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Lobinstown Quarry

Environmental Impact Assessment Report

Section 11

Landscape

2024

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11 LANDSCAPE

11.1 INTRODUCTION

This section of the EIAR addresses the landscape and visual impacts with respect to an accompanying planning application for the proposed development at Heronstown, Lobinstown, Navan, Co. Meath. The section provides an overview of the landscape and visual amenity within the vicinity of the proposed development, coupled with an assessment of the potential impact, if any, of the proposed development on the existing environment in respect of these issues.

The landscape consists of the visible characteristics of an area or region, including those elements that are physiographic (e.g., mountains and rivers), biological (e.g., vegetation and animals), transient (e.g., weather and climate), and human (e.g., built structures and land use). Landscapes variously combine human cultural influences superimposed on nature, creating places of unique character and identity, and by contributing to individual and social wellbeing and quality of life, is important in human fulfilment and in reinforcement of identity. Landscape also constitutes a resource favourable to economic activities, particularly tourism.

The European Landscape Convention 2000 states that landscape is “an area as perceived by people, whose visual features and character are the result of the action of natural and / or cultural (that is human) factors...landscapes evolve through time as a result of being acted upon by natural forces and human beings”.

The National Landscape Strategy for Ireland 2015-2025 is a high-level policy framework to achieve balance between the protection, management and planning of the landscape, and is devised to ensure compliance with the European Landscape Convention and to establish principles for protecting and enhancing the landscape. One of its outcomes is the development of a National Landscape Character Assessment and statutory guidelines on local Landscape Character Assessment, although these have not yet been published. The Strategy states “Landscape Character Assessments will be prepared at local and intra-local authority level, building on the National Landscape Character Assessment, using Landscape Character Assessment Guidelines. These regional and local landscape character assessments will inform and guide landscape policy, action plans and local authority development plans.

A detailed Landscape Character Assessment (LCA) of County Meath was carried out by Soltys Brewster Consulting on behalf of Meath County Council in 2007. The purpose of the study was to objectively describe, map and classify the landscape character of each part of the County. The LCA was prepared as part of the Meath County Development Plan 2013-2019 and has also been incorporated as Appendix 5 of the CDP 2021-2027.

EPA (2015) offers guidance on the description of the landscape in terms of context, character, significance and sensitivities, the analysis of the potential impacts on the landscape, and any proposed mitigation measures. This section also indicates the associated sections within the EIAR that consider these impacts and any proposed mitigation measures.

The assessment of the landscape and visual impacts of the proposed development has been prepared in accordance with the Advice Notes for preparing Environmental Impact Statements, Draft (EPA 2015). Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, Draft (EPA 2022) were also consulted.

Meath possesses a diverse range of landscapes, including coastline, drumlins in the north, rich pastures, tracts of peatland and raised bog in the southwest, and the central upland area that includes Tara - the ancient capital of Ireland. Meath is also home to one of three UNESCO World Heritage Sites in Ireland — the passage tombs of Brú na Bóinne (Newgrange and Knowth). The Boyne Valley is home to the largest concentration of megalithic carved stone art in Western Europe and can be best seen at the Loughcrew Cairns and at Brú na Bóinne. The county has a rich and varied landscape with historic features dating back to prehistory and many well-known tourist attractions that are related to its heritage. It retains a strong connection with traditional agriculture and the landscape supports a wide range of ecological habitats despite rapid growth of its settlements. It is the interaction of these elements that will influence landscape character for future generations.

County Meath, located in the centre of Ireland (Meath means 'middle'), is known as the 'Royal County' because the Hill of Tara, south of Navan was the home of the High Kings of Ireland for many centuries. This meant that Meath was Ireland's political and social centre during this time. It was one of the five original provinces of Ireland and has an incredibly rich cultural heritage that has arisen from its social dominance and central location.

Meath's relatively accessible landform together with its network of navigable river corridors, encouraged successive waves of visitors to settle here over time. Because of its proximity to Dublin, southern and eastern parts of Meath have experienced massive population growth over the last few decades. This is less the case in northern and western parts which were traditionally less well explored and are still experiencing less development pressure. Navan is the county town. Trim and Kells were historically the two secondary urban centres in Meath but today, Ashbourne, Dunboyne, Kilcock and the edges of Drogheda have developed as major new settlement areas.

Today's landscape, while recently accommodating a significant increase in building, has a largely managed agricultural character stemming from the 18th Century estate system of field bounded by hedgerows with individual farm holdings and small towns and villages. Meath's long history in farming is reflected in numerous country houses and farmhouses, outbuilding and stables scattered across the landscape. The south of the county is as well known for stud farming as adjacent County Kildare and there are many well managed and established stud farms which give the area a strong sense of identity.

The landscapes of the county intrinsically constitute invaluable elements of its natural resource base and need to be protected from inappropriate development. All aspects of the natural, built and cultural heritage come together in the landscapes we experience every day. Landscapes are an important part of people's lives, giving individuals a sense of identity and belonging, contributing to our well-being. Sensitive development and conservation of this resource is essential to the underpinning of the rural economy and quality of life.

Meath occupies a strategic position within the GDA and includes part of the Dublin Metropolitan Area (i.e., Dunboyne and environs), which is the economic engine of the State,



accounting for over 40 % of the national GDP, as well as being the largest market in the State. The county's proximity to the capital has had a major effect on both the nature and extent of development and the associated traffic movements. In particular, the southern tract of the county, containing the M2/N2, M3 and M4, is increasingly coming under the influence of the Dublin Metropolitan Area.

The excellent, multi-modal transport infrastructure (i.e., M2/N2, M3/N3 and M4 and Dublin-Belfast and Dublin-Galway mainline railways) provides ready access to Dublin Airport and Dublin Port, as well as to other regional growth centres of Drogheda, Dundalk and Athlone, and neighbouring county towns, also delivers strong connectivity for the county.

The application site is located within the Townland of Heronstown c. 2 km southeast of Lobinstown and c. 9 km northwest of Slane, Co. Meath and c. 9 km west of Collon, County Louth. The site is located adjacent to, and with direct access onto, the L1603, the local road connecting Slane to the southeast to the N52 regional road at Woodtown Lower to the north, and in the vicinity of Heronstown is known as the Slane Road. The N2 National Primary Road and N52 National Secondary Road can be accessed at Slane and Fringerstown, respectively, and thus connect the site to the principal transport arteries in north of the county.

Mineral extraction is a significant industry and demand for aggregates is certain to continue with increased development of the Dublin Metropolitan Area. There are already a large number of quarries and pits in County Meath and large areas identified as having high aggregate potential, particularly around Kells in the northwest. Any such future development must be carefully planned to avoid unnecessary adverse landscape impacts.

The development will consist of the continuance of operation of the existing permitted quarry and associated infrastructure (ABP Ref. 17.QD.0017; P.A. Ref. LB200106 & ABP Ref. 309109-21), deepening of the quarry extraction area by 1 no. 15 metre bench from 50 m OD to 35 m OD, a lateral extension to the quarry over an area of c. 4.8 ha to a depth of 35 m OD, provision for aggregates and overburden storage, and restoration of the site to natural habitat after uses following completion of extraction, within an overall application area of c. 18.5 hectares. An extraction capacity of up to 300,000 tonnes per annum is sought to provide the applicant with the ability to respond to demand for aggregates in the region. Permission is sought for a period of 20 years in order to extract a known resource with a further 2 years to fully restore the site.

Blasting will continue to be used as the method of extraction, to fragment the rock prior to crushing, screening and aggregate rinsing using mobile plant on the quarry floor. The existing site infrastructure includes site entrance with a c. 350 m long paved internal roadway, internal access roads, weighbridge, wheelwash, portacabin office, car park, mobile crushing, screening, and washing plant, settlement lagoon system, and other ancillaries, which will continue to be utilised for the duration of the works. An effluent treatment system also exists on-site (Refer to EIAR Figure 3.1). Discharge of water from the settlement lagoon at the northern boundary of the existing quarry into the adjacent Killary Stream and ultimately the Dee River is undertaken in compliance with existing trade effluent discharge licence consent (Ref. 20/01).

11.2 REGULATORY BACKGROUND

11.2.1 LEGISLATION

The European Landscape Convention (ELC), to which Ireland is a signatory, was adopted in 2000, and requires signatories to recognise landscapes in law and establish policies aimed at their protection, management and planning. The ELC aims to encourage public bodies to adopt policies and measures at national, regional and local level to protect, manage and plan landscapes. Under the convention, landscape means “an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”, and can include high quality natural areas, rural lands, urban areas, peri-urban areas, degraded areas and everyday spaces.

There is no Irish legislation specifically governing protection of the landscape, although preparation of the landscape and visual impact assessments was done in conformance with the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018). The latter Regulations transpose the EIA Directive 2014/52/EU, amending previous Directive 2011/52/EU, on the assessment of the effects of certain public and private projects on the environment into Irish planning law.

Planning legislation and national guidelines, such as the Draft Guidelines on Landscape and Landscape Assessment (DoEHLG 2000) clearly indicate that conservation of the landscape in all its contexts must now be integrated into all aspects of planning policy.

11.2.2 PLANNING POLICY AND DEVELOPMENT CONTROL

There are two main documents that deal with long-term national and regional development strategies, and these underpin the direction of spatial development at the strategic level in the County. Firstly, at the national level, the National Planning Framework (DoHPLG 2018a), and secondly at the regional level, the Eastern & Midland Regional Spatial & Economic Strategy 2019-2031 (EMRA 2019).

In early, 2018, the government published “Project Ireland 2040”, the new overarching public policy initiative, which consists of the National Planning Framework to 2040 and the National Development Plan 2018-2027 (DoHPLG 2018a; b), which replaces the revoked NSS and the Infrastructure and Capital Investment Plan 2016-2021 (DoPER 2016), respectively. This represents an alignment of the investment strategy with the strategic planning policy, to create a unified and coherent plan, which will drive the long-term economic, environmental and social progress across all parts of the country over the next ten years. This has now fed into the planning processes by being incorporated into the new Regional Spatial & Economic Strategies (RSES) that are replacing the Regional Planning Guidelines.

The Eastern & Midland Regional Spatial & Economic Strategy (RSES) was adopted on 28th June 2019 (EMRA 2019) and will directly influence planning policy in Meath as it has been incorporated into the Meath County Development Plan (CDP) 2021-2027, which was adopted on 22nd September 2021. The RSES recognise the European Landscape Convention (ELC), and also acknowledges the importance that local authorities within the Eastern & Midland Region move towards consensus and adopt a shared methodology and consistency in

landscape classification and assessment to ensure compatibility in decision-making (i.e., Landscape Policy Objective RPO 7.27; EMRA 2019).

RPO 7.27: Following the adoption of the national landscape character assessment, the Assembly will prepare a Regional Landscape Character Assessment to promote better landscape management and planning in the Region.

Landscape Character Assessment (LCA) is a tool for identifying the features that give a specific area its 'sense of place'. Thus, LCA offers the potential to establish a coherent strategy for integrating landscape, land use and transportation policies as well as economic, energy policies, etc.

Local authorities create their CDPs based on these higher level frameworks, guidelines and strategies. Thus, the plans must be consistent with longer term planning and sustainable development objectives, including those set out in the National Planning Framework and Regional Spatial & Economic Strategies. A CDP sets out a strategic framework for the proper planning and sustainable development of the administrative area of the local authority, over a six year period.

A primary role in planning is to assist in the achievement of sustainable development, in part, by promoting an approach to landscape planning and management, which links objectives and recommendations for landscape character to existing planning policies. The capacity of each landscape character type to absorb new development will largely depend on the sensitivity of the landscape type. Developments which are likely to create a significant environmental and particularly visual impact will best be absorbed in areas where the landscape is robust, i.e., has the capacity to absorb development without significantly changing its character. All developments should be assessed on a site-by-site basis to avoid, minimise or mitigate any potential environmental or visual impact.

The importance of landscape and visual amenity and the role of planning in its protection are recognised in the Planning and Development Act 2000 (as amended). This requires that development plans include objectives for the preservation of landscape, views and prospects and the amenities of places and features of natural beauty. It also provides for the designation of Landscape Conservation Areas (LCA), Areas of Special Amenity (ASA) and the assessment of landscape character.

The relevant policies and objectives with respect to landscape in the RSES and Meath CDP are given in the Appendix 1, Section 1.3.2.1 & 1.3.2.2 respectively.

11.2.3 GUIDANCE

This chapter of the EIAR has been prepared with regard to the following guidance:

Countryside Agency and Scottish Natural Heritage (2002). *Landscape Character Assessment Guidance for England and Scotland*. Countryside Agency/Scottish Natural Heritage, Cheltenham, Gloucestershire, UK.

DoAHG (2011). *Architectural Heritage Protection: Guidelines for Planning Authorities*. Department of Arts Heritage and the Gaeltacht (DoAHG), Dublin, Ireland.

- DoEHLG (2000). Landscape and Landscape Assessment: Consultation Draft of Guidelines for Planning Authorities. Department of Environment, Heritage and Local Government (DoEHLG), Dublin, Ireland.
- DoHPLG (2018c). Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. Department of Housing, Planning and Local Government (DoHPLG), Dublin, Ireland.
- EPA (2022). Guidelines on the Information to be contained in an Environmental Impact Assessment Report, Draft, Environmental Protection Agency (EPA), Johnstown Castle, Wexford, Ireland.
- Irish Landscape Institute (2002). Guidelines on Landscape and Visual Assessment, 2nd ed. Irish Landscape Institute, Dublin, Ireland.
- Landscape Institute with the Institute of Environmental Management & Assessment (2005). *Guidelines for Landscape and Visual Impact Assessment - 2nd ed.* Spon Press, London, UK.
- Landscape Institute (2019). *Visual Representation of Development Proposals*. Technical Guidance Note 06/19. London, UK.

11.3 METHODOLOGY

The landscape and visual baseline study comprised a desktop study with follow-up field survey in the vicinity of the site. Although closely linked, landscape and visual impacts are assessed separately.

Landscape Impact Assessment (LIA) is concerned with changes in the physical landscape brought about by the proposed development, which may alter its character and how this is experienced. This requires a detailed analysis of the individual elements and characteristics of the landscape, which combine to form the overall landscape character. By assessing the quality of the elements in the landscape and identifying the key sensitivities, it is possible to assess the ability of the landscape to absorb the type and scale of change associated with the proposed development, without causing unacceptable adverse changes to its character.

Visual Impact Assessment (VIA) is concerned with changes in the composition of views produced by changes to the landscape, how these are perceived and the effects on visual amenity. Visual impacts are measured on the basis of: (1) visual obstruction due to partial or intermittent blocking of a view; or (2) visual intrusion due to interruption of a view without blocking.

Analysis of the visual baseline information was used to identify the extent and nature of the existing views of the site from the principal representative viewpoints, and the nature and characteristics of the visual amenity of the potentially sensitive visual receptors.

In the EIAR assessment, consideration is given to both the importance of an attribute and the magnitude of the potential environmental impacts as a result of the proposed development. The impact ratings are in accordance with impact assessment criteria provided in guidance from the EPA (EPA 2022) (See also Appendix 3. General Guidance on Baseline Environment & Impacts).

11.3.1 CONSULTATIONS

In accordance with best practice guidelines, the process also involved non-statutory consultation. A pre-consultation document was issued to statutory consultees. The list of consultees included Meath County Council, the Dept. of Culture, Heritage & the Gaeltacht Development Applications Unit (DAU), Geological Survey of Ireland (GSI), Inland Fisheries Ireland (IFI), An Taisce, Uisce Éireann, and Environmental Health Services (HSE) (Refer to EIAR Section 1.5.2). Responses were received from the DAU, GSI, IFI and HSE (Refer to Appendix 4). Consideration has been given as necessary with respect to matters raised through the preparation of the EIAR.

Local consultation was undertaken on 14th November 2023 as part of the hydrogeological assessment. During this date, all households within an approximate range of 500 m radius of the proposed development were visited by Breedon Ireland personnel. A second visit was undertaken the following day on 15th November 2023 to those households at which no one had been present and to ensure as many households as possible were consulted and had the opportunity to engage with Breedon Ireland personnel.

11.3.2 DESK STUDY

The desk study was used to determine the nature of the visual amenity of the area along with the approximate visibility of the development, which is determined through topographic analysis of map data. Potential receptors of visual effects, including residents and visitors through the area were also identified.

Ordnance Survey Ireland (OSi) Discovery Series 1:50,000 and OSi 1:5,000 raster mapping and aerial photography were examined (Refer to Figures 1.1 to 1.2). A topographical survey of the existing site was also carried out and modeled using digital terrain modeling software (Refer to Figure 1.3) through which cross sections were produced (Refer to Figure 3.3). LSS Digital Terrain Modelling software has been used to undertake ZTV (Zones of Theoretical Visibility analysis).

ZTV analysis is a useful **desk study** that may help to clarify the potential effect of developments in a landscape, but it is not an end in itself. In order to get a better understanding of actual visibility, the results of the ZTV must be tested on the ground. As such an extensive field study of the area was also undertaken to identify any significant views that could be observed and to confirm the findings of the ZTV analysis.

For the purpose of this assessment Figure 11.1 and Figure 11.2 highlight the study area delineated as the likely zone of visual influence (based on Vertical & Horizontal ZTV analysis).

Visual impacts are best assessed from specific viewpoints. Principal representative viewpoints are mapped within the study area and these views are illustrated by photographs with annotations to describe any important characteristics, and the changes that have arisen as a result of the development (Refer to Plate 11.1 to Plate 11.6).

As part of the assessment an examination of the RSES for the Eastern & Midland Region 2019-2031 (EMRA 2019), the Meath CDP 2021-2027 (Meath 2021), which includes a Landscape Character Assessment (Appendix 5, Vol. 5 of CDP), and supporting documentation, was undertaken.

11.3.2.1 Sources of Information

The assessment was carried out in general accordance with the above guidance documents. The main sources of information are listed in Section 11.7 References, while abundant data was sourced online from observations made during virtual tours of the site and surrounding area using Google Maps and Google Earth Pro.

11.3.3 METHODOLOGY FOR ASSESSMENT OF LANDSCAPE ASPECTS

Landscape effects consist of the changes in the landscape, its character and quality that might result from development. The effect that these changes have on the landscape reflects the sensitivity of that landscape to change and the magnitude of that change.

The assessment methodology was conducted in accordance with Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, Draft (EPA 2022). During the assessment, consideration was given to both the importance of an attribute and the magnitude of the potential environmental impacts of the proposed activities on that cited

attribute. These impact ratings are in accordance with impact assessment criteria provided in guidance from the EPA (EPA 2022) (See also Appendix 3 General Guidance on Baseline Environment & Impacts).

For the purpose of assessment, a matrix has been developed (Refer to Table 11.2 below) to define the significance of the landscape impacts. In completing the matrix, the landscape resource is considered in terms of magnitude of change in landscape characteristics and sensitivity of the landscape to accommodate change or intervention without suffering unacceptable effects to its character and values. The significance of impact is the relationship between magnitude and sensitivity.

The sensitivity of the area was devised by consideration of designations such as Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Natural Heritage Areas (NHAs and pNHAs), by reference to Ordnance Survey 1:50,000 discovery sheet mapping, aerial photography and any distinctive features of interest within the study area.

11.3.4 METHODOLOGY FOR ASSESSMENT OF VISUAL ASPECTS

Visual impact is the result of a change in view from receptors such as residences, prospects, public pathways and roads with views of the site. The magnitude of impact is assessed according to the scale of the effect, which will depend largely upon the size and type of the development and the distance of the receptor from the site.

Residential properties are considered the most sensitive receptors to changes in view whereas road users are the least sensitive as their experience is transient. The significance of visual impact depends upon the sensitivity of the receptor and the magnitude and duration of the effect.

The visual study consisted of a number of steps:

1. As part of the assessment an examination of the RSES for the Eastern & Midland Region 2019-2031 (EMRA 2019), the Meath CDP 2021-2027 (Meath 2021), which includes a Landscape Character Assessment, and supporting documentation, was undertaken.
2. Ordnance Survey Ireland (OSi) Discovery Series 1:50,000 and OSi 1:5,000 raster mapping and aerial photography were examined (Refer to Figures 1.1 to 1.3).
3. An Unmanned Aerial Vehicle (UAV) survey of the site was conducted by JSPE on 7th July 2023. Multiple aerial photographs taken with the on-board camera were digitally stitched together, from which very accurate maps are created using the principle of photogrammetry. The site and immediate environs were surveyed with high horizontal and vertical spatial resolution (i.e., 3 cm per pixel), and produced a topographic survey with accuracy of up to 10 cm. The topographic survey data were modeled using digital terrain modeling software (Refer to Figure 1.3) to produce a DTM, through which cross sections were produced (Refer to Figure 3.3).
4. LSS Digital Terrain Modelling software has been used to undertake ZTV analysis. ZTV analysis tools provide true tests of likely impact because the results reflect the effect that distance has on the apparent size of the object (a large object up-close has more visual impact than the same sized object further away. The visual impact analyses 'bald earth'

terrain datasets which do not take into consideration the existence of natural and man-made features which may form a barrier to the 'line of sight'. As such, these analyses are going to produce a '**worst case**' with no account being taken of the influence of buildings and trees on the visibility.

5. The following ZTV analysis tools have been used.

Vertical ZTV (Visibility Surface(s))

The visual impact is linked to the vertical angle (VA) subtended at the viewpoint (eyepoint) by the top and bottom extremities of the object being viewed. This in effect gives a measure of how much of a given field of view is occupied by the object when viewed from different receptor locations and automatically takes account of the effect distance would have. Something close is far more intrusive than something hundreds of metres away (Refer to Figure 11.1).

Horizontal ZTV

'Horizontal ZTV' measures how much of a receptor's horizontal field of view is taken up by an object (i.e., development). What is produced is a model where the elevation of every grid point represents the chosen Horizontal ZTV in degrees. It is then possible to contour this or display coloured bands in order to highlight potentially problematic areas of high 'impact' (Refer to Figure 11.2).

6. ZTV analysis is a useful **desk study** that may help to clarify the potential effect of developments in a landscape, but it is not an end in itself. In order to get a better understanding of actual visibility, the results of the Zone of Visual Influence (ZVI) must be tested on the ground. As such an extensive field study of the area was also undertaken to identify any significant views that could be observed and to confirm the findings of the ZTV analysis.
7. For the purpose of this assessment, Figure 11.1 and Figure 11.2 highlight the study area delineated as the likely zone of visual influence (based on Vertical & Horizontal ZTV analysis).
8. Visual impacts are best assessed from specific viewpoints. Principal viewpoints were mapped, and these views illustrated by photographs with annotations to describe any important characteristics, and the changes that have arisen as a result of the development (Refer to Figure 11.1 & Figure 11.2 and Plates 11.1 to 11.6).

For the purpose of assessment, a matrix has been developed (Refer to Table 11.3 below) to define the significance of the visual impact with respect to the principal viewpoints identified.

11.3.5 FIELD SURVEY

Site visits were undertaken on 7th July 2023, 17th December 2023 and 14th January 2024. The purpose of the site visits was to enable familiarisation with the site, establish the general landscape character of the area and identify principal representative viewpoints including residences, prospects, public pathways and roads with views of the site. The actual extent of visibility was also checked in the field due to the localised screening effects of buildings, walls,

fences, trees, hedgerows and banks. Potential seasonal screening effects were also identified where necessary and recorded.

The visual survey also includes and is supported by a photographic record from the principal and other relevant viewpoints. The photographs were taken at eye level (i.e., 1.6 metres above ground level) at the point of interest towards the development area using a digital camera. A panoramic image was produced by the careful 'stitching' together of single-frame images for each identified view.

The analysis of the visual baseline information identifies the extent and nature of the existing views of the site from the principal representative viewpoints, and the nature and characteristics of the visual amenity of the potentially sensitive visual receptors.

Principal viewpoints were mapped, and these views illustrated by photographs with annotations to describe any important characteristics, and the changes that have arisen as a result of the development (Refer to Plate 11.1 to Plate 11.6). The locations of the principal viewpoints are shown on Figures 11.1 and 11.2.

11.4 BASELINE DESCRIPTION OF RECEIVING ENVIRONMENT

11.4.1 LANDSCAPE BASELINE CONDITIONS

11.4.1.1 Site Area Description

The application site is located within the Townland of Heronstown, at Irish Transverse Mercator (ITM) Grid Ref. E690900, N781500, c. 2 km southeast of Lobinstown, c. 9 km northwest of Slane, c. 9 km west of Collon, c. 10 km southwest of Ardee, c. 14.5 km north-northeast of Navan, c. 16 km west of Dunleer, c. 17 km east of Kells, c. 19 km west-northwest of Drogheda, c. 19 km northwest of Duleek, c. 19 km southeast of Kingscourt, c. 21 km east of Mullagh, c. 23 km south of Carrickmacross, c. 25 km northwest of Bettystown-Laytown-Mornington, c. 25 km west of Clogherhead, and c. 25 km southwest of the most southerly outskirts of Dundalk (Refer to Figure 1.1). The quarry is located on the north side of, and with direct access onto, the L1603 local road, which in the vicinity of the site is known as the Slane Road, as it allows access to Slane, the nearest large settlement (Refer to Figure 1.2 & 1.3).

The development will consist of the continuance of operation of the existing permitted quarry and associated infrastructure (ABP Ref. 17.QD.0017; P.A. Ref. LB200106 & ABP Ref. 309109-21), deepening of the quarry extraction area by 1 no. 15 metre bench from 50 m OD to 35 m OD, a lateral extension to the quarry over an area of c. 4.8 ha to a depth of 35 m OD, provision for aggregates and overburden storage, and restoration of the site to natural habitat after uses following completion of extraction, within an overall application area of c. 18.5 hectares.

The site is bounded by the L1603 to the south, the Killary Stream to the north and agricultural lands, mostly pasture, to the east and west. Tracts of afforestation occur nearby to the east and to the north of the landholding. The boundaries of the existing quarry are lined by mature hedgerows, while the perimeter of the proposed extension is characterised by poorly developed field boundaries and will require fencing and reinforcement of field boundaries.

The site is located in a rural area consisting mostly of agricultural fields with minor levels of scrub and forestry plantation in the wider area. The region is characterised by relatively flat to undulating landform to the northwest, which is relatively typical of the lowlands in County Meath, while a series of NE-SW trending hills, known as the Ferrard Hills are located c. 1 km southeast of the site.

The townland of Heronstown falls within a swathe of County Meath that is identified as Strong Rural Areas. This area type occurs along a spine from the northeast of the county, including Kells and Slane, spanning as far as Oldcastle in the west. This area has less of a tradition of urban settlement and is under more moderate pressure for one-off housing development. The population density of the Killary ED, which includes the townland of Heronstown, is 25 persons per km², which is very low compared to the average of 83 and 133 persons per km² in County Meath and Leinster, respectively.

The total application area, including the site infrastructure, covers c. 18.5 ha of land (Refer Figures 1.2 & 1.3). The landholding has an irregular shape, with the current quarry occupying the southern and central sections, while the northern field which contains a large settlement pond, and the eastern extension are currently undeveloped and largely held in pasture. The

site is located on lands north of, and with direct access onto, the L1603, which allows access to the N51 and N2 at Slane c. 9 km to the southeast. Thus, the site has the benefit of being strategically located with links to the most critical transport arteries in northeastern Meath. The site location is highlighted on Figure 1.1 at a scale of 1:50,000.

Topography

County Meath is known as the Royal County as it is home to Tara - the ancient capital of Ireland, as well as the UNESCO World Heritage Site of Brú na Bóinne. The county has a rich and varied landscape with historic features dating back to prehistory and many well-known tourist attractions that are related to its heritage. Meath possesses a diverse range of landscapes, including coastline, drumlins in the north, rich pastures, tracts of peatland and raised bog in the southwest, and the central upland area.

Meath has a relatively flat lying, undulating landform with limited topographic relief (i.e., elevation differences) and although mostly devoid of lakes, contains a network of rivers, including the Boyne, Blackwater, Dee, Nanny and Delvin. The county consists mostly of lowlands belonging to the Carboniferous limestone terrain of the Irish Midlands. However, the northern half of the county contains two distinct blocks of Lower Paleozoic siliciclastic rocks, namely the Balbriggan-Bellewstown Block and Longford-Down Massif, which are more indurated and weather resistant and tend to manifest topographically as prominent hills. Heronstown is located within the Longford-Down Massif and overlies calcareous greywacke & banded mudstone of the Silurian aged Salterstown Formation.

Thus, the topography of the region is characterised by relatively flat to undulating landform to the northwest, which is relatively typical of the lowlands in County Meath, while a series of NE-SW trending hills, known as the Ferrard Hills occur c. 1 km southeast of the site. The lands in the vicinity of the site are typically at elevations of 85-120 m OD and gradually increase to the southeast from c. 83 m OD at the northwestern boundary of the landholding to c. 111 m OD at the eastern boundary and 225 m OD at Slieve Bengh, c. 2.5 km to the southeast. As alluded to above, the lands overlie the Longford-Down Massif close to the north-eastern limit of the lowland limestone terrain, where elevations typically vary from 90 to 200 m OD.

The site sits on gently rising ground towards Slieve Bengh of the Ferrard Hills to the southeast, where the NE-SW trending line of the hills forms the boundary between the Dee River and Boyne River sub-catchments (Refer to EIAR Figure 7.4). The site lies near the headwaters of the Killary Stream, which drains into Killary Waters and ultimately into the Dee River, before discharging into the Irish Sea at Annagassan, Co. Louth.

The site and immediate surrounds, the Killary Stream, Killary Water and Dee River are all within WFD Catchment & Hydrometric Area HA 06: Newry-Fane-Glyde-Dee. No natural heritage sites are designated downstream of the site, except for Dundalk Bay SAC and SPA c. 21.5 km to the northeast — a downstream distance of c. 43 river km.

The existing quarry, permitted under P.A. Ref. LB200106, comprises a medium-sized hard rock quarry, which has been extensively worked. The quarry site at Heronstown comprises mainly disturbed ground resulting from the operation of quarrying, which is largely dominated by bare, exposed ground with stockpiles of aggregate and an area of grassland (i.e., the northern field and proposed eastern extension area). Installation of a concrete plant in the

northern field was granted planning permission (P.A. Ref. 22328) on 16th June 2022. The overburden will be stripped from the northern field and proposed extension, which will be used in the construction of peripheral screening berms.

The quarry has been developed by excavating into ground that is gently rising to the southeast and as a result, the latter screens all views of the workings in an arc from the northwest anti-clockwise to the east. Presently, there are few and mostly intermittent views of the workings along the L1603 and L1604 local road from the north. There are no views of the workings at the quarry entranceway, with most views of the current quarry workings screened by the intervening topography and vegetation, as well as mature peripheral hedgerows and screening berms on the boundaries of the existing permitted quarry. There are limited, middle-distance views along the L1604, which generally amount to views of the upper benches of the south-eastern quarry face.

Land Use

Lobinstown Quarry is located the Townland of Heronstown, c. 2 km southeast of Lobinstown Village, c. 9 km northwest of Slane, c. 9 km west of Collon, and c. 145 km north of Navan. The lands occur on the northern end of the Midlands lowland terrain. The Heronstown area is located within Landscape Character Area (LCA) 3: North Navan Lowlands, which consists of a large area of agricultural land to the north of Navan contained in the east and west by the Rivers Blackwater and Boyne, respectively, and to the north by a more complex hilly landscape along the north Meath border. It comprises a mixture of pasture and arable fields that have been enlarged by loss or removal of traditional boundaries, now often consist of post and wire or timber fences and drainage ditches along road corridors.

The landscape becomes more scenic further from Navan, although condition of field boundaries is often poor. The topography is more undulating, and the occurrence of trees is more common, particularly to the northeast near Heronstown. Road corridors often have quite an open character but the tertiary roads in the northeast are more enclosed by drumlin topography, trees and hedgerows. It is a rural landscape that is generally in a degraded condition. The LCA contains no specific attractions outside of Navan, although historic features would be of interest.

The predominant land use in the LCA is as large agricultural fields, with a mix of pasture and arable crops. The 2018 Corine (CORINE: Co-ORdinated INformation on the Environment) map (Refer to Figure 11.8) shows that the predominant land use within the Heronstown area is given as pasture (231); non-irrigated arable land (211); mixed forest (313); and broad-leaved forest (311). Prior to the commencement of commercial quarrying, the lands had been kept in agriculture use. Ultimately, the site will be reclaimed in accordance with the approved quarry restoration scheme, and most probably undergo a change of land use to wildlife amenity.

Meath has third lowest forest cover by county in the State with 5.9% forest cover in 2022. However, there is a relatively high level of forest cover in the Heronstown area, much of which is mono-type afforestation comprising scattered, rectilinear patches of coniferous forest, much of which has been recently planted. There are a few planned landscapes or parkland of demesnes in the area (e.g., Parsonstown, Tankardstown, Mullaghwillin, Gibbstown and Headfort Demesnes). The dominant land use in the wider area of the quarry is clearly

agricultural, with some history of quarrying west of Lobinstown and at Mullagh Dillon, Knockmooney and Deerpark near Slane.

Field dimensions vary from small to very large, while hedgerows vary from over-grown to less commonly well-managed. The predominance of medium to large field sizes and managed hedgerows with some hedgerow trees tends to create a more open rural landscape, with some enclosed road corridors with restricted views. The area is generally characterised by rolling topography with poor drainage and poorly drained mineral soils. The land is mostly used for stock rearing with minor mixed tillage, with blocks of mixed and coniferous forestry.

A drainage channel drains into the mainstream of the Killary Stream c. 475 m west of the site, which ultimately drains into the Dee River and discharges into Dundalk Bay.

The landscape of the quarry site at Heronstown comprises mainly disturbed ground resulting from the operation of quarrying, which is largely dominated by bare, exposed ground with stockpiles of aggregate and an area of grassland (i.e., the northern field and proposed eastern extension area).

The existing quarry is bounded by thick, mature hedgerows on all boundaries (Refer to EIAR Figure 1.3). Perimeter earthen berms will be constructed from the stripped overburden and seeded on the boundaries of the proposed extension area and site of the readymix concrete batching plant in the field north of the drainage channel.

The proposed development will continue to use the established quarry and associated infrastructure located in the site, including site entrance, internal roads, site office, wheelwash, weighbridge, mobile crushing and screening plant, and other ancillaries (Refer to EIAR Figure 1.3).

Access to the site will be from the existing main entrance with direct access onto the L1603 local road. The proposed eastern quarry extension (c. 4.8 ha) will result in the loss of some pasture and hence a minor change in land cover, with a commensurate impact on agriculture. The total application area, including the site infrastructure, covers c. 18.5 ha of lands (Refer to EIAR Figures 1.2 & 1.3).

On completion of site activities, the site of the quarry will be decommissioned and restored in accordance with an approved quarry restoration scheme, and thus integrated back into the surrounding landscape. It is envisaged that the land use will change to a beneficial after-use, most probably as a wildlife amenity.

Drainage & Geology

The site and immediate surrounds are situated in the Dee Sub-Catchment (Dee_SC_030), part of the WFD Catchment & Hydrometric Area HA 06: Newry-Fane-Glyde-Dee (Refer to EIAR Figure 7.4). The quarry is located in a lowland area between the Northern Drumlin Belt and Ferrard Hills. The site occurs on gently rising ground towards Slieve Bengh of the Ferrard Hills to the southeast. The area northwest of the Ferrard Hills and including the Heronstown, is characterised by a dendritic drainage pattern that drains to the west and north. The site lies near the headwaters of the Killary Stream, which drains into Killary Waters and ultimately into the Dee River. No natural heritage sites are designated downstream of the site, except for

Dundalk Bay SAC and SPA c. 21.5 km to the northeast — a downstream distance of c. 43 river km.

Details with respect to the local bedrock geology and soils are provided within Section 6 – Land, Soils and Geology. Based on the GSI bedrock map of the area (McConnell et al. 2001), the application site is underlain by the Silurian aged Salterstown Fm. of the Longford-Down Massif. This unit is described by the GSI as “Calcareous greywacke & banded mudstone” composed of “dark, blue grey weathering siltstones, with interbedded quartzo-feldspathic thin to medium bedded sandstones, rare microconglomerates, several bentonites and thin quartzose sandstone units.”

Teagasc soil mapping is presented in EIAR Figure 6.2 and indicates that the application site is covered in shallow, poorly drained mineral soils with an acidic signature.

The quarry area is largely dominated by bare, exposed ground with stockpiles of aggregate and an area of grassland, known here as the northern field, which accommodates the settlement pond and a screening embankment along the northern site boundary with the Killary Stream. Planning permission (P.A. Ref. 22328) for a concrete plant in the northern part of the site was granted on 16th June 2022. The overburden has been stripped from the southern and central sections of the site permitted under P.A. Ref. LB200106, and it is proposed to extend extraction to the east of this area.

The existing quarry is bounded by hedgerows and screening berms on the remaining boundaries, while screening berms will be constructed on the boundaries of the extension with the stripped overburden.

Tourism

The County’s wealth of built heritage makes it exceptional in Ireland. It includes the UNESCO World Heritage Site of Brú na Bóinne, the seat of the High Kings of Ireland at Tara, the passage tombs of Loughcrew, the largest Anglo-Norman castle in Europe at Trim, the historic towns of Navan, Trim and Kells, great country houses, demesne landscapes and a significant industrial heritage of canals and mills. Other heritage attractions include monuments, castles, abbeys, monasteries, churches, round towers, high crosses and other protected structures, which are clustered in Drogheda, Slane, Kells and Trim.

County Meath is known as the Royal County as it is home to Tara - the ancient capital of Ireland. Meath was also part of the area known as “The Pale”, which was under the direct control of the English establishment during the Middle Ages. The area of County Meath is very much defined by the Boyne River Catchment, and it is the Boyne Valley that is home to the megalithic tumuluses at Brú na Bóinne, the Hill of Tara, and the source of the “Bradan Feasa” or “Salmon of Knowledge” of Cú Chulainn mythology. The Boyne Valley is home to the largest concentration of megalithic carved stone art in Western Europe, and can be best seen at the Loughcrew Cairns and at Brú na Bóinne. With its numerous ancient monuments, ruins, castles, battlefields and Landed Estates (or Demesnes) with their Great Houses, Meath is a county steeped in history.

The identity of the County is linked to this heritage, and is central to how residents see themselves as individuals, communities and as a county. The unique heritage is an intrinsic

part of the character and attractiveness of the county and is a catalyst in attracting tourism and investment.

The county has a rich and varied landscape with historic features dating back to prehistory and many well-known tourist attractions that are related to its heritage. Meath possesses a diverse range of landscapes, including coastline, drumlins in the north, rich pastures, tracts of peatland and raised bog in the southwest, and the central upland area. The county's natural heritage includes scenic river valleys, rolling farmland, a network of mature hedgerows and diverse coastal habitats.

Meath is largely characterised by lowland Carboniferous limestone terrain that is mostly devoid of lakes, but contains a network of rivers, including the Boyne, Blackwater, Dee, Nanny and Delvin. Meath is almost a landlocked, inland county except for a narrow coastline c. 10 km in length, between the Boyne Estuary and Delvin Bridge north of Balbriggan. There are no mountains in the county although the hills in the north of the county are a conspicuous feature. The northern half of the county contains two distinct blocks of siliciclastic rocks, namely the Balbriggan-Bellewstown Block and Longford-Down Massif, which tend to manifest topographically as hills.

The county abuts County Dublin, and includes settlements considered part of the Dublin Metropolitan Area such as Dunboyne. Dublin is the primary economic hub and National Gateway, and the largest market in the State, and the southeastern half of the county is increasingly coming under its influence. The excellent transport infrastructure, including the N2, M3 and M4, provide strong connectivity to Dublin Airport and Dublin Port.

Tourism and recreation are key sectors in both the economic and social development of the County, providing opportunities for employment and wealth generation, and also facilities and infrastructure that enhance the quality of life for residents. Rural tourism can play a strong role in stimulating rural economies. The location of the county largely in the hinterland of the largest metropolitan area in the state has generated considerable demand for golf course and leisure estate type developments over the past decade.

County Meath is a predominantly rural county in terms of land use, and the rural areas are home to a diverse range of land uses including agriculture, the primary land use, and equine industries, centres of local food production, recreational and tourist activities, established villages and rural housing. The fertile soils in Meath provide the basis for a thriving agricultural and food sector, and the natural and built heritage enhances the quality of life for locals and visitors to the county.

Meath is the country's second most important centre for the bloodstock industry. It is home to the only official strand races in Europe, which take place on Laytown Beach each year, while racing has taken place at nearby Bellewstown for almost 300 years. Fairyhouse Racecourse, Navan Racecourse and Tattersalls Bloodstock Auctioneers are highly prominent enterprises in the area. Bloodstock and sport-horse enterprises generate employment directly and also through other associated enterprises and sectors such as tourism.

Heritage attractions in east Meath include: the World Heritage Site and visitor centre at Bru na Boinne; Loughcrew Cairns; Four Knocks Passage Tomb; Hill of Tara; Hill of Slane; St Columbas Church and Monastic Site with St. Colmcille's House, Round Tower and High

Crosses at Kells; Bective Abbey, Bective; King John's Castle, Cathedral of St Peter and St Paul and Priory of St. John The Baptist, all at Trim; Donaghmore Round Tower near Navan; Battle of the Boyne Site, Oldbridge; Slane Castle; Donore Castle; Ardraccan House; Loughcrew Estate and Gardens; and many more. Meath also offers many other tourist attractions, including: Tower of Lloyd, Kells; 8 heritage trails; numerous walking and hiking trails; water sports at Rathbeggan Lakes and on the miles of sandy beaches at Bettystown-Laytown; adventure centre at Loughcrew, Oldcastle; angling on the famous Boyne and Blackwater Rivers; golfing; horse racing; and numerous festivals such as Moynalty Steam Threshing; Tattersalls International Horse Trials and County Fair; and the Slane Castle Music Festival.

The growing trend towards activity-based tourism and adventure tourism also provides a significant opportunity, and the county can capitalise on the growing demand for experiential holidays in a perceived 'wild' setting. Participation in adventure activities is becoming increasingly popular amongst visitors and includes the popular activities such as: walking and cycling; game and coarse angling; kayaking & canoeing; and golf and equestrian pursuits.

Greenways are trails developed for use exclusively by cyclists, pedestrians and other non-motorised transport. They are generally traffic-free routes, and as such are generally safer and can be enjoyed by most members of society. Greenways have become very popular on old disused railway lines, along rivers and canal tow paths. There is currently only one greenway developed in the county, the Royal Canal Greenway, while the Boyne Valley to Lakelands County Greenway covering 30 km between Navan and Kingscourt is due for completion in early 2024, with c. 65% currently completed. In addition, development of the Boyne Greenway & Navigation Restoration covering the 26.5 km between Navan and Oldbridge has been proposed.

There are numerous walking and cycling trails, including Mullaghmeen Forest Loop; Girley Bog; Broadboyne Bridge, Navan; Loughcrew Cairns; Hill of Tara; Porchfield Loop; Summerhill Woods; Little Forest Loop; Royal Canal Way (Enfield to Moyvalley); Porchfield and Talbot's Castle Loop; Jamestown Bog Walk; Balrath Woods Nature Trail; Slane Boyne Footpath Trail; Slane Castle Loop and many more, including the Táin Trail. The latter is a 500 km long circular route that stretches from the Cooley Peninsula in Louth to Rathcroghan in Roscommon, via Kells, Crossakiel, Kilskyre, Navan and Slane in Co. Meath, which Fáilte Ireland is considering re-imagining as an internationally iconic walking, hiking, cycling and driving route and to establish it as an important tourism trail within Ireland's Ancient East and Ireland's Hidden Heartlands. The Royal Canal traverses parts of the south of the county, and the route can be travelled by boat, bike or foot.

Six designated Views and Prospects (i.e., Nos. 24 to 28 and 76) are located nearby in the adjoining Rathkenny Hills LCA. However, none of these views and prospects are towards the proposed development at Heronstown with the nearest view No. 24 being views from an unnamed local county road linking Rathkenny Crossroads to Parsonstown (or Mullaghregan) Crossroads to the west of the site. The protected views and prospects from this route, which also forms part of the Táin Trail, is to the west and northwest and not towards the quarry development. The Táin Trail continues on from Parsonstown (or Mullaghregan) Crossroads

which is c. 500 m north of the quarry entrance along the L1603 local road to McEntegart's Crossroads and northwards via Hurlstown towards Ardee.

Sailing/yachting, boat trips and cruises off the coastline are not available as there are no harbours or piers along the Meath coastline. Similarly, there are also few locations for sea angling along the coastline, although sea angling is available on the stretch of coastline from Mornington to Laytown and at the mouth of the Boyne. Fresh water angling is concentrated the River Boyne and its tributaries, which hold extensive stocks of wild brown trout. The River Boyne also has a run of Atlantic salmon and sea trout. The best salmon and sea trout fishing is during the summer months.

Golf enthusiasts visiting the area can enjoy a wide choice of excellent golf courses within short driving distance, including numerous links and heathland courses. There are several golf clubs located in the wider area, including Headfort Golf Club, Kells, Royal Tara Golf Club, Tara, Ardee Golf Club, Ardee, Bellewstown Golf Club, Bellewstown, Seapoint Golf Club, Termonfeckin and the championship course at County Louth Golf Club, Baltray, the perennial home of the East of Ireland Pro-Am Tournament. Pitch & putt is also available at Castletown Pitch & Putt Club, Castletown, Gael Colmcille Pitch & Putt Club, Kells, Navan Pitch & Putt Club, Navan, and Skryne Pitch and Putt, Skryne.

Horse racing is also popular at the annual Laytown Beach Races in September, at the Bellewstown racecourse, Navan Racecourse and Fairyhouse, home of the Irish Grand National. There are equestrian activities at nearby equestrian centres at: Glen Stables, Lobinstown; Grangeclare Paddocks Riding School, Mooneystown; Carlanstown Cross Country, Carlanstown; Kells Equestrian Centre, Normanstown, Kells; Ardmulchan Stud, Ardmulchan, Navan; Flyhigh Stud, Ardagh, Kingscourt; and Railings Riding School, Hunterstown, Ardee.

Activity centres are available at Rathe House, Kilmainhamwood; Crystal Maze, Kilmainhamwood, Causey Farm, Navan; The Zone, Navan; Navan Adventure Centre, Navan; Huckleberrys Den, Navan; Funtasia Theme Park, Drogheda; Celtic Adventures, Clogherhead; Mellows Adventure and Childcare Centre, Athboy; and Emerald Park, Ashbourne. White River Karting, Collon; the Zone, Navan, and the Athboy Karting Centre, Athboy offer activities for motor enthusiasts.

Courtough Shooting Grounds, Balbriggan is Ireland's premier shooting grounds, and provides all weather facilities where several shooting disciplines, such as Clay Pigeon and Target, as well as archery, can be enjoyed.

There are a numerous festivals and events held throughout the year in Meath and Louth, which act as significant visitor and tourism attractions, including the following notables:

- Féile na Tána, Cooley Peninsula, February
- The Fairyhouse Easter Festival, Fairyhouse Racecourse, Ratoath, April
- Carlingford Oyster Festival, Carlingford, May
- Sheridans Annual Irish Food Festival, Virginia Road Station, May
- Vantastical Music and Campervan Festival, Drogheda, June

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- Slane Castle Concert, Slane, June
- Hinterland Festival Kells, June
- SoFFT Nights, Dunderry Park, June
- Boyne Musical Festival, Drogheda, July
- Otherside Music & Arts Festival, Rock Farm, Slane, July
- Boyne Valley International Film Festival, Drogheda, August
- Lady Well Fete at Slane Castle, August
- Moynalty Steam Threshing Festival, Kells, August
- Another Love Story Festival, Killyon Manor, August
- O'Carolan Harp, Cultural & Heritage Festival, Nobber, September
- Spirits of Meath, Hill of Ward, Athboy, October
- Púca Halloween Festival, Multiple venues in Meath, October
- Enchanted Garden (Loughcrew's Lightscape Festival), November
- Winter Solstice, Newgrange, Brú na Boinne, December

Residential

The application site is located within the Townland of Heronstown in northeastern County Meath c. 2 km southeast of Lobinstown, c. 9 km northwest of Slane, c. 9 km west of Collon, c. 10 km southwest of Ardee, c. 14.5 km north-northeast of Navan (Refer to Figures 1.1 & 1.2). The quarry is located on the north side of, and with direct access onto, the L1603 local road, which in the vicinity of the site is known as the Slane Road, as it allows access to Slane, the nearest large settlement (Refer to Figure 1.2 & 1.3).

The L1603 local road connects McEntegart's Crossroads to the north c. 1.25 km east of Lobinstown with Harlinstown Crossroads c. 8 km to the south. The N52 National Secondary Road can be accessed from McEntegart's Crossroads by travelling c. 4.4 km west on the L1604 through Lobinstown and on to the N52 at Fringerstown. The R163 regional road and N51 National Secondary Road can be accessed c. 2 km west of Slane by travelling south on the L1603, known as the Slane Road, to Harlinstown Crossroads, while the N2 National Primary Road can be accessed at Slane. These are the main haulage routes, allowing the HGV traffic from the site to access the national and regional road network at the earliest opportunity, and thus avoids adverse impact on the local road network.

There is a lack of urban centres within northeastern County Meath, and a paucity of towns north of a line joining Drogheda, Slane, Kells, and Oldcastle. The historically strong agriculture and natural resources sector has supported an extensive village structure throughout the county. There are several nearby villages or hamlets, such as Lobinstown c. 2 km to the northwest, Nobber c. 9.5 km to the northwest, Drumconrath c. 9 km to the north, Rathkenny c. 4 km to the southwest, Wilkinstown c. 7 km to the southwest and Collon c. 9 km to the east. Outside of the immediate environs of the towns, urban areas and rural villages, the settlement pattern in the area can be described as low-intensity rural settlement. Residential property in

the area typically comprises a significant number of detached single residences occurring as a more diffuse ribbon development along the road network, while individual farmsteads generally occur at the end of lanes off the public roads.

While residential development in the rural area consists of individual, one-off residences, there are distinct clusters of residences that do not qualify as villages, but might constitute hamlets, craigs or small settlements, such as at Castletown. The nearest large residential settlement to the site is Slane c. 9 km to the southeast. The roads in the wider area (i.e., < 4.5 km), apart from the N52, are generally of a local character and typical of a rural location.

There are no occupied residences within the application site or landholding. The nearest residence is 120 m to the southwest of the permitted extraction area. There are 7 residences within 250 m, 15 within 500 m, 31 within 750 m and 45 within 1 km of the proposed extraction area. There are no community facilities near Heronstown, except for Heronstown National School, i.e., Scoil Naisiunta Mhuire, which is located on the L1604 c. 627 metres north of the extraction area (Refer to EIAR Figure 4.1).

There has been a long historical association with quarrying at this location and consideration has been given to screening of the development, phasing and direction of working with respect to receptors, in order to reduce visual impact, while impacts due to noise and dust are substantially attenuated.

11.4.1.2 Landscape & Landscape Character Assessment

Ireland ratified the European Landscape Convention in 2002 and agreed to implement national measures to promote landscape planning, protection and management. The Convention recognises the cultural, environmental and economic value of landscape and how it contributes to our quality of life and sense of place. The implementation of the recently published National Landscape Strategy 2015-2025 will ensure compliance with the European Landscape Convention in Ireland.

The Planning and Development Act 2000, as amended requires every planning authority to include objectives in their Development Plan for the preservation of the character of the landscape insofar as proper planning and sustainable development of the area requires it, including the preservation of views and prospects and the amenities of places and features of natural beauty or interest.

Following publication of Draft Guidelines for Planning Authorities in respect of landscape assessment in 2000, County Councils adopted a new method of landscape assessment that allowed for a more proactive approach with the county divided into a number of landscape character areas. The Landscape Character Areas are single unique areas, which are geographical areas of a particular landscape type or types.

Landscape Character Assessment (LCA) is a process which describes, maps and classifies landscapes. Landscape character is defined as 'a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse'. Defining landscape character enables an understanding to be formed of the inherent value and importance of individual landscape elements and the processes that may alter landscape character in the future. The cultural and ecological aspects of the

landscape cannot be subtracted from its physical and visual characteristics, so all of these elements are considered.

A detailed Landscape Character Assessment of County Meath was carried out by Soltys Brewster Consulting on behalf of Meath County Council in 2007. The purpose of the study was to objectively describe, map and classify the landscape character of each part of the County. Importantly, defining landscape character enables an understanding of the inherent value and importance of individual landscape elements and processes that may alter landscape character in the future. The capacity of each area to accept change, without disproportionate effects, was evaluated and a series of policies and recommendations to guide development in each type of landscape was proposed. Another objective of the study was to drive sustainable development, the principle underlying current planning legislation, by promoting a unified approach to landscape planning and management.

In terms of the landscapes within the County, the interplay between solid geology, glacial processes, soil formation, hydrology and ecology has formed the basic materials upon which human activities have impacted. This is an ongoing inter-relationship with topography, access to water and soil conditions influencing the spatial distribution and types of human activities practiced within the county over the past several millennia. Human habitation is the most recent and profound landscape influence, whereby patterns of land ownership, settlement development, agricultural and ritual activities have all been modified in response to local variations of biotic and abiotic elements and constraints.

Meath presents a wide range of landscapes. These range from: the scrubby rolling lowlands of the coastal plain; to the drumlins of Teerverchur uplands; to enclosed well-wooded river corridors; to the flat farmland of the central lowlands with numerous large estate landscapes and associated parkland; to raised bogs in the southwest lowlands, to the steeply rolling hills of the Bellewstown Hills of managed pasture and arable farmland with well wooded hedgerows creating an enclosed landscape.

Mineral extraction is a significant industry and demand for aggregates is certain to continue with increased development of the Dublin Metropolitan Area. There are already a large number of quarries and pits in Meath and large areas identified as having high aggregate potential, particularly around Kells in the northwest. It is likely that quarries and mines may be extended or new areas for mineral extraction created to meet demand. Any such future development must be carefully planned to avoid unnecessary adverse landscape impacts.

The Landscape Character Assessment 2007 divided the county into 4 landscape character types (LCTs). These are: (1) Hills and Uplands Areas; (2) Lowland Areas; (3) River Corridors and Estuaries; and (4) Coastal Areas.

Landscape Character Types are distinct types of landscape that are relatively homogenous in character and are generic in nature in that they may occur in different localities throughout the county. Nonetheless, where they do occur, they commonly share similar combinations of geology, topography, land cover and historical land use, e.g., Hills and Upland Areas.

The four LCTs are divided into 20 Landscape Character Areas (LCAs), which are units of the landscape that are geographically specific and have their own character and sense of place.

Each has its own distinctive character, based upon patterns of geology, landform, land use, cultural, historical and ecological features e.g., the Boyne Valley.

The baseline landscape character of each LCA is rated using three parameters: value, importance and sensitivity. The value of each LCA refers to the contribution the area makes to the inherent character of the county. Scenic quality, tranquility, remoteness, rarity, cultural associations, history, conservation, recreational interests and broader social, economic and environmental aspects are all considered in deriving a rating for value (Refer to EIAR Figure 11.4).

The sensitivity of an LCA is defined as its overall resilience to sustain its character despite change and its ability to recuperate from loss or damage. Sensitivity is based on the interaction of individual components such as landform, amount of evident historical features and distribution of viewers, as well as its general condition. A highly sensitive landscape is likely to be vulnerable, fragile and susceptible to change, whereas a low sensitivity landscape is likely to be more resilient of change. Landscape sensitivity mapping as applied to development control aids awareness and identification of the potential for disproportionate visual prominence. The existence and significance of a landscape sensitivity and its relevance to the specifics of the proposed development must be assessed. Sensitivity is thus a critically important parameter in assessing the impact of any proposed development (Refer to EIAR Figure 11.5).

A Matrix of Landscape Character which indicates the Value, Importance and Sensitivity of Landscape Character Areas is included in the Meath Landscape Character Assessment 2007. The potential capacity of each LCA is based on indicative types of development that are likely to occur within the study area. Capacity is the ability that the landscape has to absorb specific types of development. It is only possible to define actual capacity on a case-by-case basis because it will vary according to the type and form of development, its location in relation to the landscape character area in question, and its visibility from it.

The site at Heronstown lies within LCA 3: North Navan Lowlands (Refer to EIAR Figure 11.3). The key characteristic for this LCA that have a bearing on the relative sensitivities or resilience to development are as follows:

Landscape Character Area LCA3: Northern Navan Lowlands

This LCA consists of a large area of agricultural land to the north of Navan contained in the east and west by the Rivers Blackwater and Boyne, respectively, and to the north by a more complex hilly landscape along the north Meath border. Overall, this landscape character area is in a degraded condition. It comprises of a mixture of pasture and arable fields that have been enlarged by loss or removal of traditional boundaries, now often consist of post and wire or timber fences and drainage ditches along road corridors.

The landscape around the fringes of Navan is flat - an extension of the river plains to the east and west. It has a mix of land uses including ribbon housing development, retail units, a large quarry and a racecourse which are not well integrated into the landscape, and which have caused the loss of traditional field boundaries, trees and vernacular field and road boundaries.

Further from Navan the landscape becomes more attractive although condition of field boundaries is often poor. The topography is more undulating, and the occurrence of trees is

more common. In the centre the farmland is reasonably well managed and characterised by horse paddocks. To the northeast, the landscape becomes slightly wetter, much more undulating. There is a sub-area to the west of Wilkinstown that is covered by coniferous plantations, regenerating birch and peaty heathland with wet birch and ash woodland on its fringes. It has a very remote character and habitat value that is rare within Meath. The western part of this LCA, around Moynalty, has a better network of hedgerows and woodland.

The Boyne River corridor, which bounds this character area, is an historic landscape. Other settlements include the northern fringes of Navan, Kilberry, Carlanstown, Wilkinstown and Gibbstown, which are expanded graigs.

This area is well served by transport routes and infrastructure because of its proximity to Navan and Kells: the N52 and several regional roads all traverse this character area. Road corridors often have quite an open character, but hedgerows are usually well maintained. The tertiary roads around Gibbstown in the southern part of this area are more enclosed by trees, while the road corridors around Drumconrath in the northeast are more enclosed by drumlin topography, trees and hedgerows. The Kingscourt-Navan railway line crosses through the LCA from north to south and forms a well-wooded spine through the centre of the area. There are a number of overhead transmission lines on pylons, which converge at the edge of Navan and are visually detractive.

Complex geology of limestone, sandstone, shale and volcanic rock has created diverse landscapes. Due to the variety of geological parent material, there are several quarries and pits in the area, while the Tara Mine northwest of Navan is one of the largest lead-zinc mines in Europe.

Land use is predominantly large agricultural fields, with a mix of pasture and arable crops. Field boundaries in degraded condition. There is a significant 'sub-area' of coniferous plantation, wet birch woodland and heath in the centre of the LCA west of Wilkinstown. The urban fringe landscape around Navan has a mix of uses, degraded condition and visually detractive developments.

There are a few lakes in the LCA, of which Corstown Lough and Mentrím Lough are designated as proposed National Heritage Areas (pNHA's) and contain a variety of associated habitats including wetland and cut away bogs.

Moynalty and Navan are historic settlements within the LCA. There is evidence of the original line of the Pale indicated by the presence of Norman mottes and Woodstown lower pale ditch. Estate landscapes are evident around the periphery of Navan and in the west. The LCA also contains an abundance of ruined churches, round towers and castles. There are numerous protected churches, including those at Rathkenny, Castletown, Syddan, Newton and Fletchertown, as well as numerous protected country houses, such as Stackallen House, farmhouses and buildings.

Policies and policy objectives in respect of Landscape Character that are relevant to the proposed development are given below.

It is a policy objective of Meath County Council to:

- HER POL 52** To protect and enhance the quality, character, and distinctiveness of the landscapes of the County in accordance with national policy and guidelines and the recommendations of the Meath Landscape Character Assessment (2007) in Appendix 5, to ensure that new development meets high standards of siting and design.
- HER POL 53** To discourage proposals necessitating the removal of extensive amount of trees, hedgerows and historic walls or other distinctive boundary treatments.

It is a policy objective of Meath County Council to:

- HER OBJ 49** To ensure that the management of development will have regard to the value of the landscape, its character, importance, sensitivity, and capacity to absorb change as outlined in Appendix 5 Meath Landscape Character Assessment and its recommendations.
- HER OBJ 50** To require landscape and visual impact assessments prepared by suitably qualified professionals be submitted with planning applications for development which may have significant impact on landscape character areas of medium or high sensitivity.

11.4.1.3 Areas of Significance or Special Importance

11.4.1.3.1 Areas of High Amenity (High Landscape Value)

Although the CDP makes reference to areas of high amenity, none are specifically designated.

11.4.1.3.2 Historic Landscape Characterisation

Historic Landscape Characterisation (HLC) is concerned with identifying and detailing the contribution of the past to the present day landscape and broadens the understanding of landscape character. HLC is an important contribution to landscape management because it considers the historical development of the landscape and the relationship of buildings and monuments to landscape patterns. The Council has completed a pilot project on Historic Landscape Characterisation of the UNESCO World Heritage Site of Brú na Bóinne with the School of Archaeology in UCD in accordance with the Heritage Council guidance on Historic Landscape Characterisation (HLC) in Ireland: Policy and Best Practice Guidance (2010).

11.4.1.3.3 Landscape Conservation Areas

Section 204 of the Planning and Development Act 2000, as amended, enables a Planning Authority to designate a Landscape Conservation Area within its functional area, in order to preserve it. The CDP 2007-2013 had an objective to explore the designation of Landscape Conservation Area(s), in respect of their core areas for: (a) Tara Skryne area(s); and (b) Loughcrew and Slieve na Calliagh Hills.

In March 2009, the Meath County Council in partnership with then named Department of Environment, Heritage and Local Government and the Heritage Council commenced the



process of the designation of a Landscape Conservation Area for the Tara/Skryne landscape (as a national pilot project). A draft Landscape Conservation Area was published in May 2010. However, there is no statutory timeframe for adoption of a Landscape Conservation Area.

HER POL 54 To protect the archaeological heritage, rural character, setting and amenity of the Tara landscape and Loughcrew and Slieve na Calliagh Hills.

11.4.1.3.4 Views & Prospects

The landscape of the county has many vantage points which offer attractive views from hilltops and upland areas, along river valleys and the coast. Many of these views are associated with heritage and tourism sites and provide vantage points over high quality landscapes. These scenic views are of an amenity and tourism value and contribute to the quality of life of residents. It is not envisaged that the designation of a protected view would prohibit all development within the view, rather than any development proposed within the view should be designed and located so as not to obstruct the view or be unduly intrusive in the landscape as seen from these vantage points.

It is an objective of Meath County Council to:

HER OBJ 56 To preserve the views and prospects listed in Appendix 10, in Volume 2 and on Map 8.6 and to protect these views from inappropriate development which would interfere unduly with the character and visual amenity of the landscape.

11.4.1.3.5 Designated Sites

Appropriate assessment was introduced by the EU Habitats Directive as a way of determining if a planned project is likely to have a significant effect on one of the Natura 2000 sites (i.e., candidate Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) so far designated, or their conservation objectives. Screening for Appropriate Assessment (AA) was carried out with respect to the proposed development, and a copy of this report is included (Refer to Appendix 11).

The proposed development site is not located within a European Site, including SACs, SPAs, or any other designated ecological sites (i.e., NHA, pNHA, RAMSAR, etc.).

The nearest European sites to the Proposed Development are associated with the River Boyne and include the River Boyne and River Blackwater SAC (Site Code 002299), which is located almost 8 km to the southeast, and the River Boyne and River Blackwater SPA (Site Code 004232), which is located approximately 8.3 km to the southeast. However, the Proposed Development lies in a separate hydrological catchment to the River Boyne and the associated sites referenced above, and there is no connectivity to these sites and the River Boyne.

The Killary Water flows into the River Dee almost 10 river kilometres downstream, which discharges into Dundalk Bay a further 30 river kilometres downstream.

There is no connectivity to the River Boyne or to the River Boyne associated European sites.

There are no predicted effects on any European sites given:

- A minor stream tributary of the Killary Stream has been excluded from the proposed extension area and there is no direct connectivity to the River Dee downstream.
- The existing water management system is considered appropriate and may be considered in the AA Screening under recent ECJ determination (Case Ref. C-721/21) as an existing design measure in the consideration of hydrology and the source-pathway-receptor model.
- Given the very large distance of removal from Dundalk Bay at over 40 km downstream, the possibility of a significant effect can be excluded.
- There are no predicted emissions to air, water or the environment during the construction or operational phases that would result in significant effects.

It has been objectively concluded by Moore Group Environmental Services beyond reasonable scientific doubt that:

1. The Proposed Development is not directly connected with, or necessary to the conservation management of the European sites considered in this assessment.
2. The Proposed Development is not likely to either directly or indirectly significantly affect the Qualifying interests or Conservation Objectives of the European sites considered in this assessment.
3. The Proposed Development, either alone or in combination with other plans or projects, is not likely to have significant effects on a European site.
4. It is possible to conclude that significant effects can be excluded at the screening stage.

It can be *excluded*, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on any European site. An appropriate assessment is not, therefore, required. A final determination will be made by the competent authority in this regard.

The proposed development was the subject of an assessment that involved the investigation of the cultural heritage including the archaeological, structural and historical background of both the application area and the surrounding area (i.e., 1 km radius) using a wide range of existing information as well as a field assessment (Refer to EIAR Section 12).

No sites of archaeological importance, national monuments, or protected structures listed in the Meath Development Plan 2021-2027 (Meath 2021) are located within the proposed development area.

There is one Recorded Monument within the study area, a Ringfort – rath (RMP ME012-029----) in Rathbranchurch townland (See Appendix 12.1 for full description). This monument is located c. 1 km northwest of the application site and is considered too far distant to be impacted by the proposed development. There are no Sites and Monuments Records (SMRs) listed in the application area or the study area.

There are no Protected Structures situated within the application area. There are four Protected Structures listed within the study area (Refer to EIAR Figure 12.1 and Table 12.1). The closest Protected Structure to the application area is Milestone RPS MH012-116 in Parsonstown Demesne townland. This structure is situated c. 580 m northwest of the

application area. This and the remaining Protected Structures in the study area are all considered to be too far distant to be directly or indirectly impacted by the proposal.

There are no structures included in the National Inventory of Architectural Heritage (NIAH) situated within the application area. There are two structures (Reg. Nos. 14401205 & 14401206) included in the NIAH situated just outside the study area — a house and outbuilding (See Table 12.2). These structures are situated 1.1 km south of the application area and are considered to be too far distant to be directly or indirectly impacted by the proposal.

There will be no direct or indirect impacts on any known items of archaeology, cultural heritage or buildings of heritage or special architectural interest in the application site or the vicinity.

11.4.1.4 Characteristics of the Development

The development will consist of the continuance of operation of the existing permitted quarry and associated infrastructure (ABP Ref. 17.QD.0017; P.A. Ref. LB200106 & ABP Ref. 309109-21), deepening of the quarry extraction area by 1 no. 15 metre bench from 50 m OD to 35 m OD, a lateral extension to the quarry over an area of c. 4.8 ha to a depth of 35 m OD, provision for aggregates and overburden storage, and restoration of the site to natural habitat after-uses following completion of extraction, within an overall application area of c. 18.5 ha. An extraction capacity of up to 300,000 tonnes per annum is sought to provide the applicant with the ability to respond to demand for aggregates in the region. Permission is sought for a period of 20 years in order to extract a known resource with a further 2 years to fully restore the site.

Blasting will continue to be used as the method of extraction, to fragment the rock prior to crushing and screening using mobile plant on the quarry floor, and aggregate washing within the site using mobile wash plant. The existing site infrastructure includes site entrance with c. 350 m long paved internal roadway, internal access roads, weighbridge, wheelwash, portacabin office, car park, mobile crushing, screening and wash plant, settlement lagoon system, and other ancillaries, which will be maintained on-site for the duration of the works. An effluent treatment system also exists on-site (Refer to EIAR Figure 3.1).

The predominant land use within the application site is by definition that of quarrying activities related to the extraction of rock. The area has an established history of quarry working and ancillary activities, and these activities have co-existed with other predominantly agricultural-based land uses. On completion of site operations, the site of the quarry will be decommissioned and reinstated in accordance with the approved quarry restoration scheme, and thus integrated back into the surrounding landscape. It is envisaged that the land use will change to a beneficial after-use, most probably as a wildlife amenity.

The quarry site at Heronstown comprises mainly disturbed ground resulting from the operation of quarrying, which is largely dominated by bare, exposed ground with stockpiles of aggregate and areas of grassland (i.e., the northern field and proposed eastern extension area). Installation of a concrete plant in the northern field was granted planning permission (P.A. Ref. 22328) on 16th June 2022. The overburden will be stripped from the northern field and proposed extension, which will be used in the construction of peripheral screening berms.

The quarry has been developed by excavating into ground that is gently rising to the southeast, and as a result, the latter screens all views of the workings in an arc from the northwest anti-clockwise to the east. Presently, there are few and only intermittent views of the workings along the L1603 and L1604 local roads from the north. There are no views of the workings at the quarry entranceway, with most views of the current quarry workings screened by the intervening topography and vegetation, as well as mature peripheral hedgerows and screening berms on the boundaries of the existing permitted quarry. There are limited, middle-distance views along the L1604 to the north, which generally amount to views of the upper benches of the southeastern quarry face.

The site will continue to be worked from the existing quarry area in an easterly direction in a series of typically 15 m high benches with consideration given to direction of working, phasing of development and progressive restoration of quarry faces (particularly the upper south-eastern quarry face) to reduce the visual impact from views to the north (Refer to EIAR Figures 1.3, 3.1 to 3.3, 11.1 & 11.2 and Plates 11.1 to 11.6).

A well-coordinated restoration process (in consultation with the GSI; Refer to EIAR Table 6.7) will ensure that representative areas of quarry faces are left unvegetated. Parts of the upper benches will also be seeded with suitable species of shrubs and climbers to create vegetated ledges. Vegetation and natural colonisation on these benches will encourage growth on the faces and will subsequently break up the natural harshness of the exposed rock face.

Cross sections through the site also illustrate the effectiveness of working the quarry top-down in successive benches, including provision of a temporary berm at 98m OD within the eastern extension area to facilitate progressive restoration of the upper back southern face at the earliest opportunity (Refer to EIAR Figures 3.1 to 3.3).

A feature landscape mound is to be constructed at the site of the existing stockpiling area and planted with suitable native species. This feature mound will help break up views particularly from the north of the upper quarry face within the existing quarry. Perimeter screening berms will also be provided at the boundaries of the proposed extension area (Refer to EIAR Figures 3.1 to 3.3).

The proposed development will enable the operator to fully complete the restoration of both the existing quarry and the proposed development to beneficial after-use. Plans and sections of the design and associated restoration are shown on EIAR Figures 3.1 to 3.3. This will ensure that the upper back face is restored at the earliest opportunity, that the working face is not open to view, and that as the quarry pushes eastwards only the restored upper face will be revealed as quarrying progresses to the limit of extraction.

The site has a long history of quarrying, and these activities have co-existed with other land uses in the area, particularly medium intensity agriculture. Consideration has been given to screening of the development, phasing and direction of working and restoration of the upper quarry face with respect to receptors so as to reduce the visual impact, while impacts due to noise and dust are substantially attenuated (Refer to Figures 11.1 & 11.2 and Plates 11.1 to 11.6). Continuance of the quarry operations has the benefit of enabling an appropriate final restoration of the quarry, which will allow full reinstatement of the land to beneficial after-use as a wildlife amenity.

11.4.2 VISUAL BASELINE CONDITIONS

As detailed above the desktop study was used to determine the nature of the visual amenity of the area along with the approximate visibility of the development, which is determined through topographic analysis of map data. Potential receptors of visual effects, including residents and visitors through the area were also identified. The desk study provided the basis for subsequent field surveys and was used to delineate the likely zone of visual influence, identify the principal viewpoints and highlight sensitive visual receptors.

For the purpose of this assessment refer to Figure 11.1 and Figure 11.2, which highlight the study area delineated as the likely zone of visual influence, principal viewpoints and sensitive visual receptors identified.

Site visits were undertaken on 7th July 2023, 17th December 2023 and 14th January 2014. Principal viewpoints were mapped, and these views illustrated by photographs with annotations to describe any important characteristics, and the changes that may arise as a result of the development (Refer to Figures 11.1 & 11.2 and Plate 11.1 to 11.6).

11.4.3 SENSITIVE RECEPTORS

Landscape Receptors

The landscape receptors are the components of the landscape that could potentially be affected by the proposed development, and these are:

- North Navan Lowlands (LCA3); and
- Individual landscape elements affected such as:
 - Several lines of discontinuous hedgerows along former field boundaries within the area of the proposed extension will be removed to allow overburden stripping and access to underlying resource; and
 - Views of residual quarry face along southern boundary as quarry is developed eastwards.

Visual Receptors

The receptors with views of the site consist of road users of the L1603 and L1604 local roads, Heronstown National School, as well as local residents (Refer to EIAR Figures 11.1 & 11.2 and Plates 11.1 to 11.6).

There are no occupied residences within the application site or landholding. The nearest residence is c. 120 m to the southwest of the permitted extraction area. There are 7 residences within 250 m, 15 within 500 m, 31 within 750 m and 45 within 1 km of the proposed extraction area. There are no community facilities near Heronstown, except for Heronstown National School, i.e., Scoil Naisiunta Mhuire, which is located on the L1604 c. 627 metres north of the extraction area (Refer to EIAR Figure 4.1).

Presently, there are limited intermittent middle distant views of the upper quarry benches of the southeastern face along the L1603 and L1604 local roads from the north. There are no views of the workings at the quarry entranceway, with most views of the current quarry workings screened

by the intervening topography and vegetation, as well as mature peripheral hedgerows and screening berms on the boundaries of the existing permitted quarry.

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11.5 ASSESSMENT OF IMPACTS

The impact on the landscape of the wider area of Heronstown resulting from the proposed development is assessed here, and possible mitigation measures proposed to reduce any significant impacts. The general guidance on baseline environment and impacts given in Appendix 3 identifies the levels of impacts that are used here in order to evaluate the significance of potential impacts resulting from the proposed development. These impact ratings are in accordance with standard impact assessment criteria issued by the EPA (2015; 2022). Some of the key contents of the EPA Guidance (EPA 2022) are reproduced in Appendix 3 General Guidance on Baseline Environment & Impacts of the EIAR.

Sensitive development and conservation of the landscape resource is essential to the underpinning of the rural economy and quality of life of the area. However, it is recognised that areas where there is existing development probably have a much higher potential to absorb new development. Thus, the continuance and extension of an existing quarry is more readily absorbed than activation of a new quarry on a greenfield site.

The following Impact Assessment Matrix provides an indication of the significance of potential effects arising during the life cycle of the development not accounting for any mitigation measures (See Table 11.1).

Table 11.1 Landscape - Impact Matrix			
'Do Nothing' Impacts	●		
Factors	Construction	Operation	Decommissioning
Direct Impacts	●	●	●
Indirect Impacts	X	X	X
Cumulative Impacts	X	X	X
Residual Impacts	X	●	●
'Worst Case' Impacts	X	●	●
None/imperceptible: X; Slight: ●; Moderate: ●; Significant/Very significant: ●.			
Refer to Appendix 3 for definition of Significance			

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11.5.1 'DO NOTHING' IMPACTS

If the development did not proceed, the aggregate resource would continue to be worked within the confines of what is permitted under the current planning permission (P.A. Ref. LB200106) whilst the remainder of the proven mineral resource would remain unused in situ, and the local supply of quality aggregates would be more restricted. Under the 'Do Nothing' scenario, all quarrying and ancillary activities would be completed under P.A. Ref. LB200106, and operations would cease thereafter. The site would then be restored as per the requirements of the existing planning permission (P.A. Ref. LB200106).

As the quarry area is currently active, the existing development would have a likely, direct, negative, slight effect on the landscape because the existing restoration scheme is contingent on the continued phased development with progressive restoration of the quarry.

11.5.2 DIRECT IMPACTS

The quarry site is also not included in any area with an ecological designation (SAC, SPA, NHA or pNHA). Furthermore, the hilly landform to the southeast, substantial forested lands, and intervening hedgerows with mature trees, provide for partly enclosed road corridors and views that are predominantly limited to middle-distances from the north to northwest.

The proposed development is situated within the North Navan Lowlands LCA (i.e., LCA3), which has a moderate landscape sensitivity. Thus, LCA3 has a moderate capacity to absorb development, which can have a disproportionate visual impact. This arises from the limited capacity of this rural landscape to physically or visually absorb development, and the sensitivity of the adjoining areas of high sensitivity (i.e., LCA4: Rathkenny Hills), which corresponds to the Ferrard Hills.

Six designated Views and Prospects (i.e., Nos. 24 to 28 and 76) are located nearby in the adjoining Rathkenny Hills LCA. However, none of these views and prospects are oriented towards the proposed development at Heronstown with the nearest view No. 24 being views from an unnamed local county road linking Rathkenny Crossroads to Parsonstown (or Mullaghregan) Crossroads to the west of the site. The protected views and prospects from this route, which also forms part of the Táin Trail, is to the west and northwest and not towards the quarry development. The Táin Trail continues on from Parsonstown (or Mullaghregan) Crossroads, which is c. 500 m north of the quarry entrance along the L1603 local road to McEntegart's Crossroads and northwards via Hurlstown towards Ardee.

Potential Landscape Impacts

The principal attributes (and impacts) to be assessed include *inter alia* the following:

- Change of landform with respect to the extraction area pushing progressively east into the quarry extension area and thus also into the rising ground to the east and south;
- Change of land use from pasture to quarrying/extraction to wildlife amenity with restoration of the land and appropriate screening and planting;

- Loss of ecological habitat in the form of hedgerow and scrubland due to removal of boundary separating the existing quarry and proposed extension.
- Loss of ecological habitat in the form of several discontinuous hedgerows along former field boundaries within the area of the proposed extension due to their removal to allow overburden stripping and access to underlying resource.
- As the proposed extraction area has not been stripped of overburden, there will also be loss of ecological habitat in the form of grassland, although this is of low ecological value. This loss will eventually be reversed and improved upon by the establishment of the wildlife amenity;
- As the proposed extension area has not been stripped of overburden, the loss of cultural heritage features, namely undiscovered archaeology, due to the quarry activity is possible;
- There are limited, intermittent middle-distance views of the upper quarry benches of the southeastern face along sections of the L1603 and L1604 to the northwest and north, respectively, which generally amount to views of the upper benches of the southeastern quarry face.

The results of the impact assessment are presented in Table 11.2 below.

Potential Visual Impacts

Visual impacts are best assessed from specific viewpoints. Principal viewpoints were mapped, and these views illustrated by photographs with annotations to describe any important characteristics, and the changes that have arisen as a result of the development (Refer to EIAR Figures 11.1 & 11.2, Plates 11.1 to 11.6 and Table 11.3). Plans and sections of the design and associated restoration are shown on Figures 3.1 to 3.3.

The visual impact has been assessed during all stages of the proposed development, including operational, decommissioning, and post-closure (Refer to Table 11.3 below).

The results of the visual field survey have shown that due to intervening topography, screening, and vegetation, views towards the quarry site are generally limited to intermittent middle distance views from the L1604 local road to the north (Refer to Figures 11.1 & 11.2 and Plates 11.1 to 11.6). These intermittent middle-distance views generally amount to views of the upper quarry face.

The site will continue to be worked from the existing quarry area in an easterly direction in a series of typically 15 m high benches with consideration given to direction of working, phasing of development and progressive restoration of quarry faces (particularly the upper south-eastern quarry face) to reduce the visual impact from views to the north (Refer to EIAR Figures 1.3, 3.1 to 3.3, 11.1 & 11.2 and Plates 11.1 to 11.6).

A well-coordinated restoration process (in consultation with the GSI; Refer to EIAR Table 6.7) will ensure that representative areas of quarry faces are left unvegetated. Parts of the upper benches will also be seeded with suitable species of shrubs and climbers to create vegetated ledges. Vegetation and natural colonisation on these benches will encourage growth on the faces and will subsequently break up the natural harshness of the exposed rock face.

Cross sections through the site also illustrate the effectiveness of working the quarry top-down in successive benches, including provision of a temporary berm at 98m OD within the eastern extension area to facilitate progressive restoration of the upper back southern face at the earliest opportunity (Refer to EIAR Figures 3.1 to 3.3).

A feature landscape mound is to be constructed at the site of the existing stockpiling area and planted with suitable native species. This feature mound will help break up views particularly from the north of the upper quarry face within the existing quarry. Perimeter screening berms will also be provided at the boundaries of the proposed extension area (Refer to EIAR Figures 3.1 to 3.3).

The proposed development will enable the operator to fully complete the restoration of both the existing quarry and the proposed development to beneficial after-use. Plans and sections of the design and associated restoration are shown on EIAR Figures 3.1 to 3.3. This will ensure that the upper back face is restored at the earliest opportunity, that the working face is not open to view, and that as the quarry pushes eastwards only the restored upper face will be revealed as quarrying progresses to the limit of extraction.

The site has a long history of quarrying, and these activities have co-existed with other land uses in the area, particularly medium intensity agriculture. Consideration has been given to screening of the development, phasing and direction of working and restoration of the upper quarry face with respect to receptors so as to reduce the visual impact, while impacts due to noise and dust are substantially attenuated (Refer to Figures 11.1 & 11.2 and Plates 11.1 to 11.6). Continuance of the quarry operations has the benefit of enabling an appropriate final restoration of the quarry, which will allow full reinstatement of the land to beneficial after-use as a wildlife amenity.

The visual impact with respect to the quarry from these vantages is considered to be direct, negative, slight to moderate, long term.

The visual impact of the restoration is likely to be direct, positive, moderate, permanent effects due to closure with final restoration to beneficial amenity after-use with ongoing establishment of biodiversity.

11.5.2.1 Indirect Impacts

There are no indirect impacts associated with the proposed development and the surrounding areas.

11.5.2.2 Cumulative Impacts

Cumulative landscape and visual impact assessment is concerned with additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments (associated or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future (Landscape Inst. & IEMA 2013).

There are several quarries in the wider area, including O'Reilly Concrete Lobinstown Quarry c. 2.5 km to the west (currently in final stages of restoration), Roadstone's Slane Quarry, c. 7 km to the south, an unidentified quarry at Knockmooney on the N2 c. 8.5 km to the southeast, and a disused quarry, now operating as an SRF, at Mullaghdillon c. 6 km to the southeast. The only significant industrial/commercial activity within 5 km of the site is the industrial/warehouse estate in Grangegeeth, c. 4.5 km to the southeast.

The nearest substantial commercial activity is Meade Farm Group's Packing, Storage and Distribution facility c. 1.25 km northeast of the site at Braystown. The substantial facility employs c. 340 employees. Whites Auto Electrical have a small commercial unit in Matthews Transport Yard, Heronstown, c. 800 m north of the site on the L1603 (c. 185 m north of McEntegart's Cross Roads). PS Supplies, which is a company supplying doors and floors based in Navan, maintains a small commercial unit in Lobinstown Village, while Myles Staircases Ltd. also maintains a workshop and showroom c. 785 m south of the site on the L1603.

There are also other developments nearby, including solar farms, both existing and proposed, that could give rise to potential cumulative impacts. However, these developments are subject to planning and/or the requirements for EIA and are subject to compliance with both planning and licensing conditions. There is no other significant industrial/commercial activity within a 5 km radius of Lobinstown Quarry.

Given the nature of the proposed development, compliance with the mitigation measures specified in the EIAR and the best practice measures that will be implemented during the Construction, Operational and Decommissioning stages of the proposed development, it is considered highly unlikely that any significant cumulative impacts will arise as a result of the proposed development. Thus, it is our assessment that there will be no significant cumulative impacts resulting from the proposed development, in combination with other local existing developments, quarries, projects and plans.

Cumulative impacts associated with other developments within the wider area are dealt with where necessary under the respective topic in the EIAR.

A separate Cumulative Impacts Assessment has been included as Appendix 15, which provides an assessment of other projects located within the wider area that are potentially significant with respect to cumulative impacts.

11.5.2.3 Transboundary Impacts

The EIA Directive 2014-52-EU invokes the Espoo Convention on Environmental Impact Assessment in a Transboundary Context, 1991, and applies its definition of transboundary impacts. Given the location (c. 30 km from the border with N. Ireland), nature, size, and scale of the proposed development, it is expected that the impacts of the development would have no significant transboundary effects on landscape, given the local or at most regional nature of landscapes.

11.5.2.4 Residual Impacts

As a result of the proposed mitigation and enhancement measures incorporated in the design, no significant, adverse residual impacts are predicted in terms of Landscape during the operational phase.

It is considered that following full restoration and closure of the site that there will also be no significant, long-term, adverse impacts in terms of Landscape. The restored quarry will provide a more sustainable, long-term environment than is currently the case, but with a change in land-use from the original agricultural use to mineral extraction to ultimately a future beneficial use as a wildlife amenity.

11.5.2.5 'Worst Case' Impacts

The worst case impact would be moderate in the long-term, if the quarry was to be developed in an uncontrolled manner with no consideration given to screening of the development, phasing and direction of working and restoration of the upper quarry face with respect to receptors so as to reduce the visual impact.

There has been a long historical association with quarrying at this location and consideration has been given to screening of the development, phasing and direction of working and progressive restoration of the upper quarry face with respect to receptors so as to reduce the visual impact. Plans and sections of the design and associated restoration are shown on Figures 3.1 to 3.3.

The visual impact of the restoration is likely to be direct, positive, moderate, permanent effects due to closure with final restoration to beneficial amenity after-use with ongoing establishment of biodiversity.

Table 11.2 Potential Landscape Impact Assessment

Environmental Attribute/ Receptor	Significance / Sensitivity of Impact	Nature of Impact	Overall Significance of Impact *	Construction Stage	Operational Stage	Decommissioning Stage	Post Closure Stage
Landform	Low	Medium	Slight to Moderate		Likely, direct, negative, slight to moderate, long-term effects as southern face is open to intermittent views from section of Local County road L1604 to the north. Offset by consideration given to direction of working, landscaping works, phasing of development and progressive restoration of quarry faces (particularly the upper south-eastern quarry face) to reduce the visual impact from views to the north (Refer to EIAR Figures 1.3, 3.1 to 3.3, 11.1 & 11.2 and Plates 11.1 to 11.6).	Likely, direct, positive slight to moderate, short-term effects during final restoration of site including restoration of upper quarry faces and landscaping and planting works.	Likely, direct, positive, moderate, permanent effects due to closure with final restoration to beneficial after-use as wildlife amenity-use with ongoing establishment of biodiversity
Land use	Low	Low	Slight		Likely, direct, negative, slight, long-term effects due to change from pasture to mineral extraction and quarrying and ancillary activities. Likely, direct, positive slight to moderate, short-term effects during final restoration of site including restoration of upper quarry faces and landscaping and planting works.	Likely, direct, positive slight to moderate, short-term effects during final restoration of site including restoration of upper quarry faces and landscaping and planting works.	Likely, direct, positive, moderate, permanent effects due to closure with final restoration to beneficial amenity after-use with ongoing establishment of biodiversity.
Ecological Habitat	Low	Low	Slight to Not Significant		There are no predicted significant adverse effects on local biodiversity, flora or fauna as a result of the proposed development given the inclusion of workable industry standard mitigation measures that will be monitored to ensure continued efficacy.	Likely, direct, positive slight to moderate, short-term effects during final restoration of site including restoration of upper quarry faces and landscaping and planting works.	Likely, direct, positive, moderate, permanent effects due to closure with final restoration to beneficial amenity after-use with ongoing establishment of biodiversity.
Cultural Heritage	High	Negligible	Imperceptible		Cultural Heritage features in locality considered to be too far distant to be directly or indirectly impacted by the proposal.	No impact expected	No impact expected.

Table 11.3 Potential Visual Impact Assessment

Environmental Attribute/ Receptor			Type of View	Significance / Sensitivity of Impact	Nature of Impact	Overall Significance of Impact *	Construction Stage	Operational Stage	Decommissioning Stage	Post Closure Stage
1.	11.1	c. 280m south of site entrance.	View from L1603 County Road c. 280m south of site entrance.	Low	Low	Not Significant to Imperceptible		Likely, direct, negative, imperceptible, long-term effects due to existing quarry & proposed eastern quarry extension area not open to significant views being screened by intervening topography and hedgerow vegetation.	Likely, direct, positive slight to moderate, short-term effects during progressive restoration of site.	Likely, direct, positive, moderate, permanent effects due to closure with final restoration to beneficial amenity after-use with ongoing establishment of biodiversity
2.	11.2	Site Entrance	Transient passing view from quarry site entrance on L1603 county road. The quarry is screened from public road by existing landscaping at site entrance. Mature screening berm between quarry workings and site entrance.	Negligible	Low	Imperceptible		Likely, direct, negative, imperceptible long-term effects due to landscaping & mature screening berm at site entrance.	Likely, direct, positive slight to moderate, short-term effects during progressive restoration of site.	Likely, direct, positive, moderate, permanent effects due to closure with final restoration to beneficial amenity after-use with ongoing establishment of biodiversity
3.	11.3	c. 220m west of site entrance	View from L1603 County Road c. 220m west of site entrance. Existing quarry & proposed eastern quarry extension area not open to significant views being screened by intervening topography, mixed woodland and hedgerow vegetation.	Low	Low	Imperceptible		Likely, direct, negative, imperceptible long-term effects due to views being screened by intervening topography, mixed woodland and hedgerow vegetation.	Likely, direct, positive slight to moderate, short-term effects during progressive restoration of site.	Likely, direct, positive, moderate, permanent effects due to closure with final restoration to beneficial after-use as agricultural and/or amenity use with ongoing establishment of biodiversity.
4.	11.4	McEntegart's Cross Roads c. 920m Northwest of Extraction Area	View from L1604 at McEntegart's Cross Roads (c. 920m Northwest of Extraction Area). Existing quarry & proposed eastern quarry area partially screened by intervening topography and mixed woodland and hedgerow vegetation	Low	Medium	Slight		Likely, direct, negative, slight, long-term effects as southern face is open to intermittent partially screened views from Local County road L1604. Offset by consideration given to direction of working, landscaping works, phasing of development and progressive restoration of quarry faces (particularly the upper south-eastern quarry face) to reduce the visual impact from views to the north (Refer to EIAR	Likely, direct, positive slight to moderate, short-term effects during progressive restoration of site.	Likely, direct, positive, moderate, permanent effects due to closure with final restoration to beneficial after-use as agricultural and/or amenity use with ongoing establishment of biodiversity.

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Environmental Attribute/ Receptor			Type of View	Significance / Sensitivity of Impact	Nature of Impact	Overall Significance of Impact *	Construction Stage	Operational Stage	Decommissioning Stage	Post Closure Stage
								Figures 1.3, 3.1 to 3.3, 11.1 & 11.2 and Plates 11.1 to 11.6).		
5.	11.5	c. 675m North of Extraction Area	View from L1604 County Road (c. 675m North of Extraction Area).	Low	Medium	Slight to Moderate		<p>Likely, direct, negative, slight to moderate long-term effects as southern face is open to intermittent views from Local County road L1604.</p> <p>Offset by consideration given to direction of working, landscaping works, phasing of development and progressive restoration of quarry faces (particularly the upper southern quarry face) to reduce the visual impact from views to the north (Refer to EIAR Figures 1.3, 3.1 to 3.3, 11.1 & 11.2 and Plates 11.1 to 11.6).</p>	Likely, direct, positive slight to moderate, short-term effects during progressive restoration of site.	Likely, direct, positive, moderate, permanent effects due to closure with final restoration to beneficial after-use as agricultural and/or amenity use with ongoing establishment of biodiversity.
6.	11.6	c. 690m Northeast	View from Bridge (c. 690m) Northeast along L1604 County Road	Low	Medium	Slight to Moderate		<p>Likely, direct, negative, slight to moderate long-term effects as southern face is open to intermittent views from Local County road L1604.</p> <p>Offset by consideration given to direction of working, landscaping works, phasing of development and progressive restoration of quarry faces (particularly the upper southern quarry face) to reduce the visual impact from views to the north (Refer to EIAR Figures 1.3, 3.1 to 3.3, 11.1 & 11.2 and Plates 11.1 to 11.6).</p>	Likely, direct, positive slight to moderate, short-term effects during progressive restoration of site.	Likely, direct, positive, moderate, permanent effects due to closure with final restoration to beneficial after-use as agricultural and/or amenity use with ongoing establishment of biodiversity.

11.6 MITIGATION MEASURES

Mitigation measures include avoidance, reduction, compensation, and remedy of potential impacts. The primary means of mitigation involves an efficient design and layout for the quarry that optimises use of existing infrastructure, screening using hedgerows and trees, topography, and the full restoration of the quarry site, once operations at the site cease.

The site will continue to be worked from the existing quarry area in an easterly direction in a series of typically 15 m high benches with consideration given to direction of working, phasing of development and progressive restoration of quarry faces (particularly the upper south-eastern quarry face) to reduce the visual impact from views to the north (Refer to EIAR Figures 1.3, 3.1 to 3.3, 11.1 & 11.2 and Plates 11.1 to 11.6).

A well-coordinated restoration process (in consultation with the GSI; Refer to EIAR Table 6.7) will ensure that representative areas of quarry faces are left unvegetated. Parts of the upper benches will also be seeded with suitable species of shrubs and climbers to create vegetated ledges. Vegetation and natural colonisation on these benches will encourage growth on the faces and will subsequently break up the natural harshness of the exposed rock face.

Cross sections through the site also illustrate the effectiveness of working the quarry top-down in successive benches, including provision of a temporary berm at 98m OD within the eastern extension area to facilitate progressive restoration of the upper back southern face at the earliest opportunity (Refer to EIAR Figures 3.1 to 3.3).

A feature landscape mound is to be constructed at the site of the existing stockpiling area and planted with suitable native species. This feature mound will help break up views particularly from the north of the upper quarry face within the existing quarry. Perimeter screening berms will also be provided at the boundaries of the proposed extension area (Refer to EIAR Figures 3.1 to 3.3).

The proposed development will enable the operator to fully complete the restoration of both the existing quarry and the proposed development to beneficial after-use. Plans and sections of the design and associated restoration are shown on Figure 3.1 to 3.3. This will ensure that the upper back face is restored at the earliest opportunity, that the working face is not open to view, and that as the quarry pushes eastwards only the restored upper face will be revealed as quarrying progresses to the limit of extraction.

All crushing and processing will be carried out on the quarry floor being screened by the quarry face and perimeter screening berms.

The site has a long history of quarrying, and these activities have co-existed with other land uses in the area, particularly medium intensity agriculture. Consideration has been given to screening of the development, phasing and direction of working and restoration of the upper quarry face with respect to receptors so as to reduce the visual impact, while impacts due to noise and dust are substantially attenuated (Refer to Figures 11.1 & 11.2 and Plates 11.1 to 11.6). Continuance of the quarry operations has the benefit of enabling an appropriate final restoration of the quarry, which will allow full reinstatement of the land to beneficial after-use as a wildlife amenity.

Progressive site restoration allows vegetation to become established during the course of the development, thereby reducing the overall impact of the development (i.e., visual impact, dust impact, flora and fauna impact, etc.). It also has the added benefit to the operator of spreading out the cost of restoration over the life of the development.

Grading and planting on completed sections of the upper quarry face will be carried out as shown by Figures 3.2 to 3.3. The upper benches will be seeded with suitable species of shrubs and climbers to create vegetated ledges. Vegetation and natural colonisation on these faces will encourage growth on the faces and will subsequently break up the natural harshness of the exposed rock face. This will occur in a progressive manner as quarrying advances.

A further 2 years will be required to implement and complete final restoration of the site to a secure wildlife amenity use. The proposed development will also enable the operator to fully complete the restoration of both the proposed and existing quarry to beneficial after-use.

Redundant structures, plant equipment and stockpiles will be removed from site on cessation of quarry activity. The former plant areas will be restored using topsoil/overburden and planted with a mixture of native trees and shrubs.

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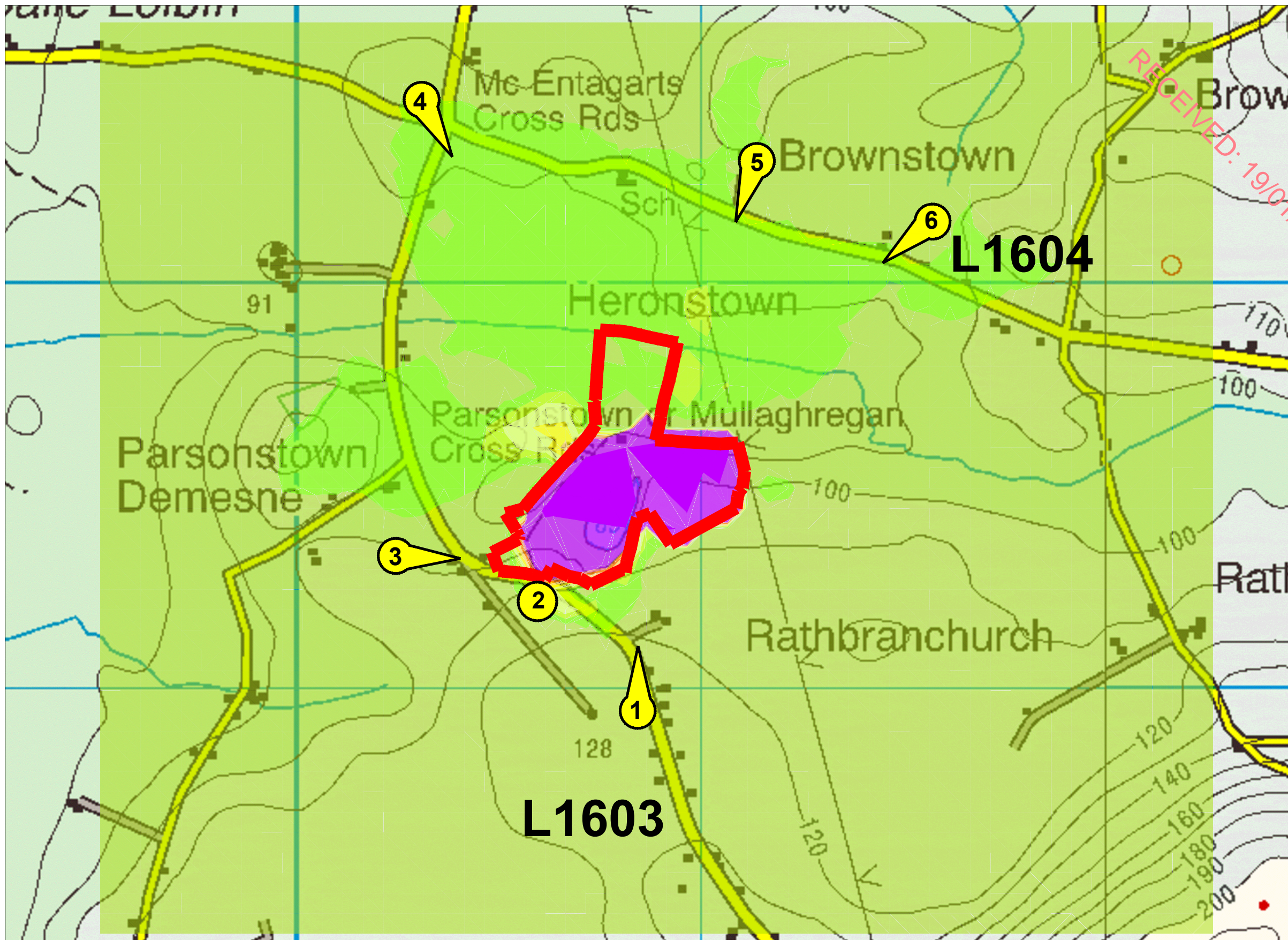
<https://www.google.ie/maps> Google Maps.

<http://www.gsi.ie> Geological Survey of Ireland

<https://laois.ie/> Laois County Council

11.8 FIGURES

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Legend

- Application Area (c. 18.5 ha)
- >10 degrees
- Between 8 & 10 degrees
- Between 7 & 8 degrees
- Between 6 & 7 degrees
- Between 5 & 6 degrees
- Between 4 & 5 degrees
- Between 3 & 4 degrees
- Between 2 & 3 degrees
- Between 1 & 2 degrees
- <1 degrees
- 1 Principle Views
(Refer to corresponding Plates 11.1 to 11.6 for details)
- L1604 Local Roads

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NOTES:

- All Dimensions in metres (m)
- Elevation Levels - metres Above Ordnance Datum (mAOD)
- Extract from 1:50,000 OSI Discovery Series Map No. 35 & 42

Scale 1:10,000

0m 500m



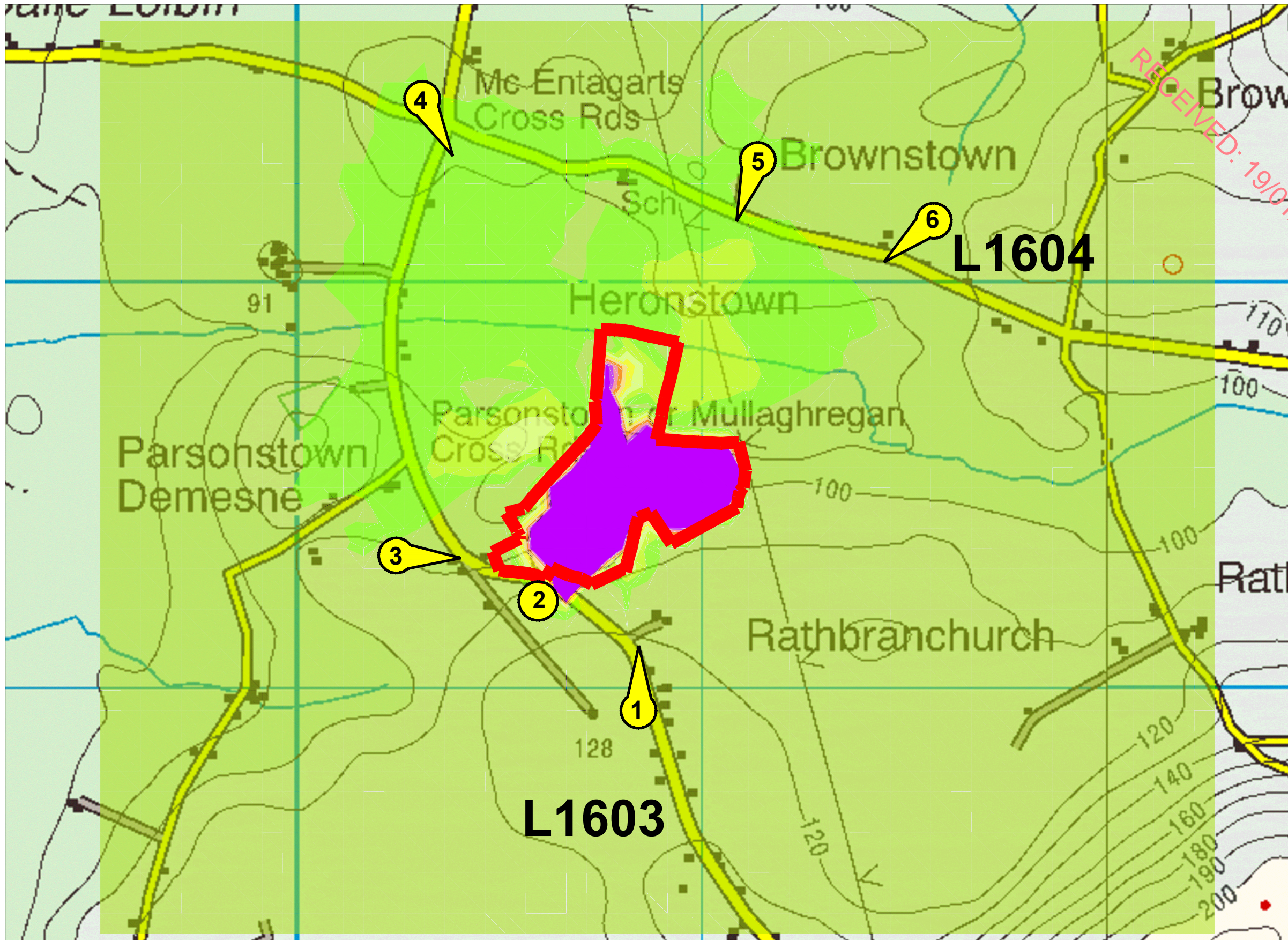
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J SHEILS PLANNING & ENVIRONMENTAL LTD

CLIENT	Breedon Ireland	
DRAWING	Vertical ZTV Analysis	
LOCATION	Heronstown, Lobinstown, Navan, Co. Meath	

Drawn by	John Sheils	Scale	1:10,000
Checked by	John Sheils	Job No.	JSPE301
Date	14/01/2024	Figure No.	11.1
		Rev.	00



Legend

- Application Area (c. 18.5 ha)
- >180 degrees
- Between 160 & 180 degrees
- Between 140 & 160 degrees
- Between 120 & 140 degrees
- Between 100 & 120 degrees
- Between 80 & 100 degrees
- Between 60 & 80 degrees
- Between 40 & 60 degrees
- Between 20 & 40 degrees
- < 20 degrees
- 1 Principle Views
(Refer to corresponding Plates 11.1 to 11.6 for details)
- L1604 Local Roads

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NOTES:

- All Dimensions in metres (m)
- Elevation Levels - metres Above Ordnance Datum (mAOD)
- Extract from 1:50,000 OSI Discovery Series Map No. 35 & 42

Scale 1:10,000

0m 500m



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CLIENT	Breedon Ireland	
DRAWING	Horizontal ZTV Analysis	
LOCATION	Heronstown, Lobinstown, Navan, Co. Meath	

Drawn by	John Sheils	Scale	1:10,000
Checked by	John Sheils	Job No.	JSPE301
Date	14/01/2024	Figure No.	11.2
		Rev.	00

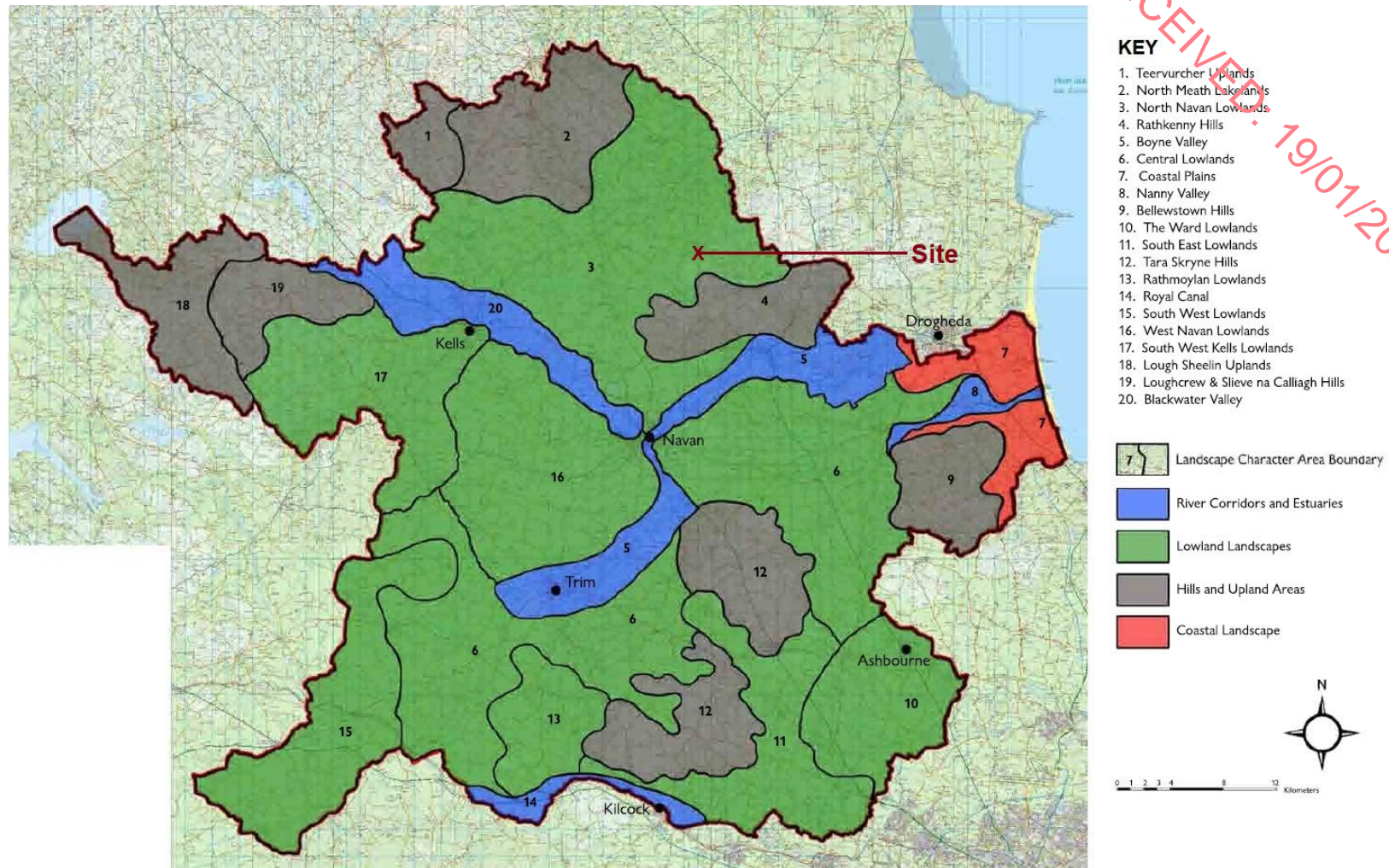


Figure 11.3 Map of Landscape Character Types of County Meath.

Map of Meath showing Landscape Character Areas (LCAs). Location of site within LCA3: North Navan Lowlands is marked by an "X". Scale Bar at bottom right. Modified from Meath County Council (2021).

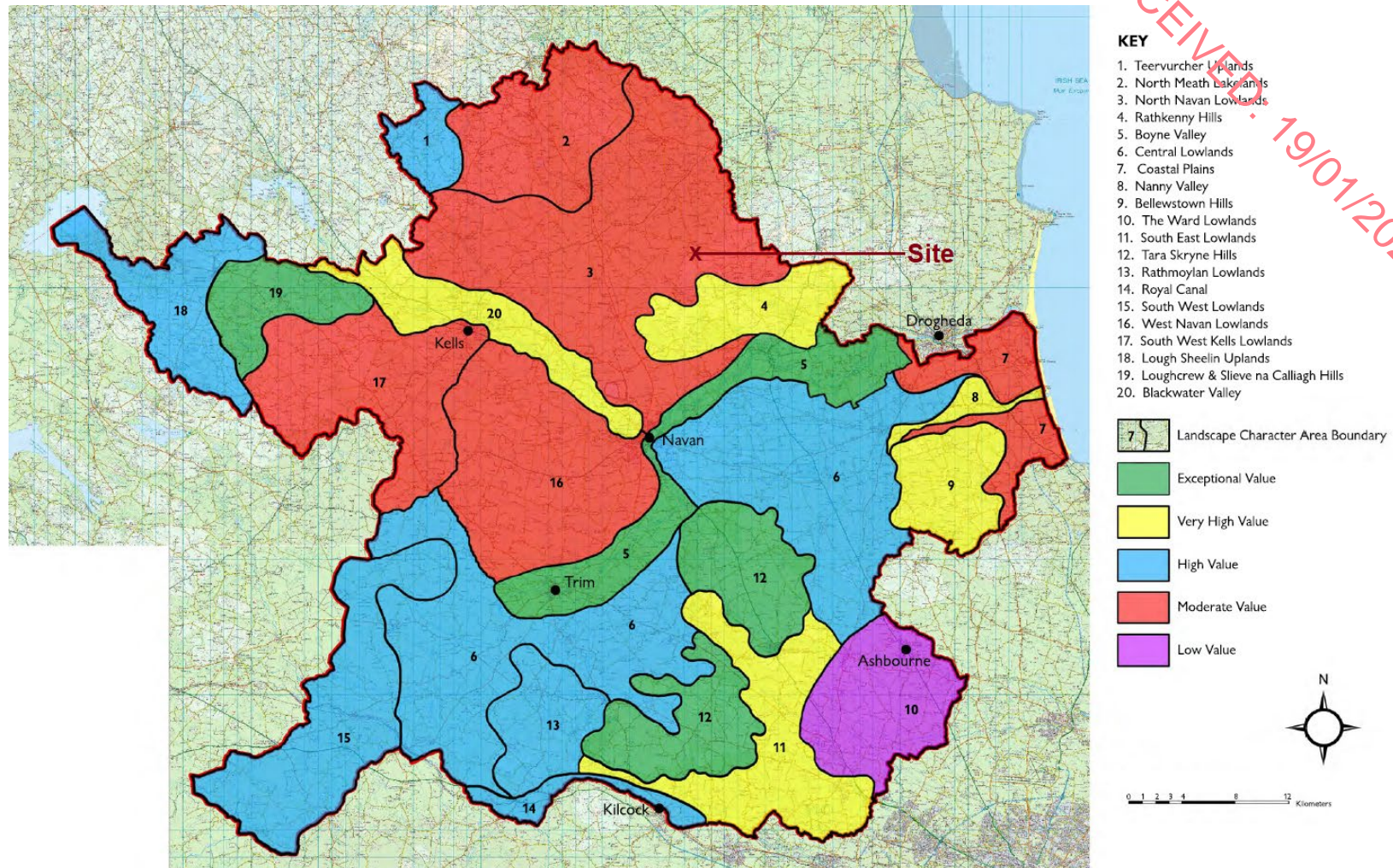


Figure 11.4 Map showing Value of Landscape Character Areas in County Meath.

Map of Meath showing Value of Landscape Character. Location of site within LCA3: North Navan Lowlands is marked by an "X". Scale Bar at bottom right. Modified from Meath County Council (2021)

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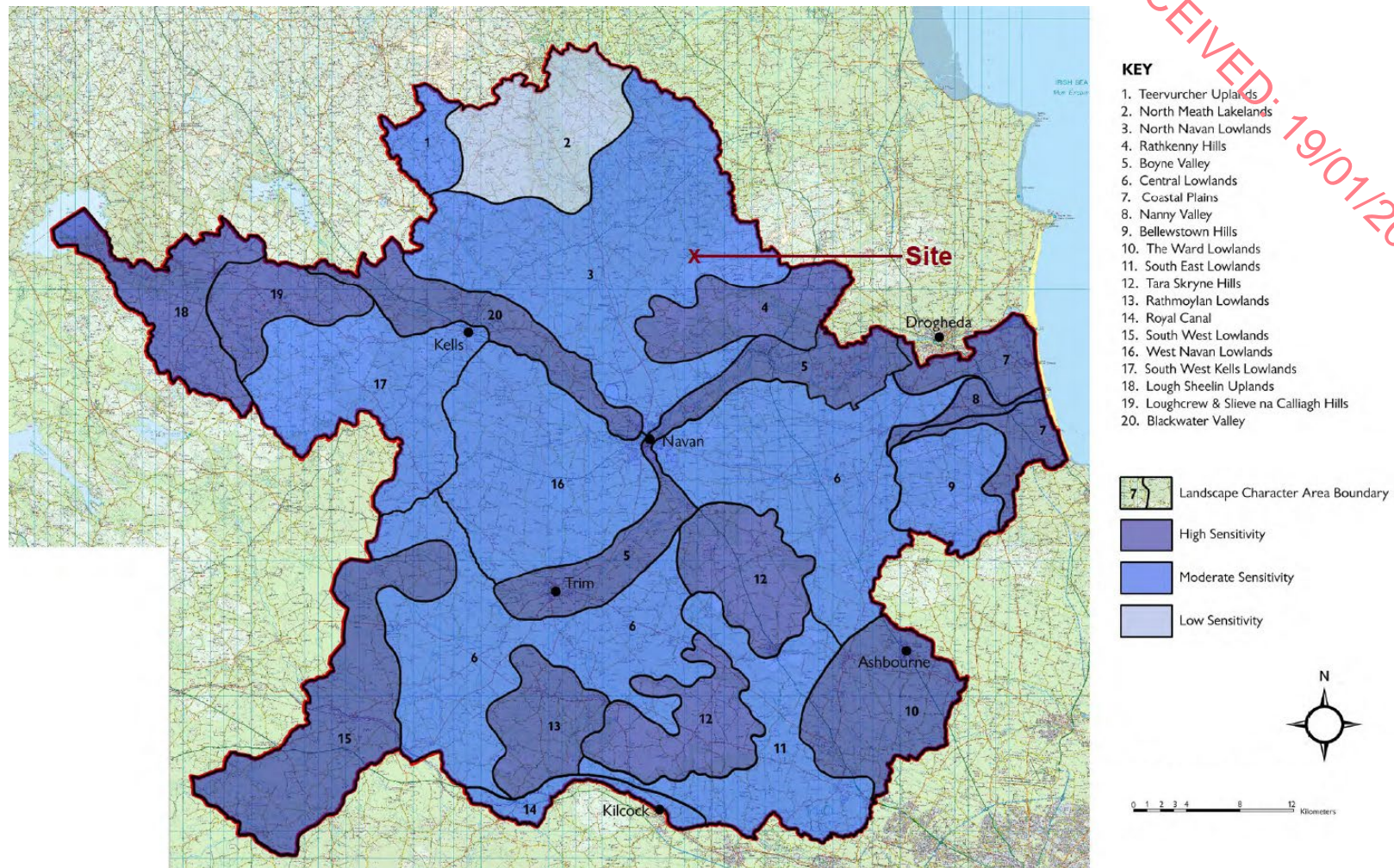


Figure 11.5 Map showing Sensitivity of Landscape Character Areas in County Meath.

Map of Meath showing Sensitivity of Landscape Character Areas. Location of site within LCA3: North Navan Lowlands is marked by an "X". Scale Bar at bottom right. Modified from Meath County Council (2021).

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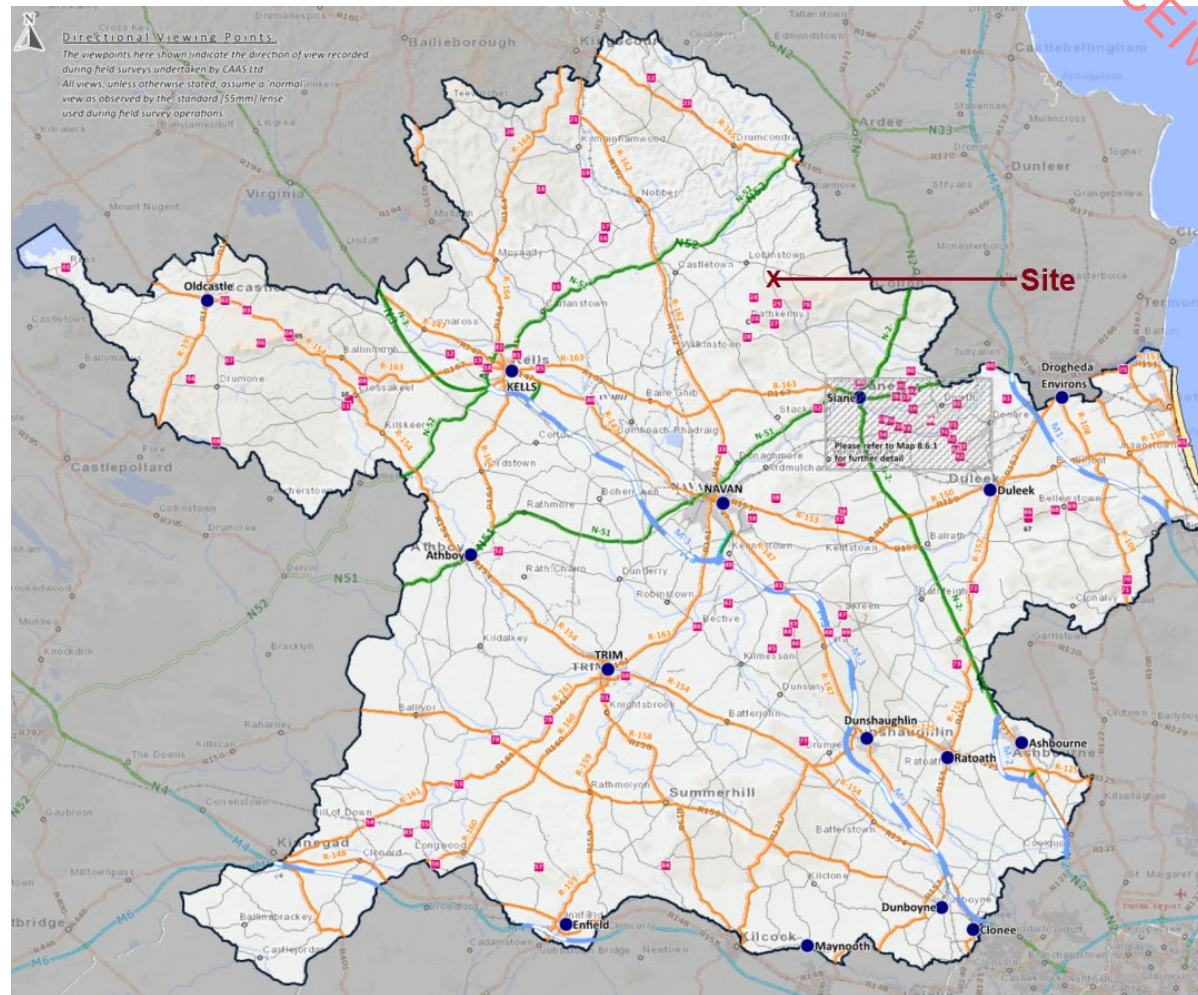


Figure 11.6 Map of Scenic Views across County Meath

There are 94 designated views and prospects in Meath, which are denoted by red square symbols. Note nearby cluster of six such points south of site in the Ferrard Hills. Modified from Meath County Council (2021).

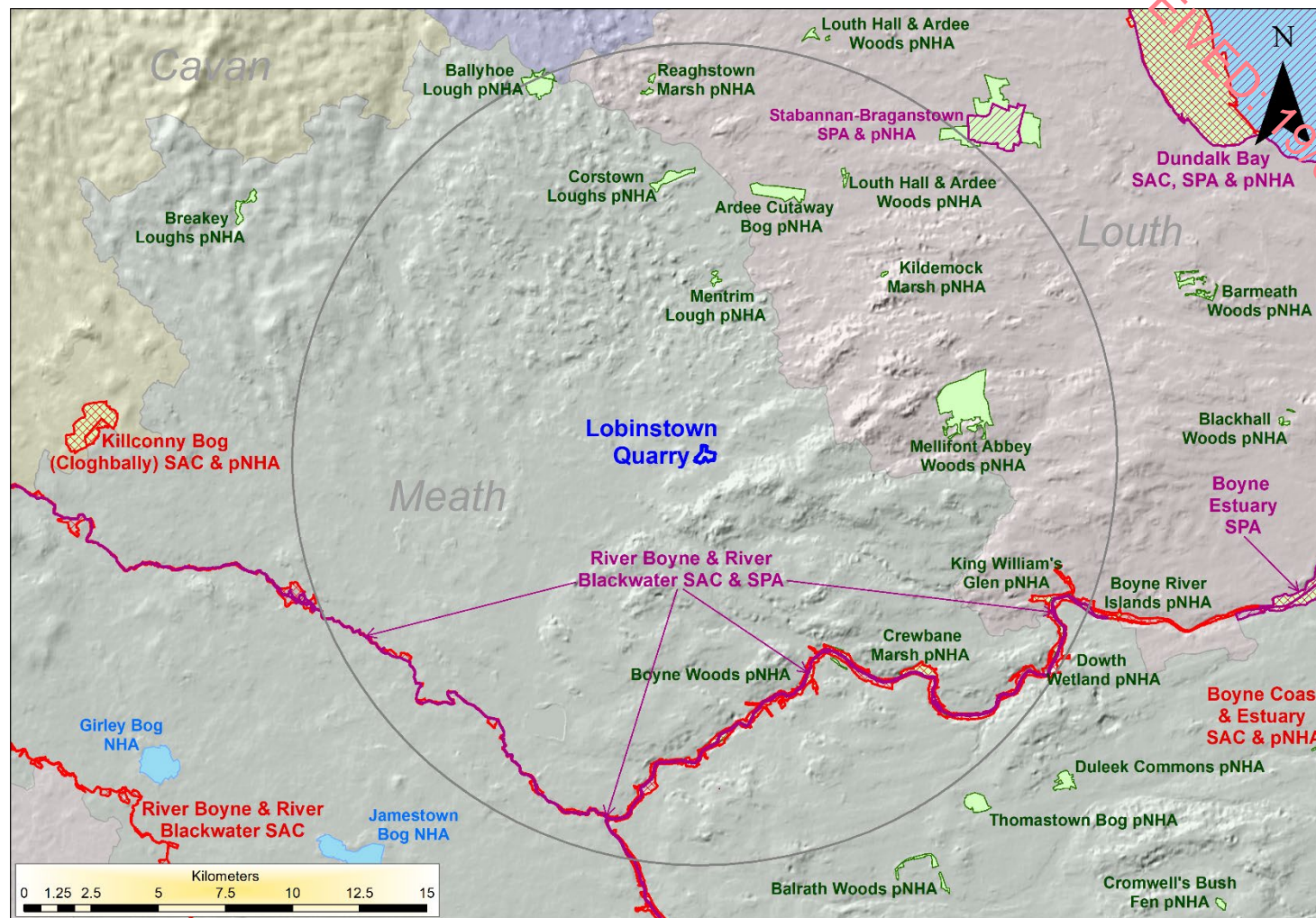


Figure 11.7 Map of SACs, SPAs, NHAs and pNHAs in North Meath and Surrounding Region.

Rendered in ArcGIS 10.3.1 using data from the NPWS (2021) overlain on image from ESRI's world imagery.

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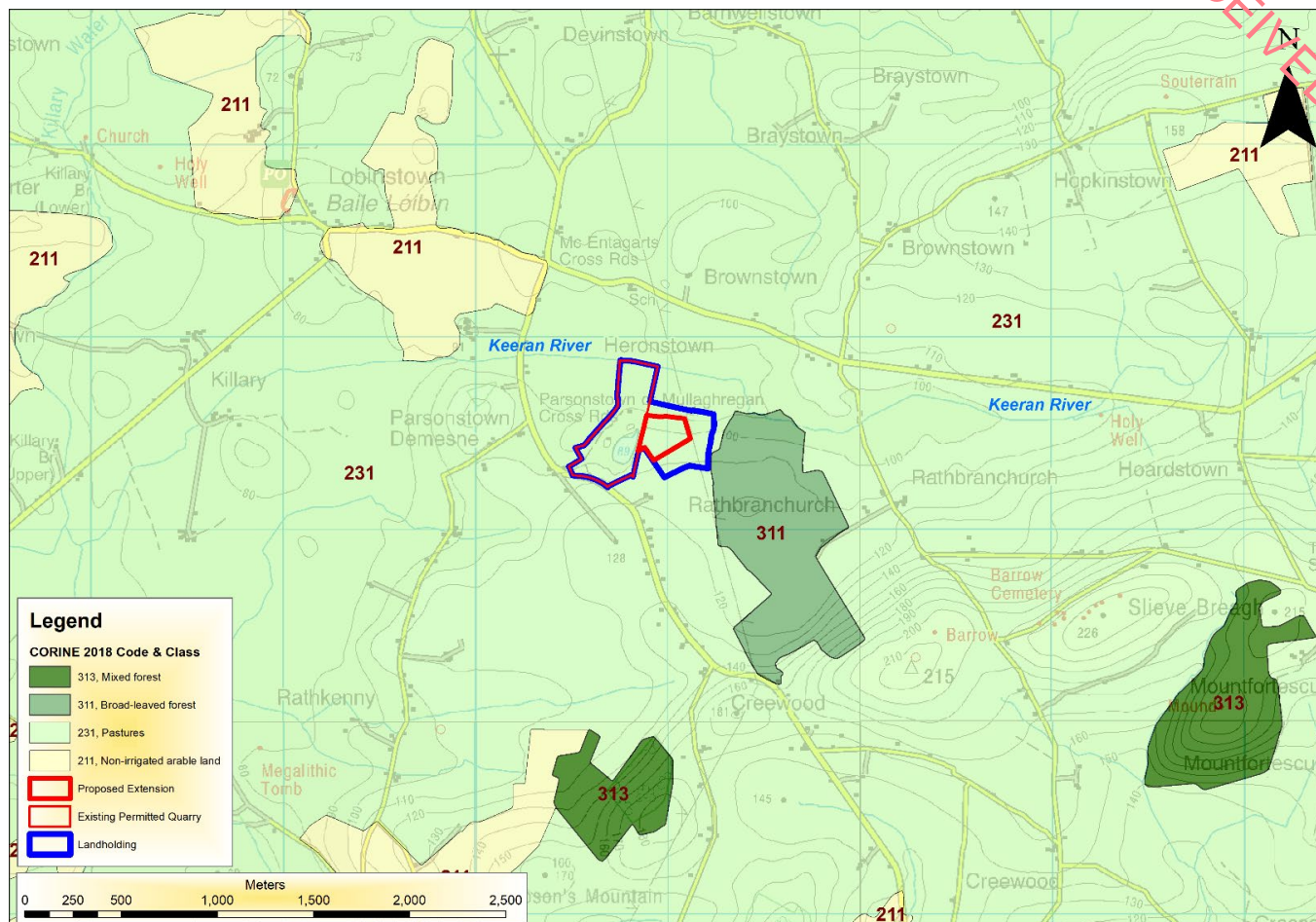


Figure 11.8 The 2018 Corine Land Use Map of the Heronstown Area.

Dominant land covers are Pastures (231); Non-irrigated arable land (211); Mixed forest (313); and Broad-leaved forest (311). Application site includes existing permitted quarry (outlined in thin red line) and proposed extension (outlined in thick red line). Rendered in ArcGIS 10.3.1 using data from OSI and EPA

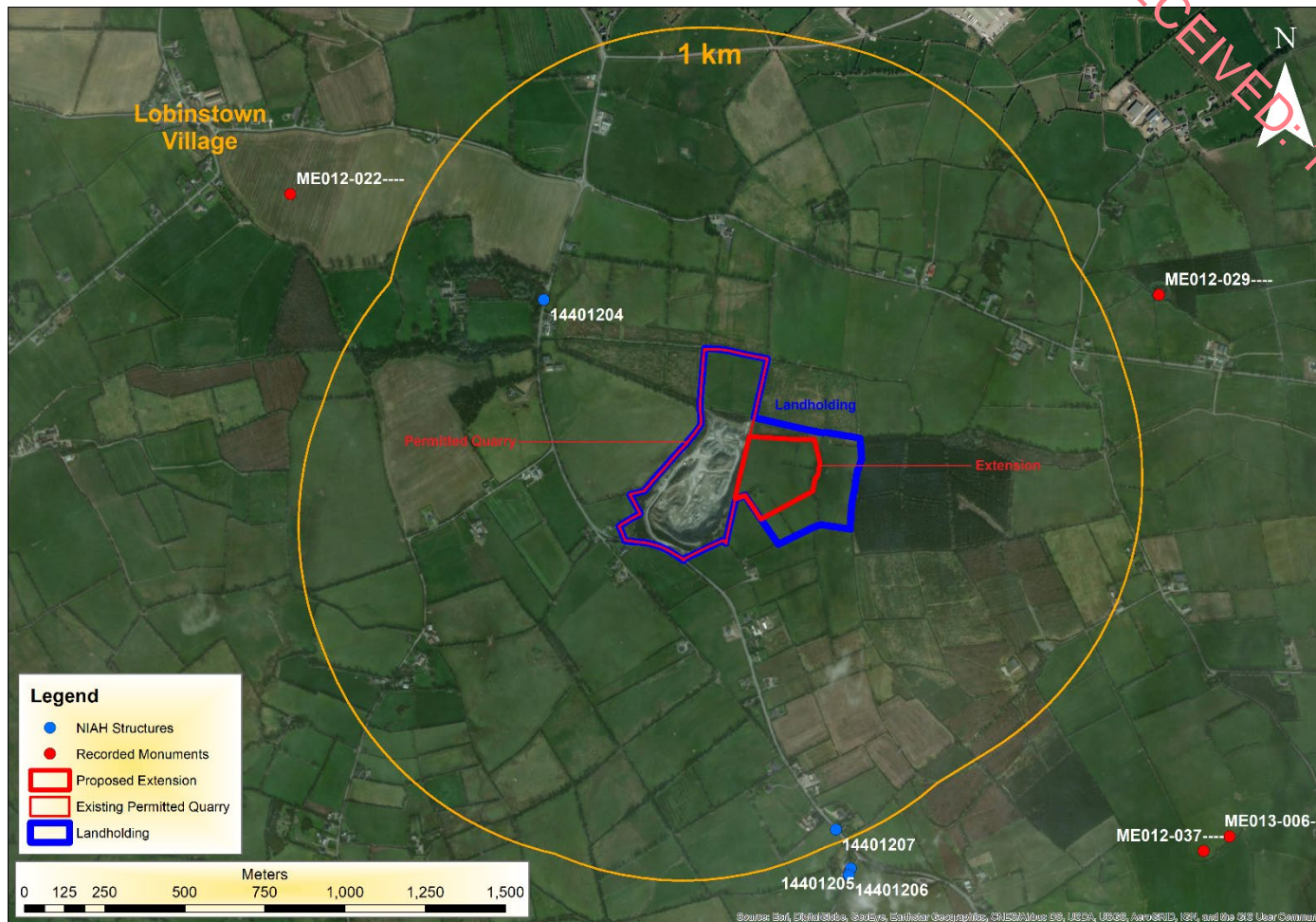


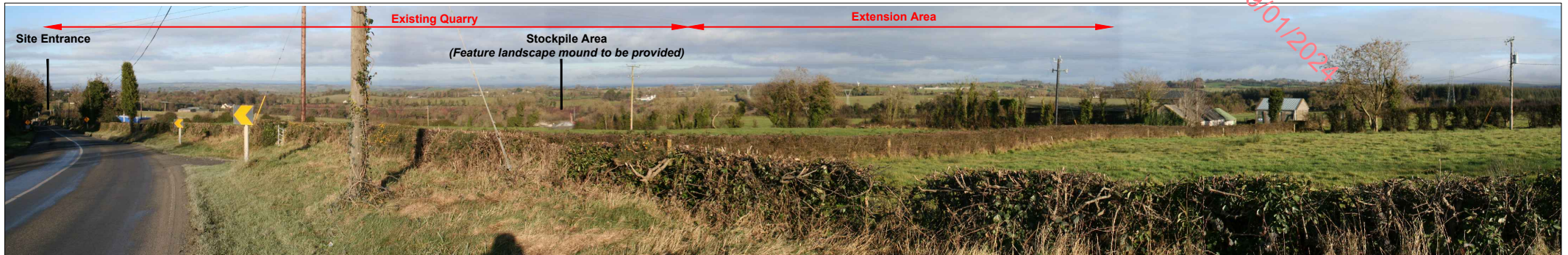
Figure 11.9 Monuments (RMPs) and Protected Structures (RPSs) in the Heronstown Area.

There are no RMPs, denoted by red dots, located on the landholding, application site (i.e., permitted quarry plus extension) nor within the 1 km study area. There are two NIAH structures (also RPSs), denoted by blue dot, within the 1 km study area. Rendered in ArcGIS 10.3.1 using data from the DoCHG (2021) overlain on image from ESRI's world imagery

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Plate 11.1 View from L1603 County Road c. 280m south of site entrance

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For Location Refer to EIAR 11.1 & 11.2

Description: View from L1603 County Road c. 280m south of site entrance. Existing quarry & proposed eastern quarry extension area not open to significant views being screened by intervening topography and hedgerow vegetation.

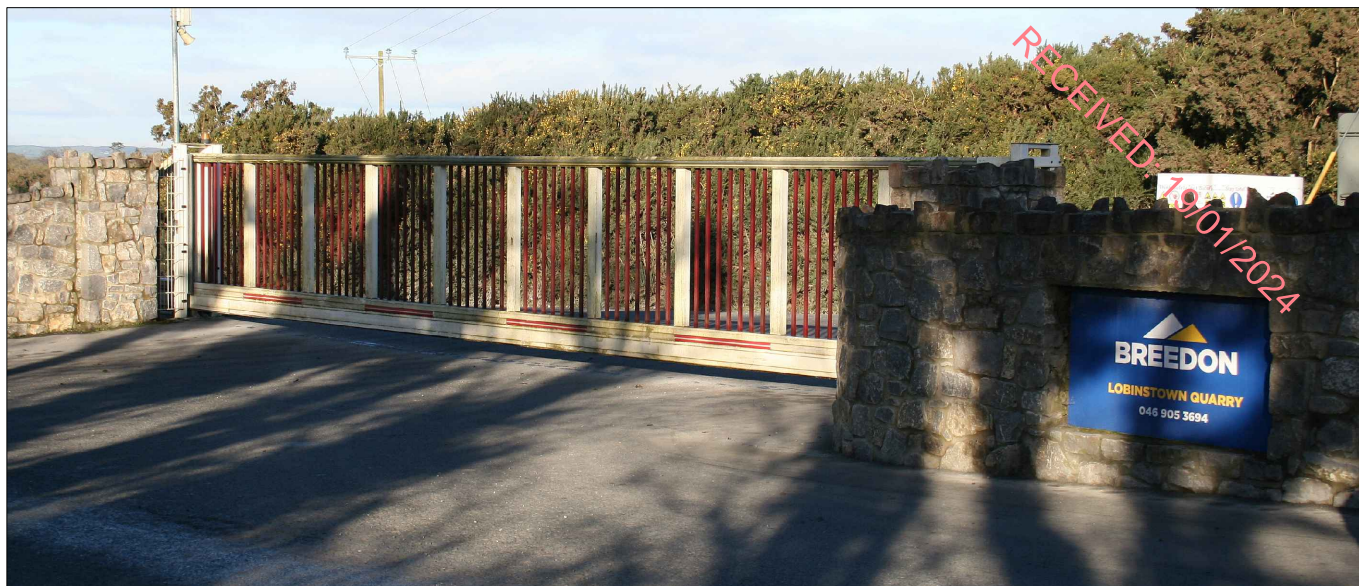
Mitigation:

- Favourable direction of working to ensure working face is not open to views from this vantage.
- Reinforce site perimeter hedgerow with suitable native species as necessary.
- Feature landscape mound to be constructed and planted with suitable native species (Refer to Figure 3.2 Landscaping & Restoration Plan).

Notes:

1. Refer to Table 11.3 for further details of Impacts & Mitigation Measures
2. For Photographic Locations refer to Figures 11.1 & 11.2
3. Visual Assessment undertaken 14/01/2024 when leaf & screening cover are at a minimum.

Plate 11.2 View from quarry site entrance on L1603 county road



2

For Location Refer to EIAR 11.1 & 11.2

Description: View from quarry site entrance on L1603 county road. Quarry workings not open to view.

Mitigation:

- Existing landscaping at site entrance.
- Mature screening berm between quarry workings and site entrance.
- Existing secure site entrance with stone pillar and walls.

Plate 11.3 View from L1603 County Road c. 220m west of site entrance



3

For Location Refer to EIAR 11.1 & 11.2

Description: View from L1603 County Road c. 220m west of site entrance. Existing quarry & proposed eastern quarry extension area not open to significant views being screened by intervening topography, mixed woodland and hedgerow vegetation.

Mitigation:

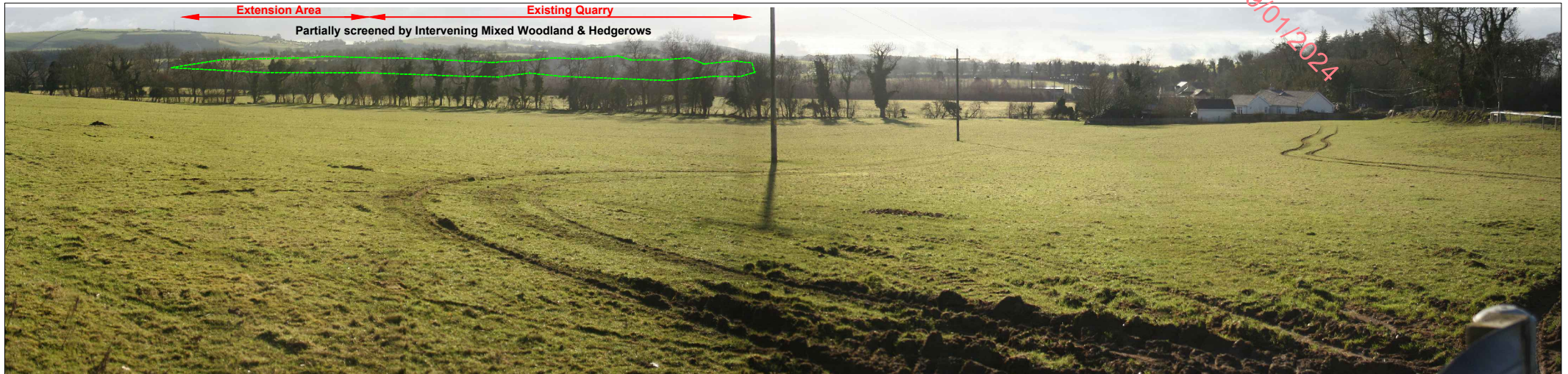
- Favourable direction of working to ensure working face is not open to views from this vantage.
- Proposed Eastern Extension Area not open to view.
- Mature mixed woodland and hedgerow vegetation forms western boundary to quarry.
- Reinforce site perimeter hedgerow with suitable native species as necessary.
- Retain mature screening along south western boundary.
- Feature landscape mound to be constructed and planted with suitable native species.
(Refer to Figure 3.2 Landscaping & Restoration Plan).

Notes:

1. Refer to Table 11.3 for further details of Impacts & Mitigation Measures
2. For Photographic Locations refer to Figures 11.1 & 11.2
3. Visual Assessment undertaken 14/01/2024 when leaf & screening cover are at a minimum.

Plate 11.4 View from L1604 at McEntegart's Cross Roads

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4

For Location Refer to EIAR 11.1 & 11.2

Description:

View from L1604 at McEntegart's Cross Roads (c. 920m Northwest of Extraction Area). Existing quarry & proposed eastern quarry area partially screened by intervening topography and mixed woodland and hedgerow vegetation.

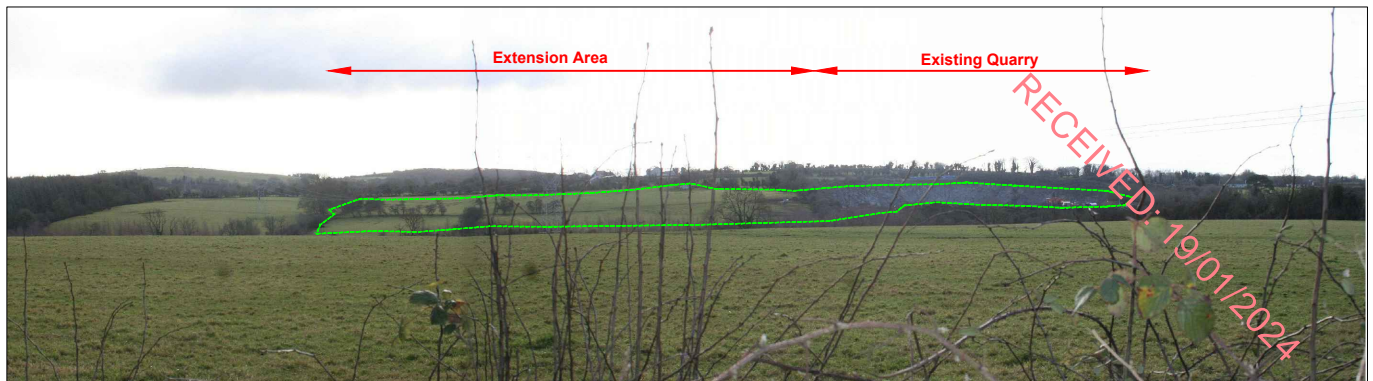
Mitigation:

- Site is below skyline. Perimeter hedgerows forming background to be retained.
- Working the quarry top-down in successive benches.
- Favourable direction and benching of workings. Working face not open to views.
- Refer to Plate 11.5 for 3D visualisation for development of quarry, including provision of a temporary berm at 98m OD within the eastern extension area to facilitate restoration of southern back face.
- Upper back southern face is progressively restored at the earliest opportunity.
- As the quarry pushes northwards only the restored upper face will be revealed as quarrying progresses to the limit of extraction.
- Preserve representative sections of quarry face in consultation with IGH.
- Parts of the upper benches will be seeded with suitable species of shrubs and climbers to create vegetated ledges.
- Natural colonisation on the residual faces will encourage growth on the faces and will subsequently break up the harshness of the exposed rock face.
- Feature landscape mound to be constructed at site of existing stockpiling area and planted with suitable native species.
- Refer to Figures 3.1 to 3.3 for further details.

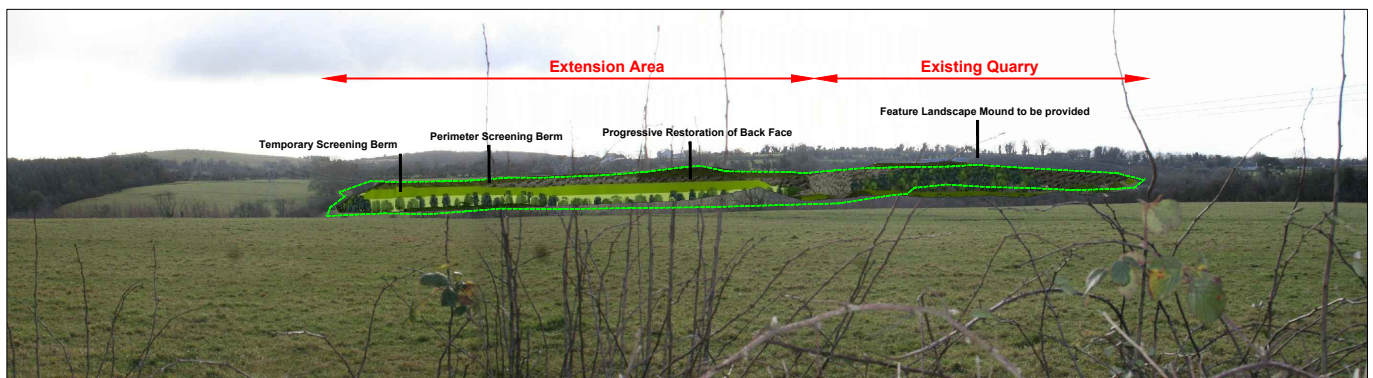
Notes:

1. Refer to Table 11.3 for further details of Impacts & Mitigation Measures
2. For Photographic Locations refer to Figures 11.1 & 11.2
3. Visual Assessment undertaken 14/01/2024 when leaf & screening cover are at a minimum.

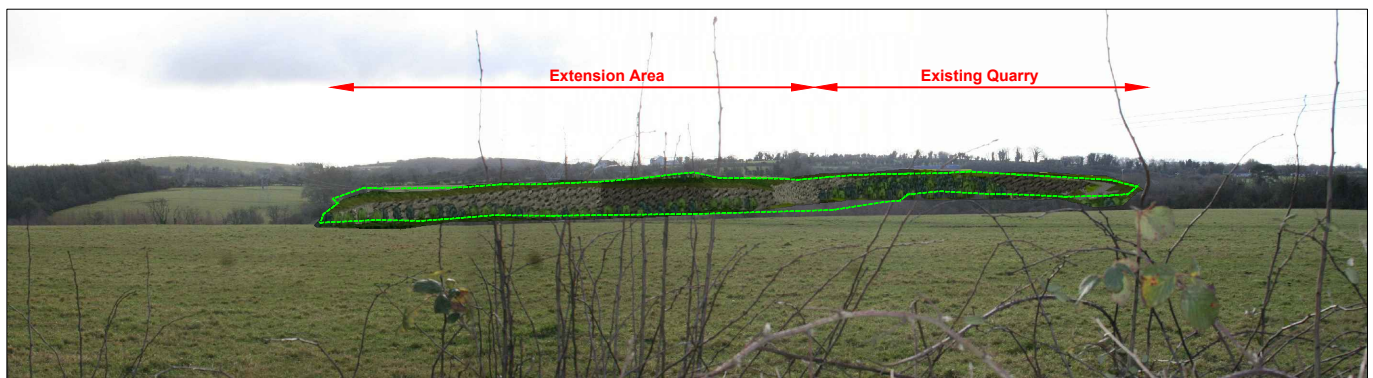
Plate 11.5 View from L1604 County Road



Existing View 14/01/24



3D Visualisation Showing Development of Upper Quarry Bench within Extension Area



3D Visualisation of Progressive Restoration of Back Face & Final Restoration

Description: View from L1604 County Road (c. 675m North of Extraction Area).



For Location Refer to EIAR 11.1 & 11.2

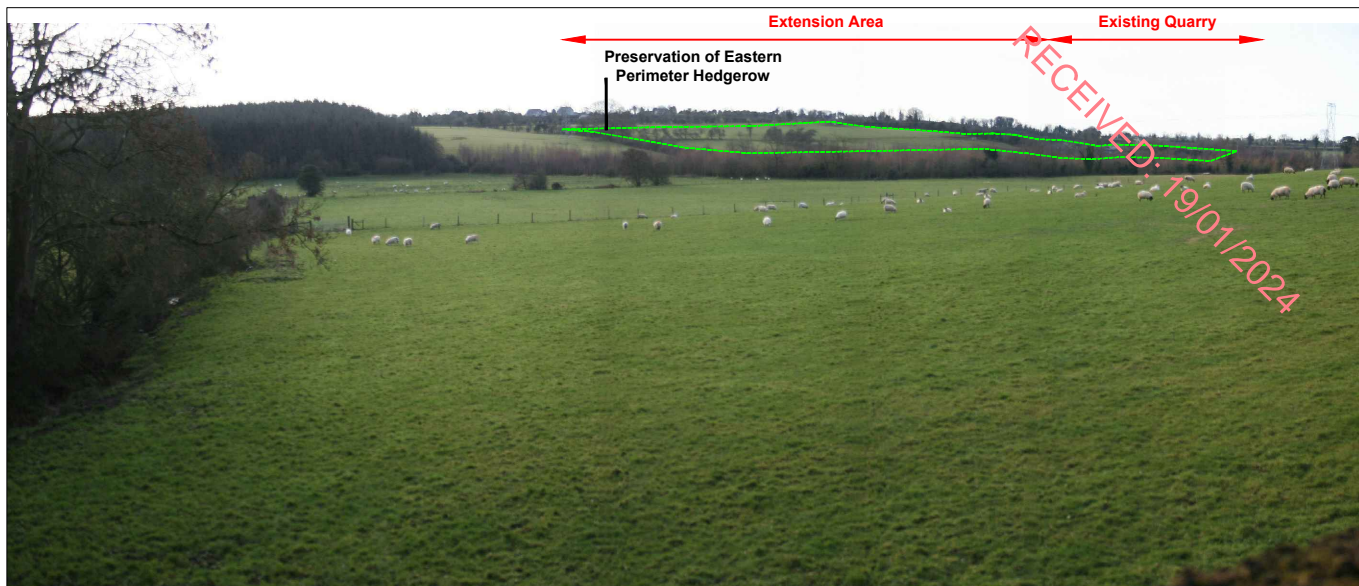
Mitigation:

- Site is below skyline. Perimeter hedgerows forming background to be retained.
- Working the quarry top-down in successive benches.
- Favourable direction and benching of workings. Working face not open to views.
- Provision of a temporary berm at 98m OD within the eastern extension area to facilitate restoration of southern back face.
- Upper back southern face is progressively restored at the earliest opportunity.
- As the quarry pushes northwards only the restored upper face will be revealed as quarrying progresses to the limit of extraction.
- Preserve representative sections of quarry face in consultation with IGH.
- Parts of the upper benches will be seeded with suitable species of shrubs and climbers to create vegetated ledges.
- Natural colonisation on the residual faces will encourage growth on the faces and will subsequently break up the harshness of the exposed rock face.
- Feature landscape mound to be constructed at site of existing stockpiling area and planted with suitable native species.
- Refer to Figures 3.1 to 3.3 for further details.

Notes:

1. Refer to Table 11.3 for further details of Impacts & Mitigation Measures
2. For Photographic Locations refer to Figures 11.1 & 11.2
3. Visual Assessment undertaken 14/01/2024 when leaf & screening cover are at a minimum.
4. Views taken from 3D computer generated model merged with digital Photographs.
5. 3D computer model colours chosen to highlight contrast between existing & proposed detail. Actual colours will be closer to surrounding natural landscape.

Plate 11.6 View from Bridge Northeast along L1604 County Road



For Location Refer to EIAR 11.1 & 11.2

Description: View from Bridge (c. 690m) Northeast along L1604 County Road

Mitigation:

- Site is below skyline. Perimeter hedgerows forming background to be retained.
- Eastern Perimeter hedgerow to be preserved.
- Perimeter Berm to be provided along boundaries of Eastern Extension Area.
- Working the quarry top-down in successive benches.
- Favourable direction and benching of workings. Working face not open to views.
- Refer to Plate 11.5 for 3D visualisation for development of quarry, including provision of a temporary berm at 98m OD within the eastern extension area to facilitate restoration of southern back face.
- Upper back southern face is progressively restored at the earliest opportunity.
- As the quarry pushes northwards only the restored upper face will be revealed as quarrying progresses to the limit of extraction.
- Preserve representative sections of quarry face in consultation with IGH.
- Parts of the upper benches will be seeded with suitable species of shrubs and climbers to create vegetated ledges.
- Natural colonisation on the residual faces will encourage growth on the faces and will subsequently break up the harshness of the exposed rock face.
- Feature landscape mound to be constructed at site of existing stockpiling area and planted with suitable native species.
- Refer to Figures 3.1 to 3.3 for further details.

Notes:

1. Refer to Table 11.3 for further details of Impacts & Mitigation Measures
2. For Photographic Locations refer to Figures 11.1 & 11.2
3. Visual Assessment undertaken 14/01/2024 when leaf & screening cover are at a minimum.