manner which would not unduly impinge on the visual amenity or environmental quality in the area."*
- Policy **RD POL 23**
- "To support the extractive industry where it would not unduly compromise the environmental quality of the county and where detailed rehabilitation proposals are provided."*
- Policy **RD POL 24**

³ Meath County Development Plan 2021-2027: <https://consult.meath.ie/en/consultation/meath-adopted-county-development-plan>

⁴ Fingal Development Plan 2023-2029: <https://www.fingal.ie/development-plan-2023-2029>

"To seek to ensure that the extraction of minerals and aggregates minimise the detracting from the visual quality of the landscape and do not adversely affect the environment or adjoining existing land uses."

- Policy **RD POL 25**

"To ensure that the extractive industry and associated development minimises adverse impacts on the road network in the area and that the full cost of road improvements, including during operations and at time of closure, which are necessary to facilitate those industries are borne by the industry itself."

- Policy **RD POL 26**

"To ensure that all existing workings shall be rehabilitated to suitable land uses and that all future extraction activities will allow for the rehabilitation of pits and proper land use management. The biodiversity value of the site should be considered in the first instance when preparing restoration plans. Where landfilling is proposed, inert material is the preferred method. Each planning application shall be considered on a case by case basis and where relevant will be dealt with under the relevant regional Waste Management Plan."

- Policy **RD POL 27**

"To ensure that development for aggregates / mineral extraction, processing and associated processes does not significantly impact in the following areas:

- i. Existing & Proposed Special Areas of Conservation (SACs);
- ii. Special Protection Areas (SPAs);
- iii. Natural Heritage Areas and Proposed Natural Heritage Areas;
- iv. Other areas of importance for the conservation of flora and fauna;
- v. Areas of significant archaeological potential;
- vi. In the vicinity of a recorded monument, and Sensitive landscapes;
- vii. World Heritage Sites."

4.36 The policies of Meath County Council in respect to **rural employment** include:

- Policy **ED POL 17**

"To support in conjunction with Meath LEO and other agencies the development of indigenous industry and business start-ups in rural employment centres (villages and settlements) in the County, subject to compliance with siting, design and environmental considerations."

- Policy **ED POL 18**

"To support rural entrepreneurship and the development of micro businesses (generally less than 10 no. employees) in rural areas where environmental and landscape impact is minimal and such developments do not generate significant or undue traffic. This policy shall not apply to sites accessed from the National Road Network."

- Policy **ED POL 19**

"To support and facilitate sustainable agriculture, agri-food, horticulture, forestry, renewable energy and other rural enterprises at suitable locations in the County."

4.37 Chapter 11 Development Management Standards of the MCDP outlines development management policies for business, commercial and employment developments.

- 4.38 Section 11.4 sets out the general standards applicable to all development types while Section 11.6.9 sets out specific requirements in relation to planning applications for quarries and ancillary developments.

Fingal

- 4.39 Chapter 7 of the Fingal County Development Plan addresses Employment and Economy and Section 7.2.6 recognises the role of the unique rural environment presented by core towns such as Naul in providing employment diversification opportunities. **Policy EEP27** on Aggregate Extraction seeks to:

“Protect and safeguard the County’s natural aggregate resources from inappropriate development and support the sustainable extraction of aggregate resources at suitable locations within the County subject to appropriate environmental safeguards.”

- 4.40 Objective EE074 on Avoidance of Adverse Impacts on the Environment, Residential and Visual Amenities seeks to:

“Ensure that proposals for extraction and land reclamation avoid significant adverse impacts on the environment, residential amenities and the visual amenity of the area through environmental assessment, mitigation and appropriate provision for the restoration of the landscape.”

A Local Area Plan for Naul dating from May 2011⁵ is available on the Fingal website, which sets a framework for the development of the village with an emphasis on guiding proper planning and sustainable development. The Local Area Plan is not listed as an operational LAP in the new County Development Plan. The Council proposes 8 new Masterplans to be prepared during the plan period. These areas present substantial land-banks with significant redevelopment and regeneration potential, requiring a long lead in time to develop a workable framework for delivery as well as significant social and physical infrastructure requirements. Naul is an area that is identified for which a Masterplan will be commenced over the period of the Fingal CDP 2023-2029.

RECEIVING ENVIRONMENT

Study Area

- 4.41 The application site is located in County Meath within the townland of Naul, approximately 400m north-west of the Naul village, which is located in Co. Dublin.
- 4.42 It is located in a predominantly rural area, on lands which are adjacent to a wooded area on the north-eastern site boundary. Within the surrounding area, land use is primarily agricultural with one-off housing development, principally along the local road network. An edge of settlement housing estate and small-scale community facilities such as the local GAA club characteristic of the small village of Naul are present about 200m south of the application site, between it and an area of former sand and gravel excavation which is now heavily vegetated.
- 4.43 The study area relates to the vicinity of the application site, in particular dwellings within it and has been defined as a c. 1 km buffer radius from the application site boundary as shown on **Figure 4-1**, which identifies residential and other community receptors within this zone. Although population and human health effects would not expect to be experienced to a 1 km distance, the radius has been selected to facilitate a conservative assessment and to ensure that a range of community services and facilities representative of the local area were included.

⁵ <https://www.fingal.ie/naul-local-area-plan>

Baseline Study Methodology

- 4.44 The baseline study comprises a desk-top review of online and published resources, information provided by the applicant and information contained in the other sections of this EIAR. A review of existing residential housing and sensitive receptors in the vicinity of the application site was undertaken. Ordnance Survey maps and aerial photography were also examined.
- 4.45 A review of publicly available demographic information was undertaken through a review of the latest years of Census Data available from the Central Statistics Office⁶ at the smallest breakdown available, the Electoral Division (ED). The application site is located in the Electoral Division of Stamullin (see **Figure 4-2**), therefore the Census information relating to this area is considered to be broadly indicative of the demographic conditions within the study area.

Sources of Information

- 4.46 Baseline information was obtained from the following sources:
- Myplan.ie (<http://myplan.ie/index.html>);
 - Historic Environment Viewer (<http://webgis.archaeology.ie/historicenvironment/>);
 - Meath County Development Plan 2021-2027
 - Fingal County Development Plan 2023-2029;
 - The environmental topic chapters of this EIAR;
 - OSi Maps;
 - Aerial Photographs;
 - openstreetmap.org;
 - Live Register Statistics; and
 - CSO Sap Map data.

Site Context

- 4.47 The application site comprises of existing agricultural lands, with a woodland area to the northeast and a disused sand and gravel pit to the southwest which for the most part has been restored mostly through natural regeneration and is now heavily vegetated. Across the R108 regional road, is the existing operational Kilsaran concrete batching plant, which the proposed output from the proposed development is intended to serve. The immediate area around the application site is interspersed with one-off houses and some linear development and agricultural buildings. As shown in **Figure 4-1**, there are c. 47 receptors within 500m of the application site and existing concrete batching facility, predominantly located to the east, west and south of the site along the public road network. The closest houses to the new proposed extraction area are the dwellings along the public road to the west and are off-set approximately 200-230m from the application boundary.
- 4.48 The Meath Landscape Character Assessment is presented in Appendix 05 of the current Meath CDP. It divides the county into 4 Landscape Character Types (LCT's), i.e. *"generic areas of distinctive character"* and further into 20 *"more geographically specific"* Landscape Character Areas (LCA's). The application site is located within the LCA 9 – Bellewstown Hills, which is classed as of regional landscape importance. The nearest other LCA, c. 150m east of the proposed site entrance is LCA

⁶ <https://visual.cso.ie/?body=entity/ima/cop/2022>

- 7 – Coastal Plains, which forms part of the Coastal Landscape LCT and is also classified as of regional landscape importance. Further details on this character assessment are provided in Chapter 13 of the EIAR – Landscape.
- 4.49 The application site is located within an undulating landscape on the southern flank of a hill which rises northwards from the site to a highpoint of c. 155mOD. Current use is predominantly agricultural fields which are bound by a mix of tree-lined hedgerows.
- 4.50 A watercourse (Delvin river) runs near the southern application boundary. There will be no discharge occurring from the application site to the watercourse.

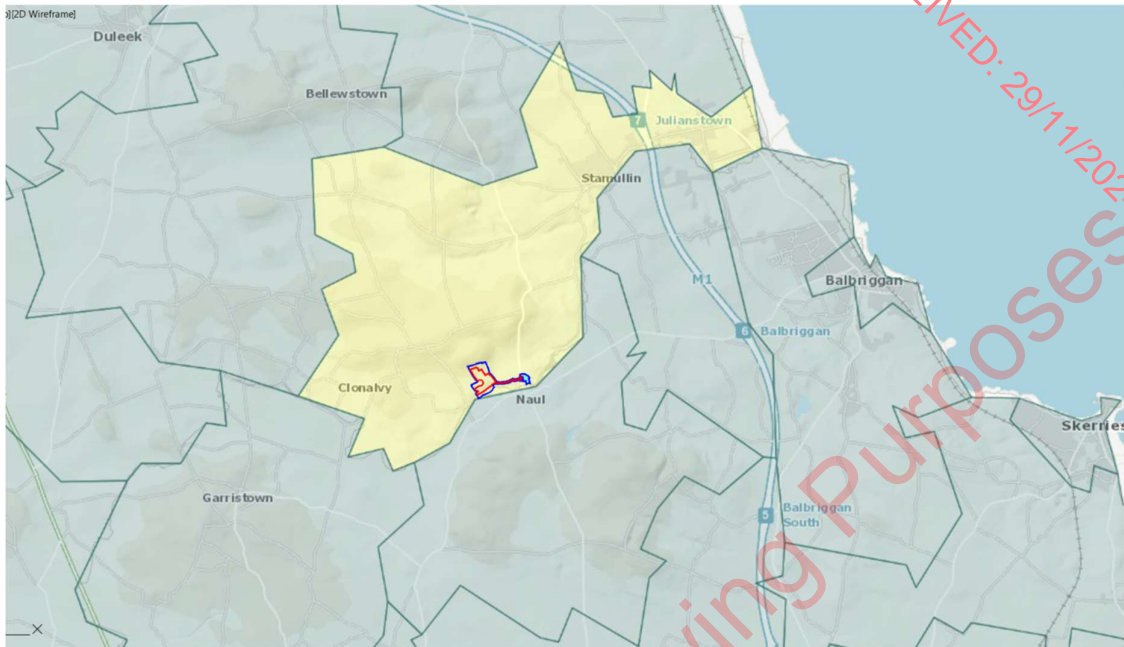
Environmental and Heritage Designations

- 4.51 There are no Natura 2000 sites within 5 km of the proposed development. The closest such site is the River Nanny Estuary and Shoreline Special Protection Area (SPA; 004158) c. 8.2 km northeast of the Site at the closest point when measured in a straight line.
- 4.52 There are no Natural Heritage Areas (NHA) within 5 km of the proposed development.
- 4.53 There are two proposed Natural Heritage Areas (pNHA) within 5 km of the proposed development:
- Bog of the Ring (pNHA 001204) c. 3.5km to the east of the site when measures in a straight line from the closest point. There is no downstream connectivity to this pNHA via surface water pathways from the site.
 - Cromwell's Bush Fen (pNHA 001576) c. 3.5km north of the site when measure in a straight line from the closest point. The is no downstream connectivity to this pNHA via surface water pathways from the site.
- 4.54 There are no recorded monuments located within or immediately adjacent to the application site. The closest Recorded Monument to the application area externally is ME033-034---- the site of a mound in Naul townland. This is described in the RMP as:
- **ME033-034----** NAUL Mound: Described as barrow. No visible trace.
- 4.55 The site of this monument is situated 215m south-west of the application area and is considered too far distant to be directly or indirectly impacted by the proposed development.
- 4.56 The remaining Recorded Monuments in the study area are situated further from the application area than RMP ME033-034---- and are considered too far distant to be directly or indirectly impacted by the proposed development.
- 4.57 There are no structures identified on the National Inventory of Architectural Heritage within the application site. The nearest structure (NIAH Reg. 11,308,005) is a water pump and is situated 330m south of the application area and is considered to be too far distant to be directly or indirectly impacted by the proposal.
- 4.58 The Meath County Development Plan 2021-2027 and the Fingal County Development Plan 2023-2029 containing the Record of Protected Structures was examined and the review established that there are no Protected Structures situated within the application area

Population

- 4.59 The townland of Naul, in which the application site is situated, is within the Stamullin electoral division (ED) refer to **Plate 4-1** below.

Plate 4-1 Extract from CSO – Map Viewer



- 4.60 The Mid-East Region is a NUTS⁷ Level III statistical region of Ireland and consists of the counties of Kildare, Louth, Meath and Wicklow. The Mid-East Region spans 6,891 km², 9.8% of the total area of the state (roughly 7% of the Island) and according to the 2016 census had a population of 688,857, roughly 14.5% of the national population. The recently released 2022 census data shows that the population of the area has increased to 764,154, which represents 14.8% of the total 2022 census population of Ireland.
- 4.61 The Mid-East has experienced continuous population growth since 1961. This growth is primarily influenced by the region's close proximity to the Dublin Region. The region has large urban areas and contains almost 20 towns with a population of over 5,000 although the region mostly has a rural landscape and a high proportion of viable agricultural land. The manufacturing industry employs a significant number of people in the region and it is the location of high-tech industries in areas such as Leixlip and Bray.
- 4.62 The application site is located in County Meath on the border with County Dublin and in close proximity to the M1 motorway, the gateway to Dublin for most of Northern Ireland.
- 4.63 County Meath's location means it is well placed to gain from the benefits of its closeness to Dublin and also to cater for population and growth over-spill from the city. The population of Meath has shown an increase at each census since 1961 and during the 26-year period 1996-2022 has grown from 109,732 (1996) to 220,826 (2022). **Table 4-2** shows the large extent of population growth in the Electoral Division area since 2006, which has even outpaced the strong population growth of Meath and, to a lesser extent, the Mid-East region.

⁷ The Nomenclature of Territorial Units for Statistics (NUTS) is a geocode standard for referencing the subdivisions of Ireland for statistical purposes. The standard is developed and regulated by the European Union.

Table 4-2
Recent Population Trends 2006 -2022

District	Pop 2006	Pop 2011	Pop 2016	Pop 2022	Actual Change 2006-2022	% Change 2006-2022
Mid-East Region	586,627	653,984	688,857	764,154	177,527	+30.3%
Meath County	162,831	184,135	195,044	220,826	57,995	+35.6%
Stamullin Electoral Division	3,844	4,696	5,009	5,471	1,627	+42.3%

Source: Census of Population 2006, 2011, 2016, 2022 CSO

- 4.64 **Table 4-3** below outlines the projected population increase within the Greater Dublin and Mid-East region as set out in the Regional Planning Guidelines for the Greater Dublin Area 2010 – 2022, as compared with actual 2022 Census figures recorded.

Table 4-3
Population Targets for Greater Dublin Area and Mid East Region

Area	2006 Census	2016	2022	Actual 2022 Census
Dublin City	506,211	563,513	606,110	592,713
Dun Laoghaire / Rathdown	194,038	222,800	240,338	233,860
Fingal	239,992	287,547	309,285	330,506
South Dublin	246,935	287,341	308,467	301,075
Kildare	186,335	234,422	252,640	247,774
Meath	162,831	195,898	210,260	220,826
Wicklow	126,194	164,280	176,800	155,851
Greater Dublin Area	1,662,536	1,955,800	2,103,900	2,082,605

Source: Regional Planning Guidelines for the Greater Dublin Area 2010 – 2022 and CSO 2022

- 4.65 As can be seen from information presented in **Table 4-3**, the populations of both Meath and Fingal have exceeded the projections for the counties, which has major implications for the physical and social planning in the counties and for the delivery of public services. The overall projected population increase for the Greater Dublin Area as a whole has not been achieved.

Employment

- 4.66 The closest Social Welfare Office to the application site is in Balbriggan town, Co. Dublin. According to the May 2024 Live Register statistics⁸, there were 1,942 persons on the live register in Balbriggan. This figure has dropped from recessionary lows of over 5,000 in 2011/2012 but is higher than in the economic boom (for example, 1,238 on the live register in October 2005).

⁸ <http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?Maintable=LRM07&Planguage=0>

- 4.67 According to the 2022 census results⁹, the Stamullin ED had a total population of 5,471. Within the ED the labour force was 2,738, of which 49 were classified as short-term unemployed and 74 long-term unemployed. The total figure for unemployed residents in the ED according to the 2016 Census was 183 out of a total of 2,368 available for work, therefore employment opportunities appear to have been enhanced.
- 4.68 A breakdown of the industry in which those at work were employed in 2016 and 2022 is provided below in **Table 4-4**. Employment by Industry in the Stamullin Electoral Division and County Meath follows a broadly regional pattern similar to that of the Mid-East region with the highest participation in the commerce and trade, and professional services sectors. A higher proportion of employees were engaged in transport and communications in Stamullin than generally in County Meath and the Mid-East region in 2016 although the proportion has decreased in 2022. Employment in agriculture, forestry and fishing has decreased in all areas and employment in most other sectors has increased.

Table 4-4
Employment by Industry

	Stamullin Electoral Division ¹⁰		Meath ¹¹		Mid-East Region ¹²	
Agriculture, Forestry, Fishing - 2016	94	4.3%	3,734	4.5%	10,333	3.6%
Agriculture, Forestry, Fishing - 2022	106	4.1%	3,598	3.6%	9,851	2.9%
Building and Construction - 2016	128	5.9%	6,147	7.4%	18,106	6.3%
Building and Construction - 2022	183	7.1%	8,350	8.3%	24,256	7.0%
Manufacturing Industries - 2016	204	9.4%	9,568	11.5%	32,548	11.3%
Manufacturing Industries - 2022	267	10.3%	11,414	11.3%	38,335	11.1%
Commerce and Trade - 2016	498	23.0%	20,332	24.4%	74,397	25.8%
Commerce and Trade - 2022	621	23.9%	25,312	25.0%	89,394	26.0%
Transport and Comms -2016	317	14.7%	7,975	9.6%	25,281	8.7%
Transport and Comms -2022	335	12.9%	10,166	10.0%	32,260	9.4%
Public Administration - 2016	129	6.0%	4,776	5.7%	16,086	5.6%
Public Administration - 2022	180	6.9%	6,190	6.1%	20,000	5.8%
Professional Services - 2016	486	22.5%	17,895	21.5%	65,674	22.7%
Professional Services - 2022	609	23.5%	23,223	23.0%	82,348	23.9%
Others - 2016	307	14.2%	12,832	15.4%	46,232	16.0%

⁹ CSO Census 2022 SapMap

¹⁰ <https://visual.cso.ie/?body=entity/ima/cop/2022>

¹¹ <https://visual.cso.ie/?body=entity/ima/cop/2022>

¹² <https://visual.cso.ie/?body=entity/ima/cop/2022> Consisting of Counties Louth, Meath, Kildare & Wicklow

	Stamullin Electoral Division ¹⁰		Meath ¹¹		Mid-East Region ¹²	
Others - 2022	294	11.3%	12,936	12.8%	47,685	13.9%
Total - 2016	2,163	100%	83,259	100%	288,657	100%
Total - 2022	2,595	100%	101,189	100%	344,129	100%

Source: Census of 2016 and 2022, CSO

- 4.69 County Meath has an unrivalled location between Dublin and Belfast at the heart of the eastern economic corridor. The region benefits from quality infrastructure in both road and rail linking the two cities. The M1 motorway is part of the strategic Euroroute 1 which connects the seaports of Larne, Dublin and Rosslare. The county also has the M2, M3 and M4 motorways passing through it along with key national secondary routes and rail routes.

Economic Activities

- 4.70 Meath has numerous economic strengths, which will allow for a further expansion and development into the future including;

- Excellent transport links and proximity to Dublin; and
- Large and skilled population with a high proportion having a third level qualification along with easy access to third level institutions at Dundalk and Dublin.

- 4.71 The county seeks to position itself as a key economic driver of the Greater Dublin Area and recognises the inherent attributes and opportunities of both urban and rural areas in achieving this goal. The Economic Development Strategy for the county seeks to ensure that the core strategy provides for an economically efficient agricultural and food sector, together with forestry, sustainable exploitation of natural resources and diversification into alternative farming and non-farming activities which are essential components of the development of a sustainable rural economy.

- 4.72 There are two principal types of economic activity prevalent in the Naul area, namely:

- Agriculture; and
- Industry

Agriculture

- 4.73 Agricultural land use in the county follows the suitability and use range of the soils. At more than one third, the dairy sector accounts for the largest land use in Meath. Mixed grazing/livestock enterprises ranks second with beef, tillage, mixed crops and sheep all adding to the list of main farming activities in the county.

- 4.74 The lands located within and immediately around the site are currently used for intensive agricultural activity and enterprise, typically tillage. Whyte Bros Farm, a large grain and food supplier and agri-based industry is located to the east of the application area and the proposed development will share the internal site access with this existing agricultural enterprise.

- 4.75 The lands to the southeast of the application area within the Fingal administrative area is zoned as RU – Rural in the Fingal CDP 2023-2029 (Sheet 2 Fingal North). The zoning objective for this are as

follows “Protect and promote in a balanced way, the development of agriculture and rural-related enterprise, biodiversity, the rural landscape, and the built and cultural heritage”.

Industry

- 4.76 Industry is mainly located along or in close proximity to the M1 motorway to the east of the site in the larger urban areas of Swords, Balbriggan and Drogheda, and along the M2 motorway in Ashbourne to the west. Closer to Naul village, the main commercial activities relate to the existing Kilsaran concrete batching facility. Adjacent to the batching facility, planning permission (P. Ref. AA180893) was granted in February 2019 for development of a recovery facility for construction and demolition waste using crushing and screening to produce secondary aggregates. A waste management licence from the Environmental Protection Agency (EPA) was granted for the facility in September 2019.
- 4.77 There are also a number of small local enterprises and other high street services in and around the Naul, including a shop, café and arts centre, pharmacy, hairdresser, bridal shop, car garage, pub, B&B's etc.

Amenities / Social Infrastructure / Tourism

- 4.78 As previously noted, the site area is predominantly rural in nature. There are a variety of recreational, social, community and sport facilities within and just outside the study area of the site in the general Naul area that support local communities and visitors to the region.
- 4.79 Such attractions include but are not limited to the Courtlough Shooting Grounds, Naul Clay Pigeon Shooting Club, Reynoldstown Animal Farm, Dublin Model Car Club, Ring Common Pitch and Putt Club and Sport Centre, McNally Family Farm Shop and a variety of B&B establishments.

Education

- 4.80 The population of the general area is serviced by primary schools, the closest to the application site being in Naul and Clonalvy villages. The closest post-primary schools are located in Balbriggan.

Natural Amenity

- 4.81 The application site is not included in any area of scientific interest, nor has any special amenity order (e.g. Natural Heritage Area, Special Area of Conservation) been made in the vicinity of the site. The lands have not been designated as an area of high amenity within the County Development Plan 2021-2027.
- 4.82 Within the Meath County Development Plan, the application site and its surroundings are acknowledged as being of regional importance for landscape character. The Fingal County Development Plan 2023-2029 (Sheet 2, Fingal North) also includes a specific objective to preserve views along the R122 directly to the south of the application site.
- 4.83 The Fournocks Megalithic Tombs are located, approximately 1.2km to the northwest of the application area. One of these tombs can be accessed from the local road to the south. There are however no formal car park or visitor facilities associated with this site. Other local features of cultural heritage interest are identified in Chapter 12 of this EIAR.

Security

- 4.84 The nearest local Garda Station is based in Balbriggan, along with ones based in Drogheda, Skerries, Lusk and Swords.

Community Facilities

- 4.85 Naul village provides a local GAA club and church, and the Séamus Ennis Arts Centre and Café. Other local services are located in nearby Balbriggan which has all the basic facilities – churches, parish hall, community centre, a range of shops, post office, health centre, several pubs, crèche/playschools, library, pharmacies, auctioneers, fire station etc.

Transportation

- 4.86 The R108 regional road passes to the east of the application site and runs from Dublin city centre to Drogheda, passing through Santry, Ballyboughal and Naul. The R122 passes to the south of the application site and runs from Balbriggan to the east, through Naul before turning south and meeting up with the R108 at St Margaret's to the west of Dublin airport.
- 4.87 Access to the national road network is via the local road network and the R122 regional road which provides access to both the M1 and M2 motorways.
- 4.88 The M1 motorway runs along a north to south alignment between the M50 motorway in Dublin and the border with Northern Ireland north of Dundalk and at its closest point runs approximately 5km to the east of the application site. There is a grade separated interchange providing full access to the M1 motorway located at Junction 6 (Naul/Balbriggan). The Belfast to Dublin train line runs through Balbriggan c. 8km to the east.

Indices of Deprivation

- 4.89 Pobal is an organisation that works on behalf of Government to support communities and local agencies toward achieving social inclusion and development. The organisation produces mapping information including on deprivation indices in order to identify areas in need of social/community investment. The overall levels of deprivation have been based on census data in relation to demographic profile, social class composition and labour market situation. According to the deprivation indices based on 2016 census data, Stamullin ED is categorised as marginally above average (i.e. slightly advantaged).

Radon

- 4.90 Parts of the application site, particularly within the middle and eastern portion, are within an area mapped by the EPA¹³ as being within the '1 in 5 homes likely to have high radon levels' risk category, and within an area where legal requirements for radon testing of workplaces are in place.

Health

- 4.91 A primary care medical centre, along with several other medical centres are in service in Balbriggan offering a wide range of medical services, along with several other General Practitioners that serve the wider community. The nearest hospital is Our Lady's Hospital in Drogheda, which is approximately 15km to the north.
- 4.92 **Table 4-5** presents the results of the 2022 census in relation to the self-reported health status of Stamullin ED, Meath county and Mid East Region residents.

¹³ <https://gis.epa.ie/EPAMaps/Radon?&lid=EPA:RadonRiskMapofIreland>

Table 4-5
Self-Reported Health Status – Stamullin ED, County Meath and Mid-East Region

	Stamullin ED	County Meath	Mid-East Region
Very Good	58.2%	57.1%	55.8%
Good	27.7%	29.6%	29.4%
Fair	7.7%	7.6%	8.1%
Bad	0.9%	1.2%	1.3%
Very Bad	0.2%	0.3%	0.3%
Not Stated	5.3%	4.3%	5.0%

- 4.93 The vast majority of residents across all administrative areas reported their health to be good or very good, and the overall trends are consistent across the ED, county and Mid-East. The reported levels of 'Very Good' health status are higher within the local Electoral Division and county than in the Mid-East.
- 4.94 A review of 2022 Census data revealed that within the ED 171 people stated that they were unable to work due to permanent sickness or disability. The equivalent number unable to work cited in 2016 was 162, which given the increased population in the ED between 2016 and 2022, is a comparable proportion, hence the situation was unchanged.

Human Health Baseline

- 4.95 The baseline information presented in the preceding sections has not identified any particular sensitivities in relation to human health. The deprivation indices in the area do not highlight the area as disadvantaged and self-reported health status is positive and in line with the national situation. The scale of community facilities and amenities available to local residents is considered to be in proportion with their rural location. The proposed development, itself, will not introduce new communities to the local area and is not expected to create any additional demand on services.
- 4.96 A further review of **Table 4-1** in the context of the baseline population confirms that the main potential for the proposed development to cause negative impacts to human health is through the potential for noise emissions and emissions to air, land and water. These issues have been addressed in detail in their respective chapters of the EIAR and conclusions in relation to their resulting impact to human health are set out below. The proposed development has potential for a substantial positive influence on the local economy through the enabling of the application site to provide a source of direct and indirect employment. This has potential knock-on effects in terms of contributing to the overall wellbeing of the local population. Given the nature and location of the proposed development, there is limited potential for it to contribute to local greenways or community services, however, the plan to return the application site to an agricultural and ecological habitat following extraction of mineral reserves within it, following final restoration, is anticipated to have positive effects on the environment and, therefore, wellbeing in general. Decreased CO₂ emissions from removing HGV traffic currently hauling aggregates to the existing concrete batching facility will also have a beneficial contribution in reducing greenhouse gas emissions.

Sensitive Receptors

- 4.97 The application site is surrounded by mostly agricultural land that is interspersed with one-off housing and agricultural buildings, along with the village of Naul to the southeast.
- 4.98 The closest residential dwellings to the application area are located along the public road network surrounding the site. There are approximately 47 one-off dwellings located within 500 metres of the application area. Between 500m and 1Km there are further clusters of individual houses situated along the local and regional road network.
- 4.99 **Figure 4-1** identifies residential properties, community facilities and farm buildings within the locality and shows 500m and 1km offsets from the application boundary. The closest residences within 250m are the residences located along the public road to the west of the proposed new extraction area as well as the residences situated along the R108 regional road, adjacent to the operational concrete batching plant which forms part of the application site.

IMPACT ASSESSMENT

- 4.100 The proposed development will require the extraction of sand and gravel from the application site followed by processing of the materials through washing, screening and crushing prior to transportation of the aggregates to the applicants concrete batching facility on the eastern side of the R108 road. As previously noted, the proposed development provides for an annual extraction rate of c. 120,000 tonnes per annum.
- 4.101 The duration of the extraction operations is ultimately dependent on the rate of extraction but is expected to last 11 years based upon the above output rate, with a further year required to complete final restoration works. Extraction and restoration operations will be carried out on a phased basis over the life of the development to minimise the amount of land-take at any one time and also to ensure restoration works are carried out at the earliest opportunity.
- 4.102 The location and intensity of associated environmental impacts at receptors will vary somewhat as the active extraction area moves southwards over time.
- 4.103 Ultimately, all of the effects of a development on the environment impinge upon human beings. Direct effects relate to matters such as water and air quality, noise, and changes to landscape character. Indirect effects relate to such matters as flora and fauna.
- 4.104 The impact of the proposed extraction and processing operations at the site on human beings and socio-economic factors is addressed in the following sub-sections by means of an appraisal of the effects of the proposed development on the environment in general, of which human beings are an integral part.

Employment / Economic Activity

Construction Stage Impacts

- 4.105 The initial phase of operations will require:
- existing agricultural entrance upgrade and road construction and strengthening works;
 - erection of fencing;
 - initial topsoil/overburden stripping from the proposed extraction area and stockpiling until restoration; and

- set up of aggregate processing plant for the crushing, washing and screening of aggregates within the proposed extraction area.
- 4.106 This initial phase would provide new employment to up to 3 machinery operators at the site and periodic employment of indirect contractors. This would be a short-term, direct, and positive effect that would not have significant effects on the environment.

Operational Stage Impacts

- 4.107 The subsequent extraction phases of operations will be broadly similar to the construction stage and are briefly outlined below with further details provided in Chapter 2 of the EIAR:
- the extraction of sand and gravel within Phase 1 followed by partial restoration;
 - the progressive topsoil/overburden and stripping / hedgerow removal from the proposed extraction areas (Phases 2 and 3);
 - final restoration to agricultural use.
- 4.108 The proposed development will support the continuation of employment at the site during the overall 11-year extraction / processing period and the subsequent restoration period.
- 4.109 The proposed sand and gravel extraction development will provide employment of 3 people (one technical/operations manager and two general operative) directly on-site, with additional Kilsaran employee truck drivers also being utilised.
- 4.110 In addition, the proposed development will contribute indirectly to sustaining and developing the local and regional economy through the provision of aggregates and building products to the construction industry and through providing supporting support in general for the local economy and service providers.
- 4.111 This is a medium-term, direct and positive effect that would not have significant effects on the environment.

Post – Operational Stage Impacts

- 4.112 Following the cessation of operations, the application site will be restored to a beneficial agricultural use. This would result in the loss of all direct jobs related to the extraction operations at the site. Some short-term employment would be provided in relation to the aftercare of the restored site. Following this, the restored site will be returned to the Whyte Bros Farm for tillage use, thus ensuring continued employment to their staff.

Community Facilities

Construction,, Operation and Post-Operational Stage Impacts

- 4.113 Given the size and nature of the proposals, it is not considered likely that any additional pressure will be placed on community services such as schools and health facilities.

Residential Amenity / Tourism / Human Health

- 4.114 Potential negative impacts on the amenity of the surrounding area arising from the proposed development relate mainly to potential disturbance from noise, dust, traffic, and visual effects. The potential for effects from these emissions has been assessed in the relevant technical chapters of the EIAR.

Construction Stage Impacts & Operational Stage Impacts

- 4.115 The initial phase of operations will require minor internal road / access works, the stripping of topsoil, the movement of these materials and the set-up of the processing plant and the weighbridge. This phase has the potential to generate dust and noise and to cause the leakage or spillage of materials such as fuel to the soil and ultimately to groundwater.
- 4.116 During the operational stage, the potential impacts on air, noise, landscape and traffic include the following:
- The generation of dust, particularly during periods of dry weather, through the movement of vehicles to and from the working area;
 - The generation of noise by the operation of machinery and HGV movements through the site;
 - The leakage or spillage of fuels or other materials to soil and, ultimately to groundwater; and
 - Ongoing visual changes as the progressive extraction / restoration operations are undertaken.

Noise and Dust

- 4.117 Detailed assessments of the potential effects of the proposed development on air quality and the noise environment are detailed in Chapters 8 and 10 of this EIAR respectively. The potential for the proposed development to generate dust and noise impacting local residences has been assessed having regard to baseline monitoring data and modelling potential impacts using accepted methodologies.
- 4.118 With this type of development, impacts are most likely to arise typically at properties within c. 100m of the application boundary. The closest residences to the application site (extraction and processing area) in this instance are those along the public road to the west, with the closest residence being between c. 200-230m from the site boundary.
- 4.119 A number of mitigation measures are recommended to ameliorate any potential adverse effects, principally through good housekeeping and the adoption of best operational practices. Existing mature perimeter screening berms and vegetation will be retained and the separation distance between dust and noise sources and sensitive receptors will both provide significant attenuation of any dust and noise emissions likely to be generated by the onsite extraction and processing activities.
- 4.120 The assessments presented in Chapters 8 and 10 of this EIAR indicate that proposed mitigation measures to ameliorate potential adverse effects, will minimise potential dust and noise impacts experienced at nearest sensitive receptors and ensure that no significant adverse residual dust and noise impacts arise from the proposed development.

Traffic

- 4.121 The projected rate of output will generate HGV traffic movements off-site, albeit for a short distance over the public road between the site entrance and the destination location of the existing concrete batching plant on the opposite side of the public road and could have an impact on traffic movements in and around the vicinity of the site. However, the concrete batching plant is already in operation and currently relies on importation of materials over the public road from two separate locations from between 20km and 40km distance.
- 4.122 The proposed development is therefore seen to have a positive impact in terms of traffic movements, given that input materials for the applicant's concrete batching plant will only require transportation over the c. 70m distance from the site entrance to it. Currently all input aggregates are imported through HGV traffic travelling in both directions on the R108 and R122 to the concrete batching facility from other Kilsaran supply sites (currently Annagor and Ballynamona, both located in County

Meath). Eliminating the requirement to transport materials from Annagor will therefore have the benefit of eliminating those HGV truck movements passing through the Naul village towards the concrete batching facility.

- 4.123 Existing haulage from Annagor to Naul (via the M1) is c. 20km one-way and from Ballynamona to Naul (via the R122) is c. 40km one-way. Based on the average annual HGV one-way movements from Annagor (c. 5,333) and Ballynamona (c. 3,555)¹⁴ which represents a 60:40 split, this equates to annual travel distances from the two locations being 106,660km (one-way) and 142,200km (one-way) respectively.
- 4.124 The proposed development will therefore result in a total annual road distance saving of 248,860km with a consequential and beneficial reduction in carbon emissions of c. 177,353 kg CO₂eq¹⁵.

Health

- 4.125 There is relatively high radon potential within the central/eastern part of the application site. Radon gas is not considered harmful in the open air and workplace testing is required in indoor or underground locations where workers spend more than 100 hours per year¹⁶. The EPA (2019) Protocol for the Measurement of Radon in Homes and Workplaces focusses solely on the measurement of indoor radon concentrations and that *"it should be noted that outdoor workplaces would not be expected to have elevated radon concentrations and therefore no radon measurements are required"*.
- 4.126 The main work at the site takes place outdoors, hence so the risk of radon in general is extremely low. Further to this, no new ancillary welfare facilities are proposed as part of the development and radon testing is deemed not be required in this case.
- 4.127 As outlined in each of Chapters 6, 7, 8 and 10 of this EIAR, a number of mitigation measures are proposed to control and minimise effects and to ensure that the residual effects of the proposed development on human health during the construction and operational phases are acceptable and not significant. On this basis, it is considered that, with implementation of the proposed mitigation measures, there would be no likely significant temporary or permanent effects on human health during either the construction or operational stages of this development.
- 4.128 The technical assessments within the chapters above have concluded that the predicted changes in pollutants are well within statutory standards and WHO guidelines. The potential for non-threshold effects is noted and is considered to be of a very low level over the period of the proposed development, therefore the magnitude is predicted to be low. In accordance with the significance matrix proposed by the IEMA Guide to Determining Significance for Human Health in EIA, therefore, the potential for effects on human health is considered to be minor adverse (not significant). On this basis, it is considered that there would be no likely significant temporary or permanent effects on human health during the construction / operational stage following mitigation.

Post – Operational Stage Impacts

- 4.129 Following restoration, the potential effects on air, noise and landscape would cease owing to the cessation of site restoration operations, the cessation of machinery operation and the growth of vegetation.

¹⁴ 120,000t (annual import) ÷ 27t (HGV load) = c.8,888 one-way movements per annum. Split 60:40 = c.5,333 (Annagor) and c.3,555 (Ballynamona) one-way movements

¹⁵ 248,860km x 0.71266kg/km conversion factor

¹⁶ <https://www.epa.ie/environment-and-you/radon/radon-testing/#d.en.82887>

- 4.130 The long-term benefit of the proposed restoration will be reinstatement of the subject lands back to agricultural use. These impacts are considered to be permanent, minor and positive.
- 4.131 Clearly, following the cessation of the proposed works, the appearance of the application site will have altered from its current state as it is returned to a beneficial agricultural use but with a different topographic profile. As outlined in Chapter 13, the effects of the development would be beneficial and positive.
- 4.132 On this basis, it is considered that there would be no likely significant effect on amenity during the post-operational stage, with the exception of traffic which would continue to utilise the public road network in the area for as long as the concrete batching facility is operational.

Unplanned Events and Health and Safety

- 4.133 According to the EPA guidelines, unplanned events, such as accidents, can include *“spill from traffic accidents, floods or land-slides affecting the site, fire, collapse or equipment failure on the site”*. The 2014 EIA directive refers to *“major accidents, and/or natural disasters (such as flooding, sea level rise, or earthquakes)”*.
- 4.134 In this instance, the vulnerability of the proposed development to accidents, unplanned events or natural disasters is quite limited owing to the relatively simple nature of the development works, the established nature of the techniques and procedures to be followed, the material to be handled on site and the relatively rural location of the proposed works.
- 4.135 Unplanned events in relation to the proposed development could potentially relate to:
- instability following the extraction of materials from the working face;
 - spill from vehicles moving within the site; and
 - flooding.
- 4.136 Instability following the extraction of materials is unlikely to have any significant impacts on employment or amenity, particularly beyond the site. There is a potential impact on human health and safety if works were not undertaken to ensure slopes are graded appropriately and that no large-scale instability occurs in the short term. The final restoration will restore the ground within the sand and gravel pit where the angle of repose will be relatively shallow (i.e. 1:2 or 1:3).
- 4.137 Chapter 14 indicates that the local road network would not be significantly impacted by traffic generated by the development and the risk of an accident resulting in a spillage is considered to be no greater in relation to this development than for any other form of development that relies on the transportation of goods and materials by HGVs. The potential for significant impacts on employment, human health in the wider population or amenity as a result of a road spillage is likely to be low and any such effects would be temporary.
- 4.138 The risk of flooding, as per Chapter 7 (Water), has been assessed to be low.
- 4.139 The site will be operated in line with strict industry controls for health and safety which will ensure that the potential for impacts will be negligible.

Cumulative Effects

- 4.140 The EIAR submitted with the previous planning application in 2019 considered the potential for cumulative effects with the following project that had recently been granted permission (February 2019).
- 4.141 Meath County Council under planning file reference number AA180893 for:

“Development at this site, within part of a sand and gravel pit (P.A. Reg. Ref. QY36, QC 17.QC2085) which is currently under restoration. The development will consist of the recovery of construction and demolition waste using mobile crushing and screening plant to produce secondary aggregates. The existing site office including welfare facilities will be replaced including provision of septic tank and percolation area. The wheelwash will be upgraded and relocated towards the site entrance. The existing palisade fence at the entrance is to be replaced with a stone wall and separate entrance gate provided for access to the site office. A weighbridge, hard standing area with drainage to oil interceptor, semi-mobile crushing and screening plant and other ancillaries will be provided. The total application area including the site infrastructure covers c. 0.8 ha of lands. The development will be subject to the requirements of a waste management licence (Reg. No. W0265 01) which is currently under consideration by the Environmental Protection Agency (EPA)”

- 4.142 This grant of planning permission was for a period of 10 years and was subject to the issuing of a waste management licence from the EPA along with the processed secondary aggregate material attaining ‘end-of-waste’ status from the EPA. It was considered in light of the available assessments that the project would not have any significant adverse cumulative effect on human beings. As the operation is now functional and waste licence has been granted by the EPA, it can be considered that the project is accounted for within the updated baseline assessments undertaken for this EIAR.
- 4.143 A search of the Meath and Fingal County Council and An Bord Pleanála's online planning search facilities was undertaken to identify any potential cumulative projects that have been or may be granted since the original EIAR was undertaken in 2019.
- 4.144 Planning permission ABP Ref. 314881 was granted in February 2024 for ancillary development that would ensure the continued viability of the applicant's concrete batching plant across (east of) the R108.
- 4.145 Although the site does not form part of the application site, the EIAR has cumulatively assessed the activities of it in combination with the proposed extraction.
- 4.146 An Bord Pleanála is currently considering a Strategic Infrastructure Development application for a ‘Circular Economy Campus’ and integrated waste management facility at the Hollywood Landfill, c. 3.6km southeast of the application site (ABP Ref. 314964). Given the distance involved and that the project relates to operational changes that have been prompted by changes to EPA licencing procedure it is not anticipated that there will be potential for cumulative effects with the proposed development under consideration in this EIAR. The general arrangements such site operating hours, location, and general operation will remain unchanged, hence the environmental emissions have been considered within the baseline assessments of this EIAR.

Interaction with other Environmental Receptors

- 4.147 As mentioned above, all environmental factors ultimately impact upon, and interact with human beings to some degree or other. These impacts are discussed in detail in the relevant Chapters of this Environmental Impact Assessment Report as follows: -

- Chapter 6 – Land, Soils and Geology
- Chapter 7 – Hydrology and Hydrogeology
- Chapter 8 – Air Quality
- Chapter 10 – Noise
- Chapter 11 – Material Assets

- Chapter 13 – Landscape
- Chapter 14 – Traffic

‘Do-Nothing’ Scenario

- 4.148 In a ‘do-nothing scenario’, the proposed operational activities at the site would not commence and the status quo would remain as is, i.e. the agricultural lands would remain as they currently are. Importation of materials to the applicant’s concrete batching plant would continue to travel from distances up to 40km away and local resources would remain underground.

MITIGATION MEASURES

- 4.149 Mitigation measures to be adopted during the proposed sand and gravel extraction/processing development will relate primarily to minimising any impacts of the project on surrounding sensitive receptors (primarily associated with noise, dust and traffic). These measures are discussed in the following chapters of this EIAR:
- Chapter 6 – Land, Soils and Geology
 - Chapter 7 – Hydrology and Hydrogeology
 - Chapter 8 – Air Quality
 - Chapter 10 – Noise
 - Chapter 11 – Material Assets
 - Chapter 13 – Landscape
 - Chapter 14 – Traffic
- 4.150 In addition, to the proposed mitigation measures, it is anticipated that impacts associated with the proposed development could be controlled by further conditions attached to any planning permission granted by Meath County Council.
- 4.151 In view of the various mitigation measures to be implemented at the site, it is anticipated that the proposed development will not give rise to any significant adverse impacts on human beings. As detailed elsewhere in this EIAR, the activities will be subject to ongoing monitoring to ensure compliance with emission limit values (ELV’s) set by any planning permission.

RESIDUAL IMPACT ASSESSMENT

Construction Stage

- 4.152 Following examination of the identified potential impacts on the receiving environment and provided appropriate mitigation measures are put in place; there are no significant residual impacts with respect to human health anticipated during the construction stage.
- 4.153 It is therefore considered that with the implementation of the mitigation measures outlined in Chapters 6, 7, 8 and 10 of the EIAR, the proposed development will not cause any significant impact on population and human health of the surrounding area.

Operational Stage

- 4.154 Following examination of the identified potential impacts on the receiving environment and provided appropriate mitigation measures in put in place, there are no significant residual impacts with respect to population and human health during the operational stage.

Post – Operational Stage

- 4.155 Following examination of the identified potential impacts on the receiving environment and provided appropriate mitigation measures in put in place, there are no significant residual impacts with respect to population and human health during the post-operational stage.

MONITORING

- 4.156 As outlined in sections 7, 8 and 10, monitoring in relation to the proposed development will be undertaken in respect of groundwater levels, dust and noise respectively. Refer to the relevant sections of this EIAR for further details of the monitoring programmes that will be undertaken.

REFERENCES

Meath County Development Plan 2021-2027

Fingal County Development Plan 2023-2029

Census 2011, 2016 and 2022 (Central Statistics Office)

FIGURES

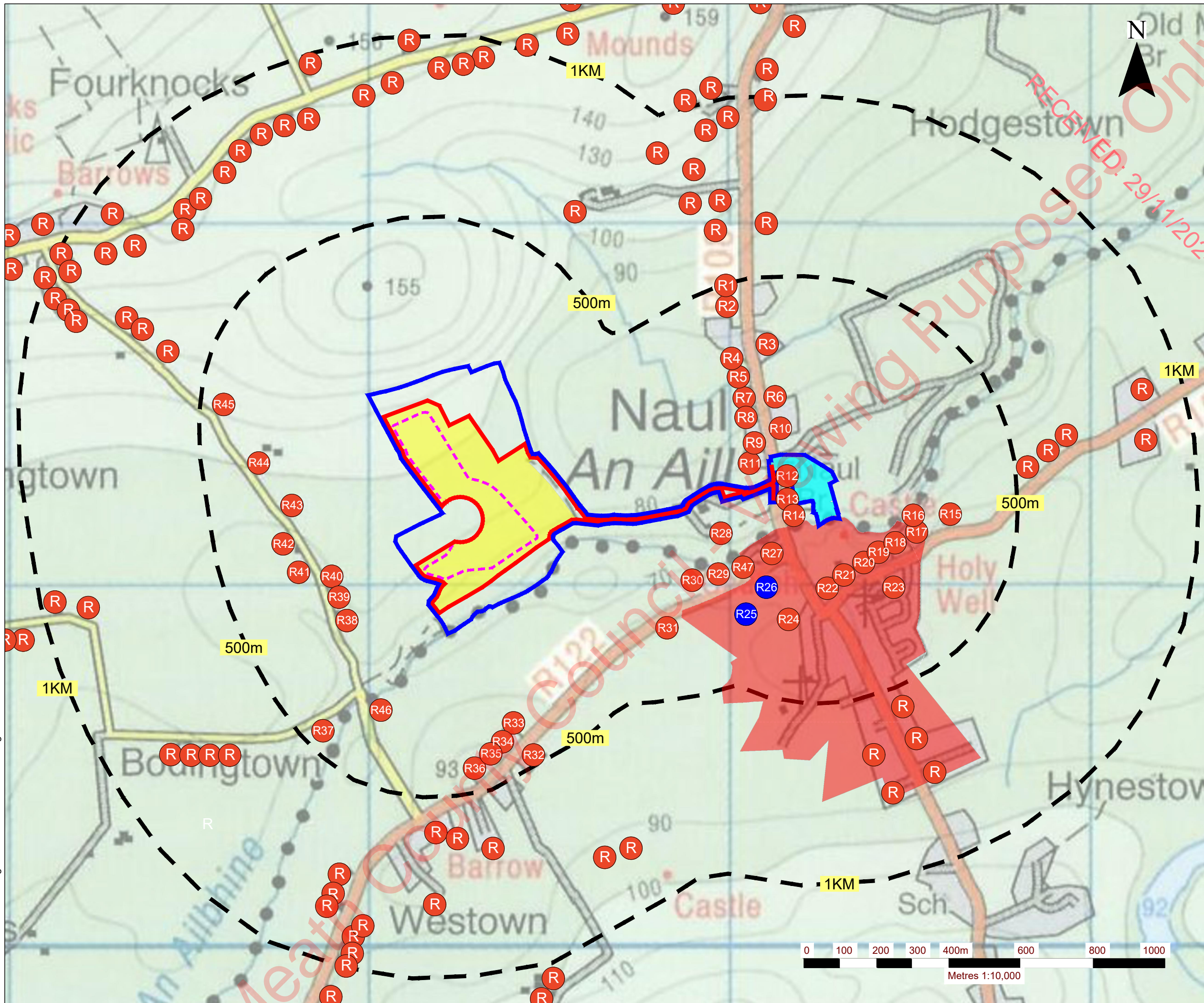
Figure 4-1

Local Receptors (Residence) Map

Figure 4-2

Electoral Divisions Map

00036.064988.Naul.EIAR-Fig4-1.Residence Locations.dwg



NOTES

1. Extract from Ordnance Survey Discovery Series Map No. 43
2. Ordnance Survey Ireland Licence No. CYAL50381397 (c) Tailte Éireann - Surveying

LEGEND

- LAND INTEREST AREA c.25 HECTARES (c.61.8 ACRES)
- APPLICATION AREA c.14.9 HECTARES (c.36.8 ACRES)
- EXISTING KILSARAN BATCHING PLANT P.REFS. 80/572 & 22/153 (ABP-314881-22)
- PROPOSED SAND AND GRAVEL PIT OPERATIONAL SITE AREA
- 500M & 1KM OFF-SET BOUNDARY TO APPLICATION SITE AREA (RED LINE) & EXISTING CONCRETE PLANT (CYAN AREA)
- RESIDENCE / RECEPTOR LOCATIONS
- NAUL VILLAGE
- PROPOSED EXTRACTION AREA c.6.2 HECTARES (c.15.3 ACRES)

Kilsaran
ideas taking shape

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KILSARAN CONCRETE UNLIMITED COMPANY
ENVIRONMENTAL IMPACT ASSESSMENT REPORT

SAND & GRAVEL DEVELOPMENT
AT NAUL TOWNLAND, CO. MEATH

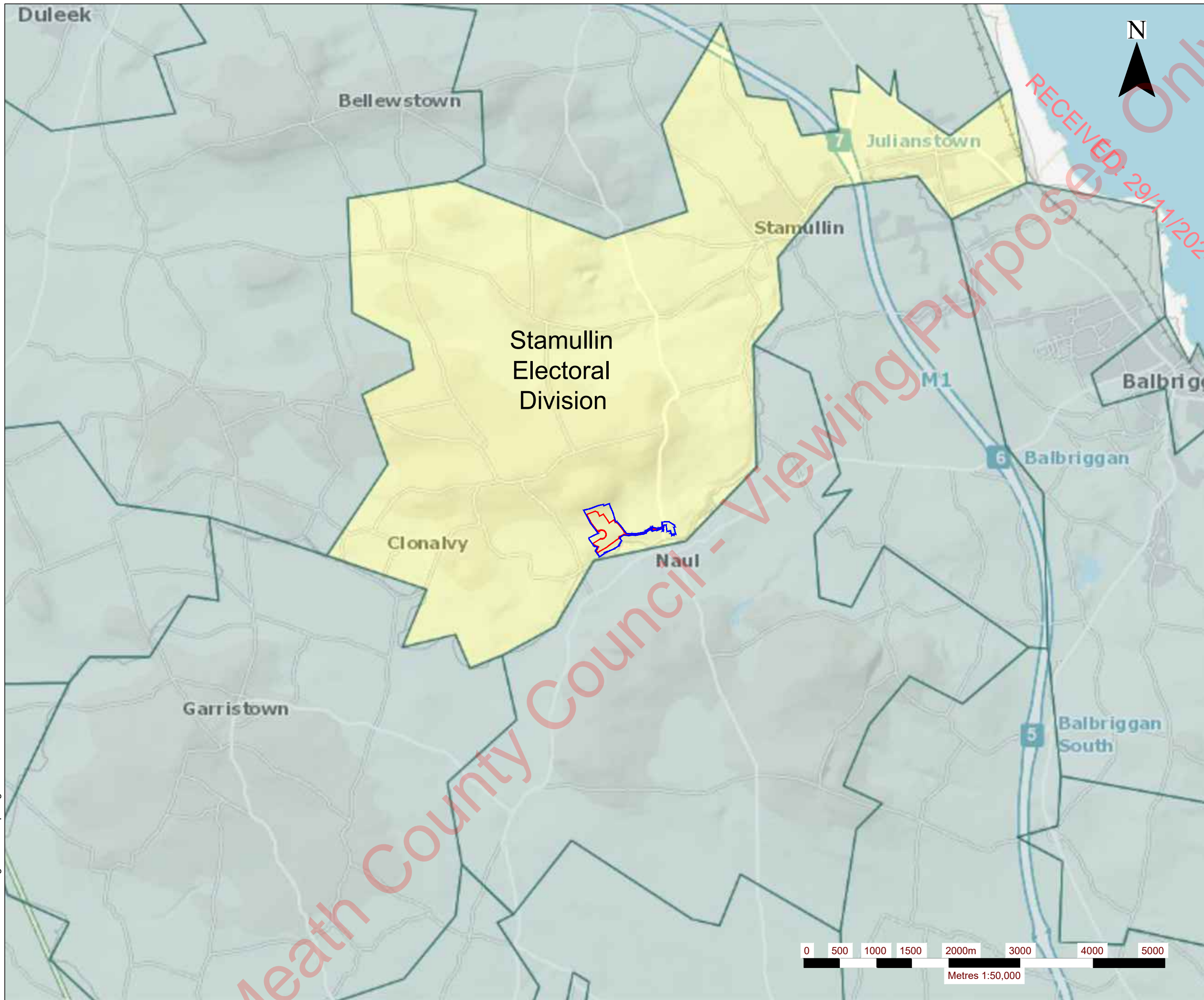
LOCAL RESIDENCE LOCATIONS

FIGURE 4-1

Scale
1:10,000 @ A3

Date
OCTOBER 2024

00036.064988.Naul.EIAR.Fig4-2.ED Map.dwg



NOTES

1. Extract from Ordnance Survey Discovery Series Map No. 43
2. Ordnance Survey Ireland Licence No. CYAL50381397 (c) Tailte Éireann - Surveying

LEGEND

	LAND INTEREST AREA c.25 HECTARES (c.61.8 ACRES)
	APPLICATION AREA c.14.9 HECTARES (c.36.8 ACRES)

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ELECTORAL DIVISIONS MAP

FIGURE 4-2

Scale 1:50,000 @ A3	Date OCTOBER 2024
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