

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

PROPOSED LARGE-SCALE RESIDENTIAL DEVELOPMENT

AT

RAILPARK, MAYNOOTH, CO. KILDARE



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Kildare County Council - Inspection Purposes Only

CHAPTER 1

INTRODUCTION

1.0 INTRODUCTION

1.1 INTRODUCTION

John Spain Associates, Planning & Development Consultants, and the associated environmental consultants, have been commissioned by Cozone Ventures Ltd, to prepare an Environmental Impact Assessment Report (EIAR) in respect to a Large-scale Residential Development at Railpark, Maynooth, Co. Kildare.

The application is for a ten-year permission for a residential-led development comprising 581 no. residential units (including 185 no. apartments/duplexes and 396 no. houses), a neighbourhood centre, public open space, landscaping, car and cycle parking, access from the permitted Maynooth Eastern Ring Road (MERR), and all associated site and infrastructural works. The application site has an overall area of approximately 15.27 hectares.

The proposal is for a mix of housing types and apartment/duplex units ranging in height from two to part six storeys and includes 53 no. 1 beds, 151 no. 2 beds, 315 no. 3 beds and 62 no. 4 beds. The housing element includes a range of 2 bed, 3 bed and 4 bed units in terraced, semi-detached and detached formats. The apartment and duplex units comprise 1 bed, 2 bed and 3 bed units arranged in a series of 3 to part 6 storey blocks. All apartment and duplex units are provided with private amenity space in the form of balconies, terraces or private gardens.

The proposed neighbourhood centre is arranged in a five storey block and a part six storey block with a new public plaza and includes a range of community and commercial uses, comprising a childcare facility (762 sq.m), a café unit (74 sq.m), a health centre (174 sq.m), a pharmacy/shop (124 sq.m) and a convenience shop (166 sq.m). A total of 89 no. apartments are proposed at the upper levels of the neighbourhood centre.

The proposed development includes significant provision of public and communal open space, including approximately 2.76 hectares of public open space in the form of a Local Park, including a linear park element, and a series of Pocket Parks. Additional amenity spaces are provided throughout the scheme, including communal open space areas for apartments and duplexes, children's play areas, and an ancillary outdoor play space associated with the proposed childcare facility. The scheme also includes hard and soft landscaping, lighting, boundary treatments and associated public realm enhancements.

Vehicular access to the development will be provided from the permitted Maynooth Eastern Ring Road (MERR), including a new signalised pedestrian and cyclist crossing. The development includes internal roads, pedestrian and cycle paths, and access points extending to the application site boundary to allow for potential future connections to adjoining lands to the north and south, subject to agreement with the Planning Authority and relevant landowners.

The development also includes surface and foul water drainage infrastructure, 6 no. ESB substations, utilities and all associated and ancillary site development works necessary to facilitate the proposed development.

The central purpose of the Environmental Impact Assessment Report (EIAR) is to undertake an appraisal of the likely and significant impacts on the environment of the proposed development in parallel with the

project design process, and to document this process in the EIAR. This is then submitted to the competent / consent authority to enable it to assess the likely significant effects of the project on the environment.

A detailed description of the proposed development with greater detail regarding the development site and its surrounds is provided in Chapter 2 of this EIAR document, and elaborated on in the subsequent specialist chapters under the various environmental considerations.

As set out in Chapter 2, each Chapter of the EIAR includes a baseline assessment for the subject site and cumulative impact assessment of the proposed development with existing, under construction, permitted, and planned projects in the immediate area. Appendix 2.1 of the EIAR includes the relevant planning history of the surrounding area, which has informed each consultant's assessment, and they also undertook their own relevant planning history research. The potential cumulative impacts primarily relate to traffic, dust, noise and other nuisances from the construction of the development, with other planned or existing projects, and each of the following EIAR chapters has regard to these in the assessment and mitigation measures proposed.

This EIAR document has been prepared in accordance with the European Union EIA Directive 85/337/EC as amended by 97/11/EC, 2003/35/EC, 2011/92/EU and Directive 2014/52/EU.

The EIAR has also been prepared in accordance with the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (published in August 2018) and the EPA's Guidelines on the information to be contained in Environmental Impact Assessment Reports, May 2022, as well as the European Commission's Guidance on the preparation of the Environmental Impact Assessment Report (2013). It should also be noted that appropriate sectoral guidance has been considered in the preparation of a number of individual chapters of the EIAR including, for example, Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment (European Commission, 2013).

This Chapter describes the methodology via which the Environmental Impact Assessment Report (EIAR) was carried out and prepared. The methodology used is broadly consistent across all chapters in order to ensure the EIAR is clear and easy to navigate.

1.2 DEFINITION OF EIA AND EIAR

Directive 2014/52/EU (the 2014 Directive amending the 2011 codifying Directive) defines '*environmental impact assessment*' as a process, which includes the responsibility of the developer to prepare an Environmental Impact Assessment Report (EIAR), and the responsibility of the competent authority (in this case, Kildare County Council) to provide reasoned conclusions following the examination of the EIAR and other relevant information.

Article 1(2)(g) of the 2014 EIA Directive states that "*environmental impact assessment*" means a process consisting of:

- (i) *the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2);*
- (ii) *the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7;*

- (iii) *the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7;*
- (iv) *the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and*
- (v) *the integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a.*

The amending Directive (Directive 2014/52/EU) uses the term EIAR rather than environmental impact statement (EIS).

A definition of EIAR has not been included in the EIA Directive; however, Section 2 of the Planning and Development Act 2000, as amended, provides the following definition:

‘Environmental impact assessment report’ means a report of the effects, if any, which proposed development, if carried out, would have on the environment and shall include the information specified in Annex IV of the Environmental Impact Assessment Directive”.

In addition, the EPA Guidelines (2022)¹ state as follows in relation to an EIAR:

“The EIAR is prepared by the developer and is submitted to a CA (Competent Authority) as part of a consent process. The CA uses the information provided to assess the environmental effects of the project and, in the context of other considerations, to help determine if consent should be granted. The information in the EIAR is also used by other parties to understand the significant effects of the project and its effects and to inform their submissions to the CA.

The EIAR presents the results of a systematic analysis and assessment of the significant effects of a proposed project on the receiving environment. The amended EIA Directive prescribes a range of environmental factors which are used to organise descriptions of the environment and these factors must be addressed in the EIAR.

The EIAR should be prepared at a stage in the design process when changes can still be made to avoid significant adverse effects. This often results in the modification of the project to avoid or reduce effects through redesign”.

In summary, EIA is a process of examination, analysis and evaluation, carried out (in this case) by Kildare County Council, that identifies, describes and assesses, in an appropriate manner, in the light of this individual case, the direct and indirect significant effects of the proposed development on the environment. An EIAR is the document produced to inform that process and consideration of site-specific considerations and the establishment of the baseline environment against which the likely impacts of a proposed development can be assessed by way of a concise, objective and systematic methodology.

¹ *Guidelines on the Information to be contained in an Environmental Impact Assessment Report, Environmental Protection Agency, 2022*

1.3 EIA LEGISLATION

Certain public and private projects that are likely to have significant effects on the environment are subject to EIA requirements derived from EIA Directive 85/337/EC (as amended by Council Directive 97/11/EC, Directive 2003/35/EC, Directive 2009/31/EC, Directive 2011/92/EU and recently Directive 2014/52/EU which amends EIA law in a number of respects by amending Directive 2011/92/EU) which are designed to ensure that projects likely to have significant effects on the environment are subject to a comprehensive assessment of environmental effects prior to development consent being given.

Article 2 of Directive 2014/52/EU provides that Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with the Directive by 16 May 2017.

The Department of Housing, Planning, and Local Government brought forward amendments to the Planning and Development Act 2000, as amended, and the Planning and Development Regulations 2001-2022 to provide for the transposition of the EIA Directive into the Irish planning code for the purposes of the Irish planning system. To this effect, the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 have now transposed the 2014 Directive into Pt XA of the Planning and Development Act 2000, as amended.

The Department provided an update to the 2013 “*Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*” to provide practical guidance on legal and procedural issues arising from the requirement to undertake EIA in accordance with Directive 2014/52/EU. These Guidelines – ‘*Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*’ were published in August 2018. These Guidelines have informed the preparation of this EIAR.

As referenced above, the 2022 Guidelines prepared by the EPA have also informed this EIAR.

1.4 EIA GUIDELINES

Where significant and likely environmental effects are identified, the EIA process aims to quantify and minimise the impact development projects have on the environment through appropriate mitigation measures. The preparation of an EIAR requires site-specific considerations and the preparation of baseline assessment against which the likely impacts of a proposed development can be assessed by way of a concise, standardised and systematic methodology.

EIA practice has evolved substantially since the introduction of the EIA Directive in 1985. Practice continues to evolve and takes into account the growing body of experience in carrying out EIARs in the development sector. Table 1.1 sets out the relevant key EIA Guidance which has been consulted in the preparation of this EIAR document. In addition, the individual chapters of this EIAR should be referred to for further information on the documents consulted by each competent expert.

We would also note that the pre-application discussions with the Planning Authority and the LRD Opinion informed the content of the EIAR.

Table 1.1 – EIA Guidelines Consulted as Part of the Preparation of this EIA

Irish
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, August 2018, DPHLG - Guidelines on the information to be contained in environmental impact assessment reports, EPA, May 2022 - Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems - Key Issues Consultation Paper, Department of Environment, Community and Local Government, 2017. - Circular letter PL 1/2017 - Advice on Administrative Provisions in Advance of Transposition (2017). - Development Management Guidelines (DoEHLG, 2007). - Advice Notes on Current Practice (in preparation of Environmental Impact Statements) (EPA 2003). - Environmental Impact Assessment (EIA), Guidance for Consent Authorities Regarding Sub-Threshold Development (DoEHLG 2003). - Guidelines on Information to be Contained in an Environmental Impact Statement (EPA 2002).
European Union / European Commission (in addition to Directives referenced above)
- Environmental Impact Assessment of Projects – Guidance on the Preparation of the Environmental Impact Assessment Report (2017) - Environmental Impact Assessment of Projects – Guidance on Screening (2017) - Environmental Impact Assessment of Projects – Guidance on Scoping (2017) - Study on the Assessment of Indirect & Cumulative Impacts as well as Impact Interaction (DG Environment 2002). - EU Guidance on EIA Screening (DG Environment 2001). - Guidance on EIA Scoping (DG Environment 2001). - EIA Review Checklist (DG Environment 2001). - Guidance on integrating climate change and biodiversity into environmental impact assessment (European Commission, 2013).

The most recent guidelines are the '*Guidelines on the information to be contained in environmental impact assessment reports*' 2022.

The 2022 EPA Guidelines were prepared to help practitioners interpret the amended EIA Directive and have been published in final form upon the enactment of legislation to transpose the 2014 Directive for the purposes of EPA licencing processes. They provide practical guidance to planning authorities, An Bord Pleanála, and other relevant stakeholders, on procedural issues and the EIA process; and outline the key changes introduced by Directive 2014/52/EU.

The content of this Environmental Impact Assessment Report has been prepared in accordance with the provisions of Article 5(1) and Annex IV of Directive 2014/52/EU and Article 94 and Schedule 6 of the 2001 Planning and Development Regulations, as amended.

1.4.1 The EIA Process

The main purpose of the EIA process is to identify, describe and assess the direct and indirect significant impacts of the proposed project on the environment, and specifically on the following factors:

- (a) *population and human health;*
- (b) *biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;*
- (c) *land, soil, water, air and climate;*
- (d) *material assets, cultural heritage and the landscape; the interaction between the factors referred to in points (a) to (d)."*

The EIAR presents the results of the analysis and assessment of the significant effects of the proposed development on the receiving environment undertaken by the competent experts appointed by the developer to prepare the EIAR and sets out measures to be incorporated into the project to eliminate or minimise these impacts.

Several interacting steps typify the early stages of the EIA process and include:

- Screening;
- Scoping;
- Assessing Alternatives; and
- Assessing and Evaluating.

Screening: Screening is the term used to describe the process for determining whether a proposed development requires an EIA.

Scoping: This stage firstly identifies the extent of the proposed development and associated site, which will be assessed as part of the EIA process, and secondly, it identifies the environmental issues likely to be important during the course of completing the EIA process having regard to the nature of the proposed development and the receiving environment and through consultation with statutory and non-statutory stakeholders. A scoping request letter was issued to Uisce Eireann following feedback received in the LRD Opinion.

Assessing Alternatives: This stage describes the reasonable alternative approaches to the proposed development and sets out the main reasons for the chosen approach having regard to the effects of the respective alternatives on the environment. Consideration of alternatives is set out in Chapter 2 of this EIAR.

Assessing and Evaluating: The central steps of the EIA process include baseline assessment (desk study and field surveys) to determine the status of the existing environment, impact prediction and evaluation, and determining appropriate mitigation measures where necessary. This stage of the EIAR is presented in Chapters 3 to 16.

1.5 SCREENING FOR EIA

Screening is the term used to describe the process for determining whether a proposed development requires an EIA by reference to mandatory legislative threshold requirements or by reference to the type and scale of the proposed development and the significance or the environmental sensitivity of the receiving baseline environment.

Annex I of the EIA Directive requires as mandatory the preparation of an EIA for all development projects listed therein.

Schedule 5 (Part 1) of the Planning and Development Regulations 2001, as amended, transposes Annex 1 of the EIA Directive directly into Irish land use planning legislation. The EIA Directive prescribes mandatory thresholds in respect to Annex 1 projects.

Annex II of the EIA Directive provides EU Member States discretion in determining the need for an EIA on a case-by-case basis for certain classes of project having regard to the overriding consideration that projects likely to have significant effects on the environment should be subject to EIA.

Schedule 5 (Part 2) of the Planning and Development Regulations 2001, as amended, sets mandatory thresholds for each project class. Sub-section 10(b) (i) to (iv) addresses '*Infrastructure Projects*' and requires that the following relevant class of project be subject to EIA:

- Class 10(b)(i) the threshold is 'more than 500 dwelling units'.
- Class 10(b)(iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.

The development is for 581 no. dwellings and the application site has an overall area of 15.27 hectares within a built-up area and therefore requires EIA.

The EIAR provides information on the receiving environment and assesses the likely significant effects of the project and proposes mitigation measures to avoid or reduce these effects. The function of the EIAR is to provide information to allow the competent authority to conduct the Environmental Impact Assessment (EIA) of the proposed development.

1.6 SCOPING FOR EIA

The EPA Guidelines state that 'Scoping' is a process of deciding what information should be contained in an EIAR and what methods should be used to gather and assess that information. It is defined in the EC guidance² as:

'Determining the content and extent of the matters which should be covered in the environmental information to be submitted in the EIAR'.

The EIAR prepared for the scheme has endeavoured to be as thorough as possible and therefore the provisions included in the revised EIA Directive and all of the issues listed in Schedule 6, Sections 1, 2 and 3 of the Planning and Development Regulations 2001-2025 and in relevant guidance documents have been addressed in the EIAR.

In this context the following topics/issues have been reviewed and addressed in the context of the proposed development:

- Introduction and Methodology

² Guidance on EIA Scoping, EC, 2001

- Project Description and Alternatives
- Population, Human Health
- Archaeology, Architecture and Cultural Heritage
- Biodiversity
- Landscape and Visual Impact
- Land and Soils
- Hydrogeology
- Water
- Air Quality
- Climate
- Noise and Vibration
- Traffic and Transport
- Material Assets
- Interactions of the Foregoing
- Principal Mitigation and Monitoring Measures
- Non-Technical Summary

In addition to the above, a series of standalone reports have been prepared to accompany the application, and which have helped inform the above chapters of the EIAR where relevant and listed in JSA cover letter. Chapter 2 provides details of the envisaged phased delivery of development on the lands.

It is necessary to examine each of the aforementioned sections of the EIAR with respect to the impacts that the proposed development may have on the environment. The purpose of the scoping exercise is to shape and mould the EIAR so as not to dismiss any potential impacts that may in fact be significant, and to focus on issues which need to be resolved.

The scope of this EIAR has been informed by the following:

- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, August 2018
- Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA, 2022
- Environmental Impact Assessment of Projects – Guidance on the Preparation of the Environmental Impact Assessment Report (2017) – European Commission
- Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems - Key Issues Consultation Paper, Department of Environment, Community and Local Government, 2017
- Circular letter PL 1/2017 - Advice on Administrative Provisions in Advance of Transposition (2017)
- The requirements of Part X of the Planning Acts, and Part 10 of the Planning and Development Regulations 2001, as amended
- Kildare County Council Development Plan 2023-2029
- Maynooth and Environs Joint Local Area Plan (LAP) 2025 – 2031
- National and Regional Planning Policy Documents
- Pre-application consultations and feedback

- The likely concerns of third parties
- The nature, location and scale of the proposal
- The existing environment together with any vulnerable or sensitive local features and current uses
- The planning history and environmental assessments associated with the subject site and adjoining lands
- The likely and significant impacts of the proposed development on the environment
- Available methods of reducing or eliminating undesirable impacts
- Feedback from the Stage 1 and Stage 2 LRD pre-application meeting / opinion from Kildare County Council

The content of this Environmental Impact Assessment Report has been prepared in accordance with the provisions of Article 5(1) and Annex IV of Directive 2014/52/EU. Article 5(1) states:

“The information to be provided by the developer shall include at least:

- (a) a description of the project comprising information on the site, design, size and other relevant features of the project;*
- (b) a description of the likely significant effects of the project on the environment;*
- (c) a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;*
- (d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;*
- (e) a non-technical summary of the information referred to in points (a) to (d); and*
- (f) any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected.”*

Annex IV states:

“1. A Description of the project, including in particular:

- (a) a description of the location of the project;*
- (b) a description of the physical characteristics of the whole project, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;*
- (c) a description of the main characteristics of the operational phase of the project (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used;*
- (d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operation phases.*

2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

4. *A description of the factors specified in Article 3(1) likely to be significantly affected by the project: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.*
5. *A description of the likely significant effects of the project on the environment resulting from, inter alia:*
 - (a) *the construction and existence of the project, including, where relevant, demolition works,*
 - (b) *the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;*
 - (c) *the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;*
 - (d) *the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);*
 - (e) *the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;*
 - (f) *the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;*
 - (g) *the technologies and the substances used.*

The description of the likely significant effects on the factors specified in Article 3(1) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project.
6. *A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.*
7. *A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.*
8. *A description of the expected significant adverse effects of the project on the environment deriving from the vulnerability of the project to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.*
9. *A non-technical summary of the information provided under points 1 to 8.*
10. *A reference list detailing the sources used for the descriptions and assessments included in the report."*

1.7 PURPOSE OF THE EIAR

The objective of the EIAR is to identify and predict the likely environmental impacts of the proposed development; to describe the means and extent by which they can be reduced or ameliorated; to interpret and communicate information about the likely impacts; and to provide an input into the decision making and planning process. As provided for in the EPA Guidelines, the EIAR focuses on:

- *‘Effects that are both likely and significant; and*
- *Description of the effects that are accurate and credible’*

It is intended that this EIAR will assist Kildare County Council as the competent authority, statutory consultees and the public in assessing all aspects of the application proposals.

The definition of Environmental Impact Assessment is clarified within the 2014 EIA Directive and is as follows:

*“(g) ‘environmental impact assessment’ means a process consisting of:
the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2);
the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7;
the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7;
the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and
the integration of the competent authority’s reasoned conclusion into any of the decisions referred to in Article 8a.”*

Under Article 5(3) of the 2014 Directive, it is expressly required that the developer must ensure that the environmental impact assessment report (EIAR) is prepared by competent experts. Each of the chapters of this EIAR for the subject development have been prepared by experts with the requisite qualifications and competences.

The intention of this EIAR document is to provide transparent, objective and replicable documentary evidence of the EIA evaluation and decision-making processes which led to the selection of the final project configuration. The EIAR documents the consideration of environmental effects that influenced the evaluation of alternatives. It also documents how the selected project design incorporates mitigation measures, including impact avoidance, reduction or amelioration; to explain how significant adverse effects will be avoided.

1.8 OBJECTIVES OF THIS EIAR

Section 2.4 of the 2022 EPA guidelines list the following fundamental principles to be followed when preparing an EIAR:

- Anticipating, predicting, avoiding and reducing significant effects
- Assessing and mitigating effects
- Maintaining objectivity
- Ensuring clarity and quality
- Providing relevant information to decision makers
- Facilitating better consultation.

The amended EIA Directive prescribes a range of environmental factors which are used to organise descriptions of the environment and the environmental impact assessment should identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the prescribed environmental factors which are:

- (a) population and human health;
- (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;
- (c) land, soil, water, air and climate;
- (d) material assets, cultural heritage and the landscape;
- (e) the interaction between the factors referred to in points (a) to (d).

The EIA process was based on the following four key objectives:

- Pursuing Preventative Action
- Maintaining Environmental Focus and Scope
- Informing the Decision
- Public & Stakeholder Participation

This EIAR documents the analysis, evaluation and assessment of the likely significant effects of the proposed Large Scale Residential development at Railpark, Maynooth, Co. Kildare, on each of these environmental factors.

Pursuing preventative action is the most effective means by which potential negative environmental impacts can be avoided. Avoidance of impacts has been principally achieved through the consideration of alternatives and through the review of the project design in light of identified key environmental constraints. This is outlined in greater detail in Chapter 2.

The EIAR document enables Kildare County Council, as competent authority, to reach a decision on the acceptability of the proposed development in the full knowledge of the project's likely significant impacts on the environment, if any.

Decisions are taken by competent/consent authorities through the statutory planning process which allows for public participation and consultation while receiving advice from other key stakeholders and statutory authorities with specific environmental responsibilities.

The structure, presentation and the non-technical summary of the EIAR document as well as the arrangements for public access all facilitate the dissemination of the information contained in the EIAR. The core objective is to ensure that the public and local community are aware of any likely environmental impacts of projects prior to the granting of consent.

1.9 FORMAT AND STRUCTURE OF THE EIAR

The preparation of an EIAR requires the assimilation, co-ordination and presentation of a wide range of relevant information in order to allow for the overall assessment of a proposed development. For clarity and to allow for ease of presentation and consistency when considering the various elements of the proposed development, a systematic structure is used for the main body of this EIAR document.

The structure used in this EIAR document is a **Grouped Format** structure. This structure examines each environmental topic³ in a separate chapter of this EIAR document. The structure of the EIAR is set out in Table 1.2 and Table 1.3 below.

TABLE 1.2: STRUCTURE OF THIS EIAR		
Ch.	Title	Content
1	Introduction and Methodology	Sets out the purpose, methodology and scope of the document.
2	Project Description and Alternatives	Sets out the description of the site, design and scale of development, considers all relevant phases from construction through to existence and operation together with a description and evaluation of the reasonable alternatives studied by the developer including alternative locations, designs and processes considered; and a justification for the option chosen taking into account the effects of the project on the environment.
3	Population and Human Health	Describes the demographic and socio-economic profile of the receiving environment and potential impact of the proposed development on population, i.e. human beings, and human health.
4	Archaeology, Architecture and Cultural Heritage	Provides an assessment of the site and considers the potential impact of the proposed development on the local archaeology, architecture and cultural heritage; and recommends mitigation measures.
5	Biodiversity	Describes the existing ecology on site and in the surrounding catchment and assesses the potential impact of the proposed development and mitigation measures incorporated into the design of the scheme.
6	Landscape and Visual Impact	Details the likely effects on the landscape and visual environment of the proposed development with reference to the accompanying verified view montages.
7	Land and Soils	Provides an overview of the baseline position, the potential impact of the proposed development on the site's soil and geology and impacts in relation to land take and recommends mitigation measures.
8	Hydrogeology	Provides an overview of the baseline position, the potential impact of the proposed development on the sites hydrogeology and recommends mitigation measures.

³ In some instances, similar environmental topics are grouped.

9	Water	Provides an overview of the baseline position, the potential impact of the proposed development on water quality and quantity and recommends mitigation measures.
10	Air Quality	Provides an overview of the baseline air quality and climatic environment, the potential impact of the proposed development, and recommends mitigation measures.
11	Climate	Provides an overview of the baseline climatic environment, the potential impact of the proposed development, and recommends mitigation measures.
12	Noise and Vibration	Provides an overview of the baseline noise environment, the potential impact of the proposed development and recommends mitigation measures.
13	Traffic and Transport	Describes the existing transport services and infrastructural service requirements of the proposed development and the likely impact of the proposed development on these material assets.
14	Material Assets	Describes the existing services and infrastructural service requirements of the proposed development and the likely impact of the proposed development on material assets.
15	Interactions of the Foregoing	Describes the potential interactions and interrelationships between the various environmental factors.
16	Principal Mitigation and Monitoring Measures	Sets out the key mitigation and monitoring measures included in the above chapters of the EIAR Document for ease of reference.
Non-Technical Summary		Provides a concise non-technical summary of the information contained in the EIAR

This systematic approach described above employs standard descriptive methods, replicable assessment techniques and standardised impact descriptions to provide an appropriate evaluation of each environmental topic under consideration. An outline of the methodology employed in most chapters to examine each environmental topic is provided in Table 1.3.

TABLE 1.3: METHODOLOGY EMPLOYED TO EVALUATE EACH ENVIRONMENTAL TOPIC

- **Introduction:** Provides an overview of the specialist area and specifies the specialist who prepared the assessment and their qualifications and competencies.
- **Study Methodology:** This subsection outlines the method by which the relevant impact assessment has been conducted within that chapter.
- **The Existing Receiving Environment (Baseline Situation):** In describing the receiving environment, the context, character, significance and sensitivity of the baseline receiving environment into which the proposed development will fit is assessed. This also takes account of any proposed developments that are likely to proceed.
- **Characteristics of the Proposed Development:** Consideration of the 'Characteristics of the Proposed Development' allows for a projection of the 'level of impact' on any particular aspect of the environment that could arise. For each chapter those characteristics of the proposed development

which are relevant to the area of study are described; for example, the chapter on noise describes the machinery and operations which are likely to produce noise while the landscape and visual impact would describe the height, scale and location of the development.

The characteristics of projects must be considered, with particular regard to: (a) the size and design of the whole project; (b) cumulation with other existing and/or approved projects; (c) the use of natural resources, in particular land, soil, water and biodiversity; (d) the production of waste; (e) pollution and nuisances; (f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge; (g) the risks to human health (for example due to water contamination or air pollution).

- **Potential Impact of the Proposed Development:** This section provides a description of the specific, direct and indirect, impacts that the proposed development may have. This is provided with reference to both the Receiving Environment and Characteristics of the Proposed Development sections while also referring to the (i) magnitude and intensity, (ii) integrity, (iii) duration and (iv) probability of impacts. Impact assessment addresses direct, indirect, secondary, cumulative, short, medium and long-term permanent, temporary, positive and negative effects as well as impact interactions. It is important to consider the appropriateness of subdividing sections into 'Construction Phase' and 'Operational Phase' in describing impacts, mitigation measures etc.
- **Do Nothing Impact:** In order to provide a qualitative and equitable assessment of the proposed development, this section considers the proposed development in the context of the likely impacts upon the receiving environment should the proposed development not take place.
- **Avoidance, Remedial and Mitigation Measures:** Avoidance, Remedial and Mitigation measures describe any corrective or mitigative measures that are either practicable or reasonable, having regard to the potential impacts. This includes avoidance, reduction and remedy measures as set out in Section 4.7 of the Development Management Guidelines 2007 to reduce or eliminate any significant adverse impacts identified.
- **Residual Effects of the Proposed Development:** This section allows for a qualitative description of the resultant specific direct, indirect, secondary, cumulative, short, medium and long-term permanent, temporary, positive and negative effects as well as impact interactions which the proposed development may have, assuming all mitigation measures are fully and successfully applied.
- **Monitoring:** This involves a description of monitoring in a post-development phase, if required. This section addresses the effects that require monitoring, along with the methods and the agencies that are responsible for such monitoring.
- **Reinstatement:** While not applicable to every aspect of the environment considered within the EIAR, certain measures need to be proposed to ensure that in the event of the proposal being discontinued, there will be minimal impact to the environment
- **Interactions:** This section provides a description of impact interactions together with potential indirect, secondary and cumulative impacts

- **Difficulties Encountered in Compiling:** This section provides an indication of any difficulties encountered by the environmental specialist in compiling the required information.
- **References:** Consultants refer to documents referred to in preparing their chapter / undertaking their assessment.

1.10 DESCRIPTION OF IMPACTS OF THE EIAR

The EPA *Guidelines on the information to be contained in Environmental Impact Assessment Reports* 2022 require that the direct, indirect, cumulative and residual impacts of the proposed development for both the construction and operational stages are described. The identified quality, significance and duration of effects for each aspect are categorised, as set out below. Quality refers to the nature of the impact, significance of effects refers to the degree that these will impact on the site and surrounding area and duration refers to how long the effects are likely to last for. A direct impact is an impact the development will give rise to. An indirect impact is similar to a secondary impact – it may result in consequences not in the immediate vicinity of the site. Cumulative Impacts are impacts that arise in conjunction with other consented developments. Residual impacts are those which remain after mitigation measures have been applied.

The quality of potential effects are described as follows:

Table 1.4: Quality of Potential Effects	
Quality of Effects	Definition
Negative	A change which reduces the quality of the environment.
Neutral	No effects or effects that are imperceptible, within the normal bounds of variation or within the margin of forecasting error.
Positive	A change which improves the quality of the environment.

The significance of an effect on the receiving environment are described as follows:

Table 1.5: Significance of Effects	
Significance of Effects on the Receiving Environment	Description of Potential Effects
Imperceptible	An effect capable of measurement but without significant consequences.
Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.

Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters a sensitive aspect of the environment.
Profound	An effect which obliterates sensitive characteristics.

The duration of effects as described in Section 3.4 of the 2022 EPA Guidelines is:

Table 1.6: Duration of Effects	
Duration of Impact	Definition
Momentary	Effects lasting from seconds to minutes
Brief	Effects lasting less than a day
Temporary	Effects lasting one year or less
Short-term	Effects lasting one to seven years
Medium-term	Effects lasting seven to fifteen years
Long-term	Effects lasting fifteen to sixty years
Permanent	Effects lasting over sixty years
Reversible	Effects that can be undone, for example through remediation or restoration

1.11 EIA PROJECT TEAM

Under Article 5(3) of the 2014 Directive, it is expressly required that the developer must ensure that the environmental impact assessment report (EIAR) is prepared by competent experts. Each of the chapters of this EIAR for the subject development have been prepared by experts with the requisite qualifications and competences, as set out in each Chapter.

1.11.1 EIA Project Management

The preparation of this EIAR was project managed, co-ordinated and produced by John Spain Associates in association with a team of specialist environmental consultants, the applicant and overall design team. John Spain Associates' role was to coordinate the EIA process and to liaise between the design team and various environmental specialist consultants. John Spain Associates were also responsible for editing the EIAR document to ensure that it is cohesive and not a disjointed collection of disparate reports by various environmental specialists. John Spain Associates does not accept responsibility for the input of specialist consultants or the design team.

1.11.2 EIAR Competent Experts/Environmental Specialists

Environmental specialist consultants were also commissioned for the various technical chapters of the EIAR document which are mandatorily required as per the EIA Directive and Regulations.

The amended EIA Directive (Directive 2014/52/EU) states the following in relation to the persons responsible for preparing the environmental impact assessment reports:

'Experts involved in the preparation of environmental impact assessment reports should be qualified and competent. Sufficient expertise, in the relevant field of the project concerned, is required for the purpose

of its examination by the competent authorities in order to ensure that the information provided by the developer is complete and of a high level of quality’.

In order to outline compliance with this requirement and in line with emerging best practice the EIAR states the names of the environmental consultants who have prepared each element of the EIAR and lists their qualifications and relevant experience; demonstrating that the EIAR has been prepared by competent experts. This is also in accordance with the 2018 EIA Guidelines for Planning Authorities and An Bord Pleanála.

Each environmental specialist was commissioned having regard to their previous experience in EIA; their knowledge of relevant environmental legislation relevant to their topic; familiarity with the relevant standards and criteria for evaluation relevant to their topic; ability to interpret the specialised documentation of the construction sector and to understand and anticipate how their topic will be affected during construction and operation phases of development; ability to arrive at practicable and reliable measure to mitigate or avoid adverse environmental impacts; and to clearly and comprehensively present their findings.

Each environmental specialist was required to characterise the receiving baseline environment; evaluate its significance and sensitivity; predict how the receiving environment will interact with the proposed development and to work with the EIA project design team to devise measures to mitigate any adverse environmental impacts identified.

The relevant specialist consultants who contributed to the EIAR and their inputs are set out in Table 1.7 below:

TABLE 1.7: EIAR SPECIALIST CONSULTANTS, QUALIFICATIONS AND EXPERTISE	
Organisation	EIAR Specialist Topics / Inputs
John Spain Associates Planning & Development Consultants, 39 Fitzwilliam Place, Dublin 2, D02 ND61 T: 01 662 5803 E: pturley@johnspainassociates.com E: tdevlin@johnspainassociates.com E: aoneill@johnspainassociates.com Paul Turley - BA, MRUP, Dip Environmental & Planning Law, MIPI Tiarna Devlin – BA, MRUP, MRTPI, MIPI Anton O'Neill - MPLAN	• Introduction • Project Description and Alternatives • Population and Human Health (Daylight / Sunlight and Microclimate) • Interactions of the Foregoing • Material Assets • Principle Mitigation and Monitoring Measures • Non-Technical Summary
Archaeological Consultancy Services Unit Archaeological Consultancy Services Unit Ltd	• Archaeology, Architecture and Cultural Heritage

TABLE 1.7: EIAR SPECIALIST CONSULTANTS, QUALIFICATIONS AND EXPERTISE

Organisation	EIAR Specialist Topics / Inputs
Unit 13 Upper Baggot Street, Second Floor, Dublin 4 T: 01 2530983 E: magda@acsu.ie E: donald@acsu.ie Magda Lyne - MA, MIAI Donald Murphy - MA, MIAI	
DNV DNV Services UK Limited Block 71, The Plaza, Park West Unit 3D, Core C Dublin 12 D12F9TN T +353 1 565 4730 E: Aoife.Gillen@dnv.com E: shane.connolly@dnv.com E: Sanni.Hintikka@dnv.com E: Laura.Griffin@dnv.com Biodiversity Shane Connolly - B.Sc. in Botany / Plant Biology Sanni Hintikka - B.Sc. (Hons) in Zoology and a Ph.D. in Marine Ecology Air Quality Laura Griffin - B.A in English and Geography and M.Sc in Climate Change Climate Aoife Gillen – M.Sc	• Biodiversity • Appropriate Assessment Screening Report • Air Quality • Climate • Noise and Vibration
AIT Landscape and Urbanism AIT Urbanism + Landscape Limited 3rd Floor,	• Landscape and Visual Impact

TABLE 1.7: EIAR SPECIALIST CONSULTANTS, QUALIFICATIONS AND EXPERTISE

Organisation	EIAR Specialist Topics / Inputs
Newmarket House, Newmarket Square Dublin 8 T: + 353 (0) 86 3263466 E: Margaret@ait-place.ie Margaret Egan – MILI, B.A in Landscape Horticulture and B.A of Science in Environmental Resource Management, Diploma in EIA Management	
Roughan O'Donovan Consulting Engineers Roughan & O'Donovan Consulting Engineers Arena House, Arena Road, Sandyford, Dublin 18, Ireland T: +353 (0)1 294 0800 E: Ciaran.McGee@rod.ie E: Maryann.Nwankwo@rod.group E: John.Cody@rod.ie E: Eoin.O'Cathain@rod.ie Ciaran McGee - CEng MIEI, RConsEI) Maryann Nwankwo - BSc (Hons) MSc hydrogeology, CWEM, MCIWEM, CENV, FGS John Cody - MSc, BSc Hons, Dip Pollution Control, MIEI Eoin O'Catháin - BE MSc PGDip Const Law PGDip H&S CEng MIEI RConsEI MCIArb	• Land and Soils including soil investigations report. • Water • Hydrogeology • Materials Asset • Traffic and Transport
Wave Dynamics Wave Dynamics Limited Unit 302, Nesta Business Centre, Old Airport Road, Santry, Dublin 9 D09 HP96 T: +353 (0)1 9125070	• Noise and Vibration

TABLE 1.7: EIAR SPECIALIST CONSULTANTS, QUALIFICATIONS AND EXPERTISE

Organisation	EIAR Specialist Topics / Inputs
E: James.Cousins@wdacoustics.com E: Cathal.Reck@wdacoustics.com Cathal Reck - BSc (Hons) in Music Technology & Production, IOA Certificate of Competence in Environmental Noise Measurement. James Cousins - BSc (Hons) Pg Cert (Const Law) IOA Diploma (Acoustics & Noise Control) MIEI MIOA	

1.12 NON-TECHNICAL SUMMARY

One of the objectives of the EIA process is to ensure that the public are fully aware of the environmental implications of any decisions. Article 5(1)(e) requires the developer to include a non-technical summary in the EIAR.

The EPA guidelines 2022 note that the non-technical summary of the EIAR should facilitate the dissemination of the information contained in the EIAR and that the core objective is to ensure that the public is made as fully aware as possible of the likely environmental impacts of projects prior to a decision being made by the Competent Authority.

The 2018 EIA Guidelines (paragraph 4.6) prepared by the DHPLG state that the Non-Technical Summary *“should be concise and comprehensive and should be written in language easily understood by a lay member of the public not having a background in environmental matters or an in-depth knowledge of the proposed project.”*

A Non-Technical Summary of the EIAR has therefore been prepared which summarises the key environmental impacts and is provided as a separate document

1.13 DESCRIPTION OF THE OPERATION STAGE OF THE PROJECT

Pursuant to the EIA Directive an EIAR document is required to set out a description of the project processes, activities, materials and natural resources utilised; and the activities, materials and natural resources and the effects, residues and emissions anticipated by the operation of the project.

The proposed development is a residential development including associated roads and services infrastructural works, and areas of open space. The primary direct significant environmental effects will arise during the construction stage. As a result, post-construction, the operation of the proposed development is therefore relatively benign and not likely to give rise to any significant additional impacts in terms of activities, materials or natural resources used or effects, residues or emissions which are likely to have a significant impact on population and human health, biodiversity, soils, water, air, climate, or landscape.

The primary likely and significant environmental impacts of the operation of the proposed development are fully addressed in the EIAR document; and relate to Population and Human Health, Landscape and Visual Impact and Noise and Air impacts associated with the traffic generated.

The proposed development also has the potential for cumulative, secondary and indirect impacts particularly with respect to such topics as traffic – which in many instances – are often difficult to quantify due to complex inter-relationships. However, all cumulative secondary and indirect impacts are unlikely to be significant; and where appropriate, have been addressed in the content of this EIAR document.

1.13.1 Description of Changes to the Project

The Guidelines on the information to be contained in environmental impact assessment reports were published by the EPA in May 2022.

The EPA EIAR Guidelines 2022 state in relation to change:

“Very few projects remain unaltered throughout their existence. Success may bring growth; technology or market forces may cause processes or activities to alter. All projects change and – like living entities – will someday cease to function. The life cycles of some types of projects, such as quarries, are finite and predictable. Such projects often consider their closure and decommissioning in detail from the outset, while for most projects a general indication of the nature of possible future changes may suffice. While the examination of the potential consequences of change (such as extension) does not imply permission for such extension, its identification and consideration can be an important factor in the determination of the application. Descriptions of likely changes may cover:

- *Extension*
- *Decommissioning*
- *Other Changes.”*

As per the EPA guidelines and in the interests of proper planning and sustainable development it is important to consider the potential future growth and longer-term expansion of a proposed development in order to ensure that the geographical area in the vicinity of the proposed development has the assimilative carrying capacity to accommodate future development.

Given the extent of the proposed site layout, and the constraints posed by physical boundaries, adjoining land uses, and landownership, there is limited potential for future expansion of the development within the site. Any future growth is likely to be confined to minor domestic extensions, which would have a negligible impact.

It is noted, however, that the wider Railpark lands are identified under Section 11.4.1 of the Maynooth and Environs Joint Local Area Plan (LAP) as part of the Railpark Key Development Area (KDA). These lands are strategically designated to accommodate integrated residential neighbourhoods that will support the planned growth of the town.

The parameters for the future development of the area in the vicinity of the subject site are governed by the Kildare County Development Plan 2023-2029 and the Maynooth and Environs Joint Local Area Plan (LAP) 2025 – 2031. Any adjacent undeveloped lands will be the subject of separate planning applications

in the future, where they are identified as being suitable for development, and where the provision of the requisite physical and other infrastructure is available.

1.13.2 Description of Secondary and Off-Site Development

A Part 8 application (Reg. Ref.: P82019-08) was approved by Kildare County Council on the 29th of July 2019 for the Maynooth Eastern Ring Road (MERR), which will provide a link between the R405 Celbridge Road and R148 Leixlip Road, including a bridge over the Royal Canal and railway line. The route of this link road is orientated through the subject lands, and will serve the proposed residential development, and we note that the LAP requires the MERR to be constructed prior to or in tandem with the development of the new residential development within the Railpark KDA.

The Maynooth Eastern Ring Road (to be provided by Kildare County Council) will traverse the proposed development lands in a north-south direction. Vehicular access to the proposed development will be via the new T-junction on the Maynooth Eastern Ring Road (MERR), and a secondary access on the southern portion of the site. The northeast section of the development will be accessed via a new local access road connecting to the MERR. The MERR will connect the proposed development to the R148 Leixlip Road to the north and the R405 Celbridge Road to the south.

The Maynooth Eastern Ring Road Scheme will deliver new water infrastructure for future developments, maintaining separate foul and surface water drainage systems. The foul sewer network will discharge to both the existing 300mm sewer and new infrastructure linked to the Ring Road Scheme. Of the total units, 273 no. units will connect to the existing Uisce Éireann network, while 308 no. units and commercial spaces will connect to the new system. Please refer to ROD reports and documentation for further information on water and wastewater connections and services.

The applicant accepts that a planning condition requiring further engagement and formal connection agreements with Uisce Eireann will be necessary to facilitate the phased implementation of this LRD.

1.13.3 Risk of Major Accidents and/or Disasters

The surrounding context consists of a mix of residential, agricultural, employment, educational and open space lands. It does not include any man-made industrial processes (including SEVESO II Directive sites (96/82/EC & 2003/105/EC) which would be likely to result in a risk to human health and safety.

Article 3 of the Environmental Impact Assessment (EIA) Directive 2014/52/EU requires the assessment of expected effects of major accidents and/or disasters within an EIA. Article 3(2) of the Directive states that:

“The effects referred to in paragraph 1 on the factors set out there in shall include the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project concerned”.

Chapter 16 of the EIAR provides further detail and an assessment of expected effects of major accidents and/or disasters.

1.13.4 Construction Phase Mitigation

With reference to the construction phase of the proposed development, the objective of the *Outline Construction Waste Management Plan*, included with the application, is to ensure that waste generated during the proposed construction and operation phases will be managed and disposed of in a way that ensures the provisions of the Waste Management Acts 1996 (as amended) are complied with.

During the construction stage, the risk of accidents associated with the proposed development are not predicted to cause unusual, significant or adverse effects to the existing public road network. The vast majority of the works are away from the public road in a controlled environment.

It is expected that the risk of accidents would be low during the construction of the proposed development considering the standard construction practices which are to be used.

With reference to the operational phase of the development the design of the scheme has had regard to DMURS during its design. This will promote a pedestrian friendly environment, promoting sustainable development and reducing the influence of cars. This has the potential to reduce accidents within the proposed development.

With reference to natural disasters (e.g. flooding), the proposed development has undergone a Site-Specific Flood Risk Assessment, prepared by ROD Consulting Engineers. The main area of the site where development is proposed is not at risk of fluvial, pluvial or groundwater flooding.

1.14 LINKS BETWEEN EIA AND APPROPRIATE ASSESSMENT (&OTHER RELEVANT ASSESSMENTS)

Article 6(3) of the Habitats Directive (92/43/EEC) states any project not directly connected with or necessary to the management of a Natura 2000 site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to the Appropriate Assessment procedure of its likely implications for the site in view of the site's conservation objectives.

In January 2010, the Department issued a guidance document entitled 'Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities'. This guidance document enshrines the 'Source-Pathway-Receptor' into the assessment of plans and projects which may have an impact on Natura 2000 sites.

Accordingly, an Appropriate Assessment Screening exercise was undertaken by DNV in accordance with 'Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – Methodological Guidance on the Provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC'. The AA Screening Report is included with the LRD application. Following the submission of the AA Screening Report at LRD Stage 2, it was determined that a Natura Impact Statement (NIS) would be required. DNV has since prepared the NIS as part of the Stage 3 application pack, and we refer to this document for further detail.

In accordance with these Guidelines, the Appropriate Assessment may be a separate document or form part of the EIAR. In the case of the proposed development a separate Appropriate Assessment Screening Report is submitted with this application as a standalone report and referenced in the Biodiversity Chapter.

Article 5(1) of the Directive also states that the EIAR shall include the information that may reasonably be required for reaching a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. The developer shall, with a view to avoiding duplication of assessments, take into account the available results of other relevant assessments under Union or national legislation, in preparing the environmental impact assessment report.

In this regard, while not required under Part 23 of the Planning and Development Regulations 2001-2025, a brief account of how the results of other relevant assessments considered in the preparation of this EIAR is included as Appendix 1.1 to this chapter.

1.15 AVAILABILITY OF EIAR DOCUMENTS

A copy of this EIAR document and Non-Technical Summary of the EIAR document is available for purchase at the offices of Kildare County Council (Planning Authority) at a fee not exceeding the reasonable cost of reproducing the document. It can also be viewed on the LRD website: www.railparklrd.com set up by the applicant.

1.16 IMPARTIALITY

This EIAR document has been prepared with reference to a standardised methodology which is universally accepted and acknowledged. Recognised and experienced environmental specialists have been used throughout the EIA process to ensure the EIAR document produced is robust, impartial and objective.

It should be noted that, as highlighted above, an important part of the EIA process is preventative action which causes the project design team to devise measures to avoid, reduce or remedy significant adverse impacts in advance of applying for consent. As a result, where no likely significant impacts have been identified where they might reasonably be anticipated to occur, the design and layout of the proposed development has generally been amended to minimise the potential of any likely significant adverse impacts.

1.17 STATEMENT OF DIFFICULTIES ENCOUNTERED

No particular difficulties, such as technical deficiencies or lack of knowledge, were encountered in compiling any of the specified information contained in this statement, such that that the prediction of impacts has not been possible. Where any specific difficulties were encountered these are outlined in the relevant chapter of the EIAR.

1.18 QUOTATIONS

EIAR documents by their very nature contain statements about the proposed development, some of which are positive, and some negative. Selective quotation or quotations out of context can give a very misleading impression of the findings of this EIAR.

The EIAR study team urge that quotations should, where reasonably possible be taken from the conclusions of specialists' chapters or from the non-technical summary and not selectively.

1.19 EIAR QUALITY CONTROL AND REVIEW

John Spain Associates is committed to consistently monitoring the quality of EIAR documents prepared both in draft form and before they are finalised, published and submitted to the appropriate competent authority taking into account latest best-practice procedure, legislation and policy.

The DHPLG have published guidelines on Environmental Impact Assessment for Planning Authorities and the Board (published August 2018)⁴, and the EPA have published guidelines on the information to be contained in an Environmental Impact Assessment Report⁵ which have been consulted in the preparation of this EIAR, in addition to the EIAR guidance published by the European Commission in 2017.

1.20 ERRORS

While every effort has been made to ensure that the content of this EIAR document is error free and consistent there may be instances in this document where typographical errors and/or minor inconsistencies do occur. These typographical errors and/or minor inconsistencies are unlikely to have any material impact on the overall findings and assessment contained in this EIAR.

⁴ *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, 2018*

⁵ *Guidelines on the Information to be contained in an Environmental Impact Assessment Report, Environmental Protection Agency, 2022*

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APPENDIX 1.1

OTHER RELEVANT ASSESSMENTS CONSIDERED

Relevant Legislation	Nature of Assessment	Relevant Assessment
Directive 92/43/EEC, the Habitats Directive	Appropriate assessment comes from the Habitats Directive (92/43/EEC), which seeks to safeguard the long-term survival of Europe's most valuable and threatened species and habitats. The geographical areas of particular importance to these species and habitats have been selected as Special Areas of Conservation (SAC) and Special Protection Areas (SPA) which are collectively referred to (in Ireland) as European sites. Together, these sites comprise the pan-European Natura 2000 network of protected areas. One of the measures which protects these areas is the requirement that every project must undergo an assessment of its implications for any European site before consent for the project is given. Consent for the project can only be given after determining that it will not adversely affect the integrity of the site(s) concerned in view of the conservation objectives of that site.¹ In order to determine if an appropriate assessment is required, a screening process must be carried out for all applications for planning permission. The Habitats Directive (92/43/EEC) and the associated Birds Directive (2009/147/EC) are transposed into Irish legislation by Part XAB of the 2000 Act and the Birds and Natural Habitats Regulations 2011. The legislative provisions for appropriate assessment screening for planning applications are set out in Section 177U of the 2000 Act.	An Appropriate Assessment Screening Report (DNV 2025) accompanies this LRD application. The AA Screening Report concludes that Stage 2 appropriate assessment is required and accompanies this LRD application. On this basis, a Natura Impact Statement accompanies this application.

Directive 2000/60/EC, The Water Framework Directive	The Water Framework Directive (WFD) (Directive 2000/60/EC) and The Groundwater Directive (Directive 2006/118/EC) requires all Member States to protect and improve water quality in all waters. The WFD is one of the key overarching instruments in the protection of waters and includes subordinate directives or water-related legislation that complement or have been developed in response to, or coherent with, the requirements of the Water Framework Directive. The WFD requires 'Good Water Status' for all European waters to be achieved through a system of river basin management planning and extensive monitoring by 2015 or, at the least, by 2027. 'Good status' means both 'Good Ecological Status' and 'Good Chemical Status'. The WFD does not require site specific assessments to be undertaken by a developer. It lays down standards for the quality of designated waters ("guide" values as well as "imperative" values) and requires Member States to monitor the quality of designated waters and to take measures to ensure that they comply with the minimum standards¹.	The EIAR includes a detailed chapter addressing Water, prepared by ROD Consulting. Subject to the mitigation set out within the EIAR, it was determined that the development would not give rise to any significant impact on water or affect the status of any watercourse under the Water Framework Directive.
Directive 2001/42/EC, The SEA Directive	The Strategic Environmental Assessment (SEA) Directive 2001/42/EC, on the assessment of the effects of certain plans and programmes on the environment requires that an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment. Public plans and	The SEA for the relevant County Development Plan incorporates mitigation to minimise the impact of the plans on the environment. The policies of the plan and the LAP were formulated with regard to the SEA processes undertaken. The subject site was designated for the nature and form of development proposed under the relevant plan and LAP, which has been subject to SEA. This is addressed in

	programmes that are likely to have significant effects on the environment must have a Strategic Environmental Assessment (SEA). The SEA Directive (2001/42/EC) is implemented in Ireland by the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI 435/2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI 436/ 2004), as amended. There are no specific assessments required by the developer under the SEA Directive in respect of the current SHD application on site. A SEA has been undertaken by the relevant authority in respect of the Kildare County Development Plan 2017-2023 and a SEA was undertaken for the Celbridge Local Area Plan 2017-2023.	further detail in the context of the assessment of alternatives within Chapter 2 of this EIAR.
Directive 2002/49/EC, regarding environmental noise	The Environmental Noise Directive 2002/49/EC relates to the assessment and management of environmental noise; this is the main EU instrument to identify noise pollution levels and to trigger the necessary action both at Member State and at EU level. The Directive requires Member States to prepare and publish, every 5 years, noise maps and noise management action plans for: • agglomerations with more than 100,000 inhabitants • major roads (more than 3 million vehicles a year) • major railways (more than 30.000 trains a year) • major airports (more than 50.000 movements a year,	Chapter 12 of this EIAR comprises an assessment of noise and vibration impacts associated with the development. The noise assessment undertaken as part of the EIAR, has regard to the relevant provisions of Directive 2002,49/EC.

	including small aircrafts and helicopters) When developing noise management action plans, Member States' authorities are required to consult the concerned public. Relevant bodies develop noise action plans that we consider as appropriate.	
Seveso Directive (Directive 82/501/EEC, Directive 96/82/EC, Directive 2012/18/EU)	The Seveso Directive (Directive 82/501/EEC, Directive 96/82/EC, Directive 2012/18/EU) was developed by the EU after a series of catastrophic accidents involving major industrial sites and dangerous substances. Such accidents can give rise to serious injury to people or serious damage to the environment, both on and off the site of the accident. The Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015 (S.I. No. 209 of 2015) (the "COMAH Regulations"), implements the latest Seveso III Directive (2012/18/EU). The purpose of the COMAH Regulations is to transpose the Seveso Directive into Irish law and lay down rules for the prevention of major accidents involving dangerous substances, and to seek to limit as far as possible the consequences for human health and the environment of such accidents, with the overall objective of providing a high level of protection in a consistent and effective manner.	The subject lands are not proximate to any Seveso/COMAH designated sites. As set out within Chapter 3 of the EIAR, the site is located beyond the consultation zone for the nearest SEVESO site, which is located at Intel Ireland Limited, Collinstown Industrial Park, Leixlip, Co. Kildare. 3.7km to the east of the site. Furthermore, there are no substances to be stored as part of the proposed development that would be controlled under Seveso Directive or COMAH Regulations. Due to the separation distance from the proposed development site to the nearest site controlled under the Seveso Directive, and the fact that it lies outside the consultation zone, there are no specific assessments required by the Applicant under the Seveso Directive or COMAH Regulations.
Directive 2008/50/EC, the clean air	The Clean Air for Europe (CAFE) Directive 2008/50/EC is the prevailing legislation to	Due to the nature of the proposed development, there are no specific assessments required by the applicant

for Europe directive	improve the quality of air in Europe and limit exposure to air pollution. The CAFE Directive set rules including how to monitor, assess, and manage ambient air quality. Overall, the main objective of the CAFE Directive is to reduce human and environmental exposure to air pollutants and ensure that the limits of values and thresholds are not exceeded. The CAFE Directive was transposed into Irish legislation by S.I. No. 180/2011 - Air Quality Standards Regulations 2011. The CAFÉ Directive mandates the location and quantity of air monitoring stations that Environmental Protection Agency (EPA) should undertake ambient air monitoring. If there is an exceedance of the ambient limit value an Air Quality Action Plan must be developed by Local Authorities in conjunction with the EPA. Chapter 9 of this EIAR includes an assessment of air quality and climate impacts associated with the development. The analysis and findings within that chapter of the EIAR were made with regard to the provisions of Directive 2008/50/EC.	under the CAFE Directive for the Proposed Development. The air quality and climate assessments undertaken as part of the EIAR, which had regard to the relevant provisions of Directive 2008/50/EC, concluded that no significant impacts would arise subject to mitigation.
Directive 2007/60/EC, regarding the assessment and management of flood risks	The Floods Directive (Directive 2007/60/EC) establishes a framework for the assessment and management of flood risks, with the aim to reduce the adverse consequences on human health, the environment and material assets.	Kildare County Council undertook a Strategic Flood Risk Assessment as part of the Maynooth and Environs Joint Local Area Plan preparation process, which zoned the subject site for the nature of development proposed. The application is accompanied by a detailed Site-Specific Flood Risk

	The Floods Directive requires Member States to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk. The Floods Directive also reinforces the rights of the public to access this information and to have a say in the planning process. The Floods Directive must be implemented in tandem with the WFD. In Ireland, the OPW is the national authority assigned with the implementation of the Floods Directive, which was transposed into Irish law by the EU (Assessment and Management of Flood Risks) Regulations SI 122 of 2010.	Assessment Report prepared by ROD Consulting. As set out in Chapter 3 of this EIAR, all proposed residential and commercial development within the subject site is located outside a Flood Zone, and there is low to very low residual risk of flooding of any sort on site.
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CHAPTER 2

PROJECT DESCRIPTION AND ALTERNATIVE

2.0 PROJECT DESCRIPTION AND ALTERNATIVES

2.1 INTRODUCTION AND TERMS OF REFERENCE

This section of the EIAR has been prepared by John Spain Associates, Planning & Development Consultants, and provides a description of the proposed development and also explains the evolution of the scheme design through the reasonable alternatives examined. This chapter of the EIAR was prepared by Tiarna Devlin, BA, MRUP, MRTPI, MIPI and Anton O'Neill, MPLAN, MRTPI, and approved by Paul Turley, Managing Director, BA, MRUP, Dip Environmental & Planning Law, MIPI, of John Spain Associates, Planning and Development Consultants. The description of the proposed development is one of the two foundations upon which an EIAR is based (the other being the description of the existing environment described in this chapter and by each of the specialist consultants in the subsequent chapters). It is also a requirement of the EIA Directive (as amended) to present an outline of the reasonable alternatives considered and a justification of the final proposed development.

The Directive requires an EIAR to contain:

“A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.”

A systematic approach in accordance with the EPA's Guidelines on the Information to be Contained in EIARs (2022), Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (2018), and other EIA guidance documents, was used to ensure all relevant aspects of the development are accurately and fully described. The objective is to provide a description of the proposed development in sufficient detail, which when taken together with the description of the existing environment provided, will allow an independent reader without acquired technical environmental knowledge, to understand the significant impacts likely to arise from the proposed development.

The description of the proposed development is set out in this chapter and the following chapters by each specialist consultant in terms of those environmental topics which will form the basis of the impact assessment process and the characteristics of the proposed development which could potentially affect population, human health, archaeology, architectural and cultural heritage, biodiversity, landscape and visual impact, land and soil, hydrogeology, water, air quality, climate, noise and vibration, traffic and transport, and material assets. The EIA Directive also requires that the description of the site, design, size or scale of the development, considers all relevant phases of the existence of the project from its construction through to its existence and operation (and where applicable its restoration or decommissioning).

This EIAR document fully reflects the key environmental impacts of the proposed development which were recognised from the scoping carried out by the design team and the level of detail required will vary considerably according to the sensitivity of the existing environment and the potential of the project for significant effects.

2.2 SITE LOCATION AND DESCRIPTION

2.2.1 Site Location and Description

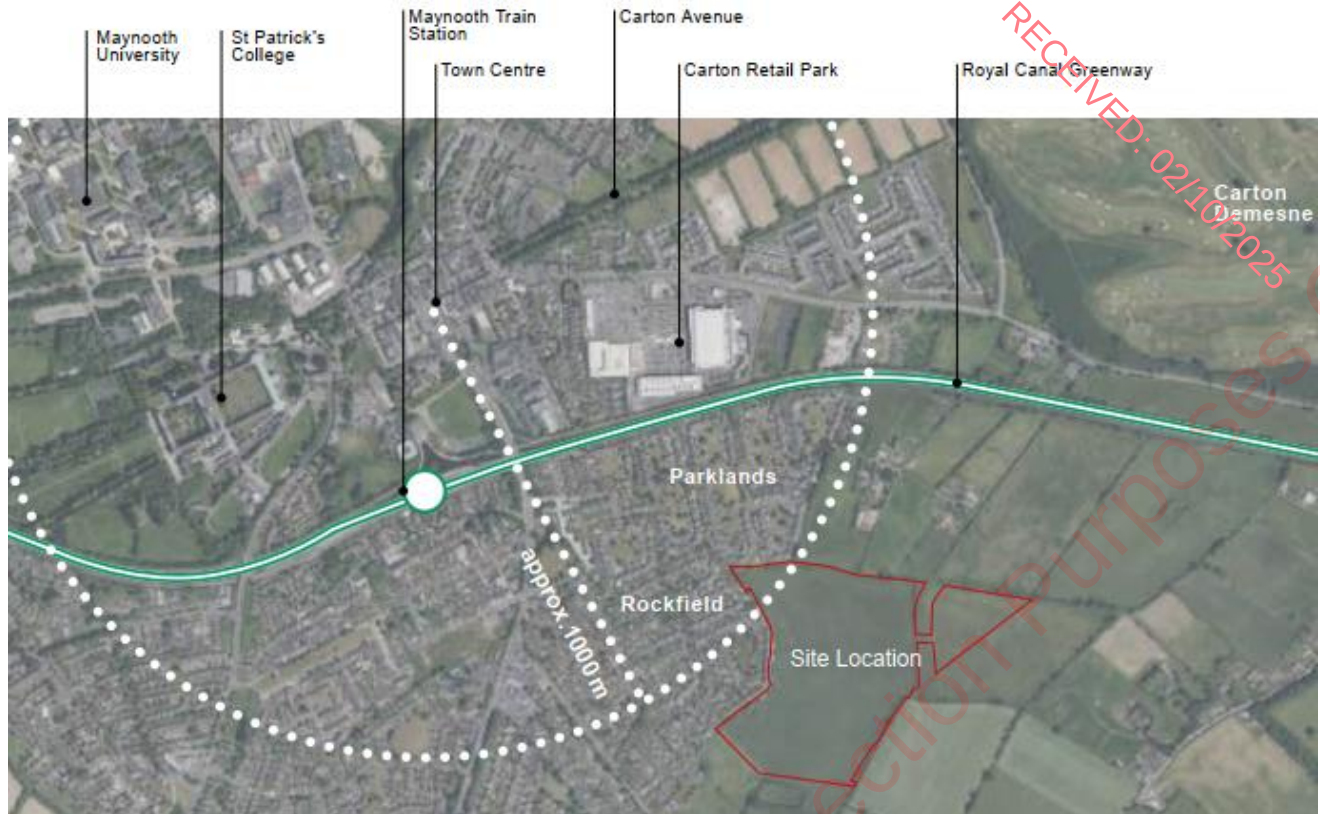
The application site has a total area of c. 15.27 hectare and is located on the eastern side of Maynooth, south of the Dublin-Sligo railway line and the Royal Canal, in an area known as Railpark, as illustrated in Figure 2.1 below. The site is approximately 1.65 km east of the town centre and 1.5 km from Maynooth rail station (via Celbridge Road) and is currently in agricultural use (see Figure 2.2), but forms part of the designated 'Key Development Area – Railpark' in section 11.4.1 of the Maynooth and Environs Joint Local Area Plan 2025-2031. The subject site is zoned C(2)- New Residential with a small portion of the lands zoned N- Neighbourhood Centre as outlined on Map 11.1 of the JLAP, the proposed development is for the southern lands of the Railpark Key Development Area as shown in Figure 2.1 and Figure 2.2.

The application site (See Figure 2.1) comprises a greenfield site located at Railpark and is situated at the edge of the established built-up area of Maynooth. The site is situated to the east / southeast of established residential neighbourhoods at Parklands and Rockfield. The application site is bound by Parklands Grove housing estate to the west, greenfield sites to the north and east and to the south by the ongoing development of 'The Grange' residential development.

The site is located to the northeast of 'The Grange' residential development, which was permitted under Reg. Ref.: 21155 / ABP Ref: 312671-22 (Phase 1) and Reg. Ref.: 21156 / ABP Ref: 312685-22 (Phase 2), and which is currently under construction. Maynooth Educate Together National School on Celbridge Road is located approx. 230 metres to the south and Gaelscoil Ui Fhiaich National School is located on the opposite side of the Celbridge Road.

There are hedgerows along the northern and western boundaries of the site, the northern hedgerow being the most complete. The hedgerow along the western boundary with Rockfield is fragmented with many gaps where vegetation has been removed. There are ornamental trees and hedging planted in adjoining gardens intermingled with the hedgerow. There is also a hedgerow running north-south through the site and along the southeastern corner. Please refer to the Biodiversity Chapter of this EIAR and the Arboricultural Report and Drawings prepared by Charles McCorkell for further details.

Figure 2.1: Site location in context with Maynooth (approximate location of site outlined in red)



Source: JFA Design Statement

Figure 2.2: Aerial photograph of Railpark lands, with the approximate extent of the application site outlined in red



Source: Google Maps

As outlined in ROD's Transport Impact Assessment, the proposed development is located approximately 400m north of the R405 (Celbridge Road), 400m south of the Dublin–Sligo railway line and the Royal Canal, and approximately 600m south of the R148 (Leixlip Road). Junction 7 of the M4 motorway lies approximately 950m to the south-west of the site.

A Part 8 application (Reg. Ref.: P82019-08) was approved by Kildare County Council on the 29th of July 2019 for the Maynooth Eastern Ring Road (MERR), which will provide a link between the R405 Celbridge Road and R148 Leixlip Road, including a bridge over the Royal Canal and railway line. The route of this link road is orientated through the subject lands, and we note that the LAP requires the MERR to be constructed prior to or in tandem with the development of the new residential development within the Railpark KDA.

The CPO process associated with MERR is currently being progressed by KCC following approval by An Bord Pleanála on the 26th day of January 2024. A contractor was appointed in June 2025, with the scheme scheduled to commence on site in September / October 2025. The anticipated construction duration is 18 months, with completion expected by February 2027. In advance of the construction of the MERR, direct access to a public road is not possible. However, the recent permissions on the Railpark lands to the south, which is now under construction, provide the potential for vehicular access through these adjacent lands to the Celbridge Road.

The subject lands are strategically located adjacent to and accessed from the MERR, which in turn forms a strategic element of the overall Maynooth Outer Orbital Route, which is of strategic importance to the future and significant planned growth for the 'Key Town' of Maynooth.

The Maynooth Eastern Ring Road (to be provided by Kildare County Council) will traverse the proposed development lands in a north-south direction. Vehicular access to the proposed development will be via the new T-junction on the Maynooth Eastern Ring Road (MERR). The north-east section of the development will be accessed via a new local access road connecting the MERR. The MERR will connect the proposed development to the R148 Leixlip Road to the north and the R405 Celbridge Road to the south.

As outlined in ROD Transport Impact Assessment, the Maynooth Train Station is within 12-20 minutes of walking distance from the proposed development and local amenities in Maynooth centre. It is served by the Commuter Service and Intercity Service. The Commuter Service runs between Dublin Connolly Station and Maynooth with a frequency of 15-30 minutes. The train station is part of the Dart+ West programme which aims to modernise and improve existing rail services in the Greater Dublin Area, delivering frequent, modern, electrified services to Maynooth.

The proposed site is also accessible by bus. Bus services along the Straffan Road are approximately c. 10 minutes walk from the proposed site. Phase 2 of the BusConnects Network Redesign launched on November 2021 saw the introduction of C-Spine routes including the following below that serve the Maynooth area:

- C3 – Maynooth to Ringsend: Frequency 30 minutes.
- C4 - Maynooth to Ringsend: Frequency 30 minutes.
- C5 - Maynooth to Ringsend: Frequency 5 buses per day.
- C6 - Maynooth to Ringsend; Frequency 5 buses per day.

As part of the BusConnects programme, it is proposed to further enhance the number of bus service in the area. The following BusConnects routes will serve the Straffan Road and the R405 Celbridge Road:

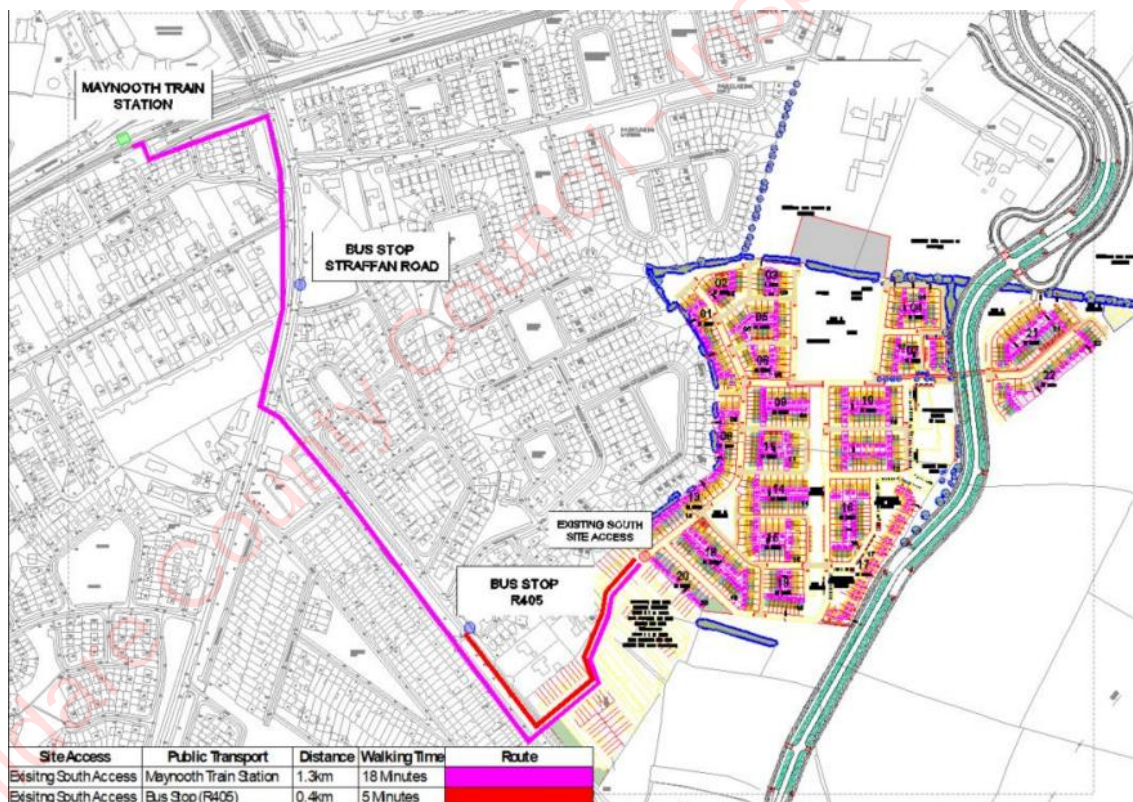
- D3: Maynooth – Ringsend, serving Straffan Road
- X25: Maynooth – Merrion Square, serving Straffan Road
- X26: Maynooth – UCD (Via City Centre), serving Straffan Road
- W6: Maynooth – Tallaght, serving R405 Celbridge Road

Figure 2.3 below illustrates the following distances to public transport from proposed and futures connections from the site:

- **Proposed Connection:**
 - ~1.3km / 18 min walking distance to Maynooth Station
 - ~0/4km / 5 min walking distance to C3/C4 bus stops on R405 Celbridge Road (via adjoining lands to the south)
- **Proposed Connection (from Site B/Parklands Grove):**
 - ~0.9km / 12 min walking distance to Maynooth Station
 - ~0.8km / 11 min walking distance to C3/C4 bus stops on Straffan Road

ROD Transport Impact Assessment notes the local public transport system will have adequate capacity to cater for the additional passenger loading associated with the proposed development.

Figure 2.3: Public Transport Accessibility from the Site (Proposed and Future Connections)



Source: ROD Transport Impact Assessment Report

The subject site is well served by existing social and community infrastructure with a wide mix and variety of uses. The proposed neighbourhood centre will provide for a creche at ground floor level of block B a

Health centre and a mix of retail uses. The subject site is also within walking distance of the town centre with a large range of restaurants, cafes and other services/facilities such as churches, community centres, medical services and a library. There are a number of sports and recreational facilities available in proximity to the site, including Ace Fit Club, Harbour Field Park and Glenroyal Leisure Club.

2.2.2 Relevant Planning History / Cumulative Assessment

Further detail on the planning history of the subject site and surrounding area is included in Appendix 2.1, including details of permissions adjacent to the subject site, and permissions in the vicinity of the site. The details of these permissions / applications were provided to the EIAR consultancy team and have informed the cumulative impact assessment undertaken as part of the preparation of this EIAR, with each consultant considering and undertaking their own planning history search in respect to their cumulative impact assessment where necessary. The identification of relevant existing and permitted developments in terms of cumulative impacts has been undertaken based on a qualitative review of the planning history of the surrounding area and site visits and desktop analysis of the area undertaken by the EIAR team. Site visits have informed the consideration of potential cumulative effects, allowing for identification of developments which are currently under construction or recently completed in the vicinity.

Relevant developments have been identified with regard to their size and scale, their use mix and composition, and their proximity to the proposed development, in particular to identify any substantial / large scale residential development or larger scale commercial development. Applications of a minor nature were discounted from the planning history search, for example applications for under 10 no. dwellings, or applications relating to minor extensions, works to existing dwellings, applications for commercial development of less than 1,000 sq.m, and change of use applications. The planning history search focussed on relevant permitted developments in the last 5 years, with a search also undertaken for permitted longer term permissions (i.e. with a 10 year permission).

A zone of influence of c. 500 metres was initially used for the desk-based identification of relevant development in close proximity to the site and given the limited planning permissions identified in this zone, this was subsequently extended to c. 1,000 metres. Larger developments with potential for in-combination construction or operational impacts have also been considered in the wider area beyond the 500 metre and 1,000 metre radius including permitted strategic housing developments. The 500 metre and 1,000m radius from the centre of the subject site was generated on the Kildare County Council online planning enquiry map.

This qualitative approach to the identification of relevant developments is effective in scoping the potential for cumulative impacts / in combination effects and has informed the EIAR chapters and the accompanying application reports prepared by specialist consultants, which assists in the consideration of potential cumulative impacts as part of this EIAR. However, it should be noted that, depending on the particular environmental factor, some of the accompanying chapters / reports may consider other developments either within the immediate surrounding area or further afield (for example more distant development that may be relevant for some factors such as traffic / noise, may be less relevant to other environmental factors such as, for example, archaeology and cultural heritage).

2.3 PROJECT OVERVIEW

A ten-year permission is sought for development described as follows in the public notices:

“The proposed development will consist of 581 no. residential units, a neighbourhood centre and all associated development, on a site of approximately 15.27 hectares.

The residential component of the development consists of 185 no. apartment / duplex apartments and 396 no. houses to be provided as follows:

- 59 no. 2 bed two storey mid terraced houses;
- 52 no. 3 bed two storey mid terrace houses;
- 223 no. 3 bed two storey end terrace/semi-detached houses;
- 58 no. 4 bed two storey semi-detached houses;
- 4 no. 4 bed two storey detached houses;
- 185 no. duplex apartments / apartments (53 no. 1 beds, 92 no. 2 beds, 40 no. 3 beds) in a series of 3 to part 6 storey duplex apartment blocks / apartment blocks.

The proposed neighbourhood centre consists of 3 no. buildings (Block A, Block B and a single storey standalone café / restaurant kiosk building) and a new public plaza and communal open space. Block A is part 5 storey / part 6 storey building comprising health centre (174 sq.m) and two no. shop units (124 sq.m pharmacy and 166 sq.m convenience shop) at ground floor level and 41 no. apartments (17 no. 1 beds and 24 no. 2 beds) from first to fifth floor level. Block B is a 5 storey building block comprising a childcare facility (762 sq.m) at ground floor level and 48 no. apartments (21 no. 1 beds and 27 no. 2 beds) from first to fourth floor level.

96 no. duplex apartments units (12 no. 1-bed, 48 no. 2-bed, and 36 no. 3-bed units) are provided in 5 no. blocks (Blocks 1 to 5) ranging from 3 no. storeys to 5 no. storeys. All duplex apartments and apartment units are provided with a balcony, terrace or private garden on all elevations.

A total of 888 no. surface car parking spaces are proposed for residential units, visitor parking and the neighbourhood centre commercial uses. A total of 623 no. cycle spaces are proposed for long stay/residents, 42 no. spaces for the neighbourhood centre commercial uses and 93 no. short stay/visitor cycle parking spaces.

The proposal includes significant public open space including a new Local Park, linear park and pocket parks, children's play areas and ancillary play area for the childcare facility. The development includes hard and soft landscaping, lighting, boundary treatments and communal open space areas.

The proposed development provides for two no. vehicular accesses from the permitted Maynooth Eastern Ring Road (MERR), including a new pedestrian/cyclist signalised crossing, associated internal roads, pedestrian and cycle infrastructure, set down areas, bin and bike stores, paths and access points provided up to the application site boundary to provide for potential future connections to adjoining lands to the north and south.

The development includes foul and surface water drainage, 6 no. ESB Substations, green roofs, PV panels, plant, services and all associated and ancillary site works and development.

An Environmental Impact Assessment (EIAR) and Natura Impact Statement (NIS) has been prepared for the development and accompanies the planning application.”

The application site area is c. 15.27 hectares. The red line on the site location map and site layout plans indicates the overall extent of the proposed development and associated works which are the subject of this application. The application site takes in an area of the proposed MERR, within the applicant's landholding, in order to provide for access arrangements, improvements to the public roads and connections to services. The associated and ancillary site works and development includes for

landscaping, hard surfacing and servicing tie-ins with the MERR, as illustrated on the architectural, landscape and engineering drawings, and will be subject to agreement with KCC.

The proposed development has been designed to maximise the use of the site whilst mitigating impacts on the existing residential areas adjoining the site of the proposed development. The height is sympathetic to the neighbouring properties in proximity to the site boundaries. The neighbourhood centre buildings, containing the childcare facility and commercial / community uses with apartments above, are 5 storeys and part 5 and part 6 storeys in height, with a single storey café / restaurant pavilion type building, and represent an attractive landmark and entrance to the proposed new neighbourhood, located adjacent to the MERR. The development respects the scale of the residences to the west, north and south of the site and will not overshadow adjoining properties in Parklands and Rockfield. The layout has been designed to reflect the vision, connectivity/movement, built form and landscape and open space requirements set out in Section 11.4.1 of the LAP for the Key Development Area - Railpark.

As discussed in greater detail in the Statement of Consistency and Planning Report and the Architectural Design Statement, this application also responds to feedback from the Planning Authority during pre-application consultations, including the LRD Opinion. The final scheme has been revised from the pre-application iterations and via the consideration of alternatives as documented within this chapter of the EIAR.

2.4 STATUTORY PLANNING CONTEXT

2.4.1 National, Regional and Local Planning Policy Context

The subject lands are subject to national, regional, county and local planning policy. The following outlines the key planning documents of relevance to the future development of the subject lands. This section will not address the detailed policies and objectives contained in the various plans which are relevant to the proposed residential development at Railpark, as these are addressed in a separately bound Planning Report and Statement of Consistency with Planning Policy which is submitted herewith. Compliance with the following national, regional, and local planning policy context is demonstrated within the Planning Report and Statement of Consistency:

National & Regional

- National Planning Framework- First Revision 2025;
- Housing for All – a New Housing Plan for Ireland (2021);
- Regional Spatial & Economic Strategy for the Eastern & Midland Regional Assembly 2019;
- Sustainable and Compact Settlements Guidelines for Planning Authorities (2024);
- Planning Design Standards for Apartments Guidelines for Planning Authorities, 2025;
- Urban Development and Building Heights Guidelines 2018;
- Guidelines for Planning Authorities on 'The Planning System and Flood Risk Management 2009 as amended by Circular Flooding Guidelines 2014;
- Quality Housing for Sustainable Communities (DoEHLG, 2008);
- Childcare Facilities, Guidelines for Planning Authorities (2001);
- Design Manual for Urban Roads and Streets (2019);
- Transport Strategy for the Greater Dublin Area 2022 – 2042;
- Climate Action Plan 2024-2025.

Local

- Kildare County Development Plan 2023-2029; and
- Maynooth and Environs Joint Local Area Plan 2025-2031.

The Kildare County Development Plan 2023-2029 (CDP) sets out the planning policy context for future development in the County up to 2029, including the core strategy, settlement hierarchy, development management standards and policies and objectives for the protection of the built and natural environment. The CDP came into effect on the 28th of January 2023 and sets out the key demographics and development standards for the proper planning and sustainable development of the County.

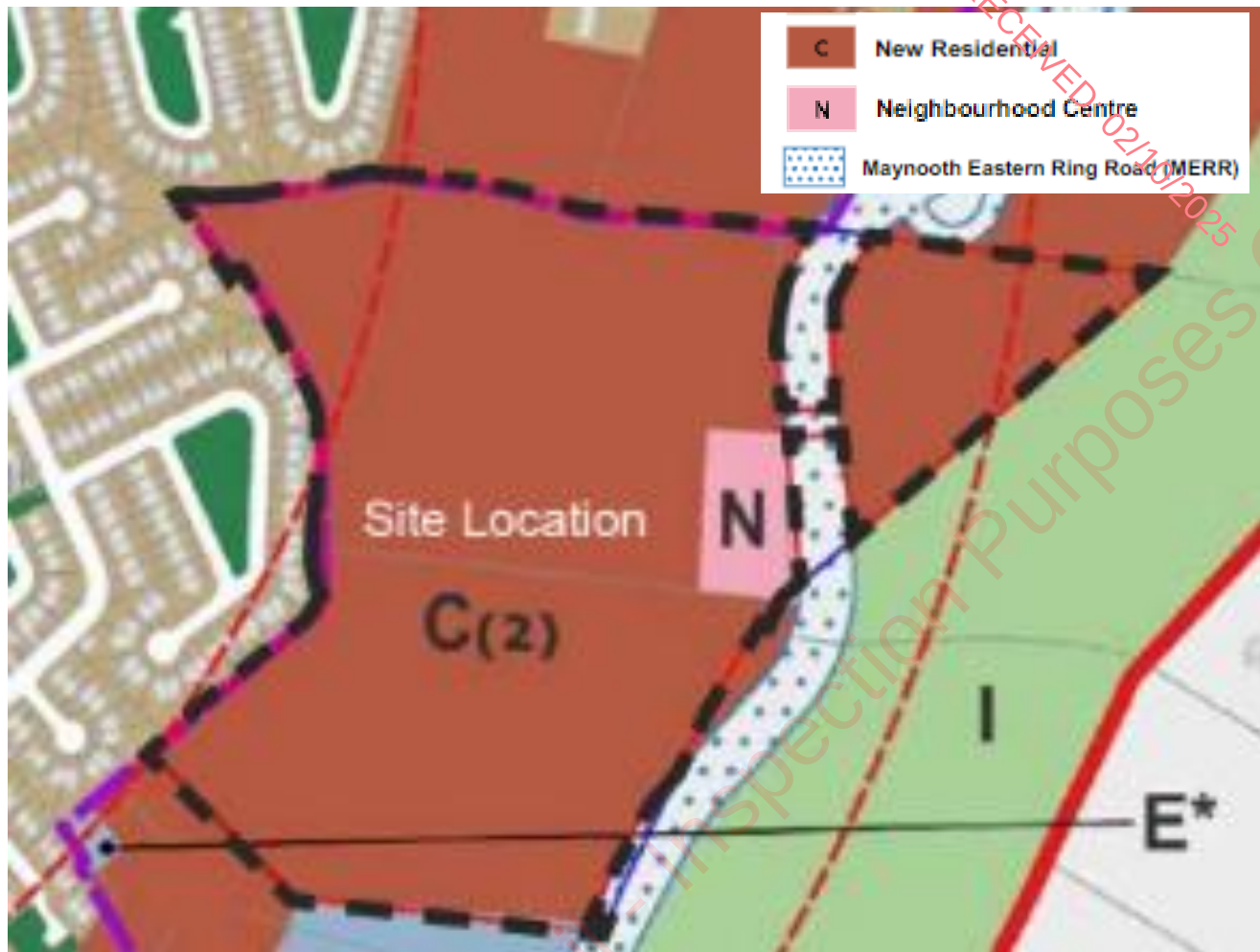
The Core Strategy designates Maynooth as a Key Town, which sits at the top of the settlement hierarchy, reflecting the RSES designation of Naas and Maynooth as Key Towns in the County. The Plan defines Key Towns as *“Large towns which are economically active that provide employment for their surrounding areas. High quality transport links and the capacity to act as regional drivers to complement the Regional Growth Centres”*.

The Development Plan refers to the National Planning Frameworks' NPO 68 which allows for a further allowance by way of up to 20% of targeted growth in the city being transferred to other settlements in the MASP, such as Maynooth. This has been agreed with the MASP Implementation Group and Maynooth is to receive an additional population of 10,000 on top of its Core Strategy allocation of 2,741.

The site is also located within an area subject to the Maynooth and Environs Joint Local Area Plan 2025-2031, which was adopted by Kildare County Council in February 2025 and came into effect in April 2025. In respect to the subject site, the Local Area Plan supports the delivery of residential development and supporting infrastructure.

The majority of the subject lands are zoned *“C2-New Residential”* in the Maynooth LAP, the objective of which is *“To provide for new residential development”*. A small portion of the lands are zoned *“N-Neighbourhood Centre”* which seeks *“To provide for new/existing neighbourhood centres and associated facilities. Neighbourhood centres are intended to serve the immediate needs of local residents and workers and should not compete with similar retail uses within the town centre.”* As shown in Figure 2.4 below. A small section of the south of the site and the east of the site is identified as forming part of the corridor for the Maynooth Eastern Ring Road as previously discussed and which will provide access to the proposed development once delivered.

Figure 2.4: LAP Land Use Zoning Map (extract of Map 11.1), with the approximate extent of subject site outlined in black



Source: JFA Design Statement

The Kildare County Development Plan outlines a population target of 2,741 no. persons and 997 no. residential units for Maynooth during the lifetime of the Development Plan. The LAP has allocated half of the additional population growth target of 10,000 persons, i.e. 5,000 people, providing a total of 1,591 no. additional residential units for Maynooth over the plan period to 2031.

The proposed development provides for a total of 581 no. residential units, with a mix of housing types, a neighbourhood centre, which includes a childcare facility and commercial / community uses, a local park, and all associated development on the subject lands, which adheres to the requirements of the LAP in respect to the subject lands. The residential density for the proposed development is 39.3 ha based on 14.76 ha net site area, which is consistent with the indicative net density of 40 uph for Railpark (which also includes adjoining lands). Table 11.1 of the LAP outlines an estimated residential yield for the wider Railpark Key Development area of 954 no units.

Figure 2.5: Figure 11.6 from the Maynooth and environs Joint LAP outlining the KDA Railpark lands



The proposed development forms a comprehensive development, with good transport links that will deliver infrastructure, including the access roads and junctions to the reserved school lands, in addition to the significant provision of public open space. The proposed development at Railpark is currently expected to be constructed over a 6-7 year period, with all units complete by 2031 contingent on the completion of the Uisce Eireann pumping station under Reg. Ref.: 21360 to the northeast of the subject site, local Uisce Eireann upgrades and the MERR. Uisce Eireann issued an updated confirmation of feasibility letter (COF) on the 13th of June 2025 which confirmed that water and wastewater connections are feasible contingent on upgrades. The COF confirms that the western portion of the site can connect to the existing network and that the western portion of the site will need to connect to the MERR

infrastructure. The wastewater connection to the network from the east portion of the site draining to the strategic wastewater pumping station (WWPS) can be facilitated prior to completion of the upgrade project subject to construction and commissioning of the strategic WWPS. Phase 5 and 6 of the proposed development will need to connect to the new WWPS as discussed in section 2.7.2.1 below, Phases 5 and 6 are scheduled to start construction in Q1 2029 contingent on planning.

The provision of 581 no. residential units and the scale and form of development proposed is consistent with the settlement development aims of the Core Strategy. The proposed development will assist in meeting the housing needs of Maynooth as part of the housing allocation of up to 1,591 no. units to be delivered by 2031.

Moreover, the Key Development Area of Railpark is identified as a New Residential Area in the Local Area Plan with the vision *“To realise the creation of a compact and well-integrated urban extension that consolidates development within the eastern area of Maynooth. The KDA will deliver a local park and a neighbourhood centre, as well as providing a site for a new post-primary school which will be developed over the medium to long term.”* As shown in Figure 2.5.

The proposed development aligns with the key principles of the Local Area Plan as set out in Section 11.4.1 for the KDA lands, including:

- The proposed development contributes to the overall vision for the Railpark KDA to provide for the development of a new residential community, including a Neighbourhood Centre and a local park, that includes an all-weather Multi-Use Games Area (MUGA) and playground, and integrates with its surroundings whilst having its own unique character and a strong sense of place;
- The proposed primary vehicular access to the subject site is provided from the proposed MERR, with a secondary access to the south, which could also cater for access to a new secondary school campus to the south. The proposal also provides for a secondary/local connection to link to the new residential development to the southwest, undeveloped lands to the north, and between sites in different ownership within the KDA, subject to agreements with the landowner / Planning Authority. The proposals also provide for a permeable network of pedestrian and cycle friendly streets that incorporate existing site features such as the existing hedgerows on site.
- The proposed built form reflects the established pattern of development in the area. A mix of housing types are proposed with duplex units and houses ranging from two to three storeys in height, and taller apartment buildings of 5 and 6 storeys in the neighbourhood centre adjacent to the MERR.
- The new residential area is structured around a variety of open spaces that provide for both active and passive recreation.

2.5 ALTERNATIVES EXAMINED

2.5.1 Consideration of Alternatives

Article 5 of the EIA Directive (as amended by Directive 2014/52/EU) states that the information provided in an EIAR should include a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the final choice, taking into account the environmental effects.

Accordingly, the presentation and consideration of various alternatives considered by the developer and its project design team is an important requirement of the EIA process. This section of the EIAR document provides an outline of the main alternatives examined throughout the design and consultation process, and this serves to indicate the main reasons for choosing the development proposed, taking into account and providing a comparison the environmental effects. For the purposes of this exercise, alternatives are described at three levels:

- Alternative Locations.
- Alternative Designs.
- Alternative Processes.

The DHPLG 2018 EIA Guidelines state:

“Reasonable alternatives may relate to matters such as project design, technology, location, size and scale. The type of alternatives will depend on the nature of the project proposed and the characteristics of the receiving environment. For example, some projects may be site specific so the consideration of alternative sites may not be relevant. It is generally sufficient for the developer to provide a broad description of each main alternative studied and the key environmental issues associated with each. A ‘mini- EIA’ is not required for each alternative studied.”

Pursuant to Section 3.4.1 of the 2022 EPA Guidelines, the consideration of alternatives also needs to be cognisant of the fact that *“in some instances some of the alternatives described below will not be applicable – e.g. there may be no relevant ‘alternative location’...”*

The 2022 EPA Guidelines are also instructive in stating:

“Analysis of high-level or sectoral strategic alternatives should not be expected within a project level EIAR... It should be borne in mind that the amended Directive refers to ‘reasonable alternatives... which are relevant to the proposed project and its specific characteristics’”.

Do-Nothing Scenario

A ‘do-nothing’ scenario would result in the subject site remaining undeveloped and primarily in a greenfield state. The proposed development is considered to represent an improvement on this do nothing scenario, as it represents an improvement in the sustainable use of this site to provide for a significant residential development, which also provides for an appropriate mix of uses and a greater density of residential use at a highly accessible location within an existing built up area. The proposed development will utilise the significant investment in the MERR, which is being built along the eastern edge of the subject lands.

Alternatives

Alternative design and layouts for the subject lands were considered and discussed by the design team over an approximately one-year period up to the finalisation of the scheme. This process was informed by pre-application discussions with the Planning Authority, including two formal Section 247 pre-application consultations with Kildare County Council, held on 17th May 2024 and 24th October 2024 (PP Ref.: 5855), as well as a Stage 2 LRD meeting on 30th April 2025 (LRD Ref.: LRD2025001).

The key environmental and practical considerations which influenced the design of the proposed development and alternative layouts on the subject lands included the following:

- The original layout presented at the first pre-app meeting held on the 17th May 2024 was prepared before the publishing of the draft Maynooth and Environs Joint Local Area Plan and was based on the Maynooth LAP 2013-2019. The publishing of the Maynooth and Environs Joint Local Area Plan 2025-2031 confirmed the location of the neighbourhood centre.
- A Multi-Use Game Area (MUGA) was requested and subsequently provided in later revisions of the scheme.
- Existing hedgerows were surveyed and have been proposed to be retained where possible.
- A pedestrian and cycle connection was provided running west to east of the site.
- The need to ensure compliance with urban design principles set out under *UD 01 of the Kildare County Development Plan 2023–2029* and the design checklist in *Appendix D of the Sustainable and Compact Settlements Guidelines for Planning Authorities*, including provision of a high-quality public realm, coherent street hierarchy, and strong placemaking measures;
- The redesign of the internal layout to eliminate long, straight roads in favour of curved street alignments that calm traffic and enhance legibility in accordance with Design Manual for Urban Roads and Streets (DMURS) guidance;
- The reconfiguration of open space and plaza areas to improve sunlight penetration, reduce noise impacts, and enhance connectivity with surrounding residential and school uses;
- The integration of a defined gateway and higher residential density at the northeastern portion of the site, adjacent to key open space, to support legibility and local identity;
- The requirement to futureproof for school access in line with the KDA objectives and to facilitate permeability to adjoining lands and the wider community;
- The provision of appropriate bin and bike storage, internal stair cores in duplex units, and high-quality architectural treatments including balconies and railings to ensure visual coherence and residential amenity;
- The inclusion of detailed cross-sections and visual impact assessments to evaluate the proposed layout relative to surrounding properties and streetscape;
- The requirement for a coordinated SuDS strategy, consistent with the Kildare SuDS Guidance Document, to manage surface water sustainably while enhancing open space quality;
- The retention and enhancement of existing vegetation, including existing hedgerows to the north and incorporation of biodiversity-enhancing planting measures;
- The commitment to delivering a high-quality urban environment that supports sustainable densities, promotes social integration, and addresses the relationship with both existing and future adjacent developments.

The following sections of this chapter of the EIAR contains an analysis of the alternative development options for the site, describing design options and changes which were incorporated into the scheme as the proposals progressed. The key considerations and amendments to the design of the scheme, having regard to and comparing the key environmental issues, are set out and discussed.

2.5.2 Alternative Locations

As outlined above, the subject site is primary zoned 'C2: New Residential' and partly zoned 'N: Neighbourhood Centre' in the Maynooth and Environs Joint Local Rea Plan 2025 -2031. The objective of the 'C2: New Residential' land use zoning is to "To provide for new residential development" and the objective of 'N: Neighbourhood Centre' is to "To provide for new/existing neighbourhood centres and

associated facilities". The proposed development is consistent with the Maynooth LAP Land Use Zoning Objectives Map 11.1 and the Land Use Zoning Matrix set out in Table 11.9 of the LAP.

The proposed residential units and public open space are located solely on lands zoned 'C2: New Residential' in accordance with the Maynooth and Environs Joint Local Area Plan Land Use Zoning Objectives Map. Both residential and park/playgrounds uses are permitted land uses within the 'C2: New Residential' land use zone.

The proposed neighbourhood centre includes a Childcare Facility, Health Centre, Café / Restaurant and 2 no. Class 1- Shop units and is located within the lands zoned 'N: Neighbourhood Centre' Table 11.9 of the LAP confirms that these land uses are permitted in principle within the zoning objective.

Thus, the proposed development accords with the zoning objectives for the subject lands.

DHPLG Guidance 2018 on the preparation of EIARs notes specifically that the consideration of some types of alternatives, such as alternative locations, may not be appropriate in all cases. EIA is concerned with projects and the Environmental Protection Agency's Guidelines (2022) state that, in some instances, neither the applicant nor the competent authority can realistically be expected to examine options that have already been previously determined by a higher authority, such as a national plan or regional programme for infrastructure which are examined by means of a Strategic Environmental Assessment (SEA), the higher tier form of environmental assessment. As the subject site has been identified to accommodate the uses proposed as part of the recently adopted Maynooth and Environs Joint LAP, it is not considered necessary to evaluate alternative locations in the EIAR.

However, the SEA Environmental Report for the Maynooth and Environs Joint Local Area Plan considered a range of alternatives in relation to land use. The options considered included the following:

- Alternative Scenario 1: Concentric Growth - This development scenario focuses on consolidating the town centre by the development of infill, vacant and underutilised sites, developing lands sequentially from the town centre outwards.
- Alternative Scenario 2: Northern Growth - This development scenario focuses on all new development on zoned lands to the north of the town, i.e., Maynooth Environs located in County Meath and adjoining infill lands in County Kildare. This development scenario would focus development on greenfield sites to the north for new residential, employment and social infrastructure.
- Alternative Scenario 3: Eastern Growth - This development scenario would focus growth to the east of Maynooth, , between the railway/canal corridor and the motorway (i.e., Railpark), towards Leixlip with new development to be accessed from the Maynooth Eastern Ring Road (MERR) which has Part 8 planning permission, and the CPO for the lands already approved by An Bord Pleanála.
- Alternative Scenario 4: Western Growth - This development scenario would focus growth to the west of Maynooth at Collegelands and Laraghbryan for high density development surrounding planned new train station and having proposed access from the planned Maynooth Outer Orbital Route (MOOR)
- Alternative Scenario 5: Town centre consolidation, rail-based development to west, phased and connected development to east and north - This development scenario focuses on consolidating the town centre by development of vacant and underutilised sites for residential and economic development, with Rail-based development surrounding a planned new railway station. With further phased development to the east at Railpark and north for residential development.

The SEA considers each of these alternatives in turn in Section 7 of the report and outlines the likely impacts associated with each alternative scenario, before defining the preferred alternative as follows:

“The emerging preferred alternative is Alternative 5. As noted in Section 7.3, Alternative 5 relates to town centre consolidation, rail-based development to west, phased and connected development to east and north of the Joint LAP area.”

The proposals contribute positively to the development of the wider area and optimises underutilised land at an appropriate location which is well serviced by infrastructure, transport and local facilities, as further demonstrated in the standalone Social and Community Infrastructure Audit / Assessment accompanying this application.

The subject site and the surrounding area have the environmental capacity to accommodate the proposed development without any significant risk of impact upon environmental sensitivities due to the site location.

2.5.3 Description Of Design Alternatives

This section provides an overview of how the proposed development has evolved to date by the way of consideration of alternative designs and how the scheme before the Planning Authority has been reached. Various options were considered as the scheme progressed and key considerations and amendments to the design were incorporated, having regard to the key environmental issues pertaining to the lands.

The proposed development has been subject to 2 no. Section 247 pre-application meetings with the Planning Authority on 17th May 2024 and 24th October 2024 (PP Ref.: 5855) and an LRD Stage 2 Pre-application meeting being held on the 30th of March 2025, with Kildare County Council issuing an LRD opinion on the 27th of May 2025.

Further discussions with ROD and Uisce Eireann are ongoing regarding the upgrades required to the wider foul network and timelines for delivery of Uisce Eireann schemes, all of which have permission / are budgeted for (new Uisce Eireann foul pumping station, foul rising main from Maynooth Eastern Ring Road to Maynooth and the Maynooth Transfer Pipeline) and will be delivered as required to facilitate the phased development of the subject lands and the wider Railpark Key Development Area lands, with Uisce Eireann confirming the first 4 phases of development can connect to the existing network.

The environmental issues which have most informed the design process to date relate to, ecology, water, noise, hedgerow retention along boundaries, relationship with the MERR and adjacent existing and permitted residential projects and the potential impacts upon existing and future traffic and transport in the area. These issues have informed the consideration of alternative designs, layouts and access arrangements up to the formalisation of the scheme to the LRD Stage 3 submission to the Planning Authority.

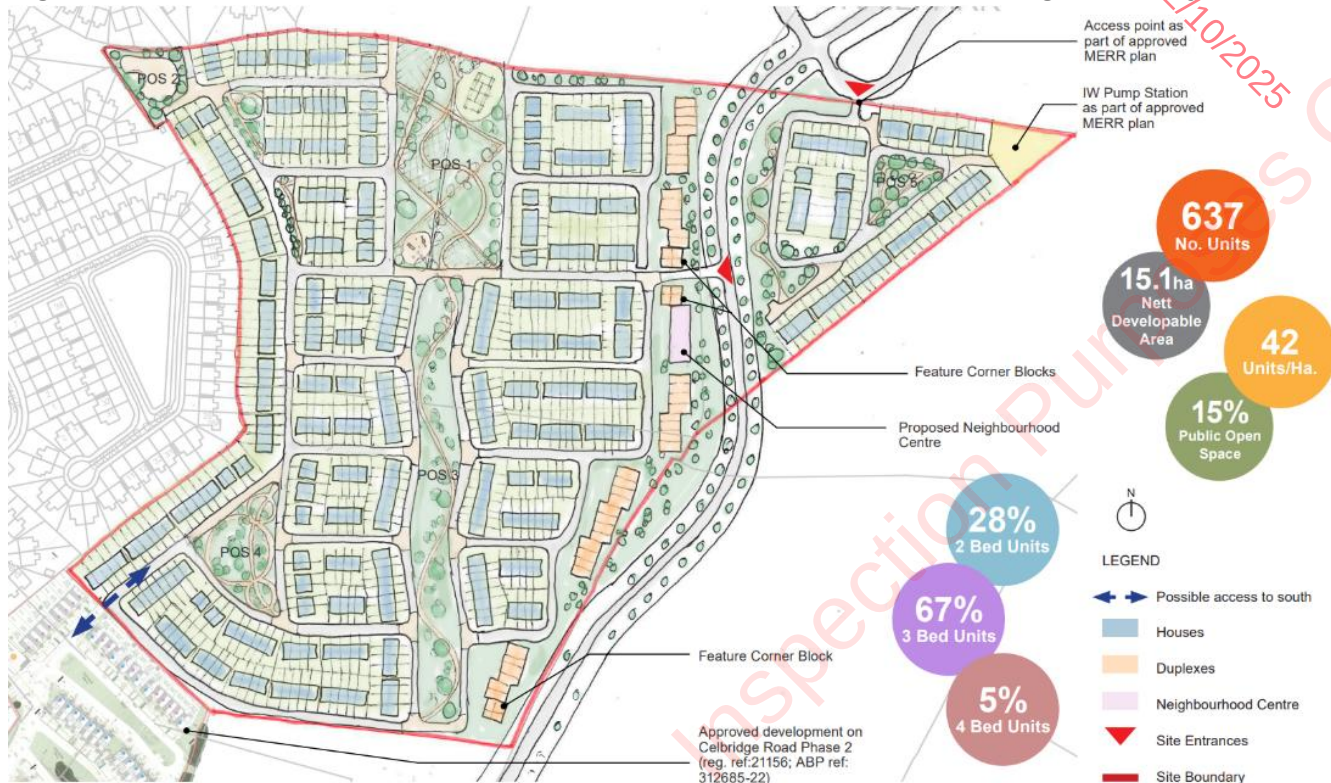
In this respect, the design team considered a number of options in terms of overall layout as follows:

2.5.3.1 Option 1 - First Pre-Application Consultation with the Planning Authority May 2024

The first pre-application meeting with the Planning Authority was held on the 17th May 2024.

The development proposed at the first pre-application meeting comprised 637 no. units, a neighbourhood centre, including a childcare facility and 5 no. areas of public open space landscaping, car and cycle parking spaces, access provided through the proposed MERR with potential secondary connections to adjoining lands, associated internal roads, pedestrian and cycle paths and all associated site and infrastructural works.

Figure 2.6: Site Plan of the Proposed Development Pre-Application Meeting No.1 (May 2024)



The Planning Authority noted that the proposed development of 637 no. units was a welcome development, given the forthcoming Maynooth and Environs Joint Local Area Plan. The Planning Authority noted that the lands were expected to form part of a new Key Development Area (KDA), with the existing residential zoning likely to be retained. It was noted that a neighbourhood centre zoning may also be incorporated into the zoning for the KDA. The Planning Authority advised that the new LAP was anticipated in early 2025. The Planning Authority advised that the location of the neighbourhood centre would be addressed in the forthcoming LAP. The shortage of GP services was noted, and it was recommended that this be considered in the design of the centre.

A number of design and layout matters were raised for further consideration. A Multi-Use Games Area was requested within POS1. Concern was expressed regarding POS2 in the northwest, with a recommendation that it be better integrated with the overall layout. It was noted that the design and arrangement of the proposed duplex units required further review. A stronger urban edge was recommended along the MERR.

Additional pedestrian access points were encouraged, integrating with the adjacent community/educational zoning to the south. The Planning Authority made reference to Chapter 15 of the Development Plan in relation to boundary treatments, with a preference for open frontages and avoidance of defensive space.

Opportunities to retain and enhance existing hedgerows and green infrastructure where advised to be maximised. The Planning authority advised that ecological surveys should include bird and bat assessments, including potential flight paths and collision risks.

Further points discussed related to the proposed childcare provision, which it was noted should be reviewed in consultation with the Childcare Committee, construction traffic and wider impacts on Maynooth should be assessed in the Traffic and Transport Assessment. Engagement with neighbouring developers and local residents' associations is encouraged, a tree survey was recommended to be carried out, including hedgerows adjoining Rockfield.

2.5.3.2 Option 2 - Second Pre-Application Consultation with the Planning Authority October 2024

The applicant and design team reviewed the proposal presented at the first pre-application meeting in light of the feedback received and in advance of the second pre-application consultation with the Planning Authority revised the scheme accordingly.

The second pre-application meeting with the Planning Authority was held on the 24th of October 2024.

The new proposed scheme which was submitted at the second pre-application meeting included for a residential development providing a total of 596 no. residential units, consisting of 410 no. houses (88 no. 2 bed units, 246 no. 3 bed units and 76 no. 4 bed units) and 186 no. apartments/duplex apartments (30 no. 1 bed units, 105 no. 2 bed units and 50 no. 3 bed units). The development provided a total of 2.82 ha of public open space, including a local park of c. 1.9 ha which provides for children's play areas, a MUGA, a skate park, basketball area/outdoor gym and other localised areas of open space.

The development also included a neighbourhood centre, with a total GFA of c. 1,548 sq.m of commercial floorspace, and 86 no. apartments. The neighbourhood centre includes a childcare facility of c. 732 sq.m over two levels, with an associated outdoor play area. The neighbourhood centre includes retail and medical centre uses at ground and first floor levels, with apartments from ground to fourth floor level.

Key changes were incorporated into the proposal following the first pre-application meeting, addressed the feedback received from the Planning Authority and the provisions of the Draft LAP which was published in the interim (published on 19th June).

A summary of the revisions to the proposal from the first pre-application meeting can be summarised as follows:

- Unit numbers reduced from 637 no. to 596 no.
- Detailed housing mix provided, including 410 no. houses and 186 no. apartments/duplexes.
- Public open space outlined as 2.82 ha, with a 1.9 ha local park including play areas, MUGA, skate park, basketball area, and outdoor gym.
- Neighbourhood centre expanded to include 1,548 sq.m of commercial floorspace, 86 no. apartments, a 732 sq.m two-storey childcare facility, and retail/medical uses. Located in line with the Draft LAP zoning.
- The revised layout delivered a stronger urban edge along the MERR and southern boundary.
- Future vehicular, pedestrian and cycle connections to the south incorporated, aligning with the Draft LAP Urban Design Framework provided under Figure 11.6 of the Draft LAP.

- A Tree and hedgerow survey informed layout, with hedgerows proposed to be retained along northern and western boundaries.
- An east to west pedestrian and cycle greenway was introduced from POS7 to POS1.
- Duplex units relocated to strengthen frontage along key edges.
- Layout updated to improve compliance with DMURS.

Figure 2.7: Site Plan of the Proposed Development Pre-Application Meeting No.2 (October 2024)



The proposed development as submitted at the second pre-application consultation with the Planning Authority responded to provisions of the Draft Maynooth and Environs Joint Local Area Plan 2025-2031 while still having regard to the provisions of Maynooth LAP 2013-2019, with the understanding that the new LAP was likely to be adopted by the Planning Authority by the time the LRD Stage 3 application was submitted or being assessed by the Planning Authority.

The resulting scheme proved for improvements in environment impact when compared to the previously discussed design with the Planning Authority. The layout and design of the scheme ensured improvements in terms of permeability and enhanced amenity (resulting in likely improvement in terms of human health for future residents), while also allowing for a significant public open space and the retention of key hedgerows and trees.

2.5.3.3 Option 3 – LRD Stage 2 consultation with the Planning Authority (April 2025)

The scheme which was submitted for pre-application consultation with the Planning Authority at LRD Stage 2, on the 21st of March 2025, was the product of an iterative process of design amendments and

improvements resulting from the 2 no. pre-application meetings with KCC and detailed design, guided by the need to manage the impact of the proposed scheme on the environment.

The proposal progressed for the site at LRD Stage 2, was prepared to be consistent with the objectives of the draft Maynooth and Environs LAP 2025-2031 and the principles of the Key Development Area Development Standards as far as possible. The amendments to the scheme which were incorporated, reflected the findings of investigations and surveys undertaken by the EIAR team for the proposed development, including tree and ecology surveys, traffic impact assessment and daylight and sunlight analysis. The information feeding into the design process from the EIAR consultants was invaluable in progressing a scheme which was considered to respond well to the existing environment in which it was to be introduced, and to the features and environmental characteristics of the subject site and its surrounding area.

The LRD Stage 2 iteration of the proposed development comprised of 581 no. residential units, a neighbourhood centre, and all associated development on a site of c. 15.98 hectares. This version of the scheme formed part of the design evolution that responded to early environmental and planning considerations and stakeholder input.

The development included a mix of housing and apartment/duplex units, with a total of 415 no. houses and 166 no. apartments/duplex units. These were provided in the following typologies:

- 61 no. 2-bed two-storey terraced houses
- 58 no. 3-bed two-storey terraced houses
- 91 no. 3-bed two-storey end-terrace/semi-detached houses
- 138 no. 3-bed two-storey semi-detached houses
- 64 no. 4-bed two-storey semi-detached houses
- 3 no. 4-bed two-storey detached houses
- 166 no. duplex apartments/apartments (comprised of 50 no. 1-bed, 88 no. 2-bed, and 28 no. 3-bed units) provided in buildings ranging from 3 to 5 storeys, all with private open space in the form of balconies, terraces, or gardens

A summary of the revisions to the proposed development can be summarised as follows:

- Unit numbers reduced from 596 no. to 581 no.
- Increase in houses from 410 no. to 415 no. with a reduction in apartments/duplexes from 186 no. to 166 no.
- More detailed unit breakdown provided, including specific typologies and layouts for houses and apartments/duplexes.
- Neighbourhood centre redesigned into two 5-storey blocks around a central plaza.
- Neighbourhood centre included café (192 sq.m), pharmacy/shop (134 sq.m), and convenience shop (106 sq.m) in addition to medical centre (259 sq.m) and childcare facility (732 sq.m).
- 86 no. apartments at neighbourhood centre adjusted to 74 no. apartments and 12 no. own-door duplex units.
- Public open space marginally reduced from 2.82 ha to 2.72 ha, while maintaining a high quality Local Park and Pocket Parks.
- Refinement of car parking strategy, 888 no. spaces (711 no. in-curtilage for houses, 115 no. for apartments/duplexes, 14 no. for commercial, 12 no. childcare staff, 36 no. visitor).

- Cycle parking was expanded to 606 no. resident spaces, 40 no. for neighbourhood centre and 83 no. visitor spaces.
- Landscape, ecology, tree surveys, traffic, and daylight/sunlight analysis from EIAR / Design Team integrated into final layout and design response.
- Emphasis on placemaking, layout around a public plaza, and strengthened response to Draft LAP and Railpark KDA guidance.

This scheme reflected a comprehensive design response to the LAP's vision for the Railpark KDA and was developed with an emphasis on place-making, integration with the future neighbourhood centre, and responding to initial constraints such as site access and environmental sensitivities.

Figure 2.8: Site Layout Plan as submitted at LRD Stage 2



2.5.3.4 Preferred Option - LRD Stage 3 Design submitted for approval

The subject scheme is described in detail in the following sections, in the Statement of Consistency and Planning Report, and in the Architectural Design Statement prepared by JFA, which accompanies this application. It is considered that the finalised design as assessed in this EIAR takes full account of the key environmental and planning factors relevant to the proposed development. The final scheme design has been directly informed by the pre-application meetings with Kildare County Council, including the formal Stage 2 LRD meeting undertaken on the 30th of March 2025, and by the written LRD Opinion issued on the 27th of May 2025.

The current proposals represent an optimal form of development for the subject lands, which comprise a substantial portion of the Railpark Key Development Area lands, and deliver a high-quality residential development and associated infrastructure while protecting the amenities of adjacent properties, enhancing biodiversity, and minimising negative environmental impacts when compared to previous layout iterations.

The LRD Opinion was received on 28th May 2025 and confirmed that the proposal does not constitute a reasonable basis for an LRD application, subject to 3 no. reasons. The reasons the documents submitted do not constitute a reasonable basis on which to make the application are:

1. The proposed layout does not reflect the urban design requirements under UD 01 of the Kildare County Development Plan 2023-2029 and the design checklist outlined within Appendix D of the Sustainable and Compact Settlements Guidelines for Planning Authorities.
2. The proposal does not comply with DMURS due to a number of long straight internal roads.
3. The surface water drainage system shall be designed in terms of incorporating appropriate Sustainable Drainage Systems (SuDS). The applicant shall comply with the Kildare County Development Sustainable Drainage Systems (SuDS) Guidance Document.

In accordance with Article 16A of the Planning and Development Regulations 2000 (as amended), the LRD Opinion also includes 64 no. specific information items to be addressed as part of the application, many of which related directly to layout, urban design, surface water management, and open space provision. These items have been responded to in full within the accompanying Statement of Response, which identify the relevant sections of the application documentation where each issue has been addressed in greater detail.

Following extensive multidisciplinary design input, the number of residential units has evolved in tandem with design development and provides for 581 no. residential units (185 no. apartments/duplexes and 396 no. houses) with a revised unit mix from that submitted at LRD Stage 2 (166 no. apartments/duplex units and 415 no. houses). This figure reflects refinements to density, layout efficiency, site area and integration with key urban design and environmental constraints. For clarity, under the Planning and Development (Amendment) Act 2021, there is no requirement that the final number of units match the indicative proposal submitted at pre-application stage, as the process allows for refinement and design development prior to the final LRD Stage 3 application submission.

The key issues from an environmental and planning perspective which influenced the final design of the proposed development included:

1. **Urban Design and Layout:** The internal layout has been significantly revised in response to Item 1 of the LRD Opinion and the requirements of UD 01 of the Kildare County Development Plan 2023–2029. Long, straight internal roads have been redesigned to incorporate curved alignments in accordance with DMURS, reducing vehicular speeds and enhancing visual variety and placemaking across the scheme.
2. **Public Open Space and Placemaking:** The initial Local Park was further refined with integration and connections to the proposed neighbourhood plaza with pedestrian connections. The previous linear north south open space layout was reconfigured into a series of Local Parks and enhanced by additional boundary planting. These design modifications provide improved daylight access, better connectivity, and a stronger sense of place with both active and passive recreational functions.
3. **Density and Gateway Definition:** The northeastern portion of the site was revised to include increased residential density and a defined urban gateway at the plaza fronting the Local Park, supporting legibility, visual identity, and compliance with the Railpark KDA framework.

4. **Surface Water and SuDS Strategy:** The surface water drainage strategy was substantially reworked in response to the Kildare SuDS Guidance Document. The revised layout includes bioretention areas, swales, rain gardens, and tree pits, improving biodiversity and landscape amenity value.
5. **Biodiversity and Tree Retention:** Setbacks and green buffers were adjusted to protect existing mature trees and hedgerows, with ecological corridors retained where feasible. The final landscaping strategy avoids invasive species, prioritises native planting, and includes biodiversity-enhancing features, as detailed in the accompanying Landscape and Arboricultural Reports.
6. **Permeability and School Integration:** The final design improves pedestrian and cyclist connectivity to the future primary and post-primary school sites and provides for future vehicular and pedestrian access routes in accordance with the KDA access strategy.
7. **Architecture and Residential Quality:** Architectural refinements include high-quality finishes, integration of bin/bike stores, and enhanced balcony and boundary treatments. These measures improve overall residential amenity and reduce visual clutter.
8. **Visual Considerations:** Additional sections and photomontages were prepared to assess the scheme's visual impact and relationship with existing development.
9. **Road layout:** The redesign of the internal layout to eliminate long, straight roads in favour of curved street alignments that calm traffic and enhance legibility in accordance with Design Manual for Urban Roads and Streets (DMURS) guidance.
10. **Unit mix:** Reduced from 581 units (415 houses / 166 apartments & duplexes) to 581 units (396 houses / 185 apartments & duplexes). While the total unit count remained the same, the internal mix changed to include more apartments/duplexes and fewer houses.
11. **Site area:** The site area decreased from 15.98 ha to 15.27 ha to exclude the lands to be developed as part of the MERR.
12. **Commercial Mix:** Minor revision in mix and quantum for the commercial element of the neighbourhood centre. Stage 2 included for Medical (259 sq.m), childcare (732 sq.m), café (192 sq.m), pharmacy/shop (134 sq.m), convenience shop (106 sq.m) the Stage 3: Childcare (762 sq.m), café (74 sq.m), health centre (174 sq.m), Class 1-shops (124 sq.m & 166 sq.m) the total GFA was slightly reduced and more compact.
13. **Childcare facility:** The childcare facility was revised from over two storeys as submitted at Stage 2 to over ground floor of the southern apartment block following feedback from the Planning Authority.

In summary, the design of the proposed development takes account of all environmental, technical and planning issues raised in relation to previous iterations of the scheme and has evolved in response to both formal and informal engagement with the Planning Authority. The finalised design delivers a coherent, integrated and high-quality development that reflects the site's physical characteristics, responds sensitively to constraints, and optimises environmental outcomes.

2.5.4 Description Of Alternative Processes

The relevance of alternative processes and technologies is limited in the case of this EIAR having regard to the nature of the proposed development, which is primarily for a residential development. The Climate Action Energy Statement prepared by Fallon Design identifies the energy standards with which the proposed development will have to comply with and also sets out the overall strategy that will be adopted to achieve these energy efficiency targets. The dwellings will be required to minimise overall energy use and to incorporate an adequate proportion of renewable energy in accordance with Building Regulations Part L 2022, Conservation of Energy & Fuel.

The building fabric has been selected to meet the requirements of Part L building Regulations. The incorporation of these elements and technologies into the scheme will ensure higher performance and improved building sustainability when compared to alternative out-dated, less energy efficient materials and technologies. All residential units shall be certified A rated BER's to a Nearly Zero Energy Building standards. This development's fabric first design strategy will result in lower climate impact from a reduced overall heating requirement and energy consumption.

The daylight and sunlight assessment and microclimate / wind assessment of the proposed development is a separate matter to the EIAR and is addressed in standalone reports prepared by GIA accompanying the application.

With reference to the operational phase, no new, unusual or technically challenging operational techniques are required, as such no alternative operational processes have been considered.

2.6 CHARACTERISTICS OF THE PROJECT

The description of the development as set out within the public notices has been provided in Section 2.3 above. The following provides a summary of the key characteristics of the project of most relevance to the EIAR, which should be read in conjunction with all accompanying application documents and reports. Each chapter of the EIAR includes details of the characteristics of the project of most relevance to that particular aspect of the environmental assessment.

The following table sets out the key figures and quanta associated with the proposed Large-scale Residential Development.

Table 2.1: Proposed Development Details

	Proposed
Application Site Area (red line boundary)	15.27 ha
Net Development Area	15.10 ha
No. Residential Units	581 no. units
Non-residential units	Neighbourhood Centre – childcare facility (762 sq.m), café / restaurant unit (74 sq.m), health centre (174 sq.m), and two no. Class 1- Shop units (124 sq.m) and (166 sq.m).
Mix	<u>All units (Duplex / Apartments and Houses)</u> • 53 no. 1 beds • 151 no. 2 beds • 315 no. 3 beds • 62 no. 4 beds <u>Breakdown</u> • 59 no. 2 bed two storey terraced houses • 52 no. 3 bed two storey mid terrace houses • 223 no. 3 bed two storey end terrace/semi-detached houses • 58 no. 4 bed two storey semi-detached houses • 4 no. 4 bed two storey detached house

	185 no. duplex apartments / apartments (53 no. 1 beds, 92 no. 2 beds, 40 no. 3 beds) in a series of 3 to part 6 storey duplex apartment / apartment blocks;
Site Coverage	17%
Plot Ratio	37.4%
Density	39.31 (based on net site area of 14.78 ha)
Car Parking	888 no. spaces in total: 711 no. spaces for houses (approx. 1.8 spaces per house) 115 no. spaces for duplex/apartment units (approx. 0.6 spaces per unit) 36 no. visitor spaces for residents 14 no. spaces for the commercial uses at the neighbourhood centre 12 no. staff spaces for the childcare facility
Cycle Parking	758 no. spaces in total: 623 no. residential on curtilage spaces 42 no. neighbourhood spaces 93 no. visitor spaces
Public Open Space	2.76 Ha (18.07% of site area)
Communal Open Space	1,135 sq.m
Part V	116 no. units 20%

2.6.1.1 Duration of Permission

As set out in the public notices and having regard to the scale of the proposed development, the intended phasing of delivery and the fact that the application is subject to an EIAR, a ten-year planning permission is sought for this development having regard to the provisions of Section 41 of the Planning and Development Act 2000, as amended.

2.6.1.2 Residential Density

The proposed development of 581 no. units equates to a net density of 39.3 uph on a net site area of 14.78 based on the application site area, and excluding areas related to the MERR and pumpstation. The density and building height respect the adjoining areas.

The development achieves a density of c. 39.3 uph and is considered appropriate in terms of the indicative density ranges set out in the LAP of 40 dwellings per hectare (DPH) for the overall Railpark lands and in respect of the contemporary Sustainable and Compact Settlement Guidelines which has the indicative net density range for the subject site would be 30-50 dwelling per hectare (dph) for 'Large Towns' (as defined by the Sustainable and Compact Settlement Guidelines 2024) which the subject site considered to be a suburban/urban extension located at the edge of the town.

2.6.1.3 Building Height

The LAP does not include any specific building height restrictions in Maynooth as per Section 3.3.3 of the LAP. While most buildings on the site are proposed to be 2 storey, taller buildings are used strategically around the scheme. The Neighbourhood Centre is located at the main access point from the MERR and is defined by a 5 storey apartment block and a part 6 apartment block with a single storey pavilion-style building located in the Village Square located at the entrance of the site from the MERR. These taller elements act as landmark buildings that create a clear sense of arrival and mark the entrance to the development, emphasising the importance of this location within the overall layout.

A series of 3 storey duplex blocks extend along the MERR to form a strong urban edge and provide visual definition to the site boundary. These blocks also serve to reinforce legibility across the MERR between the two parts of the site. At key points along this frontage, four-storey blocks are positioned at the end of the duplex row, acting as bookends and introducing vertical emphasis and visual interest at the corners.

2.6.1.4 Residential Units

The proposed development will have a total of 581 no. houses, apartments and duplex apartments, broken down as follows:

- 53 no. 1 beds (9%)
- 151 no. 2 beds (26%)
- 315 no. 3 beds (54%)
- 62 no. 4 beds (11%)

The houses (396 no. in total) comprise terraced, semi-detached and detached units, with a mix of:

- 59 no. 2 beds (15%)
- 275 no. 3 beds (69%)
- 62 no. 4 beds (16%)

In relation to the apartment and duplex apartments (185 no. in total), the mix is broken down as follows:

- 53 no. 1 beds (29%)
- 92 no. 2 beds (50%)
- 40 no. 3 beds (21%)

The apartments and duplex apartments are compliant with the Planning Design Standards for Apartments Guidelines for Planning Authorities 2025, in respect of floorspace, layout, and private open. Please refer to Section 6 of the Statement of Consistency and Planning Report prepared by JSA and the Housing Quality Assessment prepared by JFA for further details.

2.6.1.5 Childcare Facility

The proposed development includes a childcare facility with a GFA of 762 sqm located in the ground floor level of the southern apartment block within the Neighbourhood Centre, i.e. Block B. The childcare facility also includes an outdoor play area, with an area 287 sq.m, in addition to 12 no. staff car parking spaces.

The childcare facility has been estimated as being capable of accommodating c. 152-190 childcare spaces (based on a gross floorspace requirement of c. 4-5 sq.m per child). It is considered that this facility will be able to accommodate the demand for childcare spaces generated by the proposed development with potential additional capacity to accommodate demand from the surrounding area.

2.6.1.6 Landscape and Open Space

A landscape design for the proposed development has been prepared by ÁIT, and we refer to the Landscape Design Report and accompanying landscape drawings for further details. In summary, provision is made for extensive public and communal open space, and the aim of the landscape design is to create a high quality attractive environment with amenity facilities for the proposed apartments and the surrounding area.

The landscape scheme protects and enhances biodiversity through the following:

- An east-west green corridor, which follows the alignment of an existing hedgerow to be retained and enhanced. This corridor will feature a pedestrian and cycle greenway and will be further supported by a grassland meadow verge and native tree planting. This corridor supports ecological connectivity while also promoting sustainable mobility through active travel links.
- A north-south green corridor, which will be established through the delivery of a Local Park and associated open space. This corridor will include newly created habitats such as tree lines, hedgerow planting, and meadow grasslands, contributing to the overall biodiversity value of the development. These habitats also form part of an integrated nature-based surface water management system (SuDS). A greenway is also proposed within this corridor to provide pedestrian and cyclist connectivity across the site.

In addition to the principal green corridors, a number of pocket parks will be distributed throughout the development. These smaller spaces are designed to support doorstep play for younger children, while also accommodating sustainable drainage features that contribute to the site's overall climate resilience and landscape integration.

The landscape strategy creates a network of external spaces that allows for flexibility in recreation activity, social interaction and active play, as well as spaces that are quiet and calming, and connects to and utilises existing green infrastructure for walking cycling and running. The proposed landscaping has been fully co-ordinated in respect of SuDS and public lighting.

All houses are provided with private amenity space in the form of gardens. All apartments and duplex apartments are provided with private amenity spaces in the form of balconies and terraces.

Public Open Space and Local Park

The proposal includes a total c. 2.9 ha (>18% of site area):

- Local Park: 14,400 sqm including MUGA, playground, amenity lawns
- Linear Park: 5,041 sqm
- Public Plaza: 891 sqm
- Pocket Parks:
 - o POS 2: 2,335 sqm
 - o POS 6: 1,330 sqm

- o POS 7: 2,150 sqm
- o POS 8: 1,490 sq.m

The proposed development incorporates a green infrastructure strategy that responds to the requirements of the LAP, specifically Section 11.4.1 relating to the Railpark Key Development Area (KDA). The layout has been designed to retain and enhance existing hedgerows and treelines where possible, particularly through the formation of two principal green corridors, an east-west corridor along an existing hedgerow and a north-south corridor centred on the proposed Local Park.

These corridors are designed to provide ecological connectivity, recreational amenity and support sustainable drainage functions. The east-west corridor will incorporate a greenway for pedestrians and cyclists, with additional native tree planting and meadow verge to supplement the retained hedgerow. The north-south corridor will be formed through new tree and hedgerow planting associated with the Local Park and linked green spaces.

The Local Park, centrally located in accordance with the KDA framework, will provide for a range of recreational uses including play areas, a MUGA, teen play and looped walking routes. Smaller pocket parks distributed throughout the scheme will support doorstep play and accommodate nature-based drainage features where feasible.

A Village Square with a single storey pavilion-style building is proposed adjacent to the MERR, providing a strong urban edge and forming a key gateway into the development. The neighbourhood centre is located at ground floor level of both apartment blocks and includes a childcare facility (762 sq.m), café / restaurant unit (74 sq.m), health centre (174 sq.m), and two no. Class 1- Shop units (124 sq.m) and (166 sq.m).

Connectivity and Permeability

The proposed development will enhance the connectivity and permeability of the site and its surrounding area.

The proposals also allow for potential future links with the lands reserved for the school and to the future residential phases to the north. The proposals also provide for a future vehicular connection with the adjoining residential development to the south. There is also potential for a pedestrian connection to Parklands in the north-west, but this would need to be delivered by the Planning Authority / others in the future. The public realm strategy also focuses on prioritising pedestrians and cyclists throughout the site. Please refer to the ÁIT Landscape Report for further details.

Figure 2.9: CGI of Proposed Residential Development and Pocket Park

2.6.1.7 Transport and Access

The proposed development will be accessed primarily via the Maynooth Eastern Ring Road (MERR), which will be delivered by Kildare County Council and traverses the site in a north-south direction. A new T-junction on the MERR will provide vehicular access to the site, alongside a signalised pedestrian and cyclist crossing. The northeast portion of the site will be accessed via a new local street connecting to the MERR. The southwest of the site will also be accessed directly from the MERR.

The MERR will provide strategic connectivity between the R148 Leixlip Road (north) and the R405 Celbridge Road (south), integrating the development within the wider transport network. A future vehicular connection is also proposed to link with 'The Grange' residential development to the south (Reg. Ref.: 21/155 and 21/156), currently under construction, which will further enhance vehicular access towards the R405 Celbridge Road.

The proposed development layout has been designed to prioritise permeability and connectivity, with dedicated pedestrian and cycle infrastructure at the main access point and throughout the scheme. A greenway route is proposed through the site, providing an east-west cycle and pedestrian connection that intersects with the MERR.

Provision has been made for two direct access points to the proposed post-primary school lands to the south, and connections to the wider Railpark Key Development Area (KDA), as identified in the Maynooth and Environs Joint LAP 2025-2031.

The development provides for sufficient visibility splays at all access points and is designed in accordance with the Design Manual for Urban Roads and Streets (DMURS). Further detail is provided in the Traffic and Transportation Assessment & Mobility Management Plan and Engineering Infrastructure Design

Report, prepared by ROD. The TTA concludes that there are no traffic or transportation related reasons to preclude the granting of planning permission for the proposed development.

2.6.1.8 Car Parking

A total of 888 no. car parking spaces are proposed, which includes:

- 711 no. in-curtilage spaces for houses,
- 115 no. spaces for the duplex apartments / apartments,
- 14 no. for the commercial uses at the neighbourhood centre,
- 12 no. spaces for the staff of the childcare facility and
- 36 no. visitor spaces for residents.

A justification for the quantum parking for the development is provided in the Traffic Impact Assessment prepared by ROD.

17 no. electric vehicle charging points are provided throughout the proposed development. Please refer to the application documentation prepared by Fallon Design for further details.

2.6.1.9 Bicycle Parking

A total of 758 no. spaces are proposed which includes:

- 623 no. residential on curtilage spaces
- 42 no. neighbourhood spaces
- 93 no. visitor spaces

The proposed development will provide for a high-quality cycle infrastructure throughout the site. The proposed entrance includes the provision of footpath and cycle lane facilities.

2.6.1.10 Site Services

Foul water drainage from the development will be managed via a new network discharging to a combination of existing and future infrastructure. A total of 272 no. residential units, located in the western portion of the site, will connect to the existing Uisce Éireann foul sewer network, while the remaining 309 no. residential units and commercial/community elements located to the east will discharge to a new foul sewer network associated with the Maynooth Eastern Ring Road (MERR) Scheme. This new infrastructure will also serve future phases of development in the wider KDA lands. A Statement of Design Acceptance was received in September 2025.

Uisce Éireann issued an updated Confirmation of Feasibility (COF) letter on 13 June 2025, reconfirming that water and wastewater connections to the proposed development are feasible, subject to delivery of required network upgrades. The COF confirmed that the western portion of the site can connect to the existing network, while the eastern portion will connect to the new MERR infrastructure.

Following this, Uisce Éireann issued a Statement of Design Acceptance (SODA) on 12 September 2025 (Ref: CDS25001351), confirming no objection to the proposed water and wastewater design submission.

The SODA acceptance is based on the submitted layouts and long sections, and it is recommended that the SODA be included at the stage of the full LRD planning application lodgement.

The Applicant will continue engagement with Uisce Éireann to ensure compliance with all connection requirements, including the execution of a formal connection agreement in advance of construction.

Network upgrades include works at the Maynooth Main Pumping Station, the delivery of a new rising main to Leixlip, and the construction of a strategic wastewater pumping station (WWPS). Additionally, a storage tank at the Maynooth Pumping Station, funded by the developer, is required.

The eastern portion of the development will connect to the MERR gravity sewer network, which will then flow to a permitted strategic WWPS located northeast of the site (planning permission Reg. Ref.: 21360). Although this WWPS is not currently included in Uisce Éireann's Capital Investment Plan, the COF confirms it can be delivered on a developer-led basis (funded by landowners in the wider KDA Railpark lands) within the lifetime of the permission. The COF further confirms that connection from the eastern portion of the site to the strategic WWPS can be facilitated prior to the completion of the wider upgrade project, subject to the construction and commissioning of the WWPS and rising main.

Phases 5 and 6 of the development, comprising 236 units, will connect to the new WWPS as detailed in Section 2.7.2.1 below. These phases are scheduled to commence construction in Q1 2029, contingent on planning approval.

These upgrades form part of the wider strategic infrastructure planned by Uisce Éireann, including the Maynooth Transfer Pipeline linking Maynooth to Leixlip. Uisce Éireann has indicated that the timeline for delivery of these works has been advanced, with completion anticipated between late 2027 and early 2028. This aligns with the phased delivery of the proposed development and is referenced in the Chief Executive's Report on Submissions/Observations to the Proposed Material Alterations of the Maynooth and Environs Joint Local Area Plan 2025-2031.

Design proposals for the internal foul drainage network and connections to both existing and new systems are detailed in the Engineering Report and associated drawings prepared by ROD.

The COF from Uisce Éireann confirms that a water connection is feasible, subject to network upgrades. To accommodate this development, upgrades to the existing network are required, including approximately 600m of upsizing from 400mm to 450mm diameter mains. The final requirements will be confirmed at Connection Application stage.

These upgrade works will be carried out by Uisce Éireann under exempted development powers and funded by the applicant. ROD has confirmed with Uisce Éireann that no planning permission is required for these works, which are located within public roads and verges. Following grant of permission, Uisce Éireann will confirm the applicant's cost contribution as part of the connection process.

Water supply to the development will be provided via two 200mm diameter connections to the Eastern Link main, constructed as part of the MERR Scheme. Uisce Éireann has confirmed that no temporary connection is required and that the current design drawings' connection arrangements are acceptable.

Surface water runoff will be attenuated to greenfield runoff rates in accordance with the Greater Dublin Strategic Drainage Study (GDSDS). Discharge will be restricted to 2.2 l/s/ha via vortex flow control devices (e.g., Hydrobrake or equivalent) and routed to existing watercourses within the site.

Sustainable Drainage Systems (SuDS) have been integrated across the development in accordance with the Kildare County Council Sustainable Drainage Systems Guidance Document (2024). These include vegetated detention basins with low-flow channels, vegetated conveyance swales, permeable paving across all parking bays, green roofs on apartment blocks, and flow control devices.

Surface water from roofs will primarily be routed through porous aggregates beneath permeable paved driveways, providing additional attenuation. Rain gardens will also contribute to surface water management and biodiversity. Road network runoff will discharge to the pipe network via road gullies. In landscaped areas, overland flow will be directed to swales via dropped kerbs, with runoff from private driveways captured by permeable paving with overflow to the main network.

A full retention fuel/oil separator, sized according to permitted discharge limits, will be installed prior to final outfall. Design parameters include a 1-in-100-year storm event with a 30% climate change allowance and 4% urban creep allowance. Catchment-specific parameters such as SAAR, SOIL factors, and infiltration rates are detailed within the Engineering Services Report.

Existing utility infrastructure nearby includes networks operated by Aurora Telecoms, BT Ireland, Gas Networks Ireland, ESB, Eir, and Virgin Media. Additional infrastructure is proposed as part of the MERR Scheme to serve the development. Diversions and consultations with service providers will be undertaken as required during detailed design.

2.7 THE EXISTENCE OF THE PROJECT

2.7.1 Introduction

The purpose of this section is to provide a description of the proposed development which considers all aspects of the project life cycle both during construction and post construction (and decommissioning if applicable). These include the following:

- Construction Stage (Land Use Requirements, Construction Activity & Significant Effects);
- Operation Stage (Processes, Activities, Materials Used);
- Changes to the Project; and,
- Secondary and Off-Site Developments

2.7.2 Description Of Constriction Stage

This section of the EIAR summarises the construction and phasing of the proposed development and summarises the measures to be taken to ensure that the impact of construction activity is minimised. The Construction and Environmental Management Plan and Resource and Waste Management Plan, which are included as standalone reports with this application, should be referred to for a more detailed assessment of the construction, waste and indicative construction phasing proposals for this development.

2.7.2.1 Construction Stage

For the purposes of this planning application, and notwithstanding the request for a ten-year permission, the construction of the development is anticipated to be split into six number distinct phases and be delivered over a 6-year construction programme, as illustrated in Table 2.2 below and the phasing brochure prepared by the applicant, a D/RES company. This is based on an assumption of a grant of permission in October 2025, and it is acknowledged the start dates may be extended if the decision is pushed out due to Further Information or appeals.

The phasing proposal will allow the provision or upgrading of any external infrastructure and services to be provided on a phased basis and provide an appropriate quantum of development and supporting infrastructure within each part of the overall scheme. This will also include any site enabling works. A ten-year permission is sought for the development which has regard to the scale of development, likely timeframe for tendering and construction of each phase. The development is contingent on the completion of the MERR which is expected to start construction in September / October 2025, with an anticipated construction duration of 18 months, i.e. March 2027. The proposed development aligns with the completion of the MERR.

Table 2.2: Indicative phasing timeline

Maynooth Railpark 581 Units Proposed Phasing	
Planning Granted	October 2025
Start on Site with Infrastructure works	January 2026
Phase 1 (106 units): Construction Commences (12 months)	March 2026
MERR Completion	
Phase 1 (106 units): Phase 1 complete	March 2027
Phase 2 (81 units): Construction Commences (9 months)	January 2027
Phase 2 (81 units): Phase 2 complete	September 2027
Phase 3 (86 units apartments, Creche & Neighbourhood Centre): Construction Commences (18 months)	June 2027
Phase 3 (86 units apartments, Creche & Neighbourhood Centre): Phase 3 complete	December 2028
Phase 4 (72 units and Park): Construction Commences (9 months)	September 2028
Phase 4 (72 units and Park): Phase 4 complete	June 2029
Contingent on foul drainage - cannot be catered for until the new Uisce Eireann pumping station is constructed on site.	
Phase 5 (99 units): Construction Commences (12 months)	March 2029
Phase 5 (99 units): Phase 5 complete	March 2030
Phase 6: (137 units): Construction Commences (15 months)	January 2030
Phase 6: (137 units): Phase 6 complete	March 2031

It is proposed that Phases 1-4 (a total of 345 residential units, comprising 259 houses, 86 apartments, a crèche and a neighbourhood centre) will be delivered in advance of the on-site foul pumping station becoming operational. These phases can be serviced by connection to the existing foul drainage network within the site. Infrastructure works are scheduled to commence in January 2026, following a projected grant of planning permission in Q4 2025.

Phase 1, comprising 106 units, is scheduled to commence in March 2026 with completion anticipated by March 2027. Phase 2 (81 units) is expected to follow in January 2027 and conclude in September 2027. Phase 3, which includes 86 apartments along with the childcare facility and community / commercial uses, will commence in June 2027 and take 18 months to complete by December 2028. Phase 4 (72 units and public park) is scheduled for delivery between September 2028 and June 2029.

Phases 5 and 6 (totalling 236 units) are dependent on the delivery of the Uisce Eireann pumping station and its connection to the wider network. Phase 5 (99 units) is scheduled to begin in March 2029, with completion targeted for March 2030. Phase 6 (137 units) will commence in January 2030 and is expected to complete by March 2031. Foul network upgrades are planned and Uisce Eireann has confirmed proposals to support phased development on the subject lands / residential zoned land in Maynooth. Discussions regarding wider network upgrades and implementation timelines are ongoing. Key projects include the new pumping station, rising main, and the Maynooth Transfer Pipeline (Maynooth to Leixlip), with expected completion between late 2027 and early 2028, which aligns with the UE correspondence subsequent to the original COF and the confirmation that the proposed dates for the completion of the upgrade works have been brought forward.

The phased approach ensures that development progresses in tandem with the delivery of strategic foul and water infrastructure, with early phases taking advantage of existing service capacity and later phases delivered once the site-specific pumping solution under Reg. Ref.: 21360 is operational.

2.7.2.2 Construction Activities

The Construction and Environmental Management Plan CEMP prepared by ROD Consulting Engineers, sets out the provisions for the construction phase of the proposed development. In general, the CEMP addresses working houses, traffic management, stripping of topsoil and excavation of subsoil, erosion and sediment control, accidental spills and leaks, biodiversity, waste management, noise and vibration, air, dust and climatic factors, archaeology, site compound facilities and parking.

The ground conditions are described in further detail in Chapter 7 - Land and Soils, Chapter 8 - Hydrogeology and Chapter 9 - Water. A Ground Investigation Report prepared by Priority Geotechnical Ltd. is included with application (Included as Appendix A of the Infrastructure Design Report prepared by ROD).

2.7.2.3 Potential Impacts of the Construction Stage

There are a number of impacts that may arise during the construction phase, and which are subject to assessment in the relevant chapters of the EIAR and related application documentation. This list is non-exhaustive but covers the major issues to be considered in the assessment of potential impacts of the development:

- Construction methods – duration and phasing;
- Construction traffic, parking and site working hours;
- Health and Safety issues;
- Noise & Vibration due to construction work;
- Air quality (principally dust);

- Construction waste management (see separate standalone report which accompanies this application).

2.7.2.4 Construction Methods

The construction methodology that will be utilised on the site will have three main attributes to minimise the impact of the construction phase:

- Phasing of construction;
- Efficiency;
- Minimisation of waste generated;

2.7.2.5 Construction Traffic, Parking and Site Working Hours

The CEMP addresses these issues in greater detail and considers that the works associated with the proposed development will develop additional traffic on the public road network associated with the removal of excavated material and the delivery of new materials and concrete trucks, and all construction traffic will be via the proposed Maynooth Eastern Ring Road which is expected to be delivered by Kildare County Council in advance of this development becoming operational. The new ring road will link both the R148 Leixlip Road and R405 Celbridge Road with a new bridge to be provided over the Royal Canal and Dublin to Sligo Railway Line. Construction traffic will only be permitted to access the development via the M4 and regional roads. Following the completion of the Maynooth Eastern Ring Road, construction traffic access will be via the M4 Junction 7 and the R148 only.

Except where otherwise agreed with Kildare County Council, working hours will be 07:00 – 19:00 Monday to Friday and 08:00 – 18:00 Saturday and closed on Sundays or Bank Holidays.

Should construction work be required outside of normal hours, then they shall be subject to prior agreement of the local authority. Examples of when this may be required are to facilitate water main connections or foul drainage connections, concrete pouring, road works, etc..

2.7.2.6 Health and Safety Issues

The proposed development will comply with all relevant Health and Safety legislation and best practice during the construction of the project. Where possible potential risks have been omitted from the design so that the impact on the construction phase is reduced.

2.7.2.7 Noise and Vibration due to Construction Work

The potential impacts associated with noise and vibration due to construction work, are addressed in Chapter 12 - Noise & Vibration. The CEMP includes measures to monitor, reduce and eliminate where possible the noise and vibration levels.

2.7.2.8 Air Quality and Climate

The potential impacts associated with air quality due to construction work are addressed in Chapter 10 - Air Quality and Chapter 11 - Climate. The CEMP includes dust and dirt monitoring and mitigation measures, and complaints procedures to be taken should they be necessary.

2.7.2.9 Construction Waste Management

A standalone Resource and Waste Management Plan has been prepared by ROD and an Operational Phase Waste Management Plan has been prepared by DNV for the proposed development and are included with this application and have informed the relevant assessments included in this EIAR. The purpose of both reports is to ensure the best practice is followed in terms of waste and environmental management during the construction and operational phases of the proposed development, and to ensure adverse impacts on the receiving environment, including local residents, are minimised. The plans aim to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, where possible. They also provide guidance on the appropriate collection and transport of waste from the site to prevent issues associated with litter or more serious environmental pollution (such as contamination of soil and/or water).

2.7.3 Description of the Operational Stage

Pursuant to the EIA Directive an EIAR document is required to set out a description of the project processes, activities, materials and natural resources utilised; and the activities, materials and natural resources and the effects, residues and emissions anticipated by the operation of the project.

The proposed development is primarily a residential development including a neighbourhood centre, which includes a childcare facility, health centre, a café / restaurant, pharmacy and local shop. The primary direct likely significant environmental effects will arise during the construction stage. As a result, post-construction, the operation of the proposed development is therefore relatively benign and not likely to give rise to any significant additional impacts in terms of activities, materials or natural resources used or effects, residues or emissions which are likely to have a significant impact on population and human health, biodiversity, soils, water, air, climate, or landscape. This is further outlined in subsequent chapters of this EIAR.

The primary likely and significant environmental impacts of the operation of the proposed development are fully addressed in the EIAR document.

The proposed development also has the potential for cumulative, secondary and indirect impacts, particularly with respect to such topics as traffic. Each chapter within this EIAR addresses the cumulative, secondary and indirect impacts which the development may have. On the basis of the assessment carried out as part of this EIAR, it is considered that all cumulative secondary and indirect impacts are unlikely to be significant; and where appropriate, have been addressed in the content of this EIAR document.

2.8 RELATED DEVELOPMENT AND CUMULATIVE IMPACTS

Each Chapter of the EIAR includes a cumulative impact assessment of the proposed development with other existing, permitted, and planned projects in the immediate area. As noted in Section 2.2.2 above and Appendix 2.1, the EIAR team has been advised of the relevant planning history on the application

site and in the surrounding area and also undertook their own relevant planning history research. The potential cumulative impacts primarily relate to traffic, dust, noise and other nuisances from the construction of the development, with other planned or existing projects, and each of the following EIAR chapters has regard to these in the assessment and mitigation measures proposed.

As such, with the necessary mitigation for each environmental aspect, it is anticipated that the potential cumulative impact of the proposed development in conjunction with other planned developments will be minimal.

2.9 MITIGATION MEASURES

As Chapter 2 is generally concerned with providing a description of the proposed development and setting out the alternatives considered, no specific mitigation measures are required, with the remaining chapters of this EIAR providing mitigation for identified impacts under each of the relevant environmental topics.

As described in this chapter, the consideration of reasonable alternatives by the applicant and design team has allowed for the selection of the most appropriate development proposal, with cognisance and comparison of the likely environmental effects of the alternatives considered assisting in the consideration of these options. Thus, an element of mitigation by design is inherent in the final scheme now proposed.

Each individual chapter deals with specific aspects of the proposed development and includes mitigation and monitoring measures were considered appropriate.

2.10 CONCLUSION

This chapter of the EIAR has provided a description of the development proposal and outlined the reasonable alternatives considered by the developer and design team.

In summary, the development comprises a Large-scale Residential Development of 581 no. residential units, consisting of 396 no. houses and 185 no. duplex/apartment units. (53 no. 1 beds, 151 no. 2 beds, 315 no. 3 beds and 62 no. 4 beds). The proposals also include a five to part six storey Neighbourhood Centre – childcare facility (762 sq.m), café / restaurant unit (74 sq.m), health centre (174 sq.m), and two no. Class 1- Shop units (124 sq.m) and (166 sq.m). The development provides public and communal open spaces, landscaping, car and cycle parking spaces, internal roads, pedestrian and cycle paths, associated vehicular accesses, ESB substations, and all associated site and infrastructural works.

This chapter has outlined the reasonable alternatives considered as required under the 2014 EIA Directive and Irish planning legislation. This chapter has explained that the consideration of alternative locations was not considered reasonable or appropriate, however, details have been provided of considerations of alternative designs. The reasons for the choice of the preferred design proposed have been set out.

2.11 REFERENCES

- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, August 2018

- Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA, 2022
- Environmental Impact Assessment of Projects – Guidance on the Preparation of the Environmental Impact Assessment Report (2017) – European Commission
- Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities DOELG, 2004
- Authorities Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems - Key Issues Consultation Paper, Department of Environment, Community and Local Government, 2017
- Circular letter PL 1/2017 - Advice on Administrative Provisions in Advance of Transposition (2017)
- The requirements of Part X of the Planning Acts, and Part 10 of the Planning Regulations
- Revised National Planning Framework 2025
- Regional Spatial and Economic Strategy (RSES) 2019-2031 for the Eastern and Midland Region
- Building Height Guidelines 2018
- Apartment Guidelines 2025
- Kildare County Development Plan 2023-2029
- Maynooth and Environs Joint Local Area Plan 2025-2031

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APPENDIX 2.1

REVIEW OF SURROUNDING DEVELOPMENT AND PLANNING HISTORY

Appendix 2.1: Review of Surrounding Development and Planning History

This appendix provides further detail on the planning history of the subject site and the surrounding area, including details of permissions on the subject site (where relevant), current live applications and permissions in the vicinity of the site to inform the assessments undertaken in each chapter.

The EPA Guidelines on Information to be contained in Environmental Impact Assessment Reports (2022) defines 'Cumulative Effects' as:

"The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects."

The cumulative impacts of the proposed development in combination with other relevant existing or approved projects have been considered during the preparation of this LRD application to determine whether these would give rise to significant impacts on the environment.

The details of these permissions / applications, along with the planned development adjoining the current proposals, have been provided to the EIAR consultancy team and inform the cumulative impact assessment to be undertaken as part of the preparation of this EIAR, with each consultant considering and undertaking their own planning history search in respect to their cumulative impact assessment where necessary.

Planned Development

The proposed development comprises a residential scheme delivering 581 no. residential units, a childcare facility, health centre, a neighbourhood centre with communal and public open spaces, landscaping, car and cycle parking, a secondary link street, and all associated internal roads, pedestrian and cycle paths, along with necessary site and infrastructural works.

The subject lands are designated within the Maynooth and Environs Joint Local Area Plan (LAP) 2025-2031 as part of the 'Key Development Area (KDA) – Railpark', zoned primarily for new residential development ('C2 – New Residential') with a smaller portion zoned for neighbourhood centre uses ('N – Neighbourhood Centre').

Throughout this EIAR, the environmental effects of both the proposed development and the anticipated future developments in the KDA, as well as other known committed developments in the surrounding area, will be considered to ensure a comprehensive assessment of cumulative impacts.

Existing and Permitted Development

The identification of relevant existing and permitted developments in terms of cumulative impacts has been undertaken based on a review of the planning history of the surrounding area. Site visits have also informed the consideration of potential cumulative effects, allowing for identification of developments which are currently under construction or recently completed in the vicinity.

Relevant developments have been identified with regard to their size and scale, their use mix and composition, and their proximity to the proposed development, in particular to identify any substantial / strategic residential development or larger scale commercial development. Applications of a minor nature

were discounted from the planning history search, for example applications for under 5 no. dwellings, or applications relating to minor extensions, works to existing dwellings, and change of use applications. The planning history search focussed on relevant permitted developments in the last 5 years, with a search also undertaken for permitted longer term permissions (i.e. with a 10 year permission).

A zone of influence of c. 500 metres was initially used for the desk-based identification of relevant development in close proximity to the site and given the limited planning permissions identified in this zone, this was subsequently extended to c. 1,000 metres. Larger developments with potential for in-combination construction or operational impacts have also been considered in the wider area beyond the 500 metre and 1,000 metre radius. The 500 metre and 1,000m radius from the centre of the subject site was generated on the Kildare County Council online planning enquiry map, with an accompanying report generated from the webpage of relevant planning applications within that area.

This qualitative approach to the identification of relevant developments is effective in scoping the potential for cumulative impacts / in combination effects and has informed the EIAR chapters prepared by specialist consultants, which assists in the consideration of potential cumulative impacts as part of the EIAR. However, it should be noted that, depending on the particular environmental factor, some of the EIAR chapters may consider other developments either within the immediate surrounding area or further afield (for example more distant development that may be relevant for some factors such as traffic / noise may be less relevant to other environmental factors such as archaeology and cultural heritage).

Relevant Planning History

As set out in the main body of Chapter 2, the occupation of the proposed development is dependent on the delivery of the Maynooth Eastern Ring Road (MERR) as the scheme includes two no. vehicular accesses from same, and also connects to services being provided within this important piece of road infrastructure for Maynooth. There is also a new pumping station permitted to the immediate north-east of the application site, as referenced below, and we understand that Uisce Eireann will require this to be delivered at a certain point in time during the delivery of the residential development on the zoned lands at Railpark. In addition, the scheme includes for a vehicular connection to the under construction residential development to the south, to be known as 'The Grange', and these are considered the most relevant permitted developments for the purposes of this EIAR. In addition, other recent permissions in the vicinity of the lands are referenced and have been considered where relevant throughout the EIAR.

Maynooth Eastern Ring Road (MERR)

Reg. Ref.: P82019-08 - Maynooth Eastern Ring Road

A Part 8 application for the Maynooth Eastern Ring Road (MERR), which provides for the construction of a 7m carriageway of 1.55km in length, bridge across the Royal Canal and railway line, provision of pedestrian and cyclist facilities along the length of the development, including a link to the towpath of the canal, new junctions at the R148 Dublin Road and Dunboyne Road (R157) and the Celbridge Road (R405) and Griffin Rath Road (L80149) and all associated works, was approved by Kildare County Council on the 29th of July 2019.

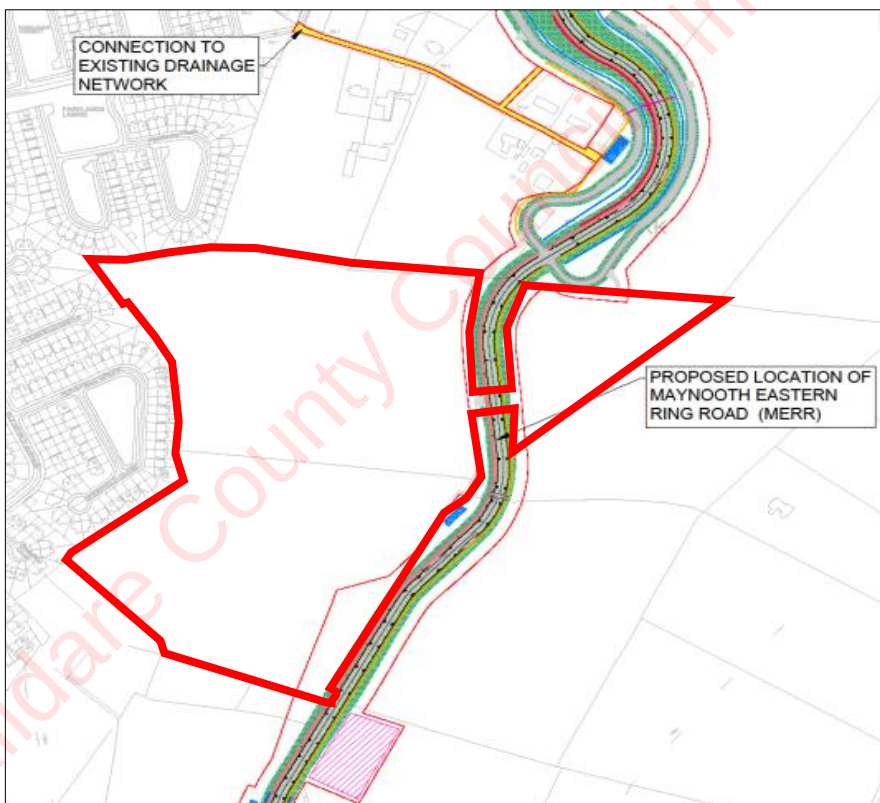
The Planning Report accompanying the Part 8 application described the 'Maynooth Eastern Ring Road' as comprising of *'a new single carriageway relief road to the east of Maynooth town, to facilitate the connection of the R405 Celbridge Road and the R148 Leixlip Road. The proposed new road will include*

a 41m long single span bridge crossing of the Royal Canal and the Dublin to Sligo railway line. At the northern extent of the development it will connect to the existing junction of the R148 Leixlip Road and the R157 Dunboyne Road. At the southern end of the development it will connect to the existing junction of the R405 Celbridge Road and the Griffin Rath Road. Pedestrian and cyclist facilities will be provided on each side of the new relief road, in both north and south directions, and an access to the Royal Canal towpath will be provided from the northern end of the proposed road for pedestrians and cyclists. The relief road will be approx. 1.55 km long, while approximately 800m of existing roads will be upgraded to accommodate the proposed adjustments to the existing junctions. Access to lands, both agricultural and those zoned as 'New Residential' will be provided to enable future development'.

The route of this link road is orientated through the subject lands and will provide access to the site and has been designed to facilitate residential development on the lands as illustrated in the Railpark KDA in the new Maynooth and Environs Joint LAP. A relevant extract of the proposed ring road is shown in Figure A2.1 below, with the approximate extent of the subject lands' boundary outlined in red.

The CPO process associated with the MERR is currently being progressed by KCC following approval by An Bord Pleanála on the 26th day of January 2024, and a Contractor is expected to be appointed in August and construction completed within 18 months, i.e. September 2026. In advance of the construction of the MERR, direct access from the subject lands to a public road is not possible. However, the recent permissions on the Railpark lands to the south, for The Grange residential development, which is now under construction, provide the potential for vehicular access through these adjacent lands to the Celbridge Road / R405.

Figure A2.1: Extract of Part 8 Layout as Submitted with Extent of Application Site Approximately Identified in Red



Source: [Maynooth Eastern Ring Road PI. Ref P82019-08 - Kildare County Council \(kildarecoco.ie\)](#) Note: Red Line Indicative – extract only of part of Part 8 approved road)

Reg. Ref.: 21360- New Pumping Station at Railpark

Kildare County Council granted permission on 27th of September 2021 to Irish Water (now Uisce Eireann) for the following development:

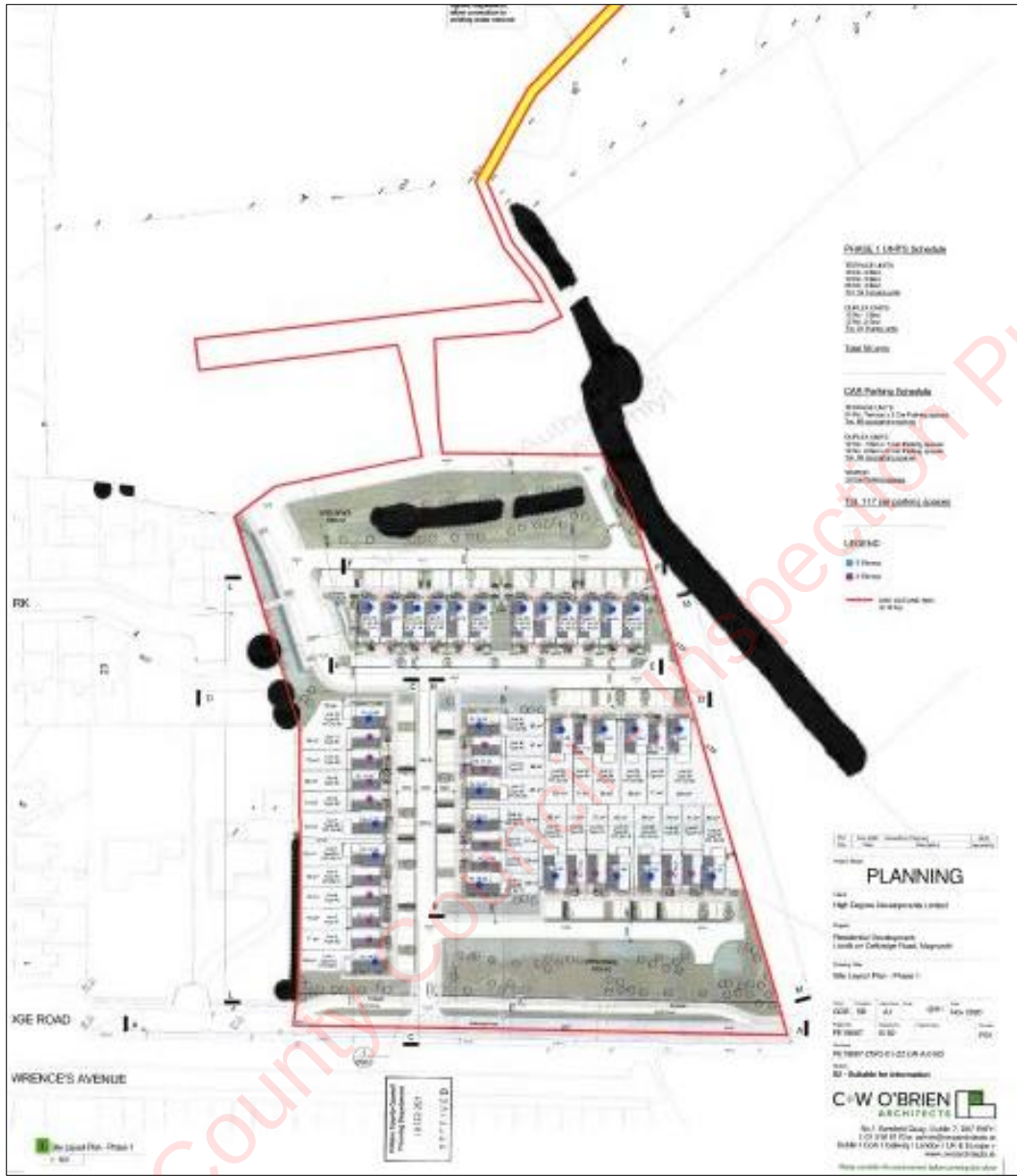
“A new wastewater pumping station with an underground emergency storage tank; inlet chamber, wet well chamber, valve and flow chambers; above ground welfare building, control kiosk, fixed lifting gantry, 1 No. odour control unit, security gate and fencing. All associated ancillary and enabling works including hardstanding, landscaping and site drainage. All the above is proposed on a site of approximately 0.1 hectares at lands to the north of Celbridge Road within the townland of Railpark.”

Figure A2.2: Extract of Site Layout Plan for permitted New Pumping Station at Railpark



southwest of the subject site, as provided for under that permission, and subject to agreement with the adjoining landowner / Planning Authority. The layout allows for connection to the north via a road terminating at the boundary which allows for a future connection to the subject site. We note that the permitted residential development will be advanced prior to the development being implemented on the subject site and will provide for future connections into these lands.

Figure A2.3: Site Layout Masterplan Map



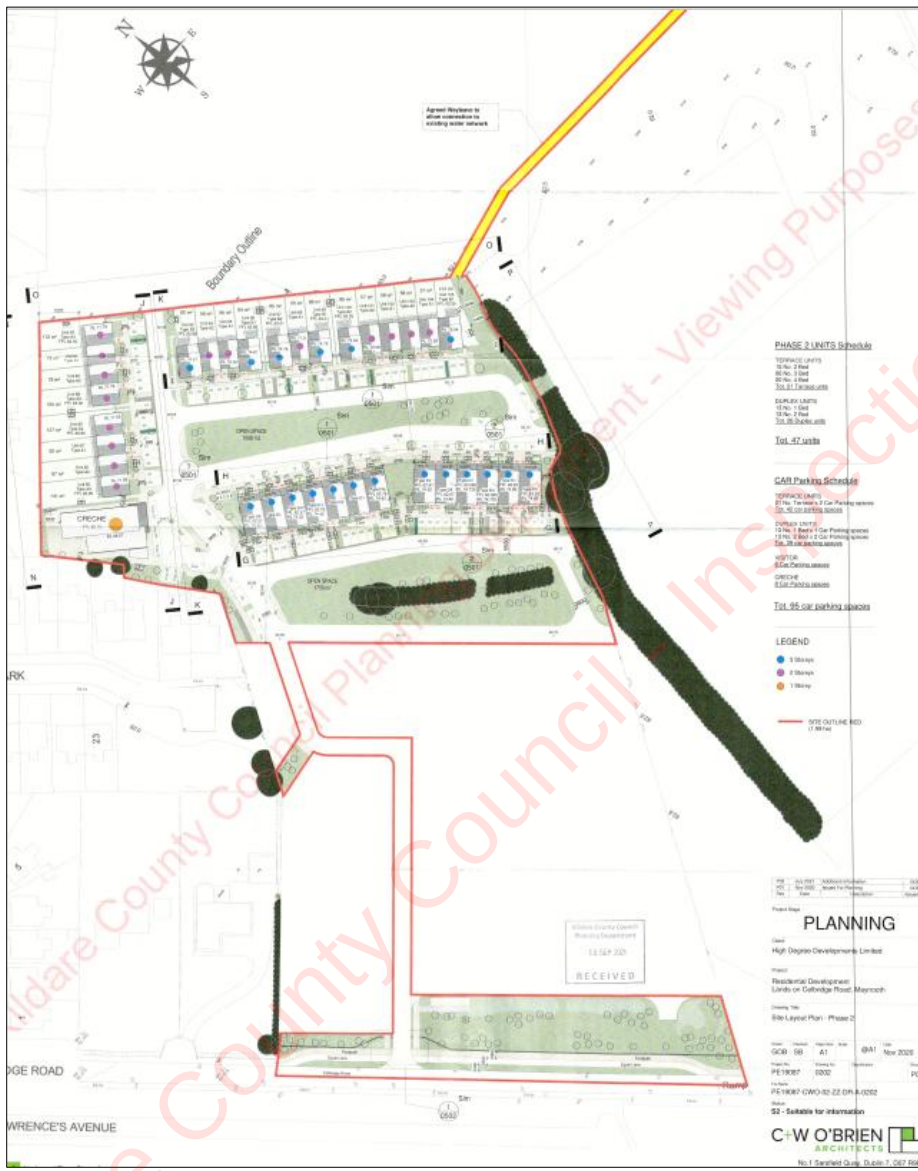
Extract from Site Layout (combined 2 phases, includes PRR 21156)

Reg. Ref.: 21156 / ABP Ref.: 312685-22

An Bord Pleanála granted permission to High Degree Developments Limited in an Order dated the 13th of February 2024, subject to 25 no. conditions, for Phase 2 of a residential development, consisting of c. 47 no. dwellings, at lands adjoining an existing residential development (Rockfield Park), Railpark, Celbridge Road, Maynooth, Co. Kildare. This forms Phase 2 of a residential masterplan for some 105 no. units in total on a wider c. 3.26 ha landholding under the Applicant's control.

The development provides for a future vehicular connection to tie-in with the residential development permitted under Reg. Ref.: 21155 / ABP Ref: 312671-22 (Phase 1) and Reg. Ref.: 21156 / ABP Ref: 312685-22 (Phase 2) to the southwest of the subject site, as provided for under that permission, and subject to agreement with the adjoining landowner / Planning Authority. The layout allows for connection to the north via a road terminating at the boundary which allows for a future connection to the subject site. We note that the permitted residential development will be advanced prior to the development being implemented on the subject site and will provide for future connections into these lands.

Figure A2.4: Site Layout



The Board in granting permission for the above developments had regard to the designation of Maynooth as a 'key town' at the top of the settlement hierarchy of Co. Kildare, the housing targets for the town to 2028 as set out in the CDP 2023-2029, and inter alia the pattern of development in the area.

Reg. Ref.: 211108- Parklands Grove

Kildare County Council issued a final grant on 3rd October 2022 for a year 10 permission for the demolition of a habitable house and the construction of residential development at Parklands Grove, Railpark, Maynooth, Co. Kildare, W23 V5D4. The site is c. 300m north of the subject application site.

The application as submitted included 40 no. houses and 36 no. apartments, 1 no. vehicular link with the approved Maynooth Eastern Ring Road and all associated and ancillary site development works.

The application was subject to further information and a response was submitted on 29th April 2022 and was deemed significant.

Condition 3 states:

“The Maynooth Eastern Ring Road (MERR) shall be operational prior to the occupation of housing in this proposed development unless otherwise agreed in writing with the Transportation Section of Kildare County Council.

Reason: In the interest of the provision of proper access and to prevent traffic congestion in Maynooth Condition No. 5 of the permission outlines that 76 no. residential units are permitted on site. “

Figure A2.5: Site Layout Plan (as revised at FI stage)



Other Relevant Planning History in the Wider Area

Reg. Ref.: 2461139 – Doctor's Lane

Kildare County Council issued decision to grant planning permission on 15th May 2025 for the following development on lands at Doctor's Lane, Maynooth, Co. Kildare (c. 850m northwest of the site):

The construction of 18 no. residential units comprising of 1 no. 2 bed 3 storey terraced house, 10 no. 2 bed with study 3 storey terraced houses, and 7 no. 3 bed 3 storey terraced houses, all provided with private gardens and balconies/terraces; bin and bicycle stores; car parking; new vehicular access on Doctor's Lane; landscaping; boundary treatments including works to existing boundary treatments; public lighting; and all associated site infrastructure and engineering works necessary to facilitate the development including the decommissioning and removal of the existing soakaway system serving No. 8 Main Street and replacement with a new SuDS system.

A Natura Impact Statement (NIS) has been prepared and is submitted to the planning authority with the application.

The application was subject to a request for further information subject to 3 items (design/layout, transportation and comments raised by third parties). The development is currently subject to a third party appeal.

Figure A2.6: Proposed Site Layout Plan



Reg. Ref.: 2460774 – Residential Development on Mill Street

Kildare County Council issued a final grant on 6th January 2025, subject to 19 no. conditions, for amendments to the permitted residential development under Reg. Ref.: 23/494 on lands adjoining and to the rear of St Mary's Church at Mill Street, Maynooth, Co. Kildare. The site is c. 1km to the north west of the application site.

The development included for permission for a Large-scale Residential Development to consist of the provision of 115no. apartments in 4no. separate blocks

Condition 2 outlines that this permission authorises the following amendments to permission REF 23/494:

- (a) *Reconfiguration of the basement layout with a reduction in car parking provision within the scheme from 74 no. car parking spaces to 69 no. car parking spaces.*
- (b) *The redesign of apartment blocks A, B1, B2 and C within the scheme with each block incorporating the following proposals only:*
 - *Block A: A four-storey building comprising 10 no. 2bed apartments.*
 - *Block B1: A five-storey building comprising 18 no. 2bed apartments.*
 - *Block B2: A six-storey building comprising 25 no. 1bed apartments and 35no. 2bed apartments.*
 - *Block C: A part 4 storey and part 5 storey building comprising 4no. 1bed apartments, 14no. 2bed apartments and 9no. 3bed apartments. Block C will be raised on stilts with a flood storage area provided at ground level beneath this block.*
- (c) *The amendment of overall unit mix within the scheme which incorporated 27no. 1bed apartments, 77no. 2bed apartments and 11no. 3bed apartments under permission 23/494 (a total of 115 apartments) to provide an amended unit mix consisting of 29no. 1 bed apartments, 77no. 2bed apartments and 9no. 3bed apartments (total of 115 apartments).*
- (d) *Associated amendments to building designs, facades, floor plans, layouts and internal configurations.*
- (e) *Amendments to the creche (providing for 29 child spaces as per drawing PL16-164-024 dated 20/04/2023) and restaurant layouts in Block A.*
- (f) *The omission of the office unit from Block A.*
- (g) *Amendments to communal space areas and associated parking area/turning area at podium level within the courtyard to include for provision of play areas.*
- (h) *The provision of associated site works and attenuation system along with a foul pump station and foul, storm and public water networks for connection to the existing foul, storm and public water networks.*
- (i) *Provision of an ESB substation adjacent to Block A.*
- (j) *Site excavation works to facilitate the proposed development to include levelling, excavation and general site preparation works.*

(k) The provision of an amended basement layout which is to be positioned beneath blocks B1, B2.

Reason: In the interests of clarity and orderly development.

Construction for the development has commenced.

Figure A2.7: Proposed Site Layout Plan



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CHAPTER 3

POPULATION AND HUMAN HEALTH

3.0 POPULATION AND HUMAN HEALTH

3.1 INTRODUCTION

The 2014 EIA Directive (2014/52/EU) updated the list of topics to be addressed in an EIAR and has replaced 'Human Beings' with 'Population and Human Health'. This chapter also meets the requirement for assessment of 'Human Beings' as per Schedule 6 of the Planning and Development Regulations 2001 (as amended).

This chapter of the EIAR was prepared by Tiarna Devlin, BA, MRUP, MRTPI, MIPI and Anton O'Neill, MPLAN, MRTPI, and approved by Paul Turley, Managing Director, BA, MRUP, Dip Environmental & Planning Law, MIPI, of John Spain Associates, Planning and Development Consultants. In preparing this chapter we have regard to the other inputs to this EIAR and the planning application, in particular the chapters addressing Air Quality, Noise and Vibration and Traffic and Transport, and the separate reports addressing Operational Waste Management prepared by DNV and Construction Waste Management and the Construction & Environmental Management Plan prepared by ROD.

Population and Human Health comprise an important aspect of the environment to be considered. Any significant impact on the status of human health, which may be potentially caused by a development proposal, must therefore be comprehensively addressed.

Population and Human Health is a broad ranging topic and addresses the existence, activities and wellbeing of people as groups or 'populations'. This chapter of the EIAR document concentrates on those topics which are manifested in the environment, such as new land uses, more buildings or greater emissions. The EIAR identifies, describes and assesses in an appropriate manner, in light of each individual case, the direct and indirect significant effects of a project on population and human health.

3.2 STUDY METHODOLOGY

At the time of writing there is no specific guidance from the EU Commission on the 2014 EIA Directive to indicate how the new term 'Human Health' should be addressed. Therefore, this chapter of the EIAR document has been primarily prepared with reference to recent national publications which provide guidance on the 2014 EIA Directive including the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (2018) and the Guidelines on the information to be contained in Environmental Impact Assessment Reports, published by the EPA in May 2022.

The preparation of this chapter also has regard to the guidance published by the European Commission in 2017 on the preparation of EIARs (taking account of the changes introduced under the 2014 Directive). The European Commission guidance states the following in relation to the assessment of Human Health:

"Human health is a very broad factor that would be highly Project dependent. The notion of human health should be considered in the context of the other factors in Article 3(1) of the EIA Directive and thus environmentally related health issues (such as health effects caused by the release of toxic substances to the environment, health risks arising from major hazards associated with the Project, effects caused by changes in disease vectors caused by the Project, changes in living conditions, effects on vulnerable groups, exposure to traffic noise or air pollutants) are obvious aspects to study. In addition, these would

concern the commissioning, operation, and decommissioning of a Project in relation to workers on the Project and surrounding population.”

EU Commission’s SEA Implementation Guidance from 2003 gives an indication of how ‘Human Health’ should be considered in terms of environmental assessment and notes:

“The notion of human health should be considered in the context of the other issues mentioned [in the list of factors to be identified, described and assessed] and thus environmentally related health issues such as exposure to traffic noise or air pollutants are obvious aspects to study.” (para 5.26).

In accordance with this approach to Human Health espoused in the Commission Guidance, this chapter addresses human health in the context of other factors addressed elsewhere in further detail within the EIAR where relevant. Relevant factors identified include inter alia water, air quality, noise, and the risk of major accidents and disasters.

The 2018 EIA Guidelines published by the Department of Housing, Planning and Local Government (DHPLG) state that there is a close interrelationship between the SEA Directive and the 2014 EIA Directive. The Guidelines state that the term ‘Human Health’ is contained within both of these directives, and that a common interpretation of this term should therefore be applied.

To establish the existing receiving environment / baseline, several site visits were undertaken by the EIAR consultancy team to appraise the location and likely and significant potential impact upon human receptors of this proposed development. A desk based study of published reference documents such as Central Statistics Office Census data, the ESRI Quarterly Economic Commentary, the Regional Spatial and Economic Strategy for the Eastern and Midlands Regional Assembly 2019 and the Kildare Development Plan 2023-2029, and the Maynooth and Environs Joint Local Area Plan 2025-2031 has also be carried out.

It is noted that there are numerous inter-related environmental topics described throughout the EIAR document which are also of relevance to Population and Human Health. Issues such as the potential likely and significant impacts of the proposed development on townscape and visual impact, daylight and sunlight, archaeology and cultural heritage, air quality and climate, noise and vibration, water, land and soils, material assets including traffic and transport impacts, are of intrinsic direct and indirect consequences to human health. The daylight and sunlight assessment and microclimate / wind assessment of the proposed development is a separate matter to the EIAR and is addressed in standalone reports prepared by GIA accompanying the application.

The Guidelines on the information to be contained in Environmental Impact Assessment Reports, published by the EPA states that *‘in an EIAR, the assessment of impacts on population & human health should refer to the assessments of those factors under which human health effects might occur, as addressed elsewhere in the EIAR e.g. under the environmental factors of air, water, soil etc’*.

This chapter of the EIAR document focuses primarily on the potential likely and significant impact on Population, which includes Human Beings, and Human Health in relation to health effects/issues and environmental hazards arising from the other environmental factors. Where there are identified associated and inter-related potential likely and significant impacts which are more comprehensively addressed elsewhere in this EIAR document, as discussed above, these will be referred to. The reader is directed to the relevant environmental chapter of the EIAR document for a more detailed assessment.

The implementation of the range of remedial and mitigation measures to be included throughout the EIAR document are considered to effectively limit any likely adverse environmental impacts of the construction and operational phase of the proposed development on Human Beings. No significant health and safety effects are envisaged during either the construction or operational phases of the proposed development. The Health and Safety policy, procedures and work practices of the proposed development will conform to all relevant health and safety legislation both during the construction and operational stages of the proposed development. The proposed development will be designed and constructed to best industry standards, with an emphasis being placed on the health and safety of employees, local residents and the community at large. It is not envisaged that detrimental effects on human health will be suffered by those living adjacent to the development during both the construction and operational phase of the development. Furthermore, the proposed development will result in several positive impacts, some of which are significant. These include inter alia a significant positive economic impact during both the construction and operational phases of the proposed development, along with positive impacts on the land use and settlement patterns, employment and social patterns.

3.3 THE EXISTING RECEIVING ENVIRONMENT (BASELINE SCENARIO)

3.3.1 Introduction

A description of the relevant aspects of the current state of the environment (baseline scenario) in relation to population and human health is provided below. Specific environmental chapters (water, noise and vibration, air quality, climate) in this EIAR provide a baseline scenario relevant to the environmental topic being discussed.

Therefore, the baseline scenario for separate environmental topics is not duplicated in this section; however, in line with guidance provided by the European Commission, the EPA and the DHPLG, the assessment of impacts on population and human health refers to those environmental topics under which human health effects might occur, e.g. noise, water, air quality etc. An outline of the likely evolution without implementation of the project as regards natural changes from the baseline scenario is also provided. This is the “Do Nothing” scenario.

The existing environment is considered in this section under the following headings:

- Economic & Employment Activity;
- Social Patterns;
- Land Use and Settlement Patterns;
- Housing
- Health & Safety;
- Risk of Major Accidents and Disasters.

The application site has a total area of c. 15.27 hectare and is located on the eastern side of Maynooth, south of the Dublin-Sligo railway line and the Royal Canal, in an area known as Railpark, as illustrated in Figure 2.1 below. The site is approximately 1.65 km east of the town centre and 1.5 km from Maynooth rail station (via Celbridge Road) and is currently in agricultural use (see Figure 3.1), but forms part of the designated ‘Key Development Area – Railpark’ in section 11.4.1 of the Maynooth and Environs Joint Local Area Plan 2025-2031. The subject site is zoned C(2) for new residential development with a small portion of the lands zoned N for Neighbourhood Centre as outlined on Map 11.1 of the JLAP.

Figure 3.1: Site Location (Red line Indicative Boundary)

Source: Goggle Maps

The site is to the east of established residential neighbourhoods at Parklands and Rockfield. The site is located to the northeast of the residential development 'The Grange' permitted under Reg. Ref.: 21155 / ABP Ref: 312671-22 (Phase 1) and Reg. Ref.: 21156 / ABP Ref: 312685-22 (Phase 2), which is currently under construction. Maynooth Educate Together National School on Celbridge Road is located approximately 230 metres to the south and Gaelscoil Uí Fhiaich is located approximately 250 metres to the south across Celbridge Road.

There are hedgerows along the northern and western boundaries of the site, the northern hedgerow being the most complete. The hedgerow along the western boundary with Rockfield is fragmented with many gaps where vegetation has been removed. There are ornamental trees and hedging planted in adjoining gardens intermingled with the hedgerow. There is also a hedgerow running north-south through the site and along the southeastern corner.

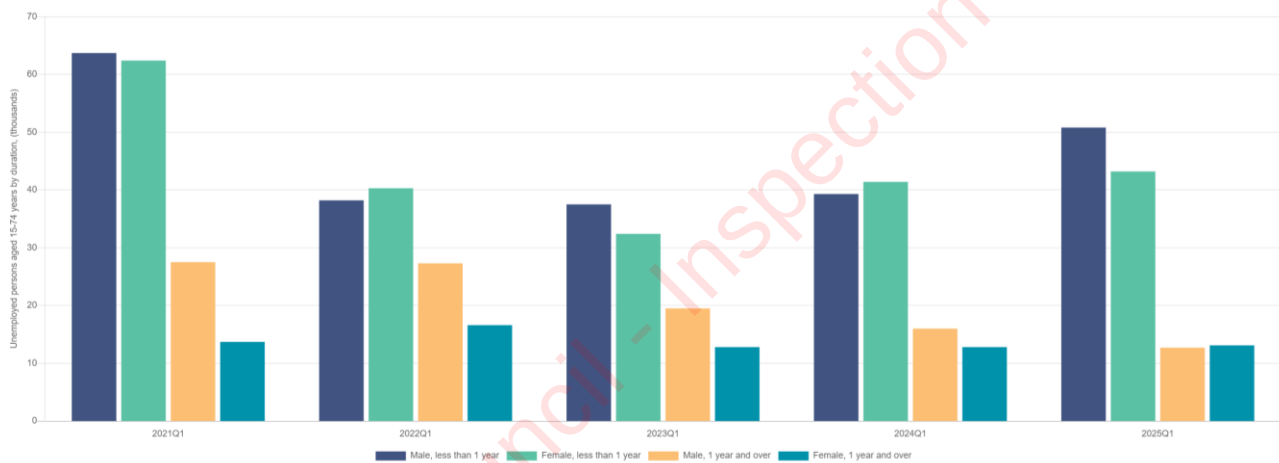
The subject site is serviced by a bus connects route located to the south of the site along Celbridge Road (R405), which includes bus route C4 / C6 from Maynooth to Ringsend Road, Dublin 4. The new W6 orbital route is also serviced from this bus stop, located less than 200m from the south of the subject site which connects Maynooth to Celbridge, Newcastle and Tallaght.

The Maynooth Train Station is located within 12-20 minutes of walking distance of the subject site and provides a frequent train services to Dublin Connolly Station. The train station is part of the Dart+ West programme which aims to modernise and improve existing rail services in the Greater Dublin Area, delivering frequent, modern, electrified services to Maynooth. The subject site is also within walking distance of the town centre with a large range of restaurants, cafes and other services/facilities such as churches, community centres, medical services and a library. There are a number of sports and recreational facilities available in proximity to the site, including Ace Fit Club, Harbour Field Park and Glenroyal Hotel and Leisure Club.

3.3.2 Economic & Employment Activity

The CSO's Labour Force Survey for Q1 2025 states that employment increased by 89,900 or 3.3% to 2,794,100 persons in the 12 months to Q1 2025 from 2,704,200 in Q1 2024. This reflects continued strengthening in labour market conditions and builds on the recovery in economic activity seen in recent years.

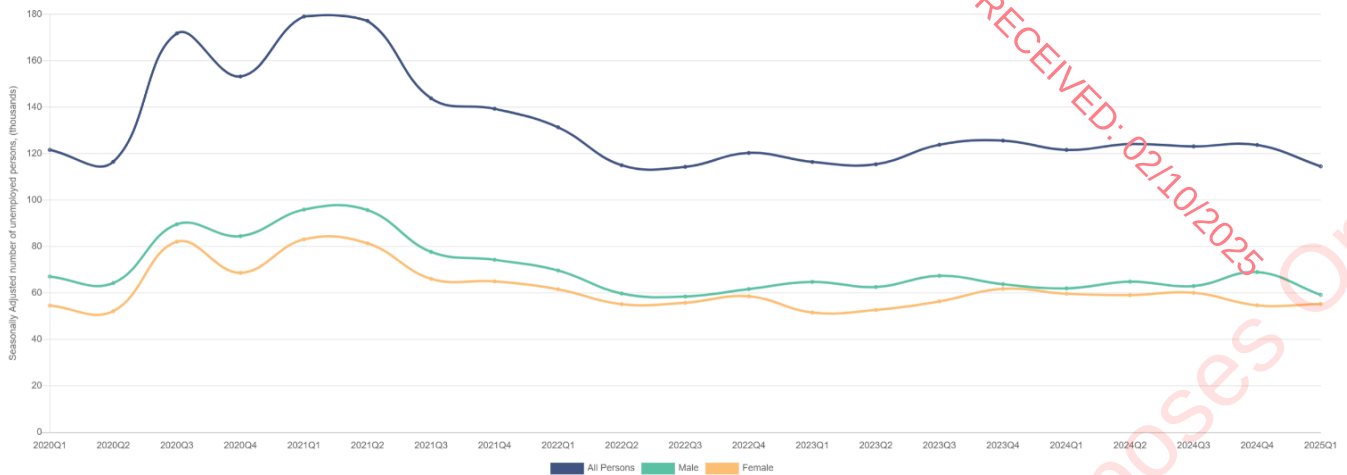
Figure 3.2: Unemployment during Q1 2021-Q1 2025



Source: [Unemployment Q1 2025 - CSO - Central Statistics Office](#)

The employment rate for those aged 15-64 rose to 74.7% in Q1 2025, up from 73.8% in Q1 2024 and 73.7% in Q1 2023. Simultaneously the unemployment rate for those aged 25-74 years was 3.6% in Q1 2025, up from 3.5% 12 months earlier. The total number of persons unemployed in this age group was 91,100, an increase of 6,400 people (+7.6%) from Q1 2024.

Figure 3.3: Unemployment rate for those aged 15-74 years by sex Quarter 1 2020 to Quarter 1 2025



Source: CSO [Unemployment Q1 2025 - CSO - Central Statistics Office](#)

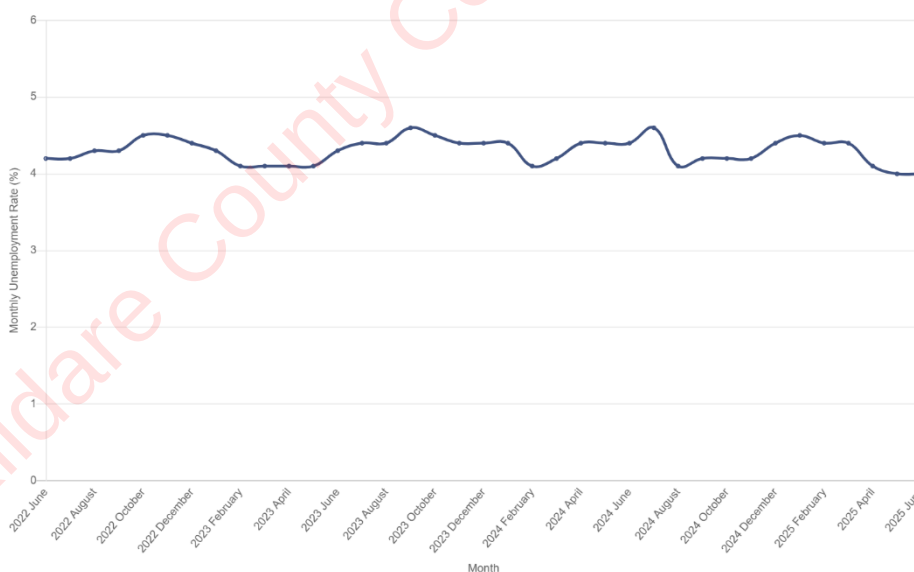
The CSO Monthly release (2nd July 2025) notes that:

“In June 2025, the seasonally adjusted unemployment rate was 4.0%, which was unchanged from the May 2025 rate. On an annual basis, the June 2025 unemployment rate of 4.0% was down from a rate of 4.4% in June 2024

The seasonally adjusted number of persons unemployed was 117,900 in June 2025, compared with 118,400 in May 2025. There was a decrease of 8,200 in the seasonally adjusted number of persons unemployed in June 2025 when compared with a year earlier.

The seasonally adjusted number of males unemployed rose to 61,300 in June 2025, compared with 60,700 in May 2025. In June 2025, the seasonally adjusted number of females unemployed fell to 56,600 from the 57,700 recorded in May 2025.”

Figure 3.4: Seasonally Adjusted Monthly Unemployment Rate (ILO), June 2022 to June 2025



Source: [Monthly Unemployment June 2025 - CSO - Central Statistics Office](#)

The Economic and Social Research Institute (ESRI) Quarterly Economic Commentary for Spring 2025 notes that:

“At the start of 2025, the Irish economy is in a strong position. Unemployment stands at 3.9 per cent, while real income growth is set to exceed 3.5 per cent in the current year. As a baseline, modified domestic demand (MDD) is forecast to increase by 3.0 per cent in 2025 and by 2.8 per cent in 2026. These projections are based on the assumption that no trade tariffs are imposed between the United States and the European Union.”

The ESRI Commentary outlines that *“the international climate remains particularly uncertain, with the incoming US administration signalling new tariffs that may disrupt global trade. In an alternative scenario where a 25 per cent bilateral tariff is introduced, MDD growth is projected to moderate to 2.8 per cent in 2025 and 2.1 per cent in 2026. The outlook is particularly sensitive to any targeting of pharmaceutical products, a key export for Ireland. Meanwhile, housing supply in 2024 was weaker than expected, with 30,330 units completed, raising concerns about sustained pressure on housing costs.”*

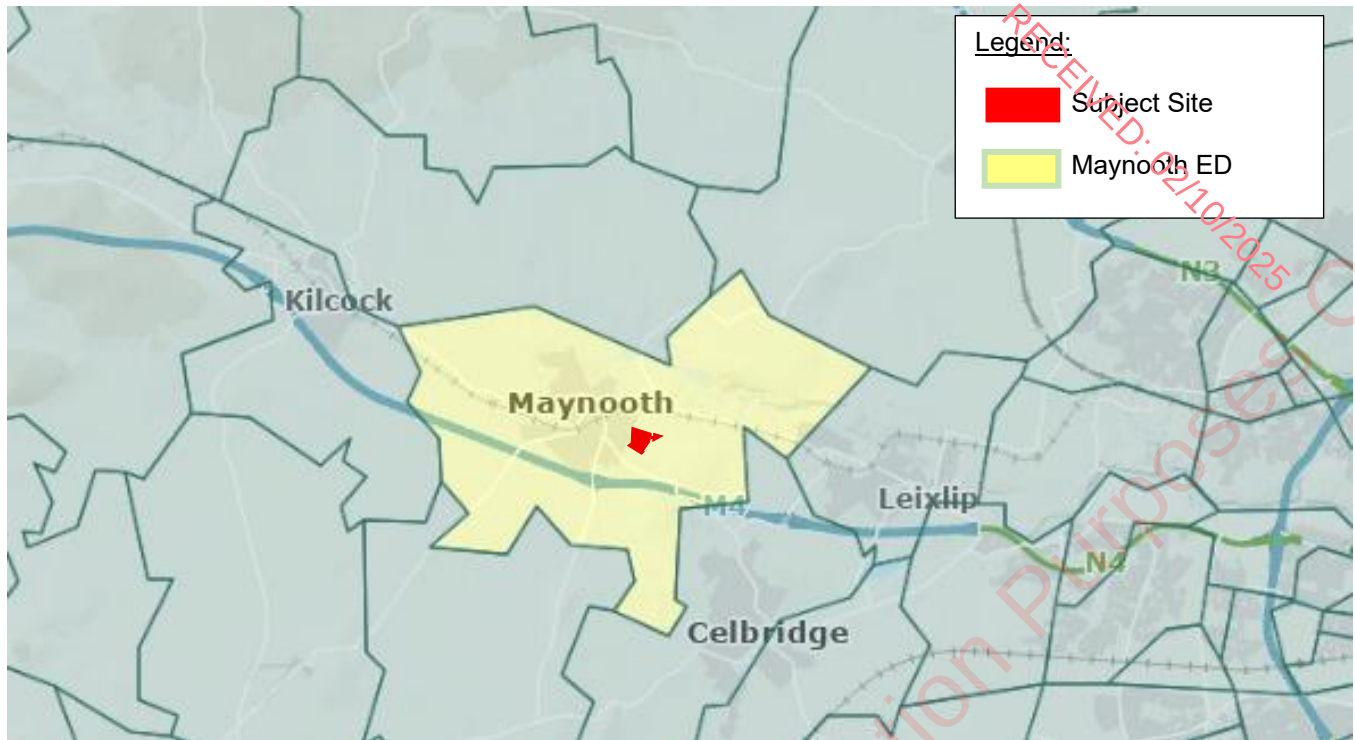
The above sources demonstrate that, while international uncertainties, particularly around US trade policy, may present downside risks, the Irish economy remains in a strong position for 2025. With unemployment at historically low levels (4.0% in June 2025) and real income growth projected to exceed 3.5%, the outlook for modified domestic demand remains positive, with baseline forecasts of 3.0% growth in 2025. Even under a more adverse global trade scenario, domestic demand is expected to hold up relatively well. This continued economic resilience, alongside increasing employment and rising incomes, is expected to drive further demand for housing, particularly in urban areas such as Dublin and urban growth towns like Maynooth, where housing supply continues to lag behind demographic and labour market pressures.

3.3.3 Social Patterns

For the purposes of this chapter, a review has been carried out of data from the 2011, 2016 and the 2022 Census of Population in order to identify any significant changes in population levels and age profile at national, regional, county, city and local levels. The 2022 Census results provides the most recent overview of the current population, employment and economic statistics and trends of the State.

The proposed development site at Railpark Maynooth, is situated within the Electoral Division (ED) of Maynooth as shown in Figure 3.5.

Table 3.1 indicates that the population of the state grew from approximately 4.5 million to 5.1 million between 2011 and 2022, representing an increase of 12.2% in 11 years. The population of the Greater Dublin Area increased by 15.4% (278,449 persons) over the same period while Kildare County grew by 17.8% (37,462 persons) between 2011 and 2022.

Figure 3.5: Image of the Maynooth electoral division indicating site location

Source: Central Statistics Office - Census 2022 Small Area Population Statistics

In particular, population growth within the wider study area of Maynooth Town rose from 2011 to 2022 by 37.9%, while the Maynooth electoral division itself experienced major growth of 37.5% since 2011 to 2022. This trend of rapid growth in Maynooth and the surrounding area brings with it a proportional increase in demand for housing and associated services provision in the area to accommodate present and future population growth in the area. The proposed development at Railpark would help alleviate such demand while also providing much needed community infrastructure in the form of GP offices, a childcare facility, retail units and Local Parks. Assuming a figure of 2.98 persons per household (average for the Maynooth ED in 2022), which is above the current national average, the proposed development could result in a population of c. 1,731 persons when fully developed for the entire Railpark LRD development (581 no. units).

Table 3.1: Population at State, Regional, County and Local Level, 2011- 2022

Area	2011	2016	2022	Change 11 - 22	% change
State	4,588,252	4,757,976	5,149,139	560,887	12.2%
Greater Dublin Area	1,804,156	1,904,806	2,082,605	278,449	15.4%
Kildare County	210,312	222,504	247,774	37,462	17.8%
Maynooth Town	12,510	14,586	17,259	4,749	37.9%
Maynooth ED	13,617	15,905	18,729	5,112	37.5%

Source: CSO

Maynooth electoral division saw a marked population increase during the 2011-2016 intercensal period, and the 2016-2022 intercensal period following the wider trend in County Dublin and Kildare County. The provision of additional housing and supporting infrastructure and services, as proposed in this application, will help to support the growing demand for housing and existing services in the area.

3.3.4 Land Use & Settlement Patterns

The site is to the east of established residential neighbourhoods at Parklands and Rockfield. The site is located to the northeast of the residential development 'The Grange' permitted under Reg. Ref.: 21155 / ABP Ref: 312671-22 (Phase 1) and Reg. Ref.: 21156 / ABP Ref: 312685-22 (Phase 2), which is currently under construction. Maynooth Educate Together National School on Celbridge Road is located approx. 230 metres to the south and Gaelscoil Uí Fhiaich is located approximately 250 metres to the south across Celbridge Road. The wider Maynooth area is characterised by medium density residential developments.

In summary, the development comprises a Large-scale Residential Development of 581 no. residential units, consisting of 396 no. houses and 185 no. duplex/apartment units. (53 no. 1 beds, 151 no. 2 beds, 315 no. 3 beds and 62 no. 4 beds). The proposals also include a five to part six storey Neighbourhood Centre – childcare facility (762 sq.m), café / restaurant unit (74 sq.m), health centre (174 sq.m), and two no. Class 1- Shop units (124 sq.m) and (166 sq.m). The development provides public and communal open spaces, landscaping, car and cycle parking spaces, internal roads, pedestrian and cycle paths, associated vehicular accesses, ESB substations, and all associated site and infrastructural works.

The subject site is located within the administrative area of Kildare County Council and is therefore subject to the objectives and policies contained within the Kildare County Development Plan 2023-2029. The site is also located within the Maynooth and Environs Joint Local Area Plan 2025-2031 area. The majority of the subject lands are zoned "C2-New Residential" in the Maynooth LAP, the objective of which is *"To provide for new residential development"*. A small portion of the lands are zoned "N-Neighbourhood Centre" which seeks *"To provide for new/existing neighbourhood centres and associated facilities. Neighbourhood centres are intended to serve the immediate needs of local residents and workers and should not compete with similar retail uses within the town centre."*

The proposed residential units and public open space are located solely on lands zoned 'C2: New Residential' in accordance with the Maynooth and Environs Joint Local Area Plan Land Use Zoning Objectives Map. The proposed uses (residential and open space) are permitted in principle under this zoning objective.

The proposed neighbourhood centre includes a Childcare Facility, Health Centre, Café / Restaurant and 2 no. Class 1- Shop units, in addition to apartments, and is located within the lands zoned 'N: Neighbourhood Centre'. Table 11.9 of the LAP confirms that these land uses are permitted in principle within the NC zoning objective. With the residential aspect open for consideration if it is ancillary to a neighbourhood centre. The proposed development provides for two no. vehicular accesses from the permitted Maynooth Eastern Ring Road (MERR), including a new pedestrian/cyclist signalised crossing, associated internal roads, pedestrian and cycle infrastructure, set down areas, bin and bike stores, paths and access points provided up to the application site boundary to provide for potential future connections to adjoining lands to the north and south, subject to agreement with the Planning Authority / adjacent landowner.

As outlined in ROD's Transport Impact Assessment, the proposed development is approximately 400m north of regional road R405 (Celbridge Road), approximately 400m south of the main Dublin to Sligo Railway line and the Royal Canal and approximately 600m south of regional Road R148 (Leixlip Road). Junction 7 on the M4 motorway is located approximately 950m south-west of the proposed development.

A Part 8 application (Reg. Ref.: P82019-08) was approved by Kildare County Council on the 29th of July 2019 for the Maynooth Eastern Ring Road (MERR), which will provide a link between the R405 Celbridge Road and R148 Leixlip Road, including a bridge over the Royal Canal and railway line. The route of this link road is orientated through the subject lands, and we note that the LAP requires the MERR to be constructed prior to or in tandem with the development of the new residential development within the Railpark KDA.

The CPO process associated with MERR is currently being progressed by KCC following approval by An Bord Pleanála on the 26th day of January 2024, a contractor was appointed in June 2025, with the scheme scheduled to commence on site in September / October 2025. The anticipated construction duration is 18 months, with completion expected by February 2027. In advance of the MERR being delivered, direct access to a public road is not available. However, recent permissions on the Railpark lands to the south, which are currently under construction, provide the potential for interim vehicular access through these adjacent lands to the Celbridge Road (R405).

The Maynooth Eastern Ring Road (to be provided by Kildare County Council) will traverse the proposed development lands in a north-south direction. Vehicular access to the proposed development will be via the new T-junction on the Maynooth Eastern Ring Road (MERR). The north-east section of the development will be accessed via a new local access road connecting the MERR. The MERR will connect the proposed development to the R148 Leixlip Road to the north and the R405 Celbridge Road to the south. The development of the Railpark KDA is contingent upon the delivery of the MERR in its entirety. In line with the adopted LAP, the applicant accepts a condition that the MERR shall be open and operational prior to the occupation of residential units, unless otherwise agreed in writing with Kildare County Council

The subject lands are strategically located adjacent to and accessed from the MERR, which in turn forms a strategic element of the overall Maynooth Outer Orbital Route, which is of strategic importance to the future and significant planned growth for the 'Key Town' of Maynooth.

As outlined in ROD Transport Impact Assessment, the Maynooth Train Station is within 12-20 minutes of walking distance from the proposed development and local amenities in Maynooth centre. It is served by the Commuter Service and Intercity Service. The Commuter Service runs between Dublin Connolly Station and Maynooth with a frequency of 15-30 minutes.

The proposed site is also accessible by bus. Bus service along Straffan Road is approximately c. 10 minutes walk from the proposed site. Phase 2 of the BusConnects Network Redesign launched on November 2021 saw the introduction of C-Spine routes including the following below that serve the Maynooth area:

- C3 – Maynooth to Ringsend: Frequency 30 minutes.
- C4 - Maynooth to Ringsend: Frequency 30 minutes.
- C5 - Maynooth to Ringsend: Frequency 5 buses per day.
- C6 - Maynooth to Ringsend; Frequency 5 buses per day.

As part of the BusConnects programme, it is proposed to further enhance the number of bus service in the area. The following BusConnects routes will serve Straffan Road and the R405:

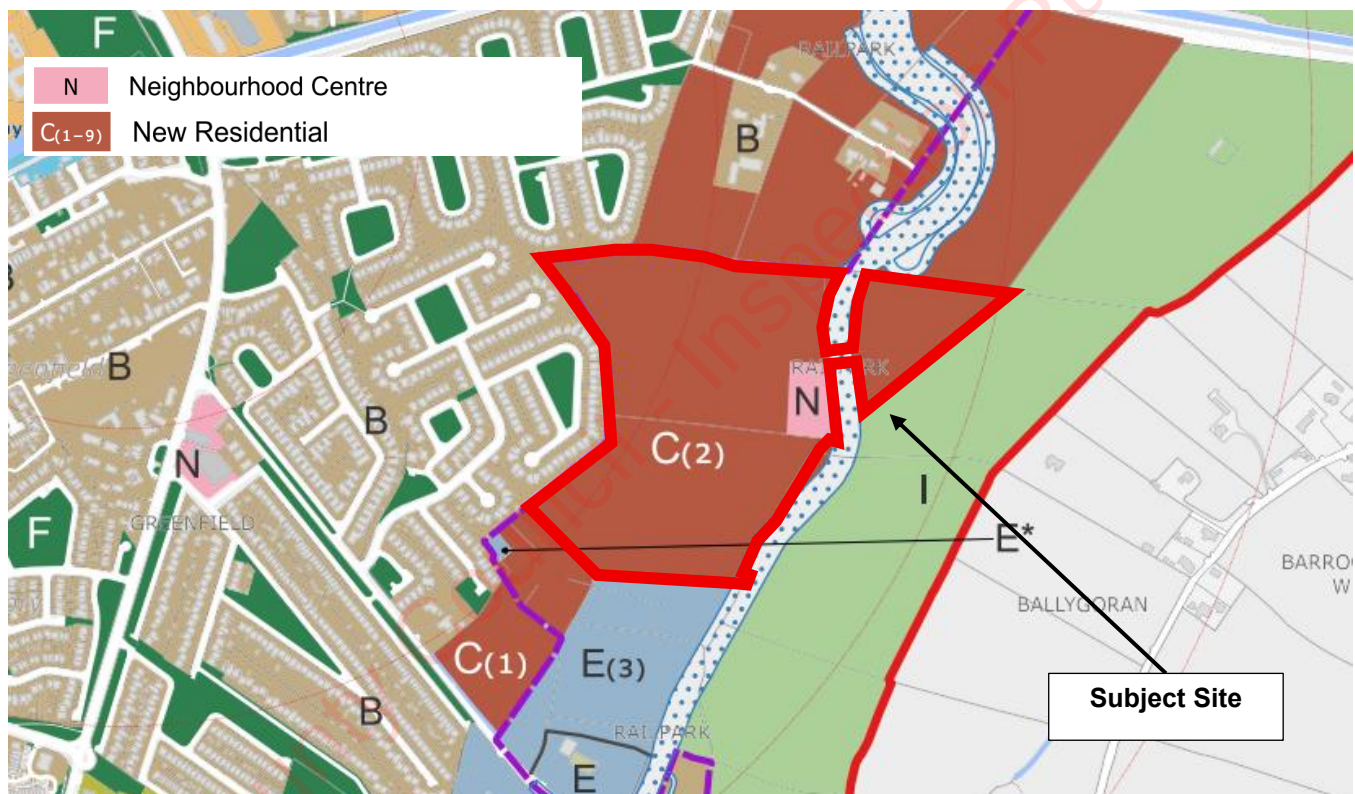
- D3: Maynooth – Ringsend, serving Straffan Road
- X25: Maynooth – Merrion Square, serving Straffan Road
- X26: Maynooth – UCD (Via City Centre), serving Straffan Road

- W6: Maynooth – Tallaght, serving R405

The subject site is well served by existing social and community infrastructure with a wide mix and variety of uses. The proposed neighbourhood centre will provide for a childcare facility at ground floor level of Block B, a health centre and a mix of retail uses. The subject site is also within walking distance of the town centre with a large range of restaurants, cafes and other services/facilities such as churches, community centres, medical services and a library. There are a number of sports and recreational facilities available in proximity to the site, including Ace Fit Club, Harbour Field Park and Glenroyal Leisure Club.

The lands to the south of the application site and to the east of the 'Grange' residential development are currently undeveloped and reserved for the Department of Education in relation to the provision of 1 no. post primary school equate to 4.38 ha in total.

Figure 3.6: Extract from Map 11.1 Land Use Zoning, Maynooth and Environs Joint Local Area Plan 2025-2031 (approximate site location outlined in red)



Source: Map 11.1 Land Use Zoning, Maynooth and Environs Joint Local Area Plan 2025-2031

3.3.5 Housing

The 'Housing For All' plan by the Irish Government and Department of Housing, Local Government and Heritage states that *"right now, Ireland's housing system is not meeting the needs of enough of our people"*.

Over the last number of years, the steadily growing demand for housing, combined with a critical undersupply of quality residential provision, has led to significant challenges in terms of affordability, homelessness, and vacancy, particularly within the Greater Dublin Area and key commuter towns such

as Maynooth, Celbridge, and Leixlip. There is a clear and established housing need in County Kildare, across the Greater Dublin Area, and nationally, as recognised in successive Government housing and planning policies, including Rebuilding Ireland: Action Plan for Housing and Homelessness (2016) and Housing for All, A New Housing Plan for Ireland (2021), which set a national target to deliver 300,000 new homes by 2030.

The Government's long-term vision for the housing system is to ensure a sustainable, affordable and high-quality supply of housing in the right locations, with social, economic and environmental sustainability at its core. The proposed development will contribute meaningfully to addressing this strategic housing need, by delivering a high-quality new residential community on zoned lands in Maynooth, adjacent to existing settlements, public transport links and local amenities, and supported by an appropriate range of community, childcare, retail and open space infrastructure.

The National Planning Framework (NPF), published in 2018, replaced the National Spatial Strategy as the overall spatial planning and development strategy for Ireland. Planning legislation provides for the Government to revise or replace the NPF every six years. On the 30th of April 2025, the Houses of the Oireachtas approved the First Revision of the National Planning Framework (NPF). The revised NPF (2025) introduced a new population growth target increasing from 5.8 million to 6.1 million by 2040. The 2025 revision of the NPF outlines a national target of 50,000 additional homes per annum to 2040, or 800,000 additional homes between 2024 and 2040 (compared to 550,000 additional homes between 2018 and 2040).

On the 29th of July 2025, the Department of Housing, Local Government and Heritage published the NPF Implementation: Housing Growth Requirements, as guidelines in accordance with Section 28 of the Planning and Development Act 2000 (as amended). These guidelines replaced the 'Section 28: Housing Supply Target Methodology for Development Planning (2020)'.

These guidelines estimate a total housing demand of c. 55,000 dwellings per annum to 2034 (including unmet demand of 13,900) and an estimated total housing demand of c. 41,000 dwellings per annum between 2034 and 2040 will need to be provided for in development plans. The new housing targets aim to evenly distribute new homes between the Eastern & Midland Region and the rest of the country, promoting balanced regional growth.

Moreover, the current level of housing need and demand is not at equilibrium, being significantly augmented by the extremely low level of housing completions in the decade since 2010 (See figure below). Over this period, a significant shortfall in housing has amassed year on year, which is reflected in the data collected in Census 2016 and 2022, which revealed overcrowding and increasing numbers of households living in cramped conditions. The guidelines outline that Unmet demand from 2017-2040 is estimated at 140,000 dwellings.

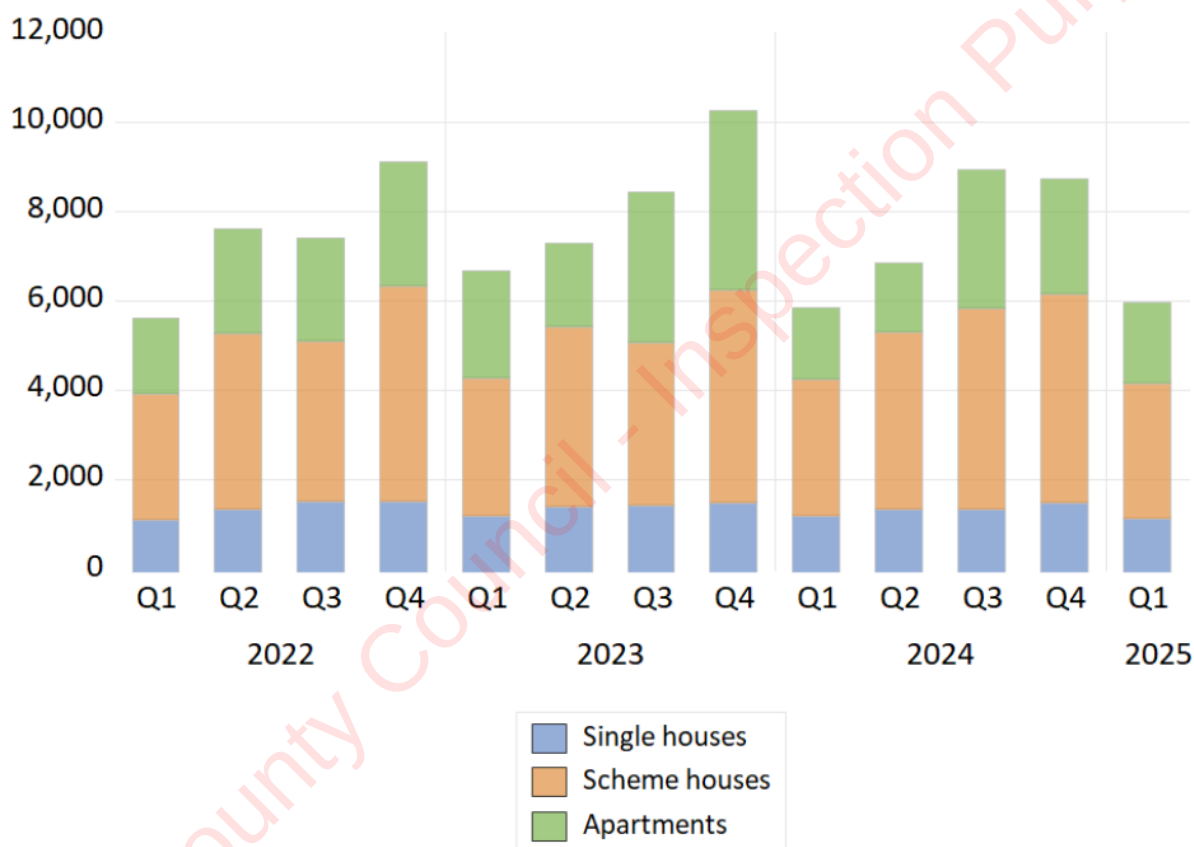
The ESRI Summer Commentary 2025 notes that *"The number of housing completions in 2024, at just over 30,000, was disappointing and we remain somewhat pessimistic about the scope for substantial growth in 2025 and 2026. We have reduced our forecast from our previous Commentary for the present year, and now expect 33,000 completions in 2025 and just under 37,000 completions in 2026, but there are considerable downside risks."*

Census 2022 revealed an increase in the national housing stock of just 108,476 units during the six-year intercensal period (taking into account obsolescence during that period) representing an increase of just over 5% (as shown in the figure below).

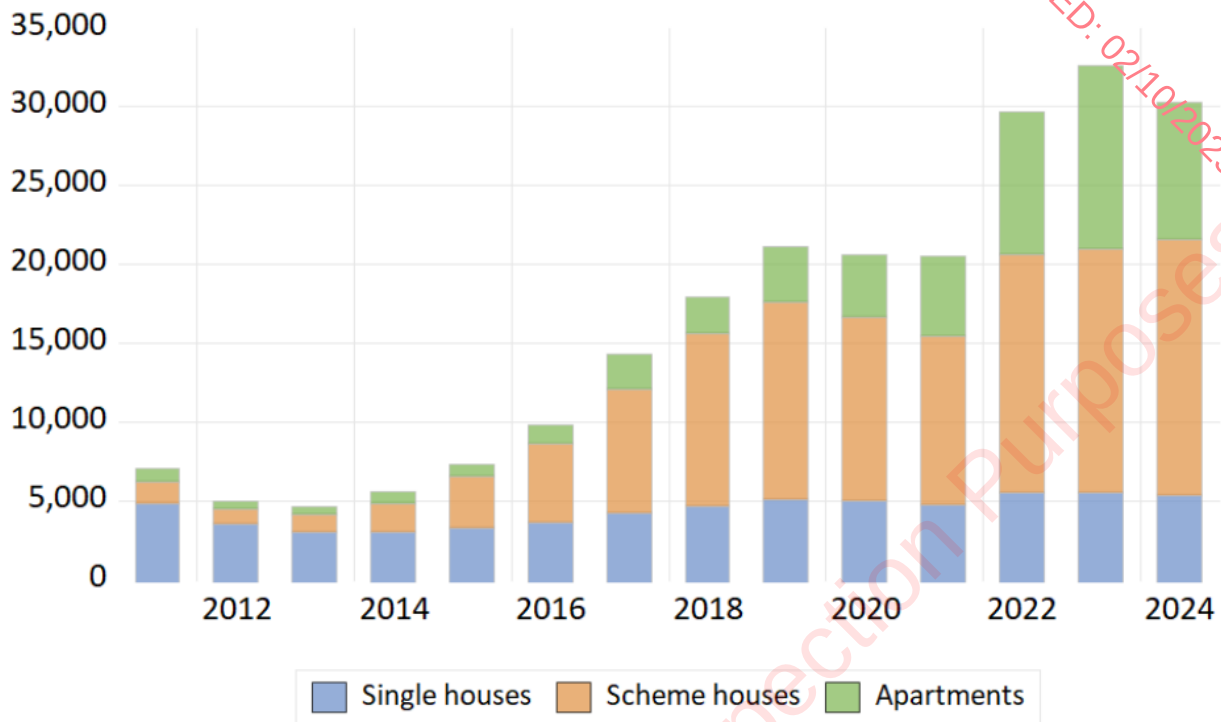
This is notable given the increase in population seen concurrently (391,163 or 8.22%). Furthermore, c. 31% of these additional units were one off houses, the majority of which would never have come to market. However, incongruously, Census 2022 also revealed a slight decrease in the national average household size (from 2.75 to 2.74) (CSO, 2023). Nevertheless, this is still considered high and is attributed to household formation falling behind population growth, another indicator of lacking housing availability and increasing housing need, in recent times.

Figure 3.7: Quarterly and Yearly housing completions commencements for the State

Quarterly completions



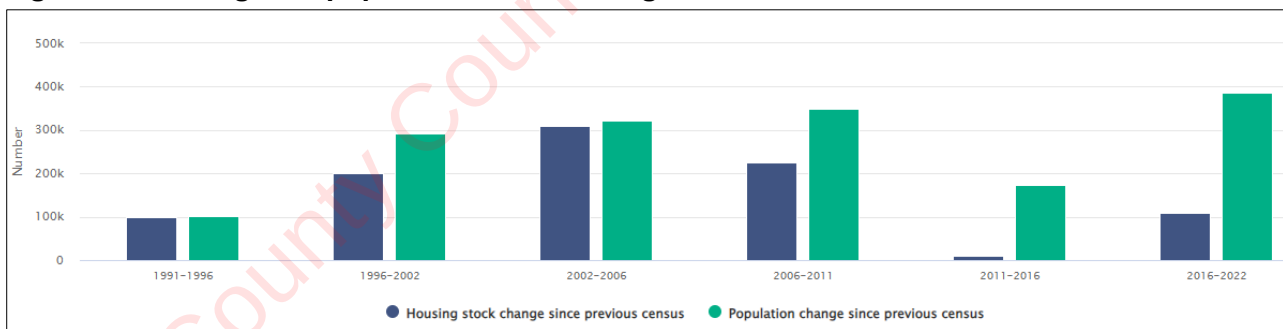
Annual completions



Source: [ESRI - Quarterly Economic Commentary - Summer 2025 \(CSO\)](#)

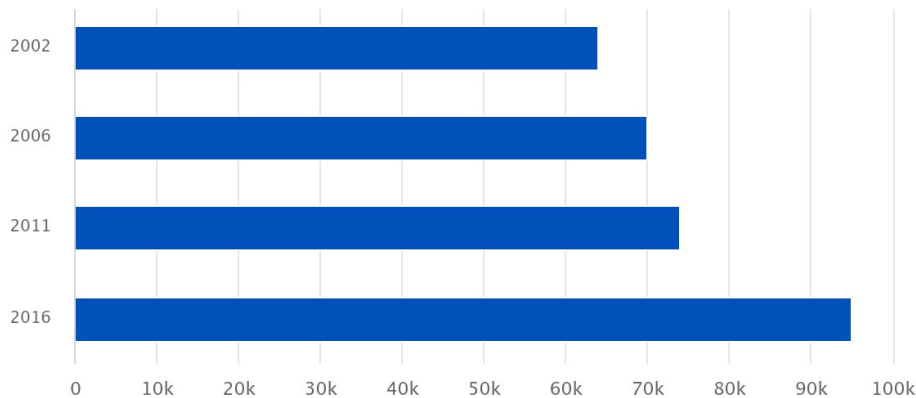
In terms of increasing future housing delivery, the proposed development is located at a location which is zoned for significant residential development, and which is appropriate for the uses proposed.

Figure 3.8: Changes in population and housing stock for Ireland, 1991-2022



Source: Central Statistics Office, 2023

The 2016-2022 intercensal period also saw a notable increase in the number of households with more persons than rooms in their dwelling (see figure below). In Census 2022, there were 58,869 occupied dwellings with an average of more than one person per room and 9,271 households with an average of more than two persons per room.

Figure 3.9: Number of households with more persons than rooms

Source: Central Statistics Office, 2017

Close to 10% of the population resided within these households in 2016 at an average of 4.7 persons per household. This is an indicator of increased overcrowding (and housing need) which may be attributed to lack of housing availability and rising costs.

These figures set out above all point to a significant and increasing housing need in the state which is not being met at present.

The Central Bank of Ireland has published a study entitled 'Economic policy issues in the Irish housing market'¹, which includes the following key points:

- *Updated estimates by Central Bank staff based on new population projections by the CSO – and taking into account the accumulated pent up demand – indicate that around 52,000 new homes could be needed per year out to the middle of the century, or a 20,000 unit increase relative to 2023 supply. Of course these estimates rely on assumptions and are subject to uncertainty, as was evident for example in the faster than expected population growth since the last set of population projections in 2018.”*
- *“Following the Global Financial Crisis, the Irish housing market has been subject to more than a decade of under-supply. Over this period, house price and rental growth have outstripped income growth, stretching affordability. While these challenges have a global dimension, housing output as a share of national income here has been significantly below the euro area average for a prolonged period.”*

The detail above demonstrates that there has been a continued shortfall in the delivery of housing over an extended period. The proposed development will provide 581 no. dwellings in a mix of 396 no. houses (59 no. 2-bed, 275 no. 3-bed, 62 no. 4-bed) and 185 no. duplexes/apartments (53 no. 1-bed, 92 no. 2-bed, 40 no. 3-bed). Assuming a figure of 2.98 persons per household (average for the Maynooth ED in 2022), the proposed development could result in a population of c. 1,731 persons when fully developed.

3.3.6 Health & Safety

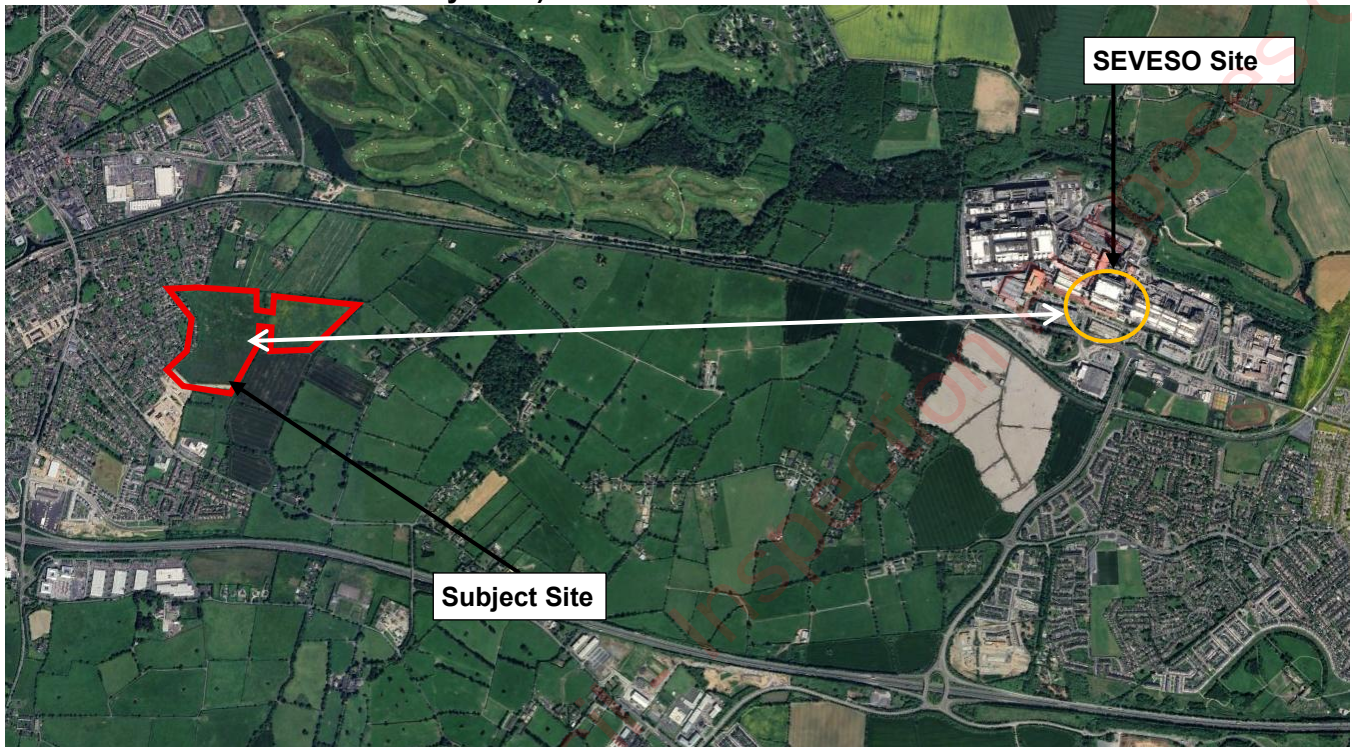
The closest SEVESO Site (Intel Ireland Limited, Collinstown Industrial Park, Leixlip, Co. Kildare) is located c. 3.7km east of the application site. The site of the proposed development is not in the

¹ Available at: <https://www.centralbank.ie/docs/default-source/publications/quarterly-bulletins/quarterly-bulletin-signed-articles/economic-policy-issues-in-the-irish-housing-market.pdf>

consultation zone of this SEVESO Site (which has a 1000 meter consultation zone).

The surrounding context consists of a mix of residential, town centre, community and educational, light industry and warehousing, agriculture, neighbourhood centre, and open space. It does not include SEVESO II Directive sites (96/82/EC & 2003/105/EC) which might result in a risk to human health and safety. It is not within the catchment area of a SEVESO Site.

Figure 3.10: Location of the Subject Site and the SEVESO Site (approximate location marked in red and SEVESO Site circled in yellow)



Source: Google Earth

3.3.7 Risk of Major Accidents and Disasters

The EIA Directive states that an EIAR must include the expected effects arising from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project.

In this respect, taking cognisance of the other chapters contained within this EIAR document, which should be reviewed for further details, it is not considered that the proposed development site presents risks of major accidents or disasters, either caused by the scheme itself or from external manmade or natural disasters.

3.4 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

Consideration of the characteristics of the proposed development allows for a projection of the level of impact on any particular aspect of the environment that could arise. In this chapter the potential impact on population and human health is assessed.

A full description of the proposed development is provided in Chapter 2 of this EIAR. A ten year permission is sought for this development which is described as follows in the public notices:

“In summary, the proposed development will consist of 581 no. residential units, a neighbourhood centre and all associated development, on a site of approximately 15.27 hectares.

The residential component of the development consists of 185 no. apartment / duplex apartments and 396 no. houses to be provided as follows:

- 59 no. 2 bed two storey mid terraced houses;
- 52 no. 3 bed two storey mid terrace houses;
- 223 no. 3 bed two storey end terrace/semi-detached houses;
- 58 no. 4 bed two storey semi-detached houses;
- 4 no. 4 bed two storey detached houses;
- 185 no. duplex apartments / apartments (53 no. 1 beds, 92 no. 2 beds, 40 no. 3 beds) in a series of 3 to part 6 storey duplex apartment blocks / apartment blocks.

The proposed neighbourhood centre consists of 3 no. buildings (Block A, Block B and a single storey standalone café / restaurant kiosk building) and a new public plaza and communal open space. Block A is part 5 storey / part 6 storey building comprising health centre (174 sq.m) and two no. shop units (124 sq.m pharmacy and 166 sq.m convenience shop) at ground floor level and 41 no. apartments (17 no. 1 beds and 24 no. 2 beds) from first to fifth floor level. Block B is a 5 storey building block comprising a childcare facility (762 sq.m) at ground floor level and 48 no. apartments (21 no. 1 beds and 27 no. 2 beds) from first to fourth floor level.

96 no. duplex apartments units (12 no. 1-bed, 48 no. 2-bed, and 36 no. 3-bed units) are provided in 5 no. blocks (Blocks 1 to 5) ranging from 3 no. storeys to 5 no. storeys. All duplex apartments and apartment units are provided with a balcony, terrace or private garden on all elevations.

A total of 888 no. surface car parking spaces are proposed for residential units, visitor parking and the neighbourhood centre commercial uses. A total of 623 no. cycle spaces are proposed for long stay/residents, 42 no. spaces for the neighbourhood centre commercial uses and 93 no. short stay/visitor cycle parking spaces.

The proposal includes significant public open space including a new Local Park, linear park and pocket parks, children's play areas and ancillary play area for the childcare facility. The development includes hard and soft landscaping, lighting, boundary treatments and communal open space areas.

The proposed development provides for two no. vehicular accesses from the permitted Maynooth Eastern Ring Road (MERR), including a new pedestrian/cyclist signalised crossing, associated internal roads, pedestrian and cycle infrastructure, set down areas, bin and bike stores, paths and access points provided up to the application site boundary to provide for potential future connections to adjoining lands to the north and south.

The development includes foul and surface water drainage, 6 no. ESB Substations, green roofs, PV panels, plant, services and all associated and ancillary site works and development.

An Environmental Impact Assessment (EIAR) and Natura Impact Statement (NIS) has been prepared for the development and accompanies the planning application.”

3.5 POTENTIAL IMPACT OF THE PROPOSED DEVELOPMENT

3.5.1 Introduction

This section provides a description of the specific, direct and indirect, impacts that the proposed development may have during both the construction and operational phases of the proposed

development. As stated, guidance documents from the EPA, the European Commission, and the Department of Housing, Planning and Local Government outline that the assessment of impacts on population and human health should focus on the health issues and environmental hazards arising from the proposed development. A wider consideration of human health effects which do not relate to the factors identified in the EIA Directive is not required. Additionally, this section addresses the population and socioeconomic impacts of the proposed development.

For a more detailed assessment of potential impacts associated with other environmental factors, please refer to specific chapters of the EIAR which assess the environmental topics outlined in the EIA Directive. The Construction and Environmental Management Plan, the Construction Waste Management Plan and the Operational Waste Management Plan, which are included as standalone reports with this application, also provide a more detailed assessment of the construction, waste and indicative phasing proposals for this development.

3.5.2 Water

Construction Phase

Construction of the proposed development will require the removal of a large part of the topsoil to facilitate the construction of the housing units, infrastructure service provision, road construction, surface water storage systems etc. Given the extent of disturbance, there is potential for weathering and erosion of the surface soils from precipitation and run-off. The excavation of soil and subsoil layers and new surface water drainage network including overland attenuation storage features to accommodate surface water runoff from the development might have a potential slight, negative, permanent and residual impact on groundwater.

During the course of the construction phase of the proposed development, there is potential, in the absence of mitigation, for surface water runoff to suffer from increased levels of silt or other pollutants, in addition to potential pollution from leaks or spillages from construction activities. These impacts are temporary, as well as for the potential impact of heavy rain fall in open trenches and the discharge of wash water from concrete trucks and discharge of vehicle wheel wash water which have the potential to contaminate the groundwater. The Outline Construction and Environmental Management Plan, and the Construction Waste Management Plan set out how all materials will be managed, stored and disposed of in an appropriate manner, mitigating the potential negative effects as outlined.

Potential impact on water is addressed in Chapter 9 (Water) which has been prepared by ROD Consulting, and a number of mitigation measures are outlined in that chapter of this Environmental Impact Assessment Report. These mitigation measures will serve to minimise potential adverse impacts of the construction phase to the water environment thereby minimising any associated risk to human health from water contamination. Therefore, the impact of construction of the proposed development in relation to water is likely to be imperceptible with respect to human health.

Operational Phase

SUDs will be implemented in accordance with the recommendations of the GDSDS and Kildare County Council requirements. In addition, the requirements of *'The Planning System and Flood Risk Management Guidelines for Planning Authorities'* will be adhered to.

In the absence of SUDs measures, surface water run-off discharge rates and flooding downstream from the development sites may be increased because of increase in impermeable surfaces, however with the implementation of SUDs as part of a treatment train approach, there are no predicted impacts on the water and hydrogeological environment arising from the operational phase.

Residual impacts from earthworks haulage and the risk of contamination of groundwater are deemed to be of minor risk. The residual impacts for a residential development, and open space are deemed to be imperceptible post construction (during the operational phase).

Further details on the mitigation measures are set out in Chapter 9 (water) of this EIAR. Therefore, the potential impact on population and human health in this regard is considered to be insignificant.

3.5.3 Noise and Vibration

Construction Phase

Noise and Vibration are addressed in Chapter 12 (Noise and Vibration) which has been prepared by Wave Dynamics Limited Acoustic Consultants.

During the construction phase there will be extensive site works, involving construction machinery, construction activities on site, and construction traffic, which will all generate noise. The highest noise levels will be generated during the substructure and superstructure stages of the construction phase. The closest noise sensitive locations to the main building works will be the residential units to the west of the site which are at a distance of approximately 290m from the centre of the site. The remainder of works will take place across the site at varying distances of up to 600m.

Chapter 12 of this EIAR states:

“Mitigation measures are required during the substructure and superstructure stages of the construction phase to minimise potential noise and vibration impacts. This includes managing noise levels associated with the construction activities. With the implementation of these measures, the construction phase impacts are expected to be managed effectively and kept within acceptable thresholds.”

The potential vibration impact during the construction phase is of imperceptible impact.

Operational Phase

The main potential for altering the noise environment once the development is operational, and thus impacting neighbouring residential receptors, is plant, traffic movements and car parking, external/public amenity spaces and creche play areas.

Traffic flow data in terms of the AADT traffic flow figures has been assessed for the opening year and the opening year +15. The calculated change in noise levels during these two periods are summarised in Table 12.23 of Chapter 12. Chapter 12 predicts that the impact in this regard is a minor magnitude of impact.

In relation to the operational noise impact at operational stage, Chapter 12 states:

“The operational phase of the development is not predicted to have a negative impact considering the predicted impacts are in line with the project criteria. Noise associated with the increase in traffic flows is projected to result in a maximum increase of 1dB(A) from baseline figures in 2024 to the “Do Something 2043” scenario, which is considered negligible in terms of perceptible change. Additionally, noise from external plant and equipment has been assessed to meet the required standards, ensuring that operational impacts remain minor and localised. Overall, the operational phase will have minimal residual effects on the surrounding environment during both the daytime and night-time periods.”

There are no expected sources of vibration associated with the operational phase.

3.5.4 Air Quality

Construction Phase

During the construction phase, site clearance and ground excavation works have the potential to generate dust emissions rising from the operation and movement of machinery on site. This could have a potential impact on population and human health.

Chapter 10 of this EIAR states:

“There is at most a high risk in terms of dust soiling and there is at most a low risk of human health impacts associated with the proposed works. Best practice dust mitigation measures appropriate for high-risk sites will be implemented to ensure there are no significant impacts at nearby sensitive receptors. In the absence of mitigation, dust impacts are predicted to be direct, short-term, negative and slight, which is overall not significant in EIA terms.”

Chapter 10 goes on to state the following:

“There is also the potential for traffic emissions to affect air quality in the short-term over the construction phase, particularly due to the increase in HGVs accessing the site. The construction stage traffic has been reviewed, and a detailed air quality assessment has been scoped out as none of the road links affected by the Proposed Development satisfy the TII scoping assessment criteria in Section 10.2.2.2. It can be determined that the construction stage traffic will have a direct, short-term, negative and imperceptible impact on air quality, which is overall not significant in EIA terms.”

Operational Phase

In relation to Population and Human Health, Chapter 10 of the EIAR states:

“Interactions between air quality and population and human health have been considered as the proposed development has the potential to cause health issues as a result of impacts on air quality from dust nuisances and potential traffic derived pollutants. However, the mitigation measures employed at the Proposed Development will ensure that all impacts are compliant with ambient air quality standards and human health will not be affected. Furthermore, traffic-related pollutants have been assessed and determined as having an overall insignificant impact, therefore air quality impacts from the proposed development are not expected to have a significant impact on population and human health.”

Chapter 10 further states that *“In accordance with the EPA Guidelines (EPA, 2022) the ecological impacts associated with the operational phase traffic emissions are overall direct, long-term, negative and slight.”*

3.5.5 Landscape and Visual Impact

Construction Phase

As described in greater detail in Chapter 6- Landscape and Visual Impact Assessment, the construction phase will impact the landscape of the site and immediate environs.

In relation to Landscape Impact, Chapter 6 of the EIAR states:

“There is the potential for likely significant and adverse temporary effects on the landscape during the construction stage of the project resulting from the following elements associated with construction works:

- *Erection of physical structures such as site compounds and storage area*
- *Erection of site hoarding, signage, security fencing*
- *Presence of site machinery and delivery/storage of materials etc*
- *Lighting:*
 - *Temporary security lighting*
 - *Lighting at height associated with construction of structures*
 - *Lighting in the contractor’s compound and car parking areas*
 - *Light spill and glare towards surrounding residential and agricultural receptor areas to the north, west and south of the site*
 - *Light spill which could impact ecology/biodiversity”*

In relation to Visual Impact, Chapter 6 of the EIAR states:

“The visual effects due to construction are likely to be short term, terminating upon completion of the development. There is potential for likely significant and adverse short-term effects during construction from the following elements associated with construction and works:

- *Dust*
- *Site huts*
- *Building materials*
- *Ground disturbance (e.g. topsoil, stockpiles, etc.)*
- *Site hoarding/security fencing*
- *Construction works*

There is potential for likely significant and adverse short-term visual effects from the use of temporary buildings, machinery necessary for construction works at proposed works, as well as stockpiling of materials.

There is potential for a significant and adverse short-term effects from the transportation of the material to be recycled and the recycled material to and from the site if applicable. There is the potential for a likely significant and adverse short-term visual impact on views into the site.

The main stages of the construction phasing will include the following:

- *Site preparation works*

- *Site establishment and erection of temporary structures*
- *Diversion and connection of services and utilities*
- *Construction of foundations and structures*
- *Mechanical and electrical installation*
- *Fit-out and external works.”*

Potential construction stage impacts, following mitigation, are predicted to vary from slight and neutral to moderate and negative, depending on the stage of construction, and the intensity of site activity. The construction impacts will be of short-term duration.

Operational Phase

Please refer to Chapter 6 of the EIAR ‘Landscape and Visual Impacts’ and the verified view photomontages for the detailed assessment. The proposed development will provide new housing, buildings, and public spaces, together with improved permeability and connections.

The assessment finds that the majority of operational phase effects will be neutral to none. Where effects do occur, these are generally slight to moderate in effect and neutral in quality, reflecting localised changes in character from agricultural use to residential development. One cumulative effect along the Celbridge Road is assessed as neutral, significant, while a further cumulative effect from the Royal Canal in combination with the MERR is assessed as negative, profound.

The adverse effects identified arise mainly from the replacement of the agricultural landscape with built form. However, these are not considered significant in the context of the site’s low sensitivity, its limited existing value, and its setting within an established and expanding residential area. The cumulative effect with the MERR reflects the impact of strategic infrastructure delivery rather than the proposed development in isolation.

Mitigation will be achieved through extensive landscape proposals, retention of boundary vegetation, provision of SuDS features and the creation of high-quality public open spaces. These measures will soften visual change, enhance biodiversity and provide amenity benefits.

Taking these factors into account, significant standalone adverse visual effects are unlikely. The proposed development will result in predominantly neutral long-term effects, with slight to moderate effects and one significant cumulative effect were combined with the permitted MERR.

Chapter 6 of the EIAR states:

“It is considered unlikely that there will be significant adverse visual effects from the proposed development once it is operational and all landscape installations and proposals as presented in the landscape site plan are implemented in full.”

3.5.6 Economic Activity

Construction Phase

The construction phase of the proposed development is likely to result in a positive net improvement in economic activity in the area of the proposed development site particularly in the construction sector and in associated secondary building services industries.

The construction of the development and all associated infrastructure will precipitate a positive impact on construction-related employment for the duration of the construction phase.

The construction phase will also have secondary and indirect 'spin-off' impacts on ancillary support services in the area of the site, such as retail services, together with wider benefits in the aggregate extraction (quarry) sector, building supply services, professional and technical professions etc. These beneficial impacts on economic activity will be largely temporary but will contribute to the overall future viability of the construction sector and related services and professions over the construction period.

The proposed development could have a slight negative economic impact on the surrounding area during the construction phase due to traffic and associated nuisance, dust, and noise. These issues and appropriate mitigation measures are addressed in Chapters 10, 12 and 13 of the EIAR, in the Traffic and Transport Assessment, the Outline Construction and Environmental Management Plan and the Construction Waste Management Plan which accompany the application. A Construction Traffic Management Plan will be implemented for the site during the construction process which will minimise disruption to the surrounding road network.

Operational Phase

The operational phase of the proposed development will result in an additional element of residential development. The Large-scale Residential Development will provide accommodation for residents in the form of 581 no. high quality residential houses and duplexes / apartments located on a site which is appropriately situated and serviced for such development in planning terms, of a design and materiality which ensure a high-quality design residential development. This increase in occupancy in the area will enhance local spending power and will assist with the delivery of a critical mass of population which will support a wide range of additional local businesses, services, transport infrastructure and employment opportunities, at a location that will continue to grow in population.

Economic opportunities will also be provided for within the development in the form of the Neighbourhood Centre, which includes a variety of employment opportunities in the form of childcare facility, health centre, café / restaurant and 2 no. class-1 shops.

The proposed development will help to meet established housing need and demand within Kildare, at a location which will encourage public transport and active transit modes due to its proximity to good quality public transport, and a broad range of existing and permitted uses, facilities and amenities.

The proposal includes 20% Part V provision on site in accordance with the requirements of the Act, which will provide for an enhanced mix of tenures, and add to the existing social housing stock. The overall benefit to the economic activity of the surrounding area resulting from the development can be considered moderate, long term, and positive.

3.5.7 Social Patterns

Construction Phase

The construction phase of the proposed development is unlikely to have any significant impact on social patterns within the surrounding area. Some temporary additional local populations may arise out of construction activity. However, these impacts are imperceptible, temporary in nature and therefore not considered significant.

It is acknowledged that the construction phase of the project may have some short-term negative impacts on local residents. Such impacts are likely to be associated with construction traffic and construction noise. These impacts are dealt with separately and assessed elsewhere in the EIAR, including Chapter 2 - Project Description and Alternatives Examined, Chapter 10 - Air Quality and Chapter 12 - Noise and Vibration. Traffic and transportation impacts are dealt with within Chapter 13.

Such impacts will be short term and in the longer term, the completed scheme will have beneficial impacts for local businesses, residents and the wider community. Any disturbance is predicted to be commensurate with the normal disturbance associated with the construction industry where a site is efficiently, sensitively and properly managed having regard to neighbouring activities. The construction methods employed, and the hours of work proposed will be designed to minimise potential impacts to nearby residents. A Outline Construction and Environmental Management Plan and a Construction Waste Management Plan have been prepared and are submitted with this planning application.

Operational Phase

The addition of new residents and additional elements of employment (within the neighbourhood centre) to the area will improve the vibrancy and vitality of the area and will help to support existing community and social infrastructure, in addition to further supporting nearby services and businesses. As set out within the Social and Community Infrastructure Audit / Assessment submitted as a standalone report with the application, the provision of a childcare facility and health centre will help meet the needs of the proposed development and surrounding area, and there is a considerable range of existing community and social infrastructure proximate to the subject site, which the residents of the proposed development will be able to avail of.

The Social and Community Infrastructure Audit / Assessment also demonstrates that the extra demand created by the proposal for primary and post primary educational facilities will not be significant in relation to current levels of local provision, while increased levels of demand from the scheme is unlikely to result in significant impact on existing services. Notwithstanding this, the southeastern parcel of the wider KDA lands are reserved for a new education campus by the Department of Education and will accommodate modern education facilities for the Maynooth area. Having regard to the estimated level of demand and the surrounding school capacity within close proximity of the subject site, it is considered that the existing and planned primary and secondary education infrastructure can accommodate the predicted increase in demand arising from the proposed development and is therefore adequate.

Therefore, while demand for schools in the area is likely to increase based on permitted and future development in the area, the necessary school's infrastructure will be progressed by the Department to meet increase in demand.

The proposed development includes the provision of a childcare facility with a GFA of 762 sq.m. As set out within the Social and Community Infrastructure Audit / Assessment Report, this childcare facility will accommodate the likely demand arising from the proposed development based on the calculation methodology within the 2001 Childcare Facility Guidelines and will also provide an additional element of childcare capacity over and above the likely demand from the proposed development.

Once operational, the proposed development will give rise to much needed additional residential accommodation. Residents will spend a portion of their income locally which would not happen without the proposed development. The proposed development provides for a childcare facility and health centre which are fully integrated with the design of the scheme. The proposed development will provide long term job opportunities for people living in the area, including healthcare professionals in the proposed health centre, in addition to those construction and development jobs provided during the construction phase.

This planning application is accompanied by a Social and Community Infrastructure Audit / Assessment Report prepared by John Spain Associates, which confirms that the area within which the proposed development is situated has the necessary community and social infrastructure to support the proposal, as supplemented by the proposed community infrastructure and facilities included within the proposed development itself.

Having regard to the fact that the area within which the development is situated benefits from a good level of social and community infrastructure and noting the elements of the proposed development which will improve and strengthen this infrastructure, it is concluded that the proposed development will precipitate a moderate, positive, long term impact on social patterns in the operational phase.

3.5.8 Land-Use & Settlement Patterns

Construction Phase

The development works will be largely confined to the proposed development site and have the potential to impact adversely and result in the temporary degradation of the local visual environment on a short-term basis. The visual impacts are assessed in greater detail in Chapter 6 of this EIAR.

The Maynooth Eastern Ring Road (to be provided by Kildare County Council) will traverse the proposed development lands in a north-south direction. Vehicular access to the proposed development will be via the new T-junction on the Maynooth Eastern Ring Road (MERR). The north-east section of the development will be accessed via a new local access road connecting the MERR. The MERR will connect the proposed development to the R148 Leixlip Road to the north and the R405 Celbridge Road to the south. The cumulative impacts of the MERR development have been assessed in greater detail in Chapter 6 of this EIAR.

The construction phase of the proposed development will primarily consist of site clearing, excavation and construction works, and the erection of the proposed new buildings on site and has the potential to impact adversely and result in the temporary degradation of the local visual environment on a short-term basis. The visual impacts precipitated by the proposed development are assessed in greater detail in Chapter 6 of the EIAR 'Landscape and Visual Impact Assessment'.

Secondary land use impacts include off-site quarry activity and appropriate disposal sites for removed spoil and other materials transported off site. The Construction Waste Management Plan addresses these issues in more detail.

The construction phase may result in a marginally increased population in the wider area due to increased construction employment in the area, however, this would be temporary in nature, and the impact would be imperceptible.

Operational Phase

The operational phase of the proposed development will result in the introduction of a greater intensity and density of residential development, delivering wider public realm improvements, and neighbourhood centre uses, in accordance with national and local planning policy objectives which seeks to deliver compact growth at suitable locations. Adequate provision of high-quality housing to serve the existing and future population of the county is an important pre-requisite and contributor to the establishment and maintenance of good human / public health. The high quality design of the proposed development, including individual units which meet and exceed the relevant standards for houses (as set out in the Quality Housing for Sustainable Communities Guidelines 2007, and the Sustainable and Compact Settlements Guidelines 2024) and apartments (as set out within the Apartment Guidelines 2025, will contribute to a positive impact on the wellbeing of future residents).

The proposed development will respond to established housing need and demand in the area of the proposed development, and the wider region. The proposed residential units will assist in addressing the significant shortfall of residential development.

The proposed development delivers a range of housing unit sizes, including one-, two-, three- and four-bedroom apartments and houses. The scheme also benefits from a high level of good quality communal and public open space, with new linkages provided through the site improving connectivity.

The delivery of 581 no. well-designed residential units, a neighbourhood centre and open space, at an appropriate location will have a direct, positive, and significant impact on the future residents of the proposed development and will support the population growth targeted for the area, at a location which is designated for residential development.

3.5.9 Health & Safety

Construction Phase

The construction phase of the proposed development may give rise to short-term impacts associated with construction traffic, migration of surface contaminants, dust, noise and littering. Secondary impacts may include resulting increased traffic arising from hauling building materials to and from the proposed development site which are likely to affect population and human health distant from the proposed development site, including adjacent to aggregate sources and landfill sites.

Construction impacts are likely to be short term and are dealt with separately in the relevant chapters of this EIAR document and will be subject to control through a Construction and Environmental Management Plan and a Construction Waste Management Plan. The construction methods employed and the hours of work proposed will be designed to minimise potential impacts. The development will

comply with all Health & Safety Regulations during the construction of the project. Where possible, potential risks will be omitted from the design so that the impact on the demolition and construction phase will be reduced.

Operational Phase

The operational stage of the development is unlikely to precipitate any significant impacts in terms of health and safety. The design of the proposed development has been formulated to provide for a safe environment for future residents and visitors alike. The paths, roadways and public areas have all been designed in accordance with best practice and the applicable guidelines including DMURS. A Quality Audit has been undertaken which has informed the design and which is submitted as part of the application. Likewise, the proposed residential units and neighbourhood centre accord with the relevant guidelines and will meet all relevant safety and building standards and regulations, ensuring a development which promotes a high standard of health and safety for all occupants and visitors.

The proposed development will not result in any significant impacts on human health and safety once completed and operational. The proposed development therefore is unlikely to result in negative impacts in relation to population and human health in this regard and the resulting impact will be negligible.

3.5.10 Risk of Major Accidents or Disasters

Construction Phase

Having regard to the topography, nature and location of the subject site, it is not considered likely that there will be any impact related to a major accident or disaster during the construction phase of the proposed development, stemming internally from within the development, or externally.

Operational Stage

The proposed development will be located on land which is not at any significant accident or disaster. The traffic arrangements and parking have been designed so as to avoid any risk of a major accident associated with the surrounding road network. For further details please refer to the Traffic and Transport Assessment and associated documentation prepared by ROD.

The site is located within Flood Zone C and is appropriately sited and designed to minimise the risk of flood impacts on the development, as set out within the Flood Risk Assessment Report prepared by ROD. The proposed development is considered compliant with the Planning System and Flood Risk Management Guidelines, with the FRA concluding by stating that *“The consulted sources indicate that no area of the subject site is liable to flood from fluvial, coastal or groundwater sources. All sources indicate that there is a low risk of flooding on site and that the site is within Flood Zone C, ensuring it is appropriate for residential and commercial developments.”*

It is considered that there is no significant risk related to major accidents or disasters, external or internal, man-made or natural in respect of the proposed development.

3.6 POTENTIAL CUMULATIVE IMPACTS

The potential cumulative impacts of the proposed development on population and human health have been considered in conjunction with the ongoing changes in the surrounding area.

The proposed development comprises a Large-scale Residential Development of 581 no. residential units, a neighbourhood centre including a childcare facility, health centre, 2 no. Class-1 shops and a café / restaurant unit, car and cycle parking, landscaping, public and communal open space, road upgrades and vehicular access and associated internal roads, pedestrian and cycle paths and all associated site and infrastructural works. The Maynooth Eastern Ring Road (to be provided by Kildare County Council) will traverse the proposed development lands in a north-south direction. Vehicular access to the proposed development will be via the new T-junction on the Maynooth Eastern Ring Road (MERR). The north-east section of the development will be accessed via a new local access road connecting the MERR. The MERR will connect the proposed development to the R148 Leixlip Road to the north and the R405 Celbridge Road to the south.

The subject lands are within the Key Development Area of Railpark as identified in the Maynooth and Environs Joint Local Area Plan 2025-2031. In each of the chapters, the impact of the proposed and future planned development will be considered also as other known 'committed developments' within the surrounding area.

The cumulative impact of the proposed development, along with other permitted, existing and proposed developments in the vicinity, will be a further increase in the population of the wider area. This will have a moderate impact on the population (human beings) in the area. This impact is likely to be long term and positive, having regard to the zoning objective for the subject lands, and their strategic location in close proximity to public transport and a range of services and amenities serving Maynooth, and the high level of demand for new housing in the area.

The cumulative impact on childcare demand has been assessed in the Social & Community Infrastructure Audit / Assessment, which demonstrates that childcare demand will be fully met through the proposed childcare facility, which has capacity to accommodate the entire scheme and provides additional capacity to serve demand arising from other developments in the area.

With regard to human health, the cumulative impact of the proposed development in conjunction with other nearby developments and the ongoing development on the subject site will provide for the introduction of high-quality new housing stock in the area with a high level of accessibility and amenity.

The overall cumulative impact of the proposed development will therefore be long term and positive with regard to human health for future residents of scheme who will benefit from a high quality, visually attractive living environment, with ample opportunity for active and passive recreation and strong links and pedestrian permeability, with a direct and convenient link to high frequency public transport modes. The impact on existing residents is considered to be neutral.

3.7 'DO NOTHING' IMPACT

In order to provide a qualitative and equitable assessment of the proposed development, this section considers the proposed development in the context of the likely impacts upon the receiving environment should the proposed development not take place.

A 'do nothing' impact would result in the subject lands continuing to be used as greenfield lands. This could be considered an underutilisation of the site from a sustainable planning and development perspective, which supports increased residential densities at suitable locations within built up areas, particularly considering the proximity of the subject lands to public transport, both existing and planned, and Maynooth Town Centre. The status of the environmental receptors described throughout this EIAR document would be likely to remain unchanged. The potential for any likely and significant adverse environmental impacts arising from both the construction and operational phases of the proposed development would not arise.

However, similarly the potential for any likely and significant positive environmental impacts arising from both the construction and operational phases of the proposed development would also not arise.

A 'do nothing' scenario would involve the subject site, which is zoned primarily for residential development and ancillary neighbourhood centre uses, not providing a residential development and remaining underutilised. The local economy would not experience the direct and indirect positive effects of the development. Failure to deliver the proposed large-scale residential development would result in existing housing need and demand remaining unmet. The objectives of the Local Area Plan for this KDA would not be achieved, and the opportunity to provide residential units at an appropriate density in the area would be missed. This would represent a sub-optimal use of zoned and serviced land which is identified for development.

3.8 AVOIDANCE, REMEDIAL & MITIGATION MEASURES

Avoidance, remedial and mitigation measures describe any corrective or mitigative measures that are either practicable or reasonable, having regard to the potential likely and significant environmental impacts.

Construction Phase

A range of construction related remedial and mitigation measures are proposed throughout this EIAR document with reference to the various environmental topics examined and the inter-relationships between each topic. These remedial and mitigation measures are likely to result in any significant and likely adverse environmental impacts on population and human health during the construction phases being avoided. The following mitigation measures are intended to mitigate the identified potential impacts on population and human health, in addition to the specific mitigation provided in relation to other environmental topics within the other chapters of this EIAR.

P&HH CONST 1: Construction and Environmental Management Plan

It will be necessary for the appointed contractor to prepare and implement a construction and environment management plan (including traffic management) to reduce the impacts of the construction phase on local residents and ensure the local road network is not adversely affected during the course of the construction project. The measures incorporated into the Outline Construction and Environmental Management Plan and this EIAR will inform the CEMP, which can be agreed with the Planning Authority prior to commencement of development.

P&HH CONST 2: Construction Waste Management Plan

It will be necessary for the appointed contractor to prepare and implement a construction waste management plan in accordance with the requirements of the Best Practice Guidelines for the

Preparation of Waste Management Plans for Construction and Demolition Projects. The measures incorporated into the Outline Construction Waste Management Plan and this EIAR will inform the CWMP, which can be agreed with the Planning Authority prior to commencement of development.

Operational Phase

The operational phase is considered to have likely positive impacts on human beings in relation to the provision of additional residential units and neighbourhood centre uses in accordance with the principles of sustainable development and zoning objectives pertaining to the site, therefore no additional operational stage mitigation measures are proposed having regard to the mitigation measures within other chapters of this EIAR.

3.9 RESIDUAL EFFECTS OF THE PROPOSED DEVELOPMENT

This section allows for a qualitative description of the resultant specific direct, indirect, secondary, cumulative, short, medium and long-term permanent, temporary, positive and negative effects as well as impact interactions which the proposed development may have, assuming all mitigation measures are fully and successfully applied. It should be noted that in addition to remedial and mitigation measures, impact avoidance measures have also been built into the EIAR and project design processes through the assessment of alternatives described in Chapter 2 of this EIAR document.

Construction Phase

The construction phase of the proposed development will result in the addition of a new residential development and neighbourhood centre, comprising of 581 no. residential units and associated facilities and amenities, in the area. This will provide for a more sustainable use of the subject site and improve the residential offering in the locality, in an accessible location. Notwithstanding the implementation of remedial and mitigation measures there will be some minor temporary residual impacts on Population and Human Health most likely with respect to nuisance caused by construction activities. It is anticipated that subject to the careful implementation of the remedial and mitigation measures proposed throughout this EIAR document and as controlled through the Construction and Environmental Management Plan, any adverse likely and significant environmental impacts will be avoided. Positive impacts are likely to arise out of an increase in economic activity. The overall predicted likely and significant impact of the construction phase will be short-term, temporary and is likely to be neutral.

Operational Phase

The proposed development will result in a generally positive alteration to the existing site in terms of urban design, architecture, economic activity and provision of residential accommodation and neighbourhood centre uses in accordance with adopted land use planning policy.

The proposed development will result in a positive alteration to the existing underutilised site in terms of the provision of residential units, a neighbourhood centre including a childcare facility, health centre, 2 no. class-1 shops and a café / restaurant unit, open space and roads infrastructure to serve the growing population of the area in accordance with national and regional planning policy.

Positive impacts on population and human health will include health benefits associated with the provision of a significant number of modern, well-designed and sustainable residential units, a high-quality

environment, public open space and improvements to the public realm which creates a highly permeable layout that encourages walking and cycling, amenity and recreational facilities.

A desktop wind microclimate assessment was undertaken by GIA, separate to the EIAR, and accompanies the LRD application. The assessment found that most thoroughfares, building entrances and amenity areas will provide suitable conditions for their intended use (sitting, standing or walking), benefitting from the shelter of existing or proposed buildings and landscaping. Overall, conditions within the development are expected to be suitable and safe for use from a wind and microclimate perspective and therefore there will be no potential for adverse impacts on human health from a wind / microclimate assessment perspective.

A daylight and sunlight impact assessment was undertaken by GIA and accompanies the LRD application in accordance with the BRE Guidelines (BR209, 2022). The assessment demonstrates that when considered with compensatory design measures (dual-aspect units, well-sunlit open space, private amenity provision, and high-quality internal layouts), the proposed development is concluded to provide excellent overall daylight and sunlight amenity for future residents

The implementation of the range of remedial and mitigation measures included throughout this EIAR document are likely to have the impact of limiting any adverse significant and likely environmental impacts of the operational phase of the proposed development on Population and Human Health.

The proposed development will provide for a high standard of residential accommodation. This will be a significant residual positive impact of the proposed development.

This chapter of the EIAR has provided an assessment of the likely impact of the proposed development on population and human health. As set out above, the proposed development will result in a positive impact on housing and is not likely to result in any significant adverse effects on population and human health, and will result in some other positive impacts, including provision of a sustainable density development at an appropriate location, and economic benefits derived from the employment opportunities within the neighbourhood centre proposed. Through generating additional economic activity in the area and providing for a high standard of residential accommodation, there will be a significant positive impact arising from the proposed development.

3.10 MONITORING

This section addresses the effects that require monitoring, along with the methods and the agencies that are responsible for such monitoring.

In relation to the impact of the development on population and human health it is considered that the monitoring measures outlined in regard to the other environmental topics such as water, land and soils, and noise and vibration sufficiently address monitoring requirements.

3.11 REINSTATEMENT

It is anticipated that the proposed development will realise significant positive long term overall economic and social benefits for the local community and the wider area. The proposed development will increase the population in the study area. This is considered a positive impact having regard to the New Residential and Neighbourhood Centre zoning and proximity to public transport and Maynooth Town Centre.

Strict adherence to the mitigation measures recommended in this EIAR will ensure that there will be no negative residual impacts or effects on Population and Human Health from the construction and operation of the proposed scheme. Indeed, the delivery of additional residential development will provide a significant positive long-term impact for the local area. No additional reinstatement measures are considered necessary in respect of population and human health.

3.12 INTERACTIONS

As referenced throughout the chapter, there are numerous inter-related environmental topics described in detail throughout this EIAR document which are of relevance to population and human health. This chapter of the EIAR has been instructed by updated guidance documents reflecting the changes within the 2014 EIA Directive. These documents include the EU and Irish guidelines for preparation of an EIAR and carrying out an EIA. Therefore, in line with the guidance documents referred to, this chapter of the EIAR focuses primarily on the potential likely and significant impact on Population and Human Health in relation to health effects/issues and environmental hazards from the other environmental factors and interactions that potentially may occur.

Where there are identified associated and inter-related potential likely and significant impacts which are more comprehensively addressed elsewhere in this EIAR document, these are referred to. However, the relevant environmental topic chapter of this EIAR document contains a more detailed assessment in respect of the interaction of each environmental topic with population and human health.

3.13 DIFFICULTIES ENCOUNTERED IN COMPILING

No significant difficulties were experienced in compiling this Chapter of this EIAR document.

3.14 REFERENCES

- National Planning Framework- First Revision 2025;
- Transport Impact Assessment prepared by ROD (2025);
- Quality Housing for Sustainable Communities Guidelines (2007);
- Sustainable Residential Development and Compact Settlements Guidelines (2024);
- Design Standards for Apartments, Guidelines for Planning Authorities (2025);
- Regional Spatial & Economic Strategy for the Eastern & Midland Regional Assembly 2019;
- NPF Implementation: Housing Growth Requirements (2025);
- Kildare County Development Plan 2023-2029;
- Maynooth and Environs Joint Local Area Plan 2025-2031;
- 2025 Labour Force Survey Q1 – www.cso.ie
- ESRI Quarterly Economic Commentary, Spring 2025 – www.ESRI.ie
- ESRI Quarterly Economic Commentary, Summer 2025– www.ESRI.ie
- Central Statistics Office www.cso.ie

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Kildare County Council - Inspection Purposes Only

CHAPTER 4

ARCHAEOLOGY, ARCHITECTURAL AND CULTURAL HERITAGE

4.0 ARCHAEOLOGY, ARCHITECTURAL AND CULTURAL HERITAGE

4.1 INTRODUCTION

The following EIAR Chapter was prepared for the proposed Large-scale Residential Development (LRD) at Railpark, Maynooth, Co. Kildare (ITM 694600, 737000; see Figure 4.1). It details the results of an archaeological, architectural and cultural heritage assessment prepared by Magda Lyne (MA, MIAI) and Donald Murphy (MA, MIAI) of Archaeological Consultancy Services Unit Ltd. on behalf of the applicant, Cozone Ventures Ltd.

This chapter assesses the impacts of the proposed development on the known and potential cultural heritage resources. UNESCO define the term '*Cultural Heritage*' as encompassing several aspects of tangible assets (*immovable*: archaeological sites and monuments, architectural heritage structures; *movable*: artefacts; and *underwater*: shipwrecks, submerged features) and intangible assets (e.g. folklore, oral tradition and language). Based on this assessment, the chapter then identifies appropriate mitigation strategies.

This report includes the results of a geophysical survey under licence 24R0591 (see Section 4.3.7; Figure 4.8) carried out by Donald Murphy of Archaeological Consultancy Services Unit.

The recorded and potential cultural heritage resource within the study area, encompassing both the proposed development site and the lands extending for 500m from its boundary, was assessed in order to compile a comprehensive cultural heritage baseline and context.

4.1.1 Competency of Assessor

This chapter / impact assessment was undertaken by Magda Lyne (MA, MIAI) and Donald Murphy (MA, MIAI) of ACSU. Magda is an Archaeologist with over 15 years of experience, having worked in Poland, Ireland, Denmark and Norway. Her primary focus includes preparing Archaeological and Cultural Heritage Chapters for EIARs, Archaeological Impact Assessments (AIA), and Cultural Heritage Impact Assessments (CHIA). She has completed EIARs for numerous projects across Ireland, including housing, pharmaceutical plants, wastewater facilities, and public realm projects. Donald is the founder and Managing Director of ACSU and has over 30 years of experience as an archaeological consultant. He has completed EIARs for a variety of projects across Ireland and has managed the archaeological work in advance of several large infrastructural schemes, such as the M3 and M4 Motorways.

4.2 STUDY METHODOLOGY

This chapter's methodology is guided by a legislative framework that governs how aspects of archaeological, cultural and architectural heritage are protected. This report has been prepared in compliance with all relevant EIAR legislation and guidance, including the EIAR Guidelines from the Environmental Protection Agency (EPA, 2022). Furthermore, it addresses the relevant policies and objectives of *Kildare County Development Plan 2023-2029* and the *Maynooth and Environs Local Area Plan 2025-2031* namely:

- *Kildare County Development Plan 2023-2029*

AH O3 In co-operation with the National Monuments Service, Department of Housing, Local Government and Heritage require archaeological impact assessment, surveys, test excavation and/or monitoring and/or underwater archaeological impact assessments for planning applications in areas of archaeological importance and where a development proposal is likely to impact upon in-situ archaeological monuments, their setting and archaeological deposits, based on recommendations of a suitably qualified archaeologist and the Council will seek and have regard to the advice and recommendations of the Department of Housing, Local Government and Heritage

- Maynooth and Environs Local Area Plan 2025-2031

•BHO 3.1 Protect and promote the archaeological heritage of Maynooth and Environs, in particular those sites illustrated on Map 8.1 and Map 8.2 and listed in Table 8.4, and avoid negative impacts on sites, monuments, features or objects of significant historical or archaeological interest by ensuring archaeological assessments are undertaken to inform proposed development in accordance with the National Monuments Acts 1930–2014 or the Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 (when fully commenced).

•BHO 3.2 Prioritise the protection/preservation in situ (or upon agreement preservation by record) of items of archaeological interest as listed in Table 8.4 and shown on Map 8.1 and Map 8.2 from inappropriate development that would adversely affect and/or detract from the interpretation and setting of these sites.

•BHO 3.3 Protect the historic core of Maynooth and retain, except in exceptional circumstances, the existing street layout, historic building lines and traditional plot widths where these derive from 18th Century or earlier origins.

•BHO 3.4 Encourage, where practicable, the provision of public access to sites identified on the Sites and Monuments Record under the direct ownership or control of the Local Authority and the State.

•BHO 3.5 Provide for the protection of historic burial grounds within Maynooth, in cooperation with agencies such as the Office of Public Works and the National Monuments Section of the Department of the Housing, Local Government and Heritage.

•BHO 3.6 Support the protection, preservation and promotion of the archaeological value of underwater or archaeological sites within the Plan area including any associated with the River Lyreen, Rye Water River, the Royal Canal and associated features.

Legislation, Guidelines and Policies

On 13 October 2023, the Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 was enacted by the Oireachtas, which provides for the repeal of the National Monuments Acts 1930 to 2014 and related legislation. At the time of writing, most of its provisions have not yet come into force, however. When fully enacted it will replace the previous legislation but until that time the National Monuments Acts 1930 to 2014 and related legislation remain fully in force. At present, certain provisions with enforcement measures are in effect as of 31 May 2024 including World Heritage Properties in the State. Under the 2023 Act, a “national monument (LA)”, in relation to a local authority, means a national monument in the ownership or guardianship of that authority; “national monument (M)”, in relation to the Minister, means a national monument in the ownership or guardianship of the Minister. In so far as is compatible with the requirements of Section 75(1) and (2), the Minister may grant a lease or licence (not

being a licence granted under Section 151) in respect of land comprising a national monument (M) (or a local authority, with the consent of the Minister in respect of land comprising a national monument (LA)).

Below is a list of the legislation relevant to this assessment:

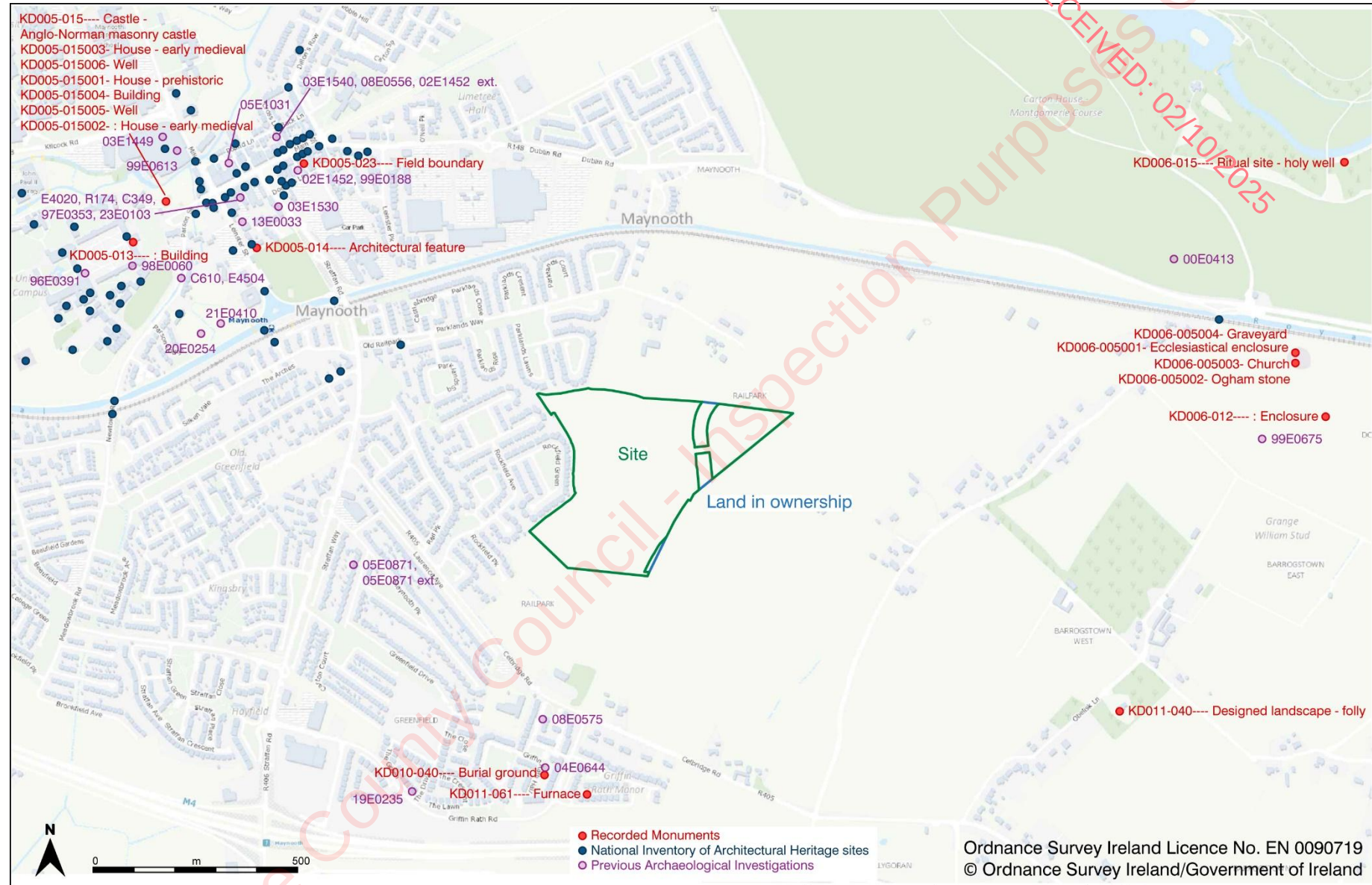
- National Monuments Acts 1930 to 2014.
- Heritage Act 1995 (as amended).
- National Cultural Institutions Act 1997.
- European Convention for the Protection of the Archaeological Heritage (Valetta Convention, 1997).
- European Convention for the Protection of the Architectural Heritage (Granada Convention, 1997).
- European Landscape Convention (Florence Convention, 2000).
- Planning and Development Act 2000 (as amended).
- UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (Paris Convention, 2003).
- Directive 2011/92/EU of the European Parliament and of the Council on the assessment of the effects of certain public and private projects on the environment, as amended by Directive 2014/52/EU of the European Parliament and the Council (hereafter the EIA Directive).

Below is a list of policies, planning documents, codes of practice and frameworks relevant to this assessment:

- Framework and Principles for the Protection of the Archaeological Heritage (Department of Arts, Heritage, Gaeltacht and the Islands 1999).
- Code of Practice for Archaeology agreed between the Minister for Arts, Heritage, Regional Rural and Gaeltacht Affairs and Transport, Infrastructure Ireland (Transport Infrastructure Ireland (TII) and Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs 2017).
- Built & Archaeological Heritage: Climate Change Sectoral Adaption Plan (Department of Culture, Heritage and the Gaeltacht 2019).
- Kildare County Development Plan 2023–2029.
- Maynooth and Environs Local Area Plan 2025-2031
- National Development Plan 2021–2030 (Department of Public Expenditure and Reform 2021).
- Archaeology in the Planning Process (Department of Housing, Local Government and Heritage (DHLGH) and Office of the Planning Regulator 2021).
- A Living Tradition: A Strategy to Enhance the Understanding, Minding and Handing On of our Built Vernacular Heritage (DHLGH 2021).
- Places for People: National Policy on Architecture (DHLGH 2022a).
- Heritage Ireland 2030: A Framework for Heritage (DHLGH 2022b).
- National Planning Framework, First Revision (Government of Ireland and National Planning Framework 2025).

Below is a list of guidelines relevant to this assessment:

- Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA 2022).
- Guidelines for Cultural Heritage Impact Assessment of TII National Road and Greenway Projects (TII 2024).
- Advice Notes on Current Practice (in the preparation of Environmental Impact Statements) (EPA 2003).

Figure 4.1: Location of site and nearby Recorded Monuments, National Inventory of Architectural Heritage Sites and excavations


- Architectural Heritage Protection: Guidelines for Planning Authorities (Department of Arts, Heritage and the Gaeltacht 2011).
- National Inventory of Architectural Heritage Handbook (2024).

Significance Criteria

The main purpose of this chapter is to identify, describe and present an assessment of the likely significant effects of the proposed development on archaeological, architectural and cultural heritage remains (known and unknown if present). An effect can be positive, negative, or neutral/none, direct or indirect. The effect may result from the construction phase and/or the operation phase of the project.

The potential effects are assessed for each component of the development as described above, as well as cumulatively.

This chapter aims to present a precise, concise, accurate and credible description of the likely and significant effects on archaeological, architectural and cultural heritage, and offer mitigation measures where a likely significant effect is predicted. The description of effects follows the EPA Guidelines (2022, table 3.4, fig. 3.4), whereby comparing the character of the predicted effect to the sensitivity of the receiving environment can determine the significance

Consultations

Consultation with the National Monuments Services (NMS) of the Department of Housing, Local Government and Heritage has taken place. The NMS are aware of the project, having approved the submitted method statements and issued a licence for the geophysical survey of the site, with the report on the findings submitted to statutory authorities. The NMS issued a licence for the test trenching of the site (with work scheduled to take place in October 2025). ACSU undertook further consultation (phone call on 18 September 2025) with the NMS archaeologist regarding the archaeological investigations for the Maynooth Eastern Ring Road. It was confirmed that at present there are no reports lodged in relation to the project.

In addition, the National Museum of Ireland, Irish Antiquities Division, was consulted, the topographical files of Ireland were reviewed, and the results are included in this chapter (Section 4.3.9).

4.2.1 Documentary Sources

For the purposes of this report, archaeology, architectural & cultural heritage is considered to include the following elements:

- Sites listed in the Sites & Monuments Record (SMR)
- Record of Monuments & Places (RMP)
- National Monuments
- Archaeological sites listed on the National Monuments Service website
- Sites reported in the Excavations Database
- Any previously unrecorded sites
- A list of protected monuments
- A list of architectural heritage structures (NIAH)
- A list of protected structures (Kildare County Development Plan 2023-2029)

The following sources were consulted in order to identify and map archaeological sites within and adjacent to the proposed development site:

Sites and Monuments Record (SMR) and Record of Monuments & Places (RMP)

A primary cartographic source and base-line data for the assessment was the consultation of the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) for County Kildare (1996). All known recorded archaeological monuments are indicated on 6-inch Ordnance Survey (OS) maps ([https://www.archaeology.ie/sites/default/files/media/pdf/Archaeology-RMP-Kildare-Map-\(1996\)-0021.pdf](https://www.archaeology.ie/sites/default/files/media/pdf/Archaeology-RMP-Kildare-Map-(1996)-0021.pdf)) and are listed in this record ([https://www.archaeology.ie/sites/default/files/media/pdf/Archaeology-RMP-Kildare-Manual-\(1996\)-0020.pdf](https://www.archaeology.ie/sites/default/files/media/pdf/Archaeology-RMP-Kildare-Manual-(1996)-0020.pdf)). The SMR/RMP is not a complete record of all monuments as newly discovered sites may not appear in the list or accompanying maps. In conjunction with the consultation of the SMR and RMP, the electronic database of recorded monuments that may be accessed on their website (<https://heritagedata.maps.arcgis.com/apps/webappviewer/>) was also consulted.

National Monuments

A List of Monuments covered by Preservation Orders and a List of National Monuments in the ownership/guardianship of the Minister for Housing, Local Government & Heritage. National Monuments in the ownership/guardianship of the Minister for Housing, Local Government & Heritage are listed on the Department's website (<https://www.archaeology.ie/sites/default/files/media/pdf/monuments-in-state-care-kildare.pdf>).

Excavations Database

The excavations database (<https://excavations.ie/>) is an annual account of all excavations carried out under license. The database includes excavations from 1970 to present. This database was consulted as part of the desktop research for this assessment to establish if any archaeological excavations had been carried out on or near to the proposed development area.

Topographical Files, National Museum of Ireland

The topographical files of the National Museum of Ireland contain information pertaining to archaeological finds (mainly artefactual) and excavations in numerous townlands throughout the country, which were reported to the museum from the 1920s. While many of these findspots are not recorded monuments, they can provide an indication of archaeological activity in a townland and consequently add to the archaeological potential of an area.

Cartographic Sources

A number of cartographic sources were also consulted as part of the desktop assessment, namely the Down Survey Map of County Kildare, Barony of Salt and Straffan (1656), Keenan and Noble's map of County Kildare (1752) and the Grand Jury map of County Kildare by Taylor (1783) as well as the first edition 6-inch (1835) and the 25-inch edition (1908-9) OS maps and available aerial photography.

Protected Structures (RPS)

The *Kildare County Development Plan 2023-2029* and the *Maynooth and Environs Local Area Plan 2025-2031* were consulted. *Kildare County Development Plan 2023-2029* contains a list of Architectural Conservation Areas and a Record of Protected Structures for the County. Both lists cultural heritage sites, buildings of historic, architectural, cultural, scientific and/or artistic interest. These are protected by the Local Government (Planning and Development) Act 1999 and the Planning and Development Act 2000, as amended, (Part IV Architectural Heritage).

Architectural Heritage Sites (NIAH)

The National Inventory of Architectural Heritage for County Kildare (<https://www.buildingsofireland.ie/>) was consulted to determine if any architectural heritage sites were present within the proposed development site. It contains a record and evaluation of the post-1700 architectural heritage of Ireland, as an aid in the protection and conservation of the built heritage. It provides the basis for recommendations of the Minister for Housing, Local Government and Heritage to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS).

Site Inspection

A site inspection was conducted as a part of the assessment. The aim of which was to assess whether or not the site contained any visible or subsurface evidence of any previously unrecorded areas or features of historical or archaeological significance.

Additional Sources

The following additional sources were and will be consulted once complete, in order to inform the assessment of all aspects of the archaeological resource within and adjacent to the proposed development site and that the assessment is cognisant of all relevant policies and objectives.

Archaeological Impact Assessment Report. Proposed Large-scale Residential Development at Railpark, Maynooth, Co. Kildare (Lyne 2024)

Archaeological Impact Assessment (desktop) is a report based on the findings of a study of available archaeological, historical, cartographic, and photographic sources as well as a site visit. It aims to identify and describe the known and potential archaeological and cultural heritage constraints within the site and its wider environs and, where present, offer recommendations for mitigation measures. Such reports are prepared usually at pre-planning stage to inform the planning process. In this case, an Archaeological Impact Assessment Report was prepared in 2024.

Geophysical Survey Report Railpark, Maynooth, Co. Kildare (24R0591; Murphy, 2025)

Geophysical Survey, in the form of magnetic gradiometry, is a non-intrusive method that is used in Irish Archaeology. It is a method for rapidly mapping archaeological objects, structures, deposits and other features, including geological anomalies, that survive beneath the ground surface. The results are presented as a grey-scale map of anomalies detected that are interpreted by an experienced archaeologist. A licence to carry out work is required and is granted by the Department of Housing Local Government and Heritage following submission of a licence application for the site in question (in this

case Licence Number 25R0591 was granted on the 18th of December to Donald Murphy). Upon completion of the survey a report detailing the results of the work carried out is submitted to the Department and the National Museum of Ireland (in this case the report was submitted to NMS and the results are included in this report see Section 4.3.7; for the full report see Appendix 4.1)

Test Trenching Report

Archaeological test trenching is carried out in advance of construction and is undertaken across the footprint of a development. Test trenches are excavated to facilitate the early identification of archaeological deposits and features. If test trenching is carried out following a geophysical survey, such as will be the case here, the trenches are placed to target anomalies detected in order to assess their significance, extent and depth and the site overall. The results allow for an informed decision on how best to deal with any discovered archaeological finds or features prior to works on site commencing. A licence to carry out work is required and is granted by the Department of Housing Local Government and Heritage following submission of a licence application for the site in question. Upon completion of the test trenching, a report detailing the results of the work carried out is submitted to the Department and the National Museum of Ireland. Test trenching has not been carried out as of yet.

The licence application for test trenching of the site was submitted and approved. Licence 25E0711 was issued to Ian Russell and is active. The test trenching is scheduled for October 2025.

4.3 THE EXISTING RECEIVING ENVIRONMENT (BASELINE SITUATION)

Archaeology is considered here to include all recorded monuments listed in the Record of Monuments and Places (RMP) and in the Sites and Monuments Record (SMR), National Monuments (i.e. those in the ownership/guardianship of the state), previously unrecorded sites, sites reported in the Excavations Database if not included in the RMP and find spots or sites listed in the Topographical Files.

A number of policies and objectives of *Kildare County Development Plan 2023-2029* and the Maynooth and Environs Local Area Plan 2025-2031 are relevant to the site (see Section 4.2). Policy AH O3 of the *Kildare County Development Plan 2023-2029* requires the proposed development be subject to a full archaeological assessment. An Archaeological Impact Assessment (Lyne 2024) was prepared by ACSU, its findings are included in this chapter, the recommendation for the site included geophysical survey and test trenching at the pre-construction phase. A geophysical survey was since carried out (see Section 4.3.7 for details) and test trenching has been scheduled for October 2025. The licence for test trenching (25E0711) is in place and valid. Given the nature of the potential archaeological features identified, and experience with similar features elsewhere, It was not considered necessary or feasible to undertake the proposed testing in advance of lodgement of the LRD application / EIAR, i.e. pre-construction testing and preservation by excavation / record is considered appropriate for the potential features identified. However test trenching is now scheduled, and is included as a part of the mitigation measures (see Section 4.8.2) and will be carried out in order to devise any further mitigation measures necessary in line with the objectives of the Maynooth and Environs Local Area Plan 2025-2031, namely BHO3.1-6. The site is located to the southwest of Maynooth town and none of the sites shown on Map 8.1 and Map 8.2 and listed in Table 8.4 are located within the current site.

4.3.1 Archaeological Background

The site is located in the townland of Railpark in the Barony of Slat North and the Civil Parish of Laraghbryan to the southwest of Maynooth town centre.

The town of Maynooth is located just inside the western edge of The Pale. The early Christian monastic centres of Laraghbryan (KD005-009001-), Taghadoe (KD010-014001-), and Donaghmore (KD006-005001-) are located within 2km of Maynooth town. Also, an early Christian burial ground (KD010-040-- --) was discovered in Moneycooly townland in 2004 (04E0644), located within the southeast part of the modern town. Burials of at least 55 individuals, almost all aligned east–west, were excavated (Duffy 2005).

The area of Maynooth was included in the diocese of Dublin sometime in the tenth century AD. This suggests that the area was somewhat organised and occupied before the arrival of the Anglo-Normans. This is also supported by the results of the excavations carried out in 1996 (96E0391) within the interior of Maynooth Castle. Hayden (1999) identified a prehistoric rectangular building (KD005-015001-); and two small post-and-wattle roundhouses (KD005-015002- and KD005-015003-) that pre-date the Anglo-Norman occupation. Furrows associated with the roundhouses were also excavated, suggesting agricultural activity in the immediate environs of the future castle site. A rectangular post-and wattle building (KD005-015004-) was also excavated on top of the Anglo-Norman remains of a 1m-deep sod mound.

Following the arrival of the Anglo-Normans, documentary references to Maynooth can be easily traced. In 1176, Richard de Clare, the former earl of Pembroke (Strongbow), granted the lands at Maynooth 'Magnoded' to Maurice Fitzgerald (c 1110–76). As a result, the area became integrated as the manor of Maynooth with an Anglo-Norman landholding system (Horner 1995). Maynooth Castle (KD005-015----; National Monument No. 485) was likely built by his son, Gerald FitzMaurice FitzGerald (c.1150–1204) to mark the acquisition of the lands in Uí Fáeláin (Kildare). Maynooth was at this time the centre of authority in the region and became the place where one of the earliest Anglo-Norman buildings in Ireland was erected. The construction likely started sometime just before 1180 and was completed by 1185, as suggested by O'Keeffe (2013), due to its similarities with the earliest phase of Trim's donjon; furthermore, it is also likely it was built by the same mason. The original building had two floors, a basement, and a first floor. A settlement developed or grew around the castle. A chapel was part of the castle complex, likely since 1248. Edward I in 1286 issued a patent for a weekly market and annual fair. In 1316, the Fitzgerald's became the earls of Kildare, and Maynooth was their chief fortress. However, Maynooth did not stand out from other small manorial villages in the late medieval Dublin environs. In 1328, two mills are mentioned. In the late 15th/16th centuries, the power of the Fitzgerald's was at its height as members of the family served as the king's lord deputy in Ireland between 1477 and 1534.

Lewis (1837) mentions that John, the sixth Earl of Kildare from the Kildare branch of the Fitzgerald family, erected a 'magnificent castle here in 1426'; he likely refers to the enlargement of the previously simple design of the donjon. During this time, the castle became 'one of the richest earl's houses under the crown of England' (Horner 1995). In 1515, the king granted a licence for the establishment of the College of the Blessed Virgin Mary of Maynooth. However, following the rebellion of Silken Thomas in 1535, the earl's estates were forfeited to the crown. Following the restoration of the estates in 1552 and the repair of the castle, little is known about Maynooth village in the second half of the 16th century. In the 1630s, Richard Boyle, earl of Cork, one of the great entrepreneurs, enlarged the castle complex. He was a

guardian to George Fitzgerald, who married his daughter. In 1642, however, the great library was destroyed and the castle was left ruinous in 1647.

The Civil Survey of 1654–55 records a manor house in Maynooth, two corn mills, two malt houses, a chapel, two bridges, and several leases issued suggesting a new tenant population.

In 1678, a patent for a weekly market and two annual fairs, references to the mill, a tan house, a new shop, slaughterhouse, a schoolhouse, and several buildings, suggest late seventeenth century Maynooth was a fast-growing village, likely due to its location on the main routes to the west of Dublin. In the late 1690s a merchant, James McManus, is mentioned concerning Maynooth, and during this time a rectory and an enclosed orchard off Parson Street are developed in the western part of the village. The 1730s saw Maynooth as a post-town with the Dublin-Kinnegad-Mullingar turnpike road constructed (Horner 1995).

In late 1739, the 19th earl of Kildare decided to develop the house at nearby Carton as his principal country residence (KD006-009----). The Talbot family had erected the first Dutch-style building in Carton, recorded in a painting by Van der Hagen. Subsequently, the estate was forfeited to the Crown and in 1703 sold to Major Gen. Richard Ingoldsby, Lord Justice of Ireland. A two-storey, nine-bay pedimented front with wings was added. It was later sold to the 19th Earl of Kildare who hired Richard Castle to enlarge the house. Major work took place and by the late 1740s the house and the gardens were largely completed. A Charter School is mentioned at this time as being bounded on two sides by a road to Dunboyne, on a third by a straight, tree-lined avenue, representing Carton Avenue, that runs through the proposed development. It is described as extending for a kilometre from the gates at the east end of the main street to the new road, skirting the newly enlarged Carton Demesne. The avenue is in the same axis as the main street that dates to the 1750s (*ibid.*). In 1757, Rocque mapped Maynooth, giving insight into the organisation and the nature of plots within Maynooth village. He also depicts the current Carton Avenue.

Peter Bere, who was associated with the earl, held several leases on the main street in 1784. He and the earl were largely responsible for the redevelopment of Maynooth. Evidence of a strategy to improve the village layout can be observed as a result (Prunty and Clarke 2011). Street frontages, including the square and green areas along each side of the main street, were developed. In the 1790s, a new axis at right angles to the main street and the construction of Williams Bridge allowed long-distance traffic to be finally diverted away from the castle. The Royal Canal was built to link Dublin and the Shannon and was routed south of Carton and Maynooth. In the western part of the village, a new Roman Catholic college – the Royal College of St Patrick – was established in Stoyte House, with additional buildings constructed. This had a positive economic impact on the village, offering a source of local employment in addition to the demesne at Carton. The Roman Catholic lay college that opened in 1802 was short-lived and closed by 1820 with its properties absorbed into St Patrick's College. With the population nearly doubled since the mid-18th century, it could now be described as a small town. In the 1830s, a Presentation convent was established in the eastern part of the town, on the site occupied by the charter school that had closed in 1819. This became the girls' national school, with a boys' school in the old chapel, both supported by the Duke of Leinster (Horner 1995).

In the 1820s, the strategy to improve Maynooth's layout, including the street framework, was nearly complete. This allowed the third duke to focus on improving the house and demesne at Carton. In 1819, the courthouse was built on the site of the former market house and shambles. In 1815, Richard Morrison

was hired to remodel and enlarge Carton House for the Dukes of Leinster. It was during this time that the demesne of c. 1,000 acres was landscaped.

In 1846, the castle area in Maynooth town was bought out and cleared of houses and cabins, a garden was established here for the people of Maynooth. Only a few large houses can be noted at this time, e.g. a parochial house and a miller's house on Mill Street, and Crom-a-boo Lodge as part of the charter school site. Rows of houses were built at this time, fronting Charter School Lane, Parson Street, and later, in c. 1900, Dillion's Row of single-storey houses on the Dunboyne Road. Several lanes in the town took their names from the developer – e.g. Kelly's Lane from Clement Kelly's grocery shop, Cushin, and Coates Lane, Coffey's Lane, and Doctor's Lane. In the 1850s, the most valued houses were mostly occupying both sides of Main Street.

A masterplan for the town's future development was prepared by architect A.W. Pugin in the 1850s. As a result, St Mary's Square, infirmary, chapel, the Aula Maxima (1894–5), and the great spire (1902) were constructed. The courthouse building was redeveloped to serve as a town hall with concert and meeting rooms.

The town growth weakened and in 1949 the Carton estate was sold. A large out of town scheme for housing at Greenfield, on the south side of the canal and railway. Main Street was tarred. With new water and sewerage schemes in the 1950s and the decision to admit lay students to the college, Maynooth was recognised as within the commuting range of an expanding Dublin and the town grew rapidly. In 1981, the railway was reopened and by 1994 the Leixlip-Kilcock motorway was built.

4.3.2 National Monuments

The term 'National Monument' is defined by the National Monuments Act (1930) as being 'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic, or archaeological interest attaching thereto'. The aforementioned Act states that the consent of the Minister is required for archaeological works at or near a national monument in the ownership or guardianship of the Minister or a local authority or to which a preservation order applies. The Minister is required to consult with the Director of the National Museum of Ireland in relation to such an application for consent.

No National Monuments are located on or within close proximity (within 1km) to the proposed development site.

Maynooth Castle (KD005-015) is a National Monument in the state Ownership No. 485, while Connolly Folly (KD011-040) is a National Monument in the state Ownership No. 681; both are located just over 1km from the site, with Maynooth Castle c. 1015m to the northwest and Connolly Folly c. 1170m to the southeast of the site (see Figure 4.1).

4.3.3 Recorded Monuments

There are no monuments as listed in the Record of Monuments and Places nor in the Sites and Monuments Record located within the site boundary. Five such monuments are located within 1km of the site. Two nearest a Burial Ground (KD010-040----) and a Furnace (KD011-061----), are recorded 480m and 500m, respectively, to the south of the site. As outlined in the section below, these were identified as a result of archaeological investigations (04E0644; Duffy 2004). The remaining three are at a distance

of 500m or greater from the site and include two monuments located within Maynooth town, an Architectural feature (DK005-014), and a field boundary (KD005-023) both to the northwest of the site with a field system (KD010-008) to the south. The field boundary was identified as a result of archaeological investigations under licence 04E0644, while the field system was recorded from the 1970s aerial imagery. The architectural feature, a medieval doorway with a twin-light window with hood moulding is located in the Church of Ireland schoolhouse.

The following is a list of three monuments (Table 4.1) located within a 1km radius of the site (Figure 4.1). The entry below is derived from the National Monuments Service Archaeological Survey Database.

Table 4.1: Recorded monuments within 1 km of the centre of the development site

RMP/SMR	Classification	Townland	ITM E	ITM N
KD010-040----	Burial ground	MONEYCOOLY	694439	736275
KD011-061----	Furnace	MONEYCOOLY	694532	736230
KD010-008----	Field system	MONEYCOOLY	694229	735944
KD005-014----	Architectural feature	MAYNOOTH	693737	737556
KD005-023----	Field boundary	MAYNOOTH	693847	737747

4.3.4 Previously Unrecorded Sites

No above-ground previously unrecorded sites were noted within the proposed development area during the site walkover survey carried out in August 2024 or from an examination of cartographic or aerial imagery. While a road is depicted on the 1752 (Figure 4.3) map the more detailed Grand Jury map of County Kildare of 1783 (Figure 4.4) shows the road outside and to the south of the site [note: the geophysical survey did not detect the presence of the road within the site, suggesting the earlier map (1752) may be inaccurate regarding the location of the road]. The geophysical survey (24R0591; Murphy 2025) identified the presence of a ring ditch and other anomalies of archaeological potential requiring further assessment in order to adequately mitigate the impact of the proposed development.

4.3.5 Previous Archaeological Investigations

The site was subject to non-invasive archaeological impact assessment (Lyne 2024;) and to geophysical survey (24R0591; Murphy 2025; see 4.3.7). Furthermore, archaeological investigations assessments in the environs were carried out and resulted in archaeological remains exposed and subsequently excavated. These include two monuments now listed as a Burial Ground (KD010-040----) and a Furnace (KD011-061----), both located to the south of the site (Figure 4.1). These were identified as a result of archaeological investigations (04E0644; Duffy 2004). Furthermore, archaeological investigations to the south identified a ring ditch/barrow with a Bronze Age burial urn, cremation burial pits, as well as an early medieval cereal-drying kiln and five inhumation burials (19E0235; Gallagher 2019). The sites were previously unknown, with no surface expression. Test trenching on the site of Gaelscoil Uí Fhiaich adjacent to the R405 Maynooth–Celbridge road to the south exposed no features of archaeological significance (08E0575; O'Hara 2008). [Note: 05E0871 has been geolocated by Database of Irish Excavation Reports in the incorrect location]. Test trenching under licence 21E0360 (Ryan 2021) of the

site adjacent and to the south with 17 test trenches excavated, did not expose anything of archaeological significance with the remains of Rockfield House recorded only, and monitoring recommended.

Listed below (Table 4.2) are the nearest previous archaeological investigations undertaken in the environs of the site (Figure 4.1), which further demonstrate the overall archaeological potential of the site and its surrounding townlands. The following information was taken from the Database of Irish Excavation Reports (www.excavations.ie).

Table 4.2: Previous archaeological investigations within the environs of the site

Excavation.ie reference	Licence No.	Site-Type	Investigation Type
2004:0851 - Moneycooly, Maynooth, Kildare	04E0644	Burial ground and Furnace Early Medieval (AD 400–1099)	Testing Monitoring Excavation
2019:693 - Greenfield, Maynooth, Kildare	17R0009 19E0235	Ring-ditch/barrow, Bronze Age burial urn, early medieval cereal-drying kiln & inhumation burials	Geophysical Survey Testing Excavation
2008:670 - Gaelscoil Uí Fhiaich, Railpark, Maynooth, Kildare	08E0575	No archaeological significance	Testing

4.3.6 Archaeological Impact Assessment (Desktop Based)

The Archaeological Impact Assessment Report (desktop based) was prepared in late August 2024 by Magda Lyne of Archaeological Consultancy Services Unit Ltd. (ACSU). The assessment was carried out to accompany the Stage 2- LRD Pre-application Consultation for a proposed Large Residential Development. The report was based on the findings of a study of available archaeological, historical, cartographic, and photographic sources as well as a site visit. It aims was to identify and describe the known and potential archaeological and cultural heritage constraints within the site and its wider environs and, where present, offer recommendations for mitigation measures.

The report found that the site contains no monuments listed in the *Record of Monuments and Places* (RMP) or the Sites and Monuments Record (SMR) nor Protected Structures, as listed in the *Kildare County Development Plan 2023–2029*, nor any structures listed in the *National Inventory of Architectural Heritage* (NIAH). The site visit did not identify any features or archaeological significance. The site was deemed to have the potential to contain previously unknown subsurface archaeological remains due to its location within a sensitive archaeological landscape with monuments identified as a result of archaeological investigations in the past in the wider environs.

Further archaeological assessment was recommended to include a geophysical survey with test trenching of the site, including targeting anomalies identified by the geophysical survey, prior to construction commencing by a licence-eligible archaeologist working under licence from the Department of Housing, Local Government and Heritage. It was noted that any archaeological material identified may necessitate further mitigation, including preservation in situ/or preservation by record (excavation) following discussion with the National Monuments Service (given the assessments carried out on the

lands, preservation by record is considered most likely, hence test trenching will be undertaken prior to construction commencing).

4.3.7 Geophysical Survey (Murphy, 2025)

The geophysical survey was conducted by Donald Murphy of Archaeological Consultancy Services Unit Ltd. (ACSU) under licence 24R0591 issued by the Department of Housing, Local Government and Heritage in consultation with the National Museum of Ireland. A full detailed gradiometer survey was undertaken throughout the application area using a Bartington GRAD 601-2 dual-sensor fluxgate gradiometer.

The site surveyed consisted of two fields. Anomalies of archaeological significance and potential were identified (see Figure 4.7). Anomaly M1 consists of a small circular enclosure measuring c. 7.5m in diameter and was interpreted as ring-ditch. Anomaly M2, while faint, is also circular and measures 8.5m in diameter and was interpreted as ?Archaeology¹ but very likely also represents ring ditch. Ring ditches are prehistoric monuments defined as circular or non circular ditches usually less than 10m, these may be remains of ploughed out barrows or other types of structures, these are relatively simple morphologically. Archaeological Survey of Ireland records 149 monuments classed as ring-ditch in County Kildare.

Furthermore, geophysical survey identified scatters of other anomalies were also identified as representing potential archaeology (?Archaeology). These include a curvilinear response and sporadic small responses that could represent archaeological features such as pits, postholes, spreads and kilns but could also be of a natural origin.

Features depicted on the examined Ordnance Survey mapping were also detected, including numerous linear anomalies corresponding with former field boundaries. Linear anomalies that are not recorded field boundaries were also detected. They likely represent early field systems, drains or paths/access. Anomalies marked as Cultivation represent furrows/plough marks.

The site overall and the anomalies identified, particularly Anomalies M1 and M2 require further assessment, with test trenching at the pre-construction phase recommended, in order to assess the site and the extent, significance and nature of the anomalies identified during geophysical survey.

Below is an extract from the report (Murphy, 2025) detailing the anomalies identified:

Table 4.3: Geophysical survey results

Anomaly No.	Form/Nature of Anomaly	Possible Source(s) of Anomaly	Investigation Type
M1	Archaeology	Ring-ditch	Small circular ring-ditch enclosure with a c. 7.5m diameter along the western portion of Field 1. The anomaly is slightly fainter along its western side and appears to be truncated by cultivation furrows.

¹ ?Archaeology = Anomaly representing a potential archaeology feature; its nature needs to be determined during test trenching

Anomaly No.	Form/Nature of Anomaly	Possible Source(s) of Anomaly	Investigation Type
M2	?Archaeology	Possible ring-ditch	A faint positive curvilinear anomaly with a diameter of c. 8.5m. It lies c.40m south of M1 ring-ditch. This feature likely represents another ring-ditch, but it has a weaker response than anomaly M1.
-	?Archaeology	Curvilinear	A positive curvilinear anomaly located directly southeast of M2 may represent the partial remains of a ring-ditch but is disturbed by the buried service to the east.
-	?Archaeology	Small to medium anomalies: pits, posts, spreads, kilns, cut features	A series of positive anomalies that occur sporadically across the survey area. These might represent cut features such as pits, postholes, spreads, kilns, or other types of archaeological features. It may also be natural in origin.
-	Linear feature	Former field boundaries	Positive linear anomalies that correspond with former field boundaries depicted on the first edition Ordnance Survey (OS) 6-inch map, surveyed 1835, and the third edition Ordnance Survey (OS) 25-inch map, surveyed 1908, are located within Fields 1 & 2.
-	Linear feature	Early field systems?	Positive linear anomalies in Fields 1 and 2 may represent former field divisions that are not depicted on OS mapping.
-	Magnetic disturbance	Modern disturbance	Magnetic disturbance in the western portion of Field 1 corresponds with modern disturbance in the area from environmental trial pits.
-	Buried service	Modern service	A bipolar response traversing Field 1 corresponds with the laying of a modern service that can be seen in aerial imagery from 2001-2005.
-	Cultivation	Land use/furrows	A series of cultivation furrows occurred in Field 1, predominantly in the southern portion of the field.
-	Ferrous	Magnetic disturbance from modern debris	Bipolar anomalies sporadically occur that are associated with magnetic interference from modern ferrous material, either in the topsoil or the surface of the survey area.

4.3.8 Sites Reported In The Excavations Database

There are no sites reported in the excavations database located within the site. However, to the south, the above-noted burial ground and furnace, now monuments KD010-040---- and KD011-061----, were recorded under licence 04E0644; (Duffy 2004). Furthermore, more recently archaeological investigations to the south identified a ring ditch/barrow with a Bronze Age burial urn, cremation burial pits, as well as an early medieval cereal-drying kiln and five inhumation burials (19E0235; Gallagher 2019).

4.3.9 Topographical Files

The topographical files of the National Museum of Ireland were consulted. There are no finds listed for Railpark townland. However, there are eleven finds listed for Maynooth, these include two stone axeheads (NMI Reg. No. 1945:259; 1967:101), a lead object (NMI Reg. No. 1995:2003), a bronze brooch (SA1925:8) and six copper alloy finds including four rings (NMI Reg. No. 1995: 2004-2007), a button (NMI Reg. No. 1995:2001) and a mount (NMI Reg. No. 1995:2002).

4.3.10 Placename Evidence

The database of Irish placenames, www.logainm.ie was consulted for the meaning of the placenames within and surrounding the proposed development site.

The site is fully within Railpark townland, located within the Parish of Laraghbryan and the Barony of Salt North. Railpark (Páirc an Ráille) was recorded in 1744 as Rayld Park (<https://www.logainm.ie/en/25437>). In 1837 it was noted as formerly called Mill Farm, with the name Rail Parks used from the late 18th century onwards.

4.3.11 Record of Protected Structures

The *Kildare County Development Plan 2023-2029* was consulted to determine if any protected structures were present within the proposed development site. In addition, the *Maynooth and Environs Local Area Plan 2025-2031* was also reviewed. No such structures were listed within the site boundary.

The nearest such structure is Lime Kiln (B06-06), located c. 310m to the northeast of the site.

4.3.12 National Inventory of Architectural Heritage (NIAH)

In addition, the database of the National Inventory of Architectural Heritage was also consulted.

A section of Royal Canal (NIAH Reg. No. 11803136) is recorded due to its dressed stone retaining walls, with the canal c. 380m to the north of the site.

4.3.13 Cartographic Sources and Aerial Imagery

Cartographical sources and aerial imagery were examined.

Potential archaeological or cultural heritage features are marked on maps and provide a useful resource in identifying sites particularly if they no longer have any above-ground remains.

A review of the available aerial photography for the area was also undertaken as part of this assessment. Unrecorded archaeological sites can often be identified in aerial photographs as cropmarks or differential growth in a field.

Cartographic Sources

A review of available historic mapping for the area was carried out to include the Ordnance Survey (OS) of Ireland 6-inch (1835; see Figure 4.5) and 25-inch (1908-09; see Figure 4.6) maps, as well as pre-Ordnance Survey mapping that includes the Down Survey (1654–57; see Figure 4.2), Keenan and

Noble's map of county Kildare (1752; Figure 4.3) and Taylor's map of County Kildare (1783; see Figure 4.4). Potential archaeological or cultural heritage features are often marked on such maps, and they can provide a useful resource in identifying sites, particularly if they no longer have any above-ground remains.

Figure 4.2: Extract from Down Survey map of the County of Kildare, Barony of Salt and Straffan (1656), showing approx. location of site.

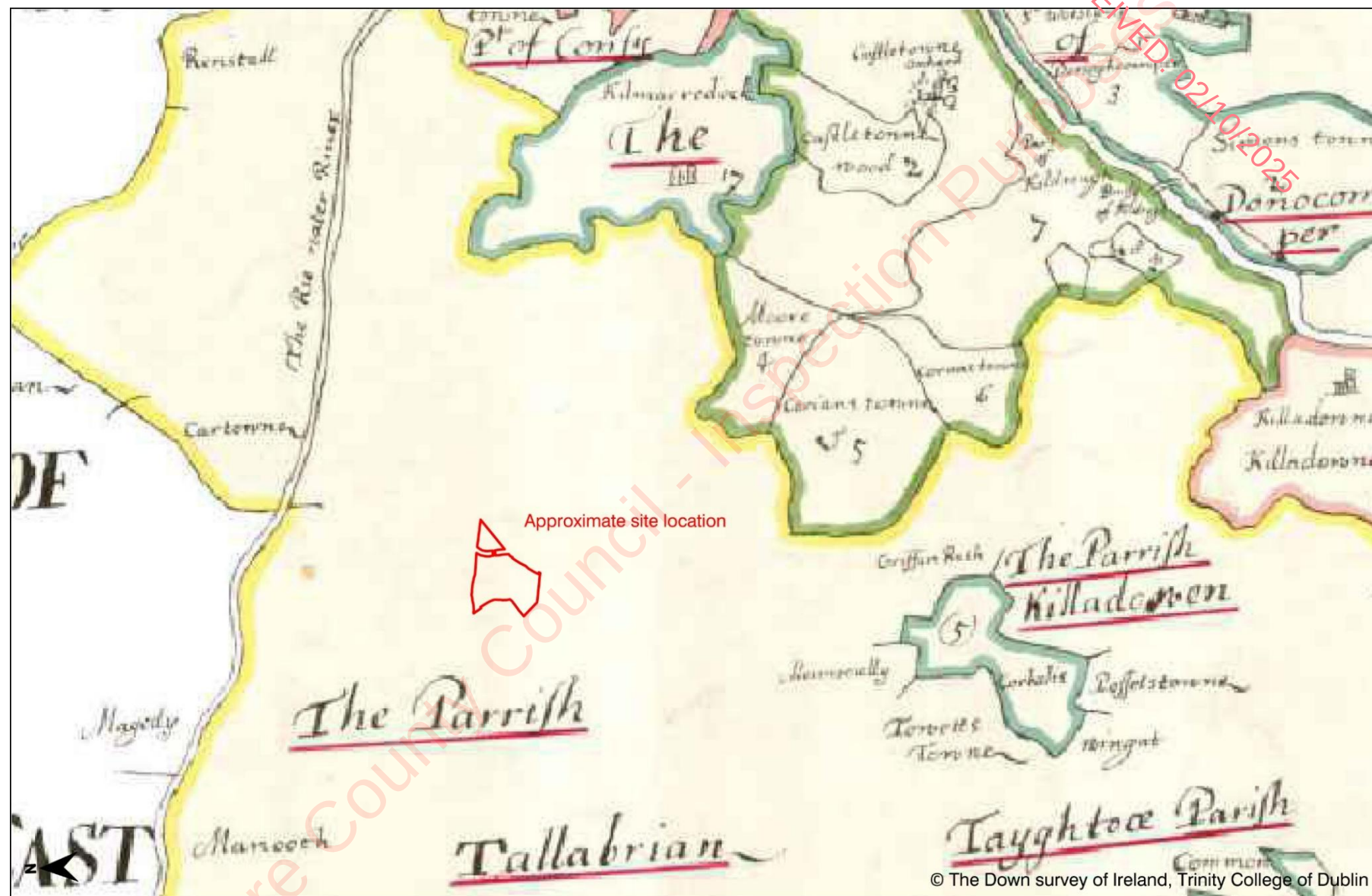


Figure 4.3: Extract from Keenan and Noble's map of County Kildare (1752), showing approximate location of site.

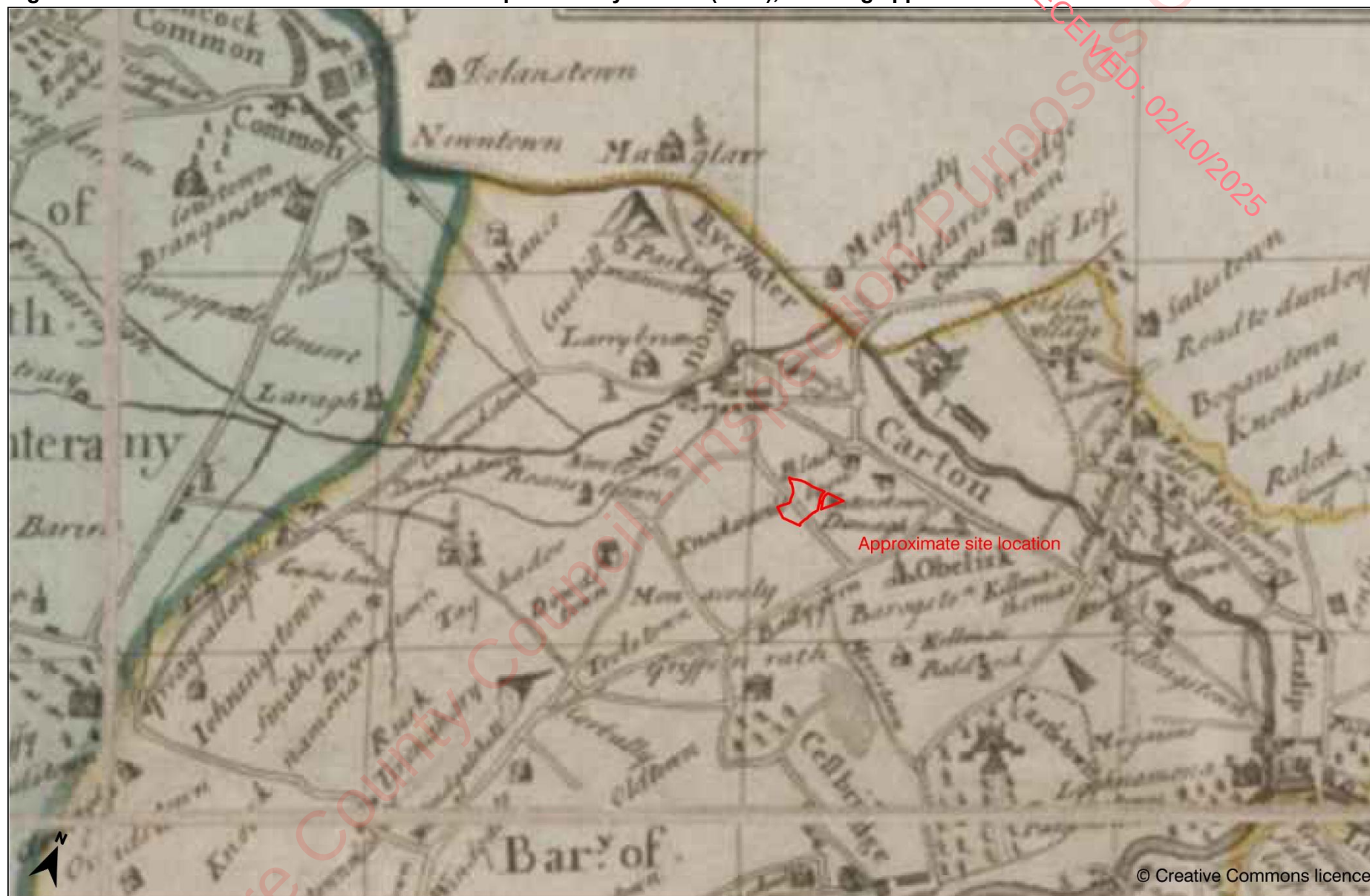


Figure 4.4: Extract from the Grand Jury map of County Kildare by Taylor (1783), showing approximate location of site.

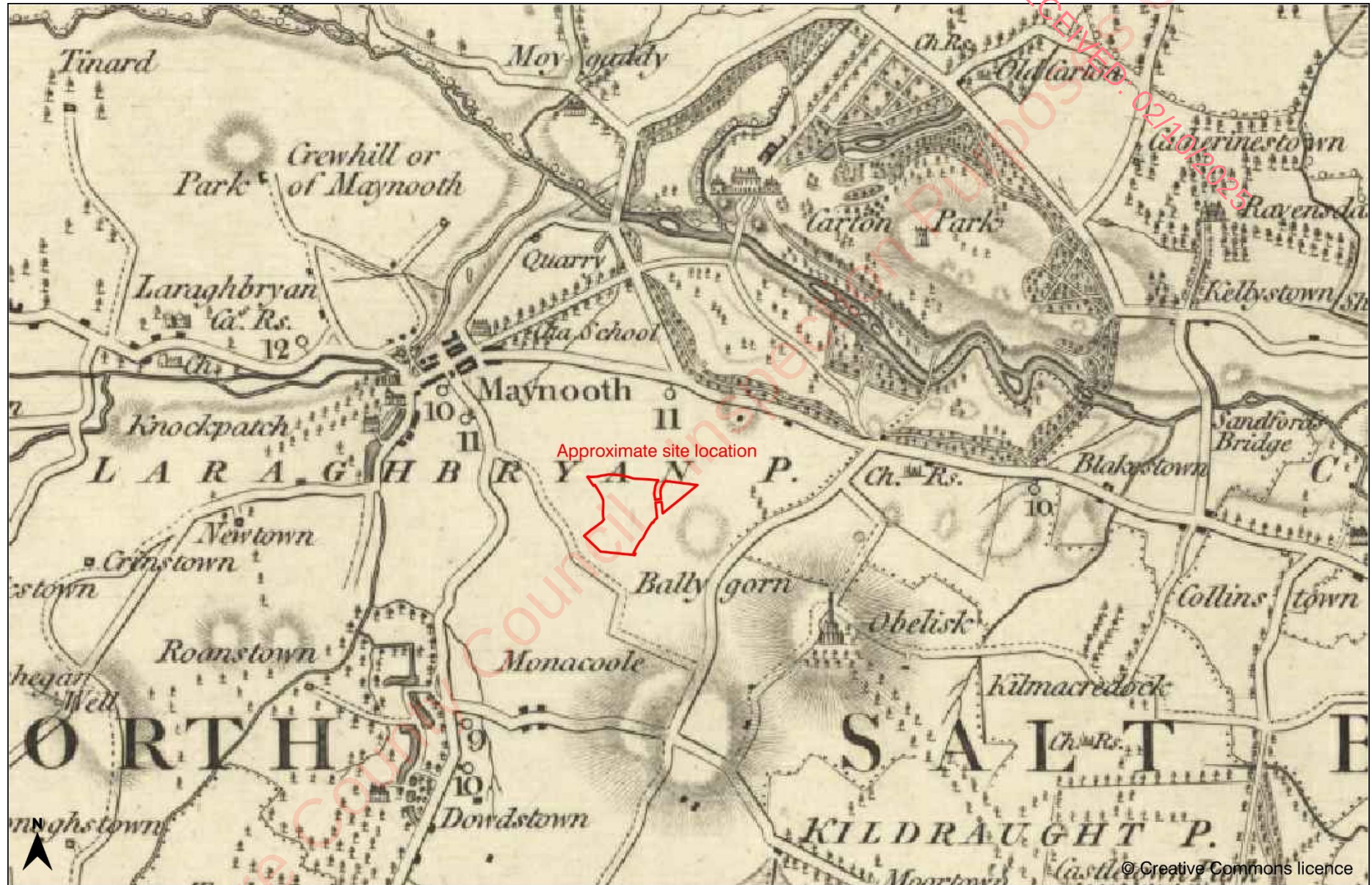


Figure 4.5: Extract from 1st edition Ordnance Survey (OS) 6-inch map (surveyed 1835 - published 1837), showing location of site.

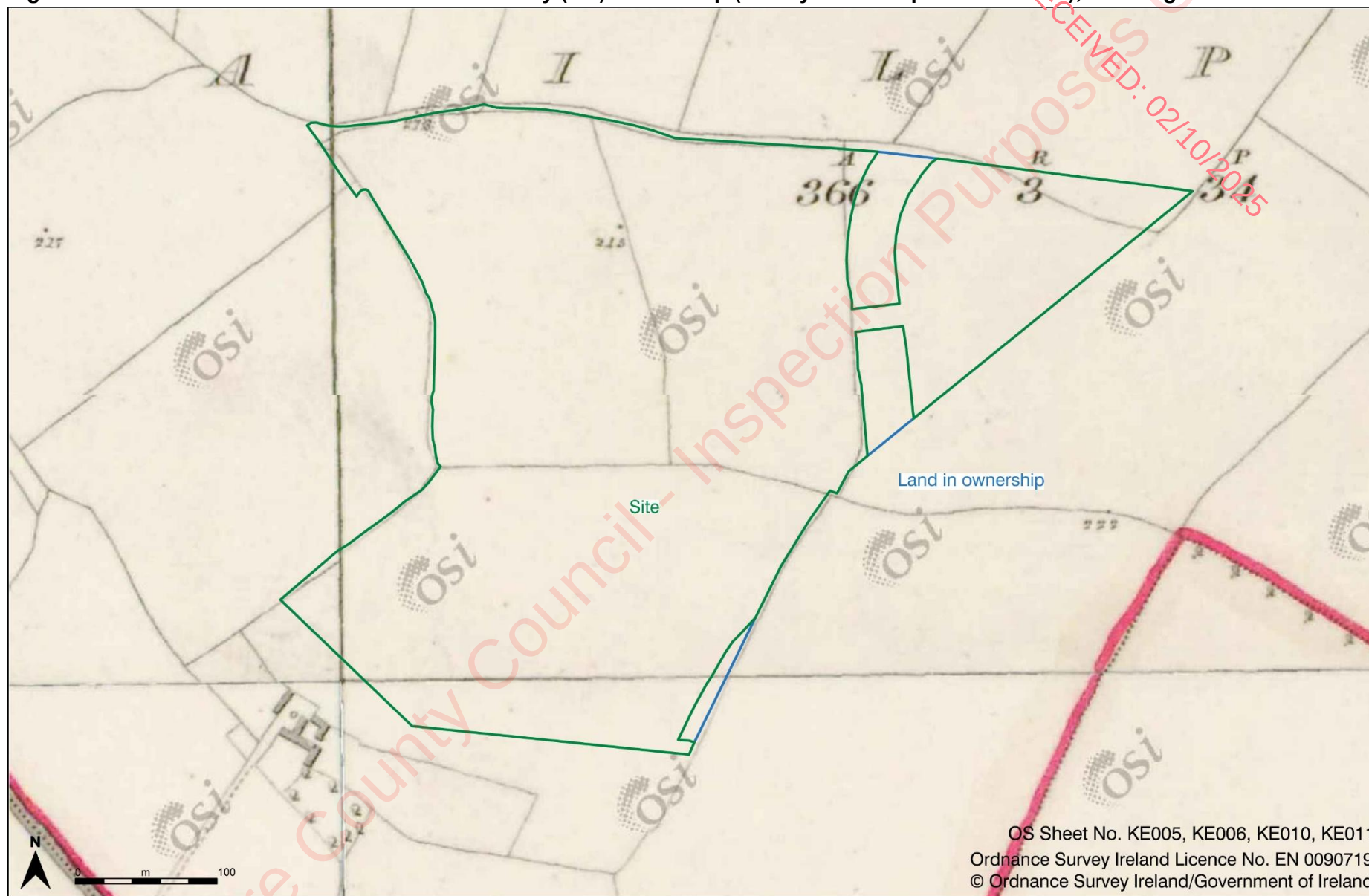


Figure 4.6: Extract from 3rd edition Ordnance Survey (OS) 25-inch map (surveyed 1908–09 - published 1910), showing location of site.

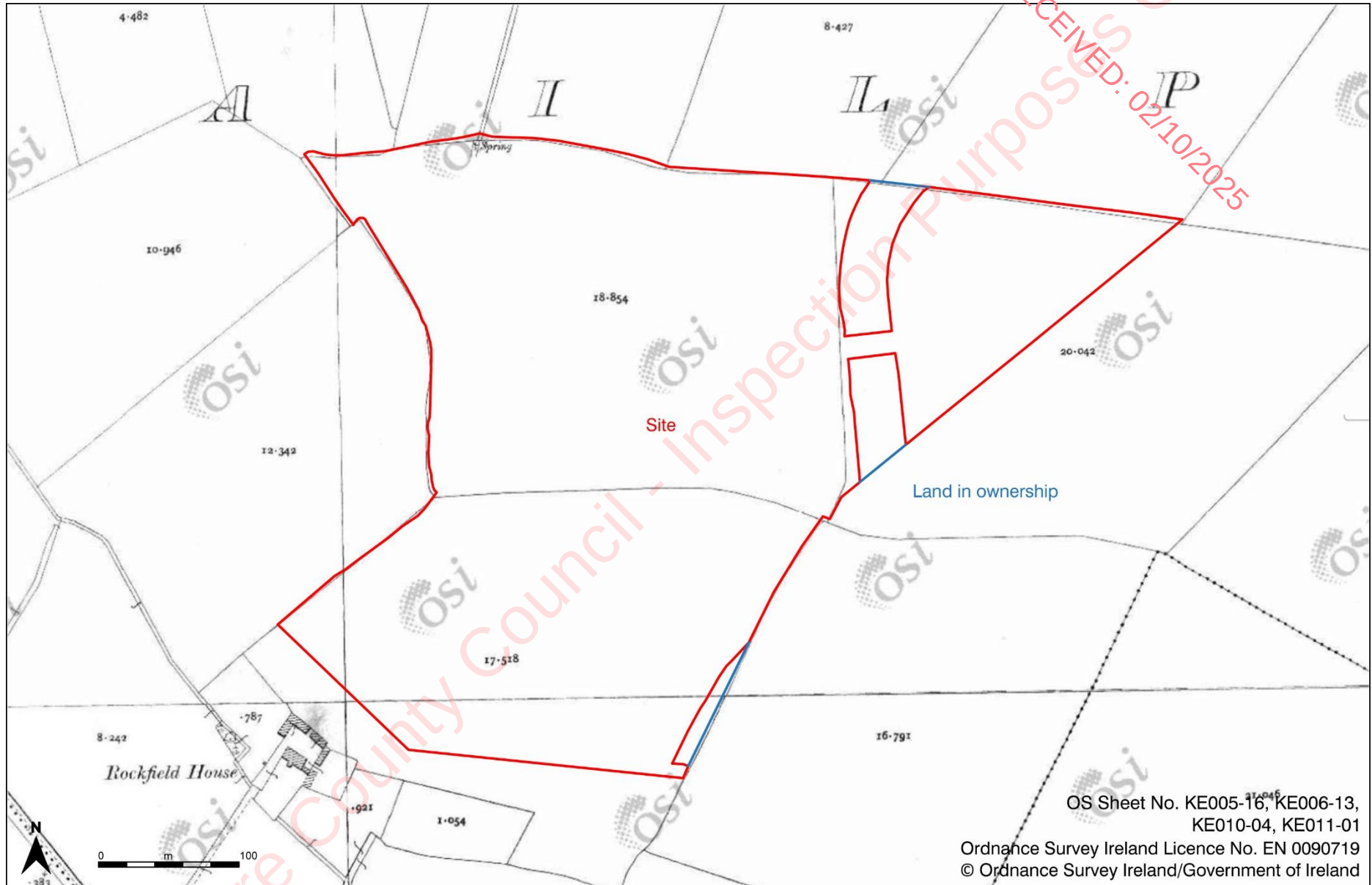


Figure 4.7: Aerial view of site.

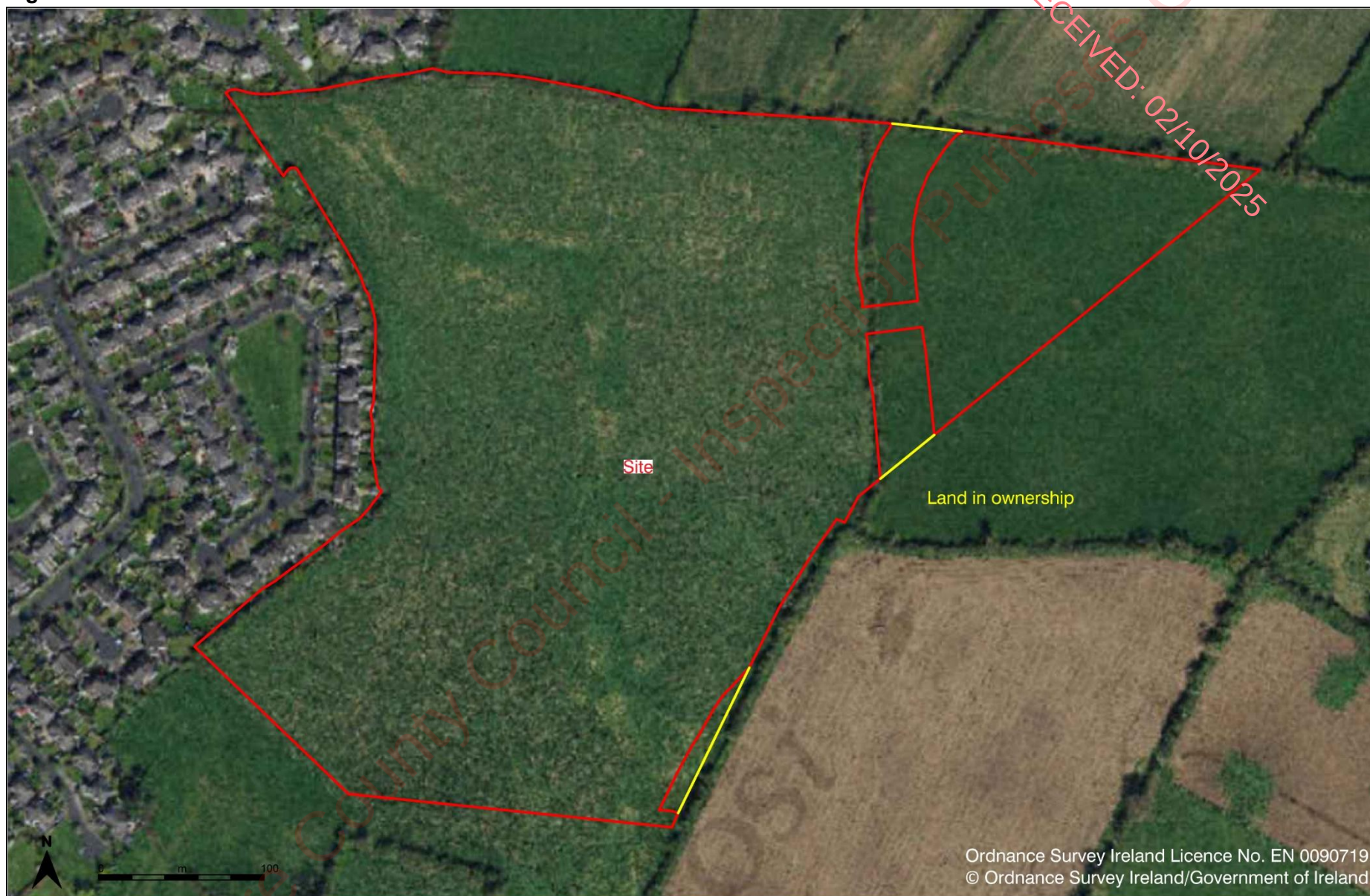
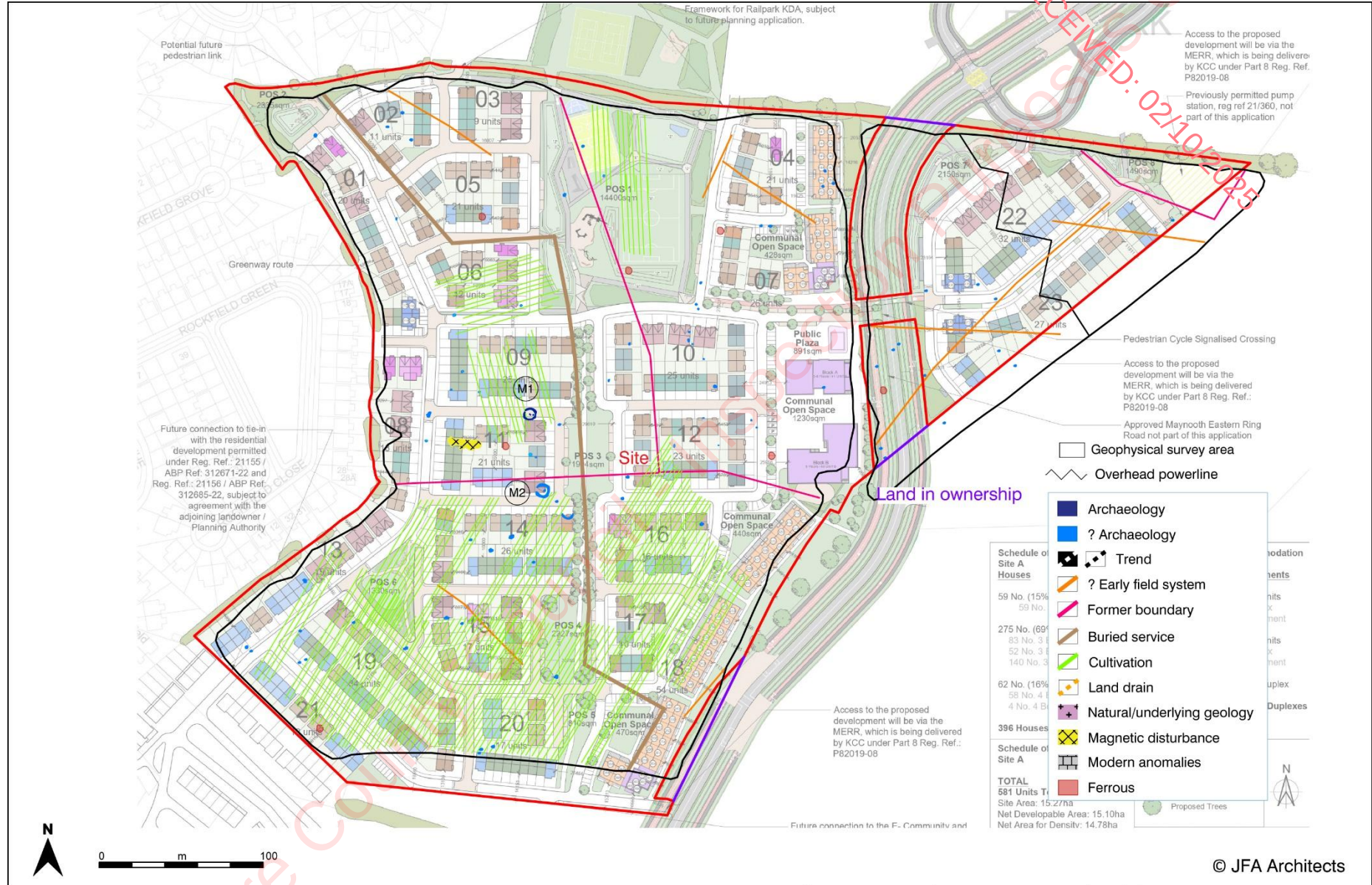


Figure 4.8: Details of site development, showing geophysical survey interpretation with the anomalies identified.



Pre-Ordnance Survey mapping examined does not give any detail in relation to the site; however, a road is shown traversing the site on the 1752 map, but the more detailed Grand Jury map of County Kildare of 1783 shows the road outside and to the south of the site, suggesting that the earlier map may be inaccurate regarding the location of the road.

The site is depicted as incorporating part of four agricultural fields on the 1835 OS map (Figure 4.5), with one of these field boundaries removed by the time of the 1908 OS map, which also depicts a spring abutting the northern boundary (Figure 4.6). This might suggest that this boundary of the site, depicted as a narrow strip on the 1835 map, was not a road/track but a wet ditch.

No features of archaeological significance were recorded on the examined mapping; however, the line of the road depicted on the 1752 map may be considered historically significant if the mapping is accurate and an abandoned 18th-century road did once cross this field; however, no remains of this road can be seen on the geophysical survey.

Aerial Imagery

By the time of the 1995 aerial, further field boundaries had been removed, and on the 2001–2005/2006–2012 aerial images, a wide strip traversing the site roughly northwest to southeast was visible. It likely represents a service pipe. The area was returned to pasture thereafter but the route of the pipeline is visible as a linear cropmark on subsequent aerial images.

Faint, parallel linear cropmarks were observed on the 2021 aerial imagery in the area adjacent and south of the site; these correspond with test trenches excavated (21E0360; Ryan 2021). Aerial imagery from late 2024 illustrates it under construction, with an area directly adjacent and south of the current site stripped of topsoil (likely for service). Parallel linear cropmarks that could represent test trenches are visible to the north of the site on the most recent aerial imagery from Google Earth (May 2025). At present, there is no record of these on excavation.ie.

No features of archaeological significance were recorded on the examined aerial imagery.

Figure 4.9: Overview of the site facing east (Plate 1) and west (Plate 2) respectfully



4.3.14 Site Inspection

A site inspection was conducted by Kevin White of ACSU in August 2024. The site consists of portions of two fields and is currently a tall meadow (see Figure 4.6) with boundaries consisting of mature hedges, trees and post and wire fence. No features of archaeological significance were noted during this field inspection.

4.4 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

The proposed development area measures c 15.27 hectares and is located on the eastern side of Maynooth, south of the Dublin-Sligo railway line and the Royal Canal, known as Railpark. The site is currently in agricultural use, but forms part of the designated Key Development Area at Railpark under the Maynooth and Environs LAP. The site is adjacent to established residential neighbourhoods at Parklands and Rockfield.

The character of the land is agricultural. There are boundary hedgerows along the northern and western boundaries of the site, the northern hedgerow being the most complete. The hedgerow along the western boundary with Rockfield is fragmented with many gaps where vegetation has been removed, possibly pruned. There are ornamental trees and hedging planted in adjoining gardens intermingled with the hedgerow. There is also a hedgerow running north-south through the site and along the southeastern corner.

The application is for residential development to provide a total of 581 no. residential units, consisting of 396 no. houses and 185 no. duplex/apartment units as well as a neighbouring centre with commercial space, apartments, a childcare facility, outdoor play area, a retail, health centre, pharmacy, café, a pavilion, as well as significant public open space.

A Part 8 application (Reg. Ref.: P82019-08) was approved by Kildare County Council on the 29th of July 2019 for the Maynooth Eastern Ring Road (MERR), which will provide a link between the R405 Celbridge Road and R148 Leixlip Road, including a bridge over the Royal Canal and railway line. The route of this link road is orientated through the subject lands, and we note that the LAP requires the MERR to be constructed prior to or in tandem with the development of the new residential development within the Railpark KDA.

The subject lands are strategically located adjacent to and accessed from the MERR, which in turn forms a strategic element of the overall Maynooth Outer Orbital Route, which is of strategic importance to the future and significant planned growth for the 'Key Town' of Maynooth.

The Maynooth Eastern Ring Road (to be provided by Kildare County Council) will traverse the proposed development lands in a north-south direction. Vehicular access to the proposed development will be via the new T-junction on the Maynooth Eastern Ring Road (MERR). The north-east section of the development will be accessed via a new local access road connecting the MERR. The MERR will connect the proposed development to the R148 Leixlip Road to the north and the R405 Celbridge Road to the south.

For a full description of the proposed development, see Chapter 2 of this EIAR and the application drawings.

4.5 POTENTIAL IMPACTS OF THE PROPOSED DEVELOPMENT

The following outlines the potential impacts in advance of mitigation measures proposed.

4.5.1 Effects On Recorded Archaeological Monuments

There will be no effects, indirect or otherwise, on recorded archaeological monuments (RMPs/SMRs) as no such monuments are located within the proposed development site. The nearest monument to the site is a Burial Ground (KD010-040----) recorded 480m to the south of the site, and no indirect or visual effect on this monument was noted.

4.5.2 Effects On Known and Potential Archaeological Features

The proposed development, without mitigation (i.e. excavation and preservation by record in this instance) will have a profound and negative impact on the ring ditch (Anomaly M1) identified during the geophysical survey (24R0591; Murphy 2025).

A potential effect on the archaeological resource lies in the uncovering of sub-surface archaeological features during groundworks associated with the proposed works and associated infrastructure. This is because anomalies of archaeological potential were identified as a result of a geophysical survey (24R0591; Murphy 2025) that require further assessment. Should additional archaeological features be present, including the road depicted within the site as shown on the 1752 map, the proposed development will have a negative, permanent and profound effect on such remains.

4.5.3 Architectural and Cultural Heritage

There will be no effects on architectural heritage as no Protected Structures, sites listed within the National Inventory of Architectural Heritage (NIAH), or vernacular structures, are located within the proposed development site.

4.5.4 Indirect Effects

Indirect effects are those whereby the proposed development may have a negative (or positive) effect on the wider archaeological landscape or surrounding architectural heritage. Indirect effects may include a visual impact on the surrounding archaeological landscape.

The introduction of the proposed development to the area will not result in a change to the general setting of any of the monuments or protected structures as none are present within or in the immediate environs of the site. The site consists of grassed fields bounded from the west by residential development.

The proposed development will therefore have no indirect effects, either temporary or permanent, on the wider cultural heritage of the area.

4.6 'DO-NOTHING' IMPACT

If the proposed development were not to proceed there would be no negative impact on the archaeological, architectural or cultural heritage resource of the proposed development area.

4.7 CUMULATIVE EFFECTS

There are no known cumulative effects on the Archaeological and Cultural Heritage resource of the area as a result of the proposed development.

In recent years, a number of small and large-scale developments were proposed and approved in the environs of the site by Kildare County Council (21155 / ABP Ref. 312671-22; 21156 / ABP Ref.: 312685-22; 211108; 2461139 2460774). Reg. Ref.: 21155 / ABP Ref. 312671-22 and Reg. Ref.: 21156 / ABP Ref.: 312685-22 refers to the lands located adjacent and to the south of the subject lands. Test trenching carried out under licence 21E0360 (Ryan 2021) prior to groundworks did not identify any features of archaeological significance with the remains of Rockfield House found and monitoring recommended.

The Maynooth Eastern Ring Road (MERR) permitted under Reg. Ref.: P82019-08 intersects the proposed development site as shown in the JFA Site Layout drawings (add cross reference) and is required for servicing the proposed development, with the occupation of units dependent on the opening of the road which is scheduled to commence construction this year. The EIA screening report in respect to the MERR issued in 2019 states the following archaeology mitigation measures be carried out:

“For archaeology, ground disturbances associated with the proposed development in greenfield areas will be monitored by a suitability qualified archaeologist during the construction phase. If any features of archaeological potential are encountered, further archaeological mitigation may be required, such as preservation in-situ or by record. A pre-construction condition survey will be carried out for the boundary wall of Carton Demesne to ensure that the wall will not be impacted by the very limited construction works nearby.”

This project is being delivered by KCC and therefore the impacts on archaeology and cultural heritage have been addressed through a separate application process and assessment and the cumulative impacts with the proposed development are not significant in the context of this chapter.

4.8 AVOIDANCE, REMEDIAL AND MITIGATION MEASURES

4.8.1 Pre-Construction Phase

The following mitigation measures will be carried out subject to the approval of the National Monuments Service (NMS) of the Department of Housing, Local Government and Heritage (DHLGH) and further mitigation may be sought by the NMS.

ARCH PRE-CONST 1: Archaeological Assessment – Test trenching

- Test trenching of the site will be carried out prior to construction commencing. A geophysical survey (24R0591; Murphy 2025) has been undertaken. Anomalies identified, particularly Anomaly M1 interpreted as a ring ditch and Anomaly M2 interpreted as a possible ring ditch, will be targeted in the course of test trenching, in addition to an intensive testing programme across the site generally (with the potential footprint of the road as shown on the 1752 map also targeted). This will be carried out prior to any works commencing in order to mitigate any potential impact on possible archaeology if present. This will be carried out by a licence-eligible archaeologist in consultation with and under licence from the NMS of the DHLGH. The licence application for test trenching of the site was submitted and approved; licence 25E0711 is now in place and valid, with the work scheduled to take place in October 2025.

- Time and resources will also be allowed for any post-excavation work and specialist analysis necessary following any archaeological test trenching that takes place.
- A report will be compiled on completion of any archaeological test trenching and will be submitted to the Planning Authority prior to commencement of development.

ARCH PRE-CONST 2: Archaeological Preservation By Record – Excavation

- Depending on the results of test trenching, further mitigation might be required in the form of excavation with the use of a metal detector of the areas of archaeological activity identified, prior to work commencing. While preservation in situ is the preferred option in which to conserve the archaeological resource, as addressed above, this is not considered feasible or necessary in this case. Hence, preservation by record of any archaeology identified will be carried out by a licence-eligible archaeologist in consultation with and under licence from the NMS of the DHLGH. Consultation with the NMS will be maintained throughout.
- Adequate time and resources will be provided by the developer for the resolution of any archaeology identified during test trenching and which will be directly impacted by groundworks. Time and resources will also be allowed for any post-excavation work and specialist analysis necessary following any archaeological excavation that takes place.
- A report is required to be compiled on completion of any archaeological excavation and will be submitted to the relevant authorities.

4.8.2 Construction Phase

Archaeological Heritage

There is some potential for the presence of additional isolated archaeological features to be present in areas that were not assessed during the pre-construction phase (e.g. between test trenches/outside of the areas stripped for excavation).

The following mitigation measures will be carried out subject to the approval of the National Monuments Service (NMS) of the Department of Housing, Local Government and Heritage (DHLGH) and further mitigation may be sought by the NMS.

ARCH CONST 3: Topsoil Stripping

- Depending on the results of test trenching and excavation, further mitigation might be required in the form of monitoring of topsoil stripping with the use of a metal detector in relation to works associated with the proposed development. The use of appropriate machinery to ensure the preservation and recording of any surviving archaeological remains will be necessary. If this is deemed appropriate, it will be carried out by a licence-eligible archaeologist in consultation with and under licence from the NMS of the DHLGH. In such case, no ground disturbance will take place in the absence of the Archaeologist without his/her express consent. Should any significant archaeological features be discovered, further archaeological mitigation may be required, such as preservation by record. Any further mitigation will require approval from the NMS.
- Monitoring will be carried out by a licence-eligible archaeologist under licence from the NMS of the DHLGH.
- Adequate time and resources will be provided by the developer for the resolution of any archaeology identified within the development site and which will be directly impacted by groundworks. Time and

resources will also be allowed for any post-excavation work and specialist analysis necessary following any archaeological excavation that takes place.

- A report is required to be compiled on completion of any archaeological excavation and will be submitted to the relevant authorities.

The above mitigation will be included in the Construction Environmental Management Plan which will be prepared and submitted to the Planning Authority prior to commencement of development.

Architectural and Cultural Heritage

No mitigation is required.

4.8.3 Operational Phase

Archaeological Heritage

There will be no mitigation required, as the effects of the proposed development on the archaeology will be mitigated prior to the operational phase in line with the mitigation measures outlined in Sections 4.8.1 and 4.8.2.

Architectural and Cultural Heritage

No mitigation is required.

4.9 RESIDUAL EFFECTS OF THE PROPOSED DEVELOPMENT

The residual effects are likely to be neutral and none to imperceptible if the mitigation measures (see Section 4.8) are implemented. Table 4.4 below summarises the residual effects of the proposed development on the archaeological landscape.

Residual impacts are defined as the overall effect of the development on archaeology, on the basis of implementing the mitigation measures recommended in this report.

Table 4.4: Residual effects and mitigation strategies

Potential Effects	Mitigation strategy	Residual effects
Construction Effects		
Topsoil removal associated with development. Groundworks and service trenches, etc.	Advance archaeological assessment of the site, including test trenching targeting anomalies identified on geophysical survey and the site overall (with the potential footprint of the road as shown on the 1752 map also targeted), followed by preservation by record (archaeological excavation) and excavation of any archaeological features identified at pre-construction phase and/or monitoring of topsoil stripping with the use of a metal	None

Potential Effects	Mitigation strategy	Residual effects
	detector, all in consultation with the Licensing Section of the National Monuments Service.	
Effects to recorded monuments - none	No mitigation required.	None
Operational Effects		
Nearby Recorded Monuments and Protected Structures are screened from view.	No mitigation required.	None

4.10 MONITORING

The mitigation measures detailed above would also function as a monitoring system to allow the further assessment of the scale of the predicted impacts and the effectiveness of the mitigation measures.

4.11 REINSTATEMENT

The proposed development does not include a decommissioning or reinstatement phase. Therefore, reinstatement is not applicable to this assessment.

4.12 INTERACTIONS

There are interactions between this chapter and the landscape and visual chapter in view of the visual impacts on the settings of archaeological and cultural heritage sites and the potential for landscaping to mitigate such impacts, and with the water chapter and the drainage / SUDs design.

4.13 DIFFICULTIES ENCOUNTERED IN COMPILING INFORMATION

No difficulties were encountered during the compilation of this chapter.

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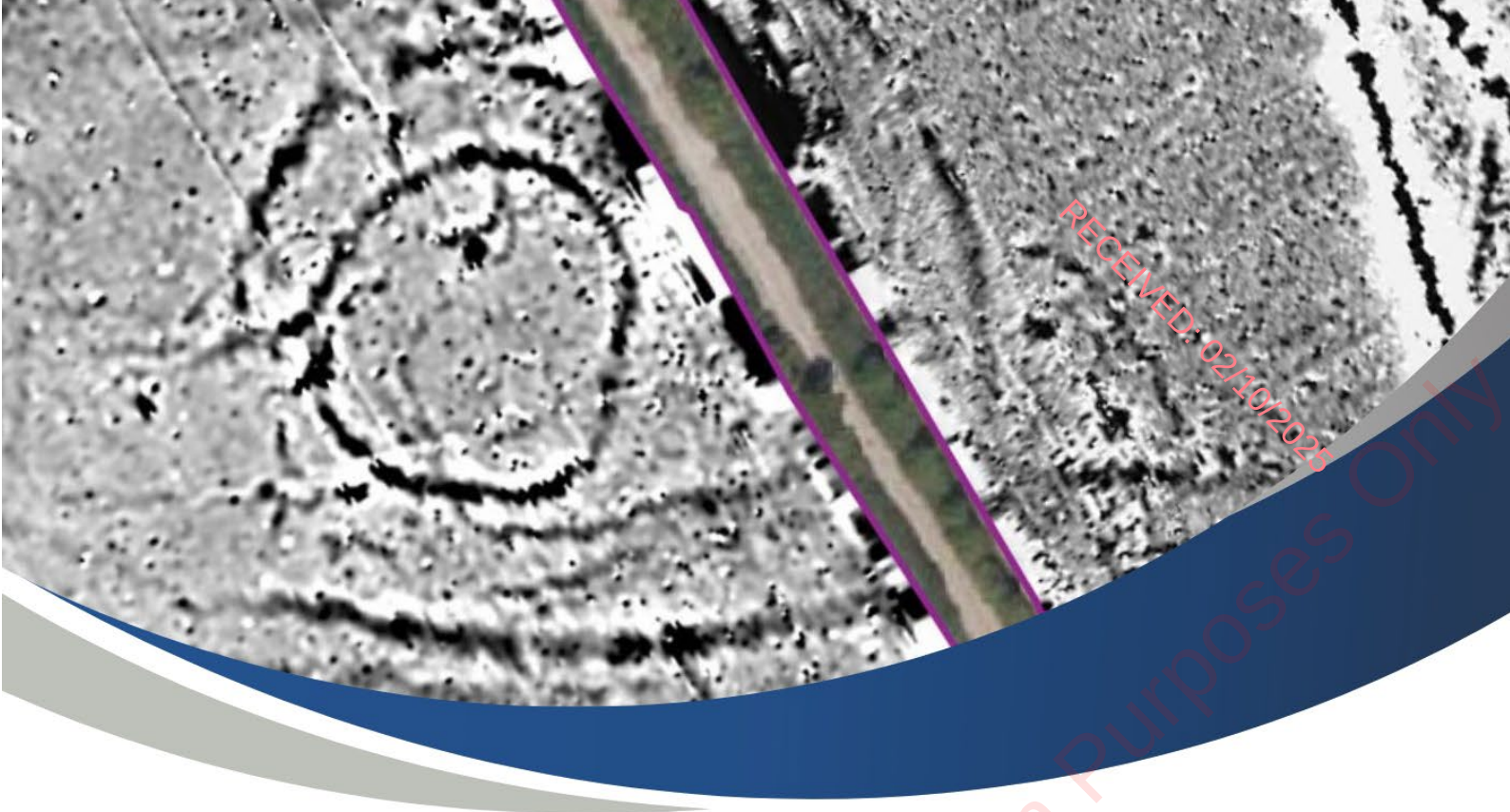
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APPENDIX 4.1

GEOPHYSICAL SURVEY REPORT



Geophysical Survey Report

Railpark, Maynooth, Co. Kildare

Detection Device Number: 24R0591

Donald Murphy
April 2025
Report Status: Final

ACSU Ref.: 24156



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PROJECT DETAILS

Project	Railpark, Maynooth, Co. Kildare
Report Type	Geophysical Survey Report
Licence No.	24R0591
Townland(s)	Railpark
RMP/SMR No.	N/A
RPS Id./NIAH Reg. No.	N/A
ITM Ref.	694600, 737000
Consultant	Archaeological Consultancy Services Unit, 21 Boyne Business Park, Greenhills, Drogheda, County Louth
Archaeologist	Donald Murphy
Report Author(s)	Donald Murphy
Report Status	Final
Report Date	28 th April 2025
ACSU Ref.	24156

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VERSION CONTROL

Revision	Date	Description	Status	Author	Reviewed	Approved
1.0	28.04.2025	Geophysical survey results	Final	D.M & J.R	M.L	D.M

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NON-TECHNICAL SUMMARY

This report details the results of a Geophysical Survey carried out at Railpark, Maynooth, Co. Kildare (ITM 694600, 737000). The site measured c. 16ha and consisted of two agricultural fields. The geophysical survey was carried out at the request of the client to assess the archaeological potential of the site in advance of a proposed Large-Scale Residential Development.

The site contains no monuments as listed in the *Record of Monuments and Places* (RMP) or the Sites and Monuments Record (SMR). Two such sites, a Burial Ground (KD010-040----) and a Furnace (KD011-061----), are recorded outside and 480m and 500m, respectively, to the south of the site. These were identified as a result of archaeological investigations (04E0644). The sites were previously unknown, with no surface expression. The site does not contain any Protected Structures, as listed in the *Kildare County Development Plan 2023–2029*, nor any structures listed in the *National Inventory of Architectural Heritage* (NIAH).

Cartographic and aerial imagery were examined as part of this assessment. The site is continuously depicted as an agricultural field. By the time of the 2001–2005 aerial image, a broad strip traversing the site was visible, representing a service pipe, which was returned to pasture thereafter.

The geophysical survey was conducted by Donald Murphy, Robert Breen and Jeanne Rochford of Archaeological Consultancy Services Unit Ltd. (ACSU) under licence 24R0591 issued by the Department of Housing, Local Government and Heritage. A full, detailed gradiometer survey was undertaken throughout the application area using a SENSYS MAGNETO MXV3 8-sensor fluxgate gradiometer cart system.

Definite archaeological features were detected within the site, with more tentative responses recorded across the survey area. Two curvilinear anomalies that likely represent ring-ditches (**M1 & M2**) were identified within the site. Scatters of other anomalies are also labelled as potential archaeology (?Archaeology). These include a curvilinear response and sporadic small responses that could represent archaeological features such as pits, postholes, spreads and kilns, but could also be of a natural origin.

Features depicted on the examined Ordnance Survey mapping were also detected, including numerous linear anomalies corresponding with former field boundaries. Linear anomalies that are not recorded field boundaries were also detected. They likely represent early field systems, drains or paths/access. Anomalies marked as Cultivation represent furrows/plough marks.

It is recommended that the anomalies identified be targeted during a future test trenching programme. This must be carried out by a licence-eligible archaeologist prior to any groundwork taking place. Once test trenching is complete, further mitigation might include preservation *in situ* (avoidance), excavation

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(preservation by record), and/or monitoring. The Department of Housing, Local Government, and Heritage shall be consulted in this regard.

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1. INTRODUCTION

This report details the results of a Geophysical Survey carried out in the townland of Railpark, Maynooth, Co. Kildare (ITM 694600, 737000; Figures 1-2). The geophysical survey was requested in advance of the proposed development and carried out under Licence 24R0591. The site lies to the north of the M4 Motorway and south of the railway line and the Royal Canal, to the southeast of Maynooth town.

2. METHODOLOGY

A full, detailed gradiometer survey was undertaken throughout the application area using a SENSYS MAGNETO MXV3 8-sensor fluxgate gradiometer cart system mounted on a GPS-based non-magnetic cart system with four mounted sensors (see also Appendix 1). A detailed survey was conducted with a sample interval of 0.25m and a traverse interval of 1m for all the survey areas within the site, with variations in the magnetic field between -100nT to +107.834nT.

All work was carried out in accordance with the *IAI Code of Professional Conduct* (Institute of Archaeologists of Ireland 2006) and in accordance with the *EAC Guidelines for the Use of Geophysics in Archaeology* (Schmidt et al. 2016), as well as English Heritage's *Geophysical Survey in Archaeological Field Evaluation* (David et al. 2008).

3. SURVEY OBJECTIVES

The survey aimed to establish the presence of any potentially existing but previously unknown monuments and any other archaeological features within the site and to inform a future programme of test trenching.

4. SOILS, GEOLOGY AND TOPOGRAPHY

The survey area consisted of two agricultural fields measuring c. 16ha.

The site has an elevation of 64m Ordnance Datum (OD).

The underlying geology consists of massive, unbedded lime mudstone and is part of the Waulsortian Limestones Formation. This bedrock geology is overlaid by deep, well-drained mineral soils (Geological Survey Ireland).

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5. ARCHAEOLOGICAL ASSESSMENT

5.1 Archaeological & Historical Background

The site is located southeast of Maynooth town centre, c. 20km to the west-northwest of Dublin City Centre. Maynooth town lies on the Lyreen River, a tributary of the River Rye. The site lies south of the Royal Canal and adjacent railway line, and north of the M4 motorway and Celbridge Road R405. The site is within Railpark townland, located within the Parish of Laraghbryan and the Barony of Salt North. Railpark (*Páirc an Ráille*) was recorded in 1744 as Rayld Park (<https://www.logainm.ie/en/25437>). In 1837, it was noted as formerly called Mill Farm, and the name Rail Parks was used from the late 18th century onwards.

No archaeological monuments are listed in the *Record of Monuments and Places* (RMP) nor in the *Sites and Monuments Record* (SMR) located within the townland of Railpark.

Maynooth

The town of Maynooth is located just inside the western edge of The Pale. The early Christian monastic centres of Laraghbryan (KD005-009001-), Taghadoo (KD010-014001-), and Donaghmore (KD006-005001-) are located within 2km of Maynooth town. Also, an early Christian burial ground (KD010-040----) was discovered in Mon-eycooly townland in 2004 (04E0644), located within the southeast part of the modern town. Burials of at least 55 individuals, almost all aligned east-west, were excavated (Duffy 2005).

The area of Maynooth was included in the diocese of Dublin sometime in the tenth century AD. This suggests that the area was somewhat organised and occupied before the arrival of the Anglo-Normans. This is also supported by the results of the excavations carried out in 1996 (96E0391) within the interior of Maynooth Castle. Hayden (1999) identified a prehistoric rectangular building (KD005-015001-) and two small post-and-wattle roundhouses (KD005-015002- and KD005-015003-) that pre-date the Anglo-Norman occupation. Furrows associated with the roundhouses were also excavated, suggesting agricultural activity in the immediate environs of the future castle site. A rectangular post-and-wattle building (KD005-015004-) was also excavated on top of the Anglo-Norman remains of a 1m-deep sod mound.

Following the arrival of the Anglo-Normans, documentary references to Maynooth can be easily traced. In 1176, Richard de Clare, the former earl of Pembroke (Strongbow), granted the lands at Maynooth 'Magnoded' to Maurice Fitzgerald (c 1110–76). As a result, the area became integrated as the manor of Maynooth with an Anglo-Norman landholding system (Horner 1995). Maynooth Castle (KD005-015----; National Monument No. 485) was likely built by his son, Gerald FitzMaurice FitzGerald (c.1150–1204), to mark the acquisition of the lands in Uí Fáeláin (Kildare). At this time, Maynooth was the centre of authority in the region, and one of the

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earliest Anglo-Norman buildings in Ireland was erected. The construction likely started sometime just before 1180 and was completed by 1185, as suggested by O’Keeffe (2013), due to its similarities with the earliest phase of Trim’s donjon; furthermore, it is also likely that it was built by the same mason. The original building had two floors, a basement, and a first floor. A settlement developed or grew around the castle. A chapel was part of the castle complex, likely since 1248. Edward I, in 1286, issued a patent for a weekly market and annual fair. In 1316, the FitzGeralds became the earls of Kildare, and Maynooth was their chief fortress. However, Maynooth did not stand out from other small manorial villages in the late medieval Dublin environs. In 1328, two mills are mentioned. In the late 15th/16th centuries, the power of the FitzGeralds was at its height as members of the family served as the king’s lord deputy in Ireland between 1477 and 1534.

Lewis (1837) mentions that John, the sixth Earl of Kildare from the Kildare branch of the Fitzgerald family, erected a ‘magnificent castle here in 1426’; he likely refers to the enlargement of the previously simple design of the donjon. During this time, the castle became ‘one of the richest earl’s houses under the crown of England’ (Horner 1995). In 1515, the king granted a licence for the establishment of the College of the Blessed Virgin Mary of Maynooth. However, following the rebellion of Silken Thomas in 1535, the earl’s estates were forfeited to the crown. Following the restoration of the estates in 1552 and the repair of the castle, little is known about Maynooth village in the second half of the 16th century. In the 1630s, Richard Boyle, Earl of Cork, one of the great entrepreneurs, enlarged the castle complex. He was a guardian to George Fitzgerald, who married his daughter. In 1642, however, the great library was destroyed, and the castle was left ruinous in 1647.

The Civil Survey of 1654–55 records a manor house in Maynooth, two corn mills, two malt houses, a chapel, two bridges, and several leases issued, suggesting a new tenant population.

In 1678, a patent for a weekly market and two annual fairs, references to the mill, a tan house, a new shop, slaughterhouse, a schoolhouse, and several buildings, suggest late seventeenth century Maynooth was a fast-growing village, likely due to its location on the main routes to the west of Dublin. In the late 1690s, a merchant, James McManus, was mentioned concerning Maynooth, and during this time, a rectory and an enclosed orchard off Parson Street were developed in the western part of the village. The 1730s saw Maynooth as a post-town with the Dublin-Kinnegad-Mullingar turnpike road constructed (Horner 1995).

In late 1739, the 19th Earl of Kildare decided to develop the house at nearby Carton as his principal country residence (KD006-009----). The Talbot family had erected the first Dutch-style building in Carton, which was recorded in a painting by Van der Hagen. Subsequently, the estate was forfeited to the Crown and, in 1703, sold to Major General Richard Ingoldsby, Lord Justice of Ireland. A two-storey, nine-bay pedimented front with wings was added. It was later sold to the 19th Earl of Kildare, who hired Richard Castle to enlarge the house.

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Major work took place, and by the late 1740s, the house and the gardens were largely completed. A Charter School is now mentioned as being bounded on two sides by a road to Dunboyne and on a third by a straight, tree-lined avenue, representing Carton Avenue, that runs through the proposed development. It is described as extending for a kilometre from the gates at the east end of the main street to the new road, skirting the newly enlarged Carton Demesne. The avenue is on the same axis as the main street that dates to the 1750s (ibid.). In 1757, Rocque mapped Maynooth, giving insight into the organisation and the nature of plots within Maynooth village. He also depicts the current Carton Avenue.

Peter Bere, who was associated with the earl, held several leases on the main street in 1784. He and the earl were primarily responsible for the redevelopment of Maynooth. Evidence of a strategy to improve the village layout can be observed (Prunty and Clarke 2011). Street frontages were developed, including the square and green areas along each side of the main street. In the 1790s, a new axis at right angles to the main street and the construction of Williams Bridge allowed long-distance traffic to be finally diverted away from the castle. The Royal Canal was built to link Dublin and the Shannon and was routed south of Carton and Maynooth. In the western part of the village, a new Roman Catholic college – the Royal College of St Patrick – was established in Stoyte House, and additional buildings were constructed. This had a positive economic impact on the village, offering a source of local employment in addition to the demesne at Carton. The Roman Catholic lay college that opened in 1802 was short-lived and closed by 1820, and its properties were absorbed into St Patrick's College. With the population nearly doubled since the mid-18th century, it could now be described as a small town. In the 1830s, a Presentation convent was established in the eastern part of the town, on the site occupied by the charter school that had closed in 1819. This became the girls' national school, with a boys' school in the old chapel supported by the Duke of Leinster (Horner 1995).

In the 1820s, the strategy to improve Maynooth's layout, including the street framework, was nearly complete. This allowed the third duke to focus on improving the house and demesne at Carton. In 1819, the courthouse was built on the site of the former market house and shambles. In 1815, Richard Morrison was hired to remodel and enlarge Carton House for the Dukes of Leinster. During this time, the demesne of c. 1000 acres was landscaped.

In 1846, the castle area in Maynooth town was bought out and cleared of houses and cabins, and a garden was established here for the people of Maynooth. Only a few large houses can be noted at this time, e.g. a parochial house, a miller's house on Mill Street, and Crom-a-boo Lodge as part of the charter school site. Rows of houses were built at this time, fronting Charter School Lane, Parson Street, and later, in c. 1900, Dillion's Row of single-storey houses on Dunboyne Road. Several lanes in the town took their names from the

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developer – e.g. Kelly's Lane from Clement Kelly's grocery shop, Cushin, Coates Lane, Coffey's Lane, and Doctor's Lane. In the 1850s, the most valued houses were mostly occupying both sides of Main Street.

A master plan for the town's future development was prepared by architect A.W. Pugin in the 1850s. As a result, St Mary's Square, the infirmary, chapel, the Aula Maxima (1894–5), and the great spire (1902) were constructed. The courthouse building was redeveloped to serve as a town hall with concert and meeting rooms.

The town's growth weakened, and in 1949, the Carton estate was sold. A large out-of-town housing scheme at Greenfield, on the south side of the canal and railway, was initiated in 1910. Main Street was tarred. With new water and sewerage schemes in the 1950s and the decision to admit lay students to the college, Maynooth was recognised as within the commuting range of an expanding Dublin, and the town grew rapidly. In 1981, the railway was reopened, and by 1994, the Leixlip-Kilcock motorway was built.

5.2 Previous Archaeological Investigations

The site was not subject to archaeological investigations previously. However, assessments in the environs were carried out, resulting in archaeological remains being exposed and excavated. These include two monuments now listed as a Burial Ground (KD010-040----) and a Furnace (KD011-061----), both located to the south of the site (Figure 2). These were identified as a result of archaeological investigations (04E0644; Duffy 2004). Furthermore, archaeological investigations to the south identified a ring ditch/barrow with a Bronze Age burial urn, cremation burial pits, as well as an early medieval cereal-drying kiln and five inhumation burials (19E0235; Gallagher 2019). The sites were previously unknown, with no surface expression. Test trenching on the site of Gaelscoil Uí Fhiaich, adjacent to the R405 Maynooth–Celbridge road to the south, exposed no features of archaeological significance (08E0575; O'Hara 2008). [Note: 05E0871 on Figure 2 has been located by the Database of Irish Excavation Reports in the incorrect location].

Listed below (Table 1) are the nearest previous archaeological investigations undertaken in the environs of the site (see Figure 2), which further demonstrate the overall archaeological potential of the site and its surrounding townlands. The following information was taken from the Database of Irish Excavation Reports (www.excavations.ie).

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Table 1: Previous archaeological investigations within the environs of the site

Excavation.ie reference	Licence No.	Site-Type	Investigation Type
2004:0851 - Moneycooly, Maynooth, Kildare	04E0644	Burial ground and Furnace Early Medieval (AD 400–1099)	Testing Monitoring Excavation
2019:693 - Greenfield, Maynooth, Kildare	17R0009 19E0235	Ring-ditch/barrow, Bronze Age burial urn, early medieval cereal-drying kiln & inhumation burials	Geophysical Survey Testing Excavation
2008:670 - Gaelscoil Uí Fhiaich, Railpark, Maynooth, Kildare	08E0575	No archaeological significance	Testing

5.3 Recorded Monuments

The site contains no monuments as listed in the *Record of Monuments and Places* (RMP) or the *Sites and Monuments Record* (SMR). Two such sites, a Burial Ground (KD010-040----) and a Furnace (KD011-061----), are recorded outside and 480m and 500m, respectively, to the south of the site. As outlined in Section 5.2, these were identified as a result of archaeological investigations (04E0644; Duffy 2004).

Below (Table 2) is a list of monuments located within the environs of the site (Figure 2). These descriptions are derived from the National Monuments Service Archaeological Survey Database (<https://heritagedata.maps.arcgis.com/apps/webappviewer/>).

Table 2: Recorded Monuments in the environs of the site

KD010-040----	Burial ground	MONEYCOOLY
In 2004, in advance of the construction of a large housing estate, archaeological test trenching (Duffy C. Excavation Licence No. 04E0644) followed by monitoring of topsoil-stripping over the entire site resulted in the discovery and excavation of a previously unrecorded burial ground (KD010-040----) and, c. 100m to the ESE, two bowl furnaces (KD011-061----). The burials were on a very slight rise and were set out in six rows within a roughly sub rectangular area (14m E-W; 6.5m N-S), with two juvenile burials immediately to the north of the main group. The graves were simple unlined pits excavated through an upper, largely stone-free, subsoil into the surface of a lower stony clay subsoil that formed the base of the cuts. All but two were		

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aligned east-west. There were occasional instances of small slabs laid at the side of the grave or overlying the interments. At least 55 individuals are represented among the burials, including disarticulated remains and skeletons disturbed by later grave-cuts. No artefacts were found with any of the burials, but the cemetery is most likely to date to the Early Christian period.

Six-Inch First edition: Not indicated

Six-Inch Latest edition: Not indicated

ITM Coordinates: 694439, 736275

Latitude and Longitude: 53.368221, -6.580947

KD011-061----	Furnace	MONEYCOOLY
In 2004, in advance of the construction of a large housing estate, archaeological test trenching (Duffy C. Excavation Licence No. 04E0644) followed by monitoring of topsoil-stripping over the entire site resulted in the discovery and excavation of two bowl furnaces (KD011-061----) and, c. 100m to the WNW, a small burial ground (KD010-040----). Two adjacent bowl furnaces, with diameters of 0.66m and 0.9m and depths of 0.37m and 0.45m, respectively, contained metal slag and charcoal. Nearby was a hearth, comprising a charcoal-rich deposit, 0.7m by 0.52m and 0.05m thick, over oxidised subsoil. References: Duffy C. 2005 Preliminary Report on Archaeological Excavations at Moneycool, Maynooth, Co. Kildare. Excavation licence No: 04E0644) Six-Inch First edition: Not indicated Six-Inch Latest edition: Not indicated ITM Coordinates: 694532, 736230 Latitude and Longitude: 53.367800, -6.579563		

5.4 Protected Structures and National Inventory of Architectural Heritage

The site does not contain any Protected Structures listed in the Kildare County Development Plan 2023–2029, nor any structures listed in the National Inventory of Architectural Heritage (NIAH). The nearest such structure is a Lime Kiln (B06-06), located c. 310m northeast of the site. Rockfield House, just southwest of the site, has been depicted since the 1835 map and is labelled on the 1908 map (Figures 3-4). However, it is not listed in the NIAH, and while it is visible on the 1995 aerial imagery, it was demolished by the time of the 1996–2006 aerial.

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5.5 Finds listed within the Topographical Files of the National Museum of Ireland

The Topographical Files of the National Museum of Ireland list all archaeological artefacts in the care of or known to the museum. Such a record can provide evidence for human settlement or activity in the absence of physical remains or documentary references. There are no topographical files listed for the townland of Railpark.

There are eleven finds listed for Maynooth. These include two stone axeheads (NMI Reg. No. 1945:259; 1967:101), a lead object (NMI Reg. No. 1995:2003), a bronze brooch (SA1925:8) and six copper alloy finds including four rings (NMI Reg. No. 1995: 2004-2007) a button (NMI Reg. No. 1995:2001) and a mount (NMI Reg. No. 1995:2002).

5.6 Cartographic Evidence

A review of available historical mapping for the area was carried out to include the Ordnance Survey (noe Táilte Éireann) of Ireland 6-inch (1835) and 25-inch (1908-09) maps (Figures 3-4), as well as pre-Ordnance Survey mapping that includes the Down Survey (1654–57), Keenan and Noble's map of county Kildare (1752) and Taylor's map of County Kildare (1783). Potential archaeological or cultural heritage features are often marked on such maps. They can provide a helpful resource in identifying sites, particularly if they no longer have any above-ground remains.

Pre-Ordnance Survey mapping examined does not give any detail in relation to the site. However, a road is shown traversing the site on the 1752 map.

The site is depicted as incorporating part of four agricultural fields on the 1836 OS map (Figure 3), with one of these field boundaries removed by the time of the 1908 OS map, which also depicts a spring abutting the northern boundary (Figure 4). This might suggest that this boundary of the site, depicted as a narrow strip on the 1836 map, was not a road/track but a wet ditch.

No archaeological features were recorded on the examined mapping; however, the line of the road depicted on the 1752 map may be considered historically significant if the mapping is accurate and an abandoned 18th-century road did once cross this field.

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5.7 Aerial Photography

A review of available aerial photography for the area was also undertaken as part of this assessment. Aerial photographs dating between 1995 and 2018 from the Ordnance Survey of Ireland (OSi) were assessed, alongside Google Earth imagery dating between 2006 and 2023. Unrecorded archaeological sites can often be identified in aerial photographs as cropmarks or differential growth in a field, particularly during periods of drought, such as those experienced in the summer of 2018.

By the time of the 1995 aerial, further field boundaries had been removed, and on the 2001–2005/2006–2012 aerial images, a broad strip traversing the site roughly northwest to southeast was visible. It likely represents a service pipe. The area was returned to pasture thereafter, but the pipeline route is visible as a linear cropmark on subsequent aerial images (Figure 5).

No features of archaeological significance were recorded on the examined aerial imagery.

6. METHOD OF DATA INTERPRETATION

As outlined above, a detailed gradiometer survey that allows the detection of potential archaeological responses was conducted. The SENSYS MAGNETO MXV3 8-sensor fluxgate is a specifically designed gradiometer for use in archaeological prospection. Extremely sensitive, these instruments can detect variations in soil magnetism to 0.01nT, affording diverse applications throughout various archaeological, soil morphological and geological conditions. The survey was geo-referenced with a Trimble R10 unit accurate to within 1cm. The results were interpreted by examining the raw data as greyscale images, X.Y. trace, relief and data plots. Archived raw data is presented in Figure 6, and an interpretation is included in Figure 7.

7. SURVEY RESULTS

The geophysical survey was conducted in April 2025 by Donald Murphy, Robert Breen and Jeanne Rochford of ACSU under licence 24R0591 (Figures 6-7). The anomalies identified are listed in Table 3 below.

Table 3: Geophysical survey results

Anomaly No.	Form/Nature of Anomaly	Possible Source(s) of Anomaly	Description
M1	Archaeology	Ring-ditch	Small circular ring-ditch enclosure with a c. 7.5m diameter along the western portion of Field 1. The

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Anomaly No.	Form/Nature of Anomaly	Possible Source(s) of Anomaly	Description
			anomaly is slightly fainter along its western side and appears to be truncated by cultivation furrows.
M2	?Archaeology	Possible ring-ditch	A faint positive curvilinear anomaly with a diameter of c. 8.5m. It lies c.40m south of the M1 ring-ditch. This feature likely represents another ring-ditch, but it has a weaker response than anomaly M1.
-	?Archaeology	Curvilinear	A positive curvilinear anomaly located directly southeast of M2 may represent the partial remains of a ring-ditch but is disturbed by the buried service to the east.
-	?Archaeology	Small to medium anomalies: pits, posts, spreads, kilns, cut features	A series of positive anomalies occur sporadically across the survey area. These might represent cut features such as pits, postholes, spreads, kilns, or other types of archaeological features. It may also be natural in origin.
-	Linear feature	Former field boundaries	Positive linear anomalies that correspond with former field boundaries depicted on the first edition Ordnance Survey (OS) 6-inch map, surveyed 1835, and the third edition Ordnance Survey (OS) 25-inch map, surveyed 1908, are located within Fields 1 & 2.
-	Linear feature	Early field systems?	Positive linear anomalies in Fields 1 and 2 may represent former field divisions that are not depicted on OS mapping.
-	Magnetic disturbance	Modern disturbance	Magnetic disturbance in the western portion of Field 1 corresponds with modern disturbance in the area from environmental trial pits.
-	Buried service	Modern service	A bipolar response traversing Field 1 corresponds with the laying of a modern service that can be seen in aerial imagery from 2001-2005.
-	Cultivation	Land use/furrows	A series of cultivation furrows occurred in Field 1, predominantly in the southern portion of the field.
-	Ferrous	Magnetic disturbance from modern debris	Bipolar anomalies sporadically occur that are associated with magnetic interference from modern

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Anomaly No.	Form/Nature of Anomaly	Possible Source(s) of Anomaly	Description
			ferrous material, either in the topsoil or the surface of the survey area.

8. IMPACT ASSESSMENT

The purpose of this impact assessment was to establish whether or not the site contained any evidence for the presence of previously unrecorded areas or features of historical, built heritage or archaeological significance and to determine the potential impacts the proposed development may have on all archaeological features.

The geophysical survey was carried out in April 2025 under Licence 24R0591. This survey identified definite archaeological features that include two curvilinear features that likely represent ring-ditches (**M1 & M2**), with a further curvilinear feature that may represent the partial remains of a ring-ditch or slot trench, while scatters of other anomalies also represent potential archaeology (?Archaeology).

If not adequately mitigated, the proposed development of this site, therefore, has the potential to impact definite archaeological features as well as features of archaeological potential identified within the site.

9. CONCLUSIONS & RECOMMENDATIONS

The geophysical survey within the townland of Railpark, Maynooth, Co. Kildare (ITM 694600, 737000) was carried out to assess the site's archaeological potential.

Definite archaeological features were detected within the site, with more tentative responses recorded across the survey area that may have a natural origin. Two curvilinear anomalies that likely represent ring-ditches (**M1 & M2**) were identified within the site. Scatters of other anomalies are also labelled as potential archaeology (?Archaeology). These include a curvilinear response and sporadic small responses that could represent archaeological features such as pits, postholes, spreads and kilns, but could also be of a natural origin.

Features depicted on the examined Ordnance Survey mapping were also detected, including numerous linear anomalies corresponding with former field boundaries. Linear anomalies that are not recorded field boundaries were also detected. They likely represent early field systems, drains or paths/access. Anomalies marked as Cultivation represent furrows/plough marks.

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It is recommended that:

- Anomalies identified are targeted during a test trenching programme, particularly the ring-ditches, curvilinear features, pits, spreads and any features of archaeological significance and potential. Following the test trenching, the National Monuments Service should be consulted to agree on an appropriate mitigation strategy for the development of the site.
- If preservation *in situ* is not an option in some areas and any archaeological features will be directly impacted by the proposed development, preservation by record (full excavation) is recommended.

All further groundworks within the proposed development site should also be monitored, and any further archaeological features identified should be preserved *in situ* or by record (excavation) in consultation with the National Monuments Service.

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Extract from the Keenan and Noble's map of county Kildare (1752).

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Extract from the First edition Ordnance Survey (OS) 6-inch map 1835

Extract from the Third edition Ordnance Survey (OS) 25-inch map 1908.

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11. APPENDIX 1 – SUMMARY TECHNICAL INFORMATION & GLOSSARY OF TERMS

Fluxgate Gradiometer Survey is a non-intrusive method of archaeological prospection that is most often used in Irish Archaeology. This method allows for rapidly mapping archaeological objects, structures, deposits and other features, including geological anomalies, that survive beneath the ground. It allows the most rapid ground coverage and records a variety of anomalies caused by human activity and changes in the natural subsoil. The results are presented as a greyscale map of anomalies detected that are interpreted by an experienced archaeologist.

Surveys are undertaken using GPS-based lightweight B SENSYS MAGNETO MXV3 8-sensor fluxgate gradiometer cart system. Ground cover must be 0.30m or less. The instrument used is operated by an experienced, skilled geophysical survey technician. The data is collected by hand-wheeling the cart over the survey area in evenly spaced parallel transects. The equipment was specifically designed for archaeological prospection. It includes highly stable sensors, minimising requirements for excess data processing. The instrument has a vertical 1 m sensor separation permitting finite resolution of buried archaeological features. Surveys can be undertaken in a scan or detailed (zig-zag traverse) modes for reconnaissance or high-density mapping. The fluxgate enables reliable flexibility during fieldwork. Regular realignment of the instruments and zero drift correction ensure constant high data quality. These extremely sensitive instruments can detect variations in soil magnetism to 0.01nT, affording diverse applications throughout a variety of archaeological, soil morphological and geological conditions.

The instrument can be employed in both commercial and research-based investigations allowing for the completion of projects within short timescales. Regular grid sample densities from standard 1600 readings to 12800 readings per 20m by 20m grid are permitted. A constant high quality of data is assured by experienced field staff operating in accordance with EAC *Guidelines for the use of Geophysics in Archaeology* (Schmidt et al. 2015) and English Heritage's *Geophysical Survey In Archaeological Field Evaluation* (David et al. 2008).

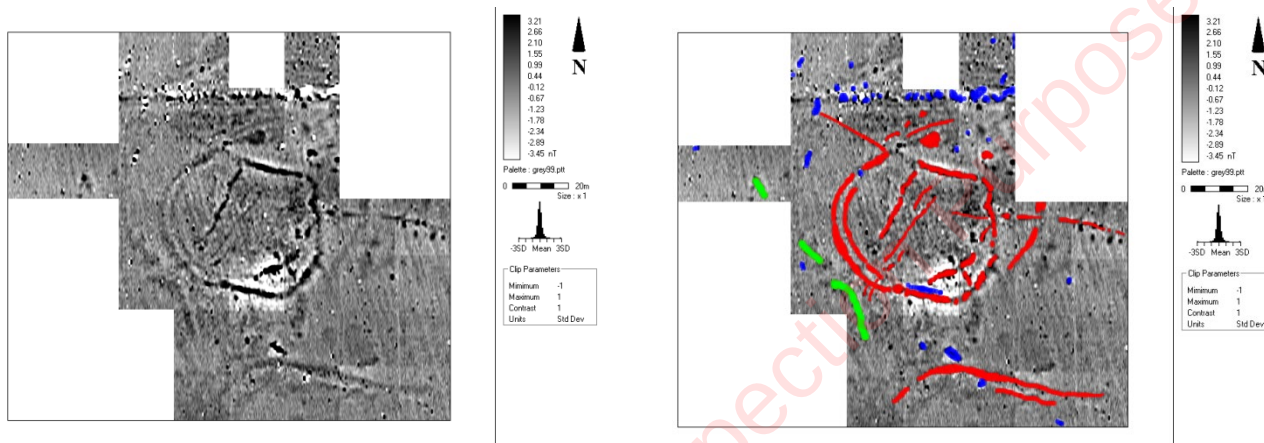


SENSYS MAGNETO MXV3 8-sensor fluxgate gradiometer cart system

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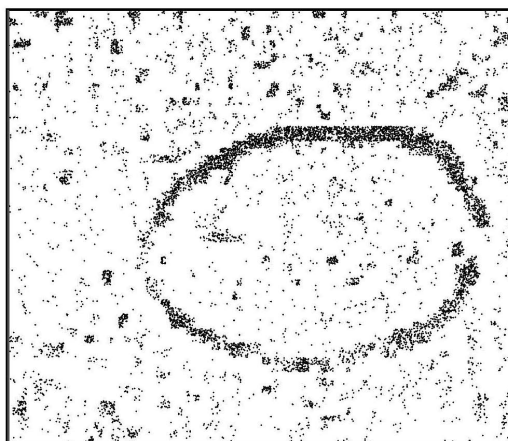
Data Display Format

Greyscale: The greyscale format assigns a cell to each datum according to its location on the grid. The display of each data point is conducted at very fine increments, allowing the full range of values to be displayed within the given data set. This display method also enables the identification of discrete responses that may be at the limits of instrument detection.

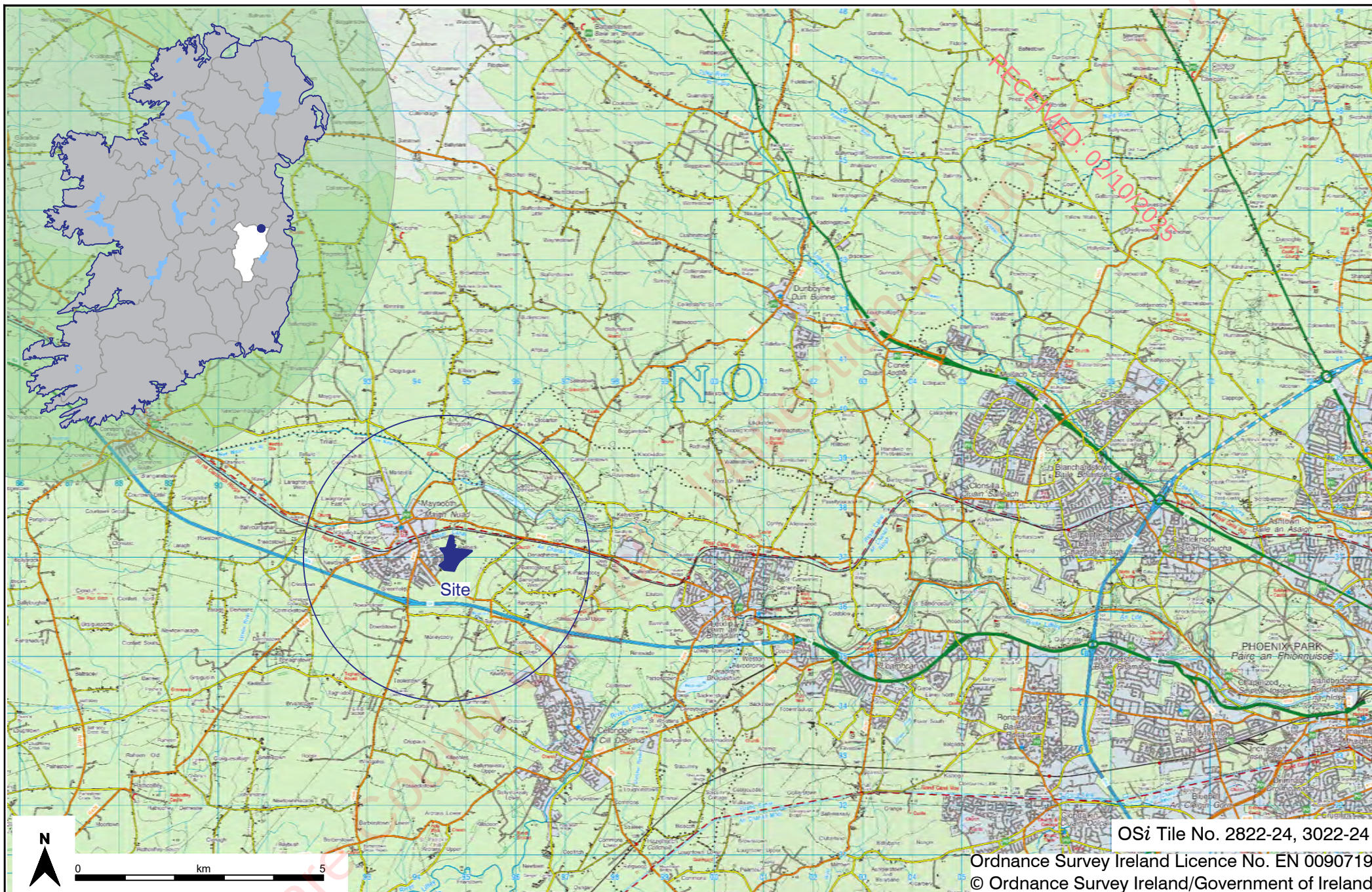


Early medieval enclosure – greyscale

Dot Density Plot: Each datum is assigned a cell in which the intensity or number of dots displayed is proportional to the magnitude of the individual response. The visibility or presentation of responses within a given survey area is governed by numeric parameters specific to both soil morphological and archaeological conditions observed on site. Typically, the range of weak to strong responses is manifested by a low to a high level of dot density. The format is useful for displaying gradiometer and resistance data, particularly for identifying low-level responses.



Dot Density plot of an oval-shaped enclosure



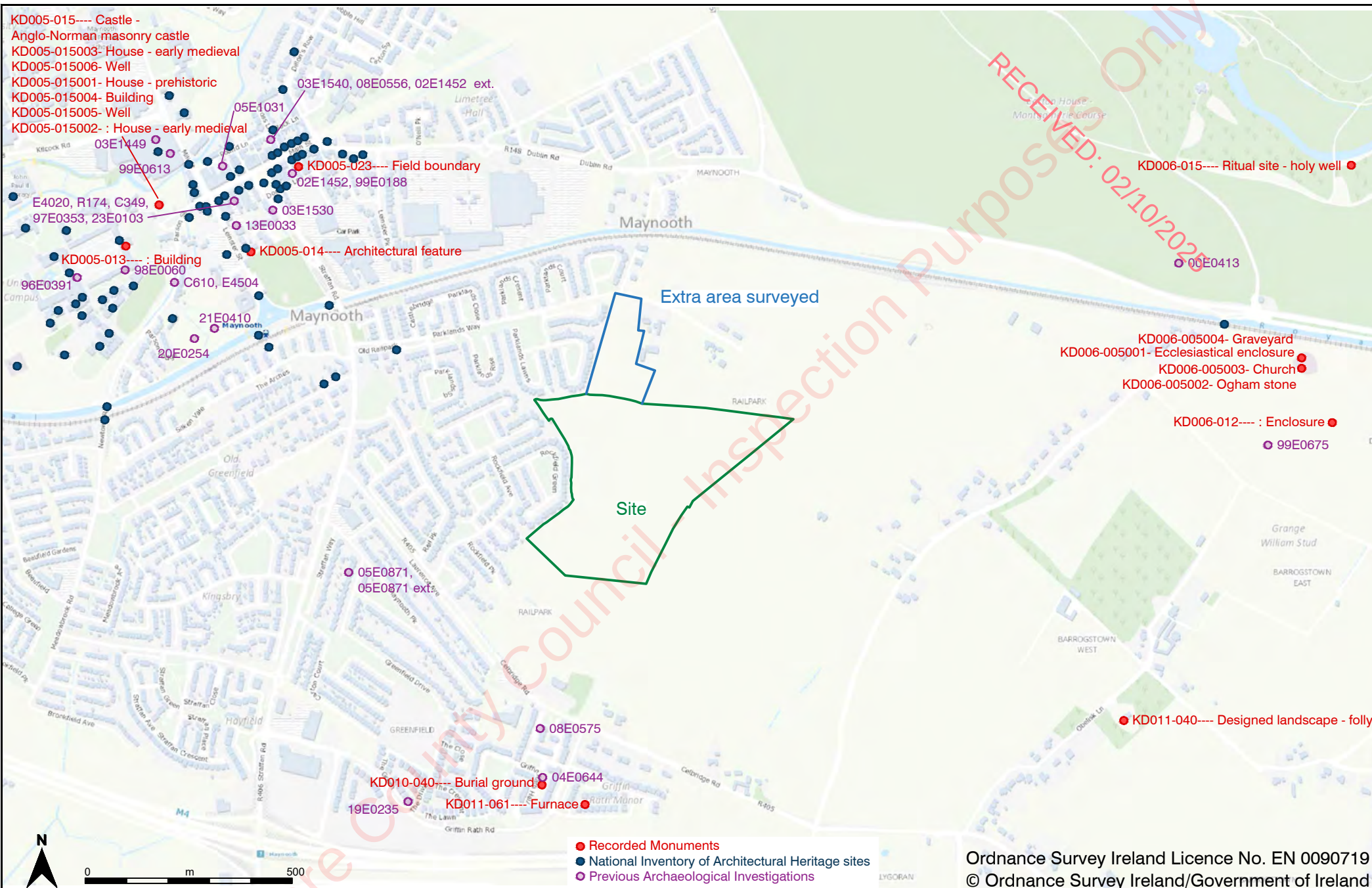
Project Railpark, Maynooth, Co. Kildare

Figure 1 Location of site

Date April 2025

Drawing No. 24156_C1001

Scale 1:100,000 @ A4



Project Railpark, Maynooth, Co. Kildare

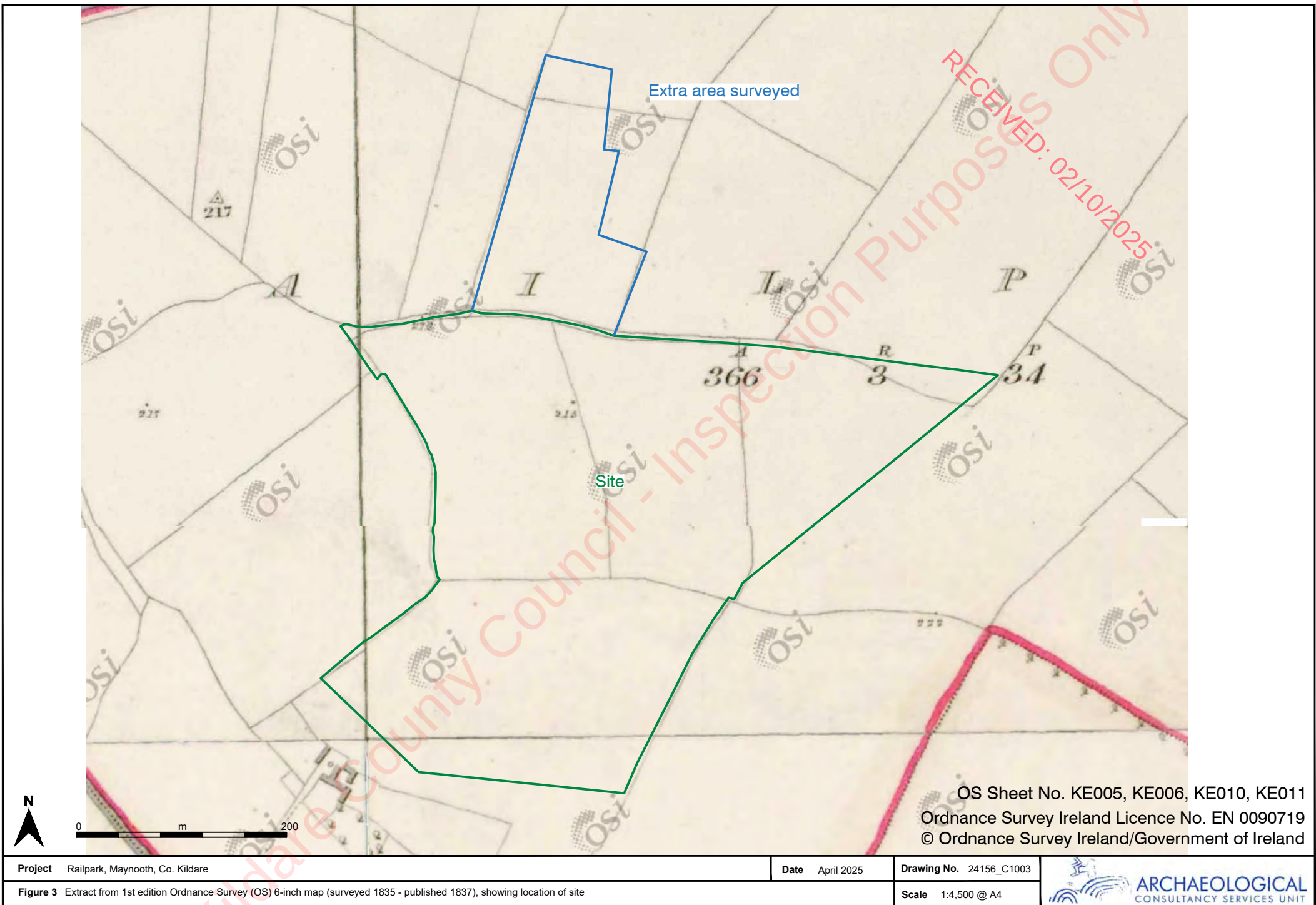
Date April 2025

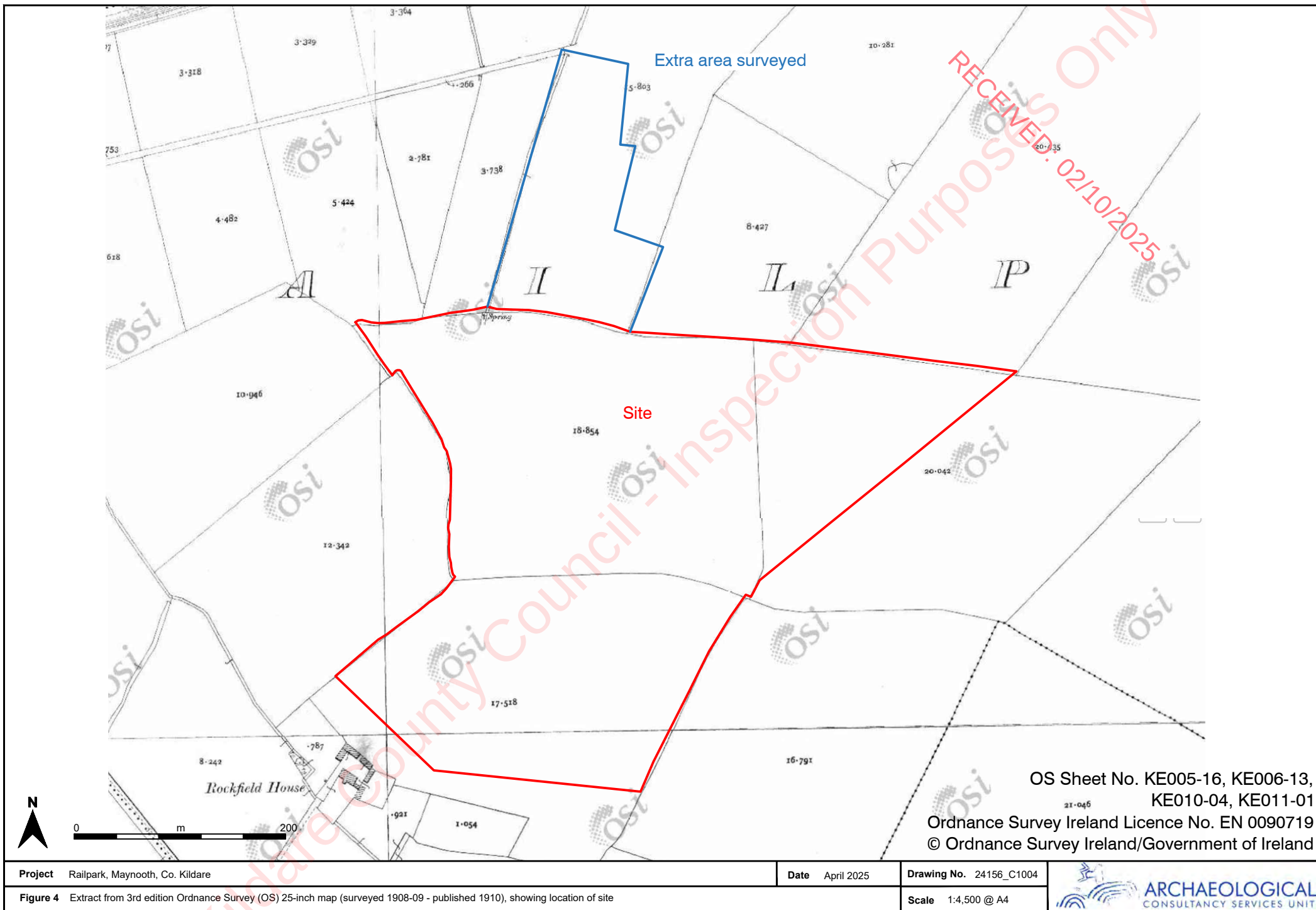
Drawing No. 24156_C1002

Figure 2 Location of site, previous archaeological investigations and nearby Sites and Monuments Record sites

Scale 1:12,000 @ A4









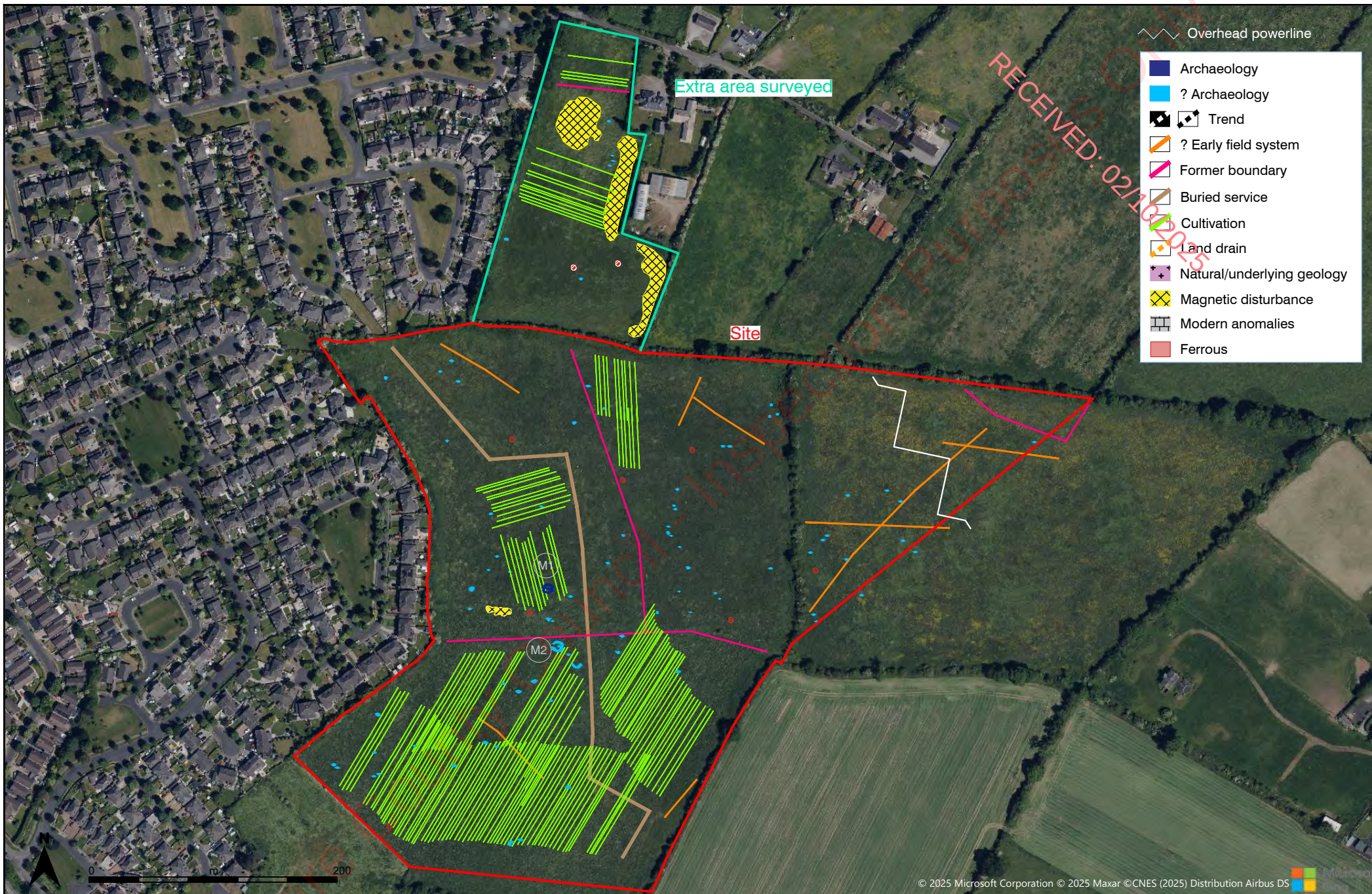
Project Railpark, Maynooth, Co. Kildare

Date April 2025

Drawing No. 24156_C1005

Figure 5 Aerial view of site

Scale 1:4,000 @ A4



Project Railpark, Maynooth, Co. Kildare

Date April 2025

Drawing No. 24156_C1007

Figure 7 Aerial view of site, showing geophysical survey interpretation

Scale 1:4,000 @ A4

