The Tecpro Building,
Clonshaugh Business & Technology Park,
Dublin 17, Ireland.

T: + 353 1 847 4220
F: + 353 1 847 4257
E: info@awnconsulting.com
W: www.awnconsulting.com

ENVIRONMENTAL IMPACT ASSESSMENT SCREENING REPORT FOR A PROPOSED MODULAR HOUSING DEVELOPMENT KILCORAN ROAD, RATHDOWNEY, CO. LAOIS

Report Prepared For

The Commissioners of Public Works in Ireland on behalf of the Department for Children, Equality, Disability, Integration and Youth

Report Prepared By

David Doran,
Environmental Consultant

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Cork Office
Unit 5, ATS Building,
Carrigaline Industrial Estate,
Carrigaline, Co. Cork.
T: + 353 21 438 7400
F: + 353 21 483 4606

AWN Consulting Limited
Registered in Ireland No. 319812
Directors: F Callaghan, C Dilworth,
T Donnelly, T Hayes, D Kelly, E Porter

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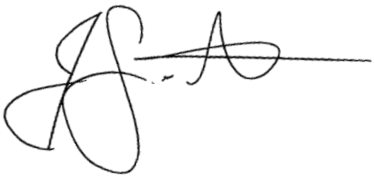
Signature		
Name	David Doran	Jonathan Gauntlett
Title	Environmental Consultant	Principal Environmental Consultant
Date	16 May 2023	16 May 2023

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1.0 INTRODUCTION

On behalf of The Commissioners of Public Works in Ireland on behalf of the Department for Children, Equality, Disability, Integration and Youth ('the Applicant'), AWN Consulting Limited ('AWN') has prepared the following Environmental Impact Assessment (EIA) Screening Report as part of a Modular Housing Development Application to the Minister for Housing (MOH) in relation to a proposed temporary emergency modular housing development located at Kilcoran Road, Rathdowney Town, Co. Laois.

The proposed development consists of the construction of 42 no. modular units to provide emergency temporary accommodation for up to 168 Ukrainian refugees.

The proposed development is to the west of Rathdowney Town centre on the Kilcoran Road. The site (hereafter referred to as 'the Site') is outlined in red on Figure 1.1. The proposed development is described in further detail in Section 2.

Figure 1-1 *Proposed development site (indicative in red) (Source: Google Earth)*

1.1 REQUIREMENT FOR EMERGENCY HOUSING

The European Union (Planning and Development) (Displaced Persons From Ukraine Temporary Protection) Regulations (S.I. No. 306 of 2022) are made under Section 3 of the European Communities Act 1972 (No. 27 of 1972) for the purpose of giving effect to Council Directive No 2001/55 EC (the Temporary Protection Directive), and Council Implementing Decision EU 2022/382 of 4 March 2022, to provide immediate protection in EU countries for persons displaced by the Russian invasion of Ukraine, including

the need to provide emergency accommodation and support to these displaced persons.

The Regulations relate to the non-application of the Planning and Development Act 2000 to certain classes of development by or on behalf of a State authority, which is defined as a Minister of the Government or the Commissioners of Public Works in Ireland. The provisions of the Planning and Development Act 2000 shall not apply to the specified classes of temporary development in the Schedule only for so long as the regulations are in force. After this time the removal, demolition or alteration of any temporary structure and the discontinuance of any temporary use and, in so far as is practicable, the restoration of the land to its condition prior to the commencement of the development, shall be required, unless the development is permitted, exempted or otherwise regularised by a provision of the Planning and Development Act 2000, or the Regulations thereto. The classes of development listed in the Schedule may include the change of use and repurposing of existing buildings and facilities, and temporary newbuild accommodation and structures to address the urgent need to provide emergency accommodation and support to displaced persons from the conflict in Ukraine.

In accordance with the Temporary Protection Directive 2001/55/EC, the duration of temporary protection activated by European Union Council Decision EU 2022/382 of 4 March 2022 should be for an initial period of one year. Unless terminated under the terms of Article 6(1), point (b), of that Directive, that period should be extended automatically by six monthly periods for a maximum of one year. At any time, the European Commission may propose to the Council to end the temporary protection, based on the fact that the situation in Ukraine is such as to permit the safe and durable return of those granted temporary protection, or propose that the Council extend the temporary protection by up to one year. As such, the maximum extended period for the duration of Temporary Protection Decision EU 2022/382, of 4 March 2022, shall be three years.

1.2 PURPOSE OF THIS REPORT

There is a mandatory requirement for an Environmental Impact Assessment Report (EIAR) to accompany a project for some types of development that meet or exceed the relevant “thresholds” specified in Schedule 5 to the Planning and Development Regulations. In addition to the mandatory requirement, there is a case-by-case assessment necessary for sub-threshold developments as they may be likely to have significant effects on the environment. If a sub-threshold development is determined to be likely to have a significant effect on the environment, then an EIAR will be required.

The proposed development and component parts have been considered, as documented in Section 2, against the thresholds for EIA as outlined in the Planning and Development Regulations 2001 (as amended). The proposed development is a sub-threshold development and is not mandatory for EIA.

The second reason for this report is to document the studies undertaken by the Applicant, and the design team, to consider whether the development would be likely to have significant effects on the environment.

AWN, along with the project team, have undertaken an assessment of the effects on the environment from the proposed development and has concluded that there is no real likely significant environmental effects on the receiving environment for the proposed development, therefore a subthreshold EIA is not required. The assessment

is documented in Section 3.0, 4.0 and 5.0 and covers each aspect of the environment in accordance with guidance including Population and Human Health; Biodiversity; Land, Soils, Geology, Hydrogeology, and Hydrology; Air Quality and Climate; Noise and Vibration; Landscape and Visual Impact; Cultural Heritage, and Archaeology; Traffic and Transportation; Material Assets, and Waste.

The information presented in this report will enable the competent authority (OPW) to undertake a screening determination in respect of the need for an EIAR for the proposed development.

1.3 EIA SCREENING LEGISLATION AND GUIDANCE

The legislation and guidance listed below has informed this report and the method to EIA Screening:

- Guidelines on the Information to be contained in Environmental Impact Assessment Reports. (2022). Environmental Protection Agency.
- Environmental Impact Assessment Screening, OPR Practice Note PN02 (Office of the Planning Regulator, 2021).
- European Union (Planning & Development) (Environmental Impact Assessment) Regulations 2018.
- Environmental Impact Assessment of Projects – Guidance on Screening. (2017). European Commission.
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. (August 2018). Department of Housing, Planning and Local Government.
- Advice Notes for preparing Environmental Impact Statements. (Draft, September 2015). Environment Protection Agency.
- European Union (Planning and Development) (Displaced Persons From Ukraine Temporary Protection) Regulations (S.I. No. 306 of 2022)
- European Union Environmental Impact Assessment (EIA) Directive 2011/92/EU as amended by 2014/52/EU.
- Planning and Development Act, 2000 (as amended).
- Planning and Development Regulations 2001 (as amended).

The screening process followed in this report is in accordance with the EIA Directive 2011/92/EU of the European Parliament and of the Council as amended by 2014/52/EU and as transposed by the Act and the Regulations and follows the format as per Section 3.2 of the EPA Guidelines (2022). The potential for significant effects of the proposed Project has been considered against the criteria under Annex II A of the EIA Directive 2011/92/EU as amended by 2014/52/EU and Schedule 7 of the *Planning and Development Regulations, 2001* as amended.

1.4 SCREENING METHODOLOGY

The screening process followed in this report is in accordance with the EIA Directive 2011/92/EU of the European Parliament and of the Council as amended by 2014/52/EU and follows the format as per Section 3.2 of the EPA Guidelines (2022).

The key steps to screen for an EIA is set out in Section 3.2 of the EPA Guidelines are as follows:

1. Is the development a type that that requires EIA?
2. Is it of a type that requires mandatory EIA?

3. Is it above the specified threshold?
4. Is it a type of project that could lead to effects? and/or
5. Is it a sensitive location? and/or
6. Could the effects be significant?

The information required to be submitted by the developer for the Planning Authority to make a determination on EIA Screening is set out in Schedule 7A of the Regulations of 2001 (see also Annex IIA of the EIA Directive).

However, it is important to note that Schedule 7A states '*The compilation of the information at paragraphs 1 to 3* [of Schedule 7A] *shall take into account, where relevant, the criteria set out in Schedule 7*.' Having regard to this for the purposes of compiling the relevant information on the likely effects of the proposed development and in order to address points 4 to 6 above, an evaluation of the characteristics of the project, the sensitivity of the location of the proposed development, and the potential for significant impacts has been made with regard to Schedule 7 of the Regulations.

Schedule 7 of the Regulations of 2001 sets out the criteria for the Planning Authority to determine whether a development would or would not be likely to have significant effects on the environment. The criteria are broadly set out under the three main headings:

1) *Characteristics of proposed development* (Report Section 3.0)
   - *a. the size and design of the whole of the proposed development,*
   - *b. cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of Section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment,*
   - *c. the nature of any associated demolition works,*
   - *d. the use of natural resources, in particular land, soil, water and biodiversity,*
   - *e. the production of waste,*
   - *f. pollution and nuisances,*
   - *g. 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, and*
   - *h. the risks to human health (for example, due to water contamination or air pollution).*

2) *Location of proposed development* (Report Section 4.0)
   - *a. the existing and approved land use,*
   - *b. the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,*
   - *c. the absorption capacity of the natural environment, paying particular attention to the following areas:*
     - *i. wetlands, riparian areas, river mouths;*
     - *ii. coastal zones and the marine environment;*
     - *iii. mountain and forest areas;*
     - *iv. nature reserves and parks;*
     - *v. areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;*
     - *vi. areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the*

European Union and relevant to the project, or in which it is considered that there is such a failure;

vii. *densely populated areas;*

viii. *landscapes and sites of historical, cultural or archaeological significance.*

3) *Types and Characteristics of Potential Impacts* (Report Section 5.0)

The likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) of the definition of 'environmental impact assessment report' in Section 171A of the Act, taking into account—

a. *the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected),*
b. *the nature of the impact,*
c. *the transboundary nature of the impact,*
d. *the intensity and complexity of the impact,*
e. *the probability of the impact,*
f. *the expected onset, duration, frequency and reversibility of the impact,*
g. *the cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed development for the purposes of Section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, and*
h. *the possibility of effectively reducing the impact.*

However, it is important to note that Schedule 7A states '*The compilation of the information at paragraphs 1 to 3 [*of Schedule 7A*] shall take into account, where relevant, the criteria set out in Schedule 7*.' The main body of this report (Sections 3.0, 4.0 and 5.0) will cover Schedule 7A fully, but it has been set out to present the information under the headings provided for in Schedule 7 in order to assist in the screening assessment.

1.5 PROJECT TEAM AND CONTRIBUTORS TO THE EIA SCREENING REPORT

This EIA Screening Report and the proposed development has been informed by the accompanying documents submitted with the application (and the relevant listed mitigation measures as included therein). The preparation and co-ordination of this screening report has been completed by AWN and has relied on specialist input from the project design team and applicant, as per Table 1.1.

Table 1.1 *Applicants project team*

Role	Contributor
Applicant	Office of Public Works
Architectural Design	Office of Public Works
Civil Engineering Design	Horganlynch Consulting Engineers; DBFL Consulting Engineers
Population and Human Health; Land, Soils, Geology, Hydrogeology, and Hydrology; Air Quality and Climate; Material Assets; Operational Waste Management; Noise and Vibration	AWN Consulting Limited
Appropriate Assessment Screening	Moore Group Ltd.

Role	Contributor
Archaeological Assessment	CRDS Limited

Each environmental specialist of the applicants project team 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 the construction phase and operational 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.

This EIA Screening report was prepared by David Doran and Jonathan Gauntlett. David Doran is an Environmental Consultant with AWN Consulting with over 2 years' experience in the environmental sector. David has a MSc in Environmental and Energy Management (Hons). Recent projects include; Strategic Housing Development / Large Scale Residential Developments, office developments, logistics park developments and other residential, commercial and industrial developments. Inputs for these include EIA Screening Reports, Waste Management EIAR Chapters, Operational and C&D/Resource Waste Management Plans and Human Health EIAR Chapters. Jonathan is a Principal Environmental Consultant in AWN Consulting with expertise in impact assessment, licensing, environmental compliance, and project management. Jonathan has a BSocSc (Environmental Planning) and BBA (Economics) from the Waikato University in New Zealand and has experience working in the environmental consultancy, planning, and regulatory fields from Ireland, the UK and New Zealand.

2.0 SCREENING EVALUATION

Schedule 5 of the Planning and Development Regulations 2001, as amended, sets out a number of classes and scales of development that require EIA. In considering the wider context and the component parts of the project the proposed development the thresholds of relevance to the proposal from Part 2 of Schedule 5 are set out below:

Under Part 2 of Schedule 5, in relation to Infrastructure projects, Class 10(b)(i) of Part 2 refers to residential developments as follows:

> *10. Infrastructure projects -*
>
> *(b)(i) Construction of more than 500 dwelling units;*
>
> *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;*
>
> *(In this paragraph, 'business district' means a district within a city or town in which the predominant land use is retail or commercial use).*

The total site area for the proposed works is 2.25 hectares (ha), and the proposed development comprises 42 no. single storey semi-detached units. The site location is not within a business district. The proposed development site is not equal to, nor does it exceed the limit, quantity or threshold set out in Class 10(B) (i) and (iv); therefore, an EIA is not mandatory.

Furthermore, an EIA is still required by Schedule 5, Part 2, Class 15 of the Regulations for sub-threshold development which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.

> *15. Any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development, but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.*

The following Sections 3.0, 4.0 and 5.0 of this report will provide information on the characteristics of the proposed development; In order to provide information on the 15 the likelihood of the project to have significant effects on the environment from these works, having regard to the criteria set out in Schedule 7.

2.1 CONCLUSION – SUB THRESHOLD DEVELOPMENT

The proposed development is '*of a type set out in Part 2 of Schedule 5 [in the Planning and Development Regulations, 2001 (as amended)] which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development*'. The development is outside the mandatory requirements for EIA and is considered to be sub-threshold for the relevant project type.

An EIAR is still required by to accompany a planning application for sub-threshold development which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7. Therefore, it is also necessary to consider whether an EIAR is required because the development will be likely to have significant effects on the environment, even though it does not meet nor exceed the relevant thresholds in Schedule 5 to the Planning and Development Regulations.

The remainder of this report presents the information required by Schedule 7A and Annex II A of the Directive to demonstrate the likely effects on the environment, having regard to the criteria set out in Schedule 7 and Annex II A of the Directive.

The following Sections 3.0, 4.0 and 5.0 will provide information on the characteristics of the proposed development, the location and context, and its likely impact on the environment. These sub sections also include in accordance with Article 299B(1)(c) a description of any features, if any, of the proposed development and the measures, if any, envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment of the development.

These sections present the information required under Schedule 7A of the Regulations, to ensure that each aspect for consideration is robustly addressed and to enable a screening to be carried out in accordance with the criteria in Schedule 7 to the Regulations.

3.0 CHARACTERISTICS OF PROPOSED DEVELOPMENT

This section addresses the characteristics of proposed development by describing the physical characteristics of the whole proposed development and, where relevant and a description of the location of the proposed development, with regard to the environmental sensitivity of geographical areas likely to be affected.

3.1 SIZE AND DESIGN OF THE PROPOSED DEVELOPMENT

The development will consist of the installation of 42 no. single storey semi-detached units (each 2-bed, 45 m^2 units), 44 no. off-street car parking spaces, bin store, bicycle stores, pavements, public lighting, landscaping, ESB substation, foul water, surface water, and potable water connections, and all ancillary site development works. The total site area for the proposed works is 2.25 hectares. An area of landscaped open green space is provided within the site bounded by a crescent fronting on units 1 through 28; units 29 through 42 are pedestrian accessed. Buffer planting is to be provided to the north-west and north east, bolstering and retaining the existing Hawthorn, Blackthorn hedgerow.

Vehicular access to the proposed development will be via proposed private lane way leading from Kilcoran Road. The modular houses are high spec bungalows, with a BER rating of A2. Each of the dwellings will have a private rear garden and semi-private front curtilage areas. The existing hedgerow located to the north, and east of the site will be retained.

The proposed site layout is shown in Figure 3.1 below.

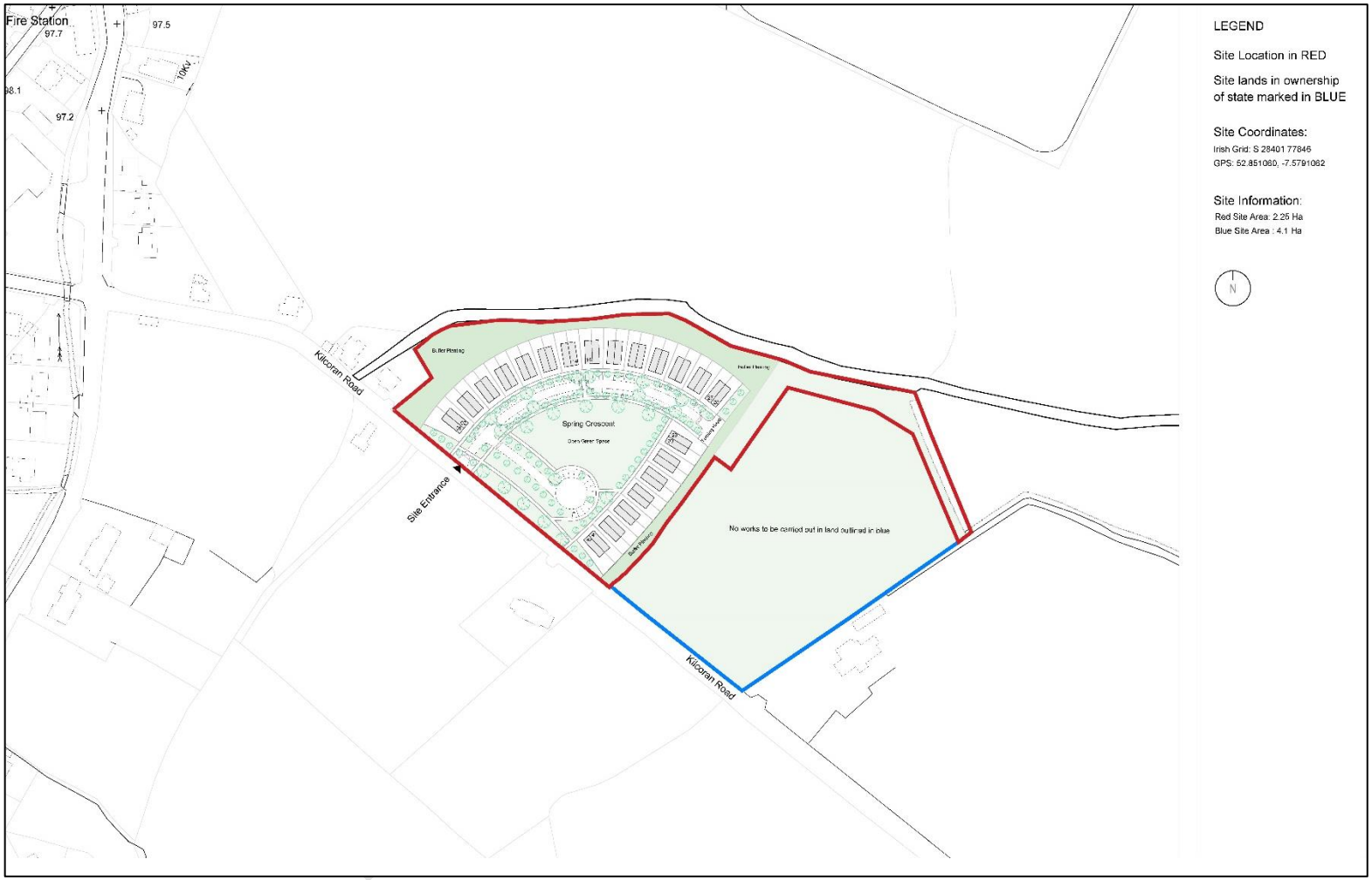

Figure 3-1 Proposed Site Layout

3.1.1 Construction Phase

As the proposed development is modular units, the majority of the construction works will occur off site. The estimated duration of onsite construction works is 4 - 6 months, there are no demolition works proposed. Construction staff numbers are anticipated to be between 5 - 30 dependant on stage. Construction traffic will access the site via existing entrances; there will be an average 20 cars / vans, and 5 – HGV per day during peak periods.

A temporary construction compound, site office and welfare facilities will be established within the proposed development site boundary. All plant, machinery, and equipment will be stored on site within the works area or within the temporary construction compound.

During construction, contractors will require temporary power for onsite accommodation, and construction equipment / plant. The power requirements will be relatively minor. It is anticipated that generators will be provided on site to provide temporary power.

There will be a requirement for deliveries of imported engineering fill, and other construction materials. Other construction activities will include site storage of cement and concrete materials, fuels for construction vehicles.

Water will be required for welfare facilities, dust suppression and general construction activities. There will also be foul wastewater requirements associated portable sanitary facilities within the construction compound. A combination of tankered water and bottled water will be used. Water will be required for Contractor welfare facilities and construction activities.

Welfare facilities (canteens, toilets etc.) will be available within the construction compound on site. Temporary connections to the existing services will be utilised to provide service and utilities subject to relevant applications and approvals.

Construction works will be immediately adjacent to the Knockheel Stream. During the construction phase there will surface water discharge to the Knockheel Stream.

Surface water from the operational development will discharge to the Knockheel Stream adjacent the Site. Irish Water network upgrades are required to establish connection for the foul sewer. These works will be located within the public domain, within the bed of Kilcoran Road; these works will be undertaken by Irish Water. The works will include the installation of 22 m of foul sewer. Potable water connection to the existing water supply on Kilcoran Road will be utilised.

Connections will comply with Local Authority and Irish Water's requirements, specification and standard required to withstand any surcharging effect to the internal network.

For the duration of the proposed infrastructure works the maximum working hours shall be 07:00 to 18:00 Monday to Friday (excluding bank holidays) and 08:00 to 14:00 Saturdays. No working will be allowed on Sundays and Public Holidays.

A Construction and Environmental Management Plan (CEMP) will be prepared by the construction contractor which will set out the construction techniques and methodologies which will be implemented during construction of the proposed development. The CEMP will implement the mitigation measures set out within this

report to ensure that pollution and nuisances arising from site clearance and construction activities is prevented where possible and managed in accordance with best practice environmental protection. The CEMP will be implemented and adhered to by the construction Contractor and will be overseen, and updated as required if site conditions change, by the Project Manager, Environmental Manager and Ecological Clerk of Works where relevant. All personnel working on the Site will be trained in the implementation of the procedures.

Table 3.1 *Summary of key construction works*

Activity	Description of Activity
Site Preparation Works and Establishment of Construction Services	The primary activities that will be required during the Site preparation phase for the development will be the establishment of construction fencing and hoarding and site compound. The Site compound will provide office, portable sanitary facilities, equipment storage, parking etc for contractors for the duration of the works. All areas under construction will be fenced for security and safety purposes and temporary lighting supplied, as necessary. Tree protection areas will be established at an early stage in line with the project arborists recommendations.
Site clearance and earthworks	This phase will include site clearance, vegetation removal, excavations and levelling of the Site to the necessary base level for construction. Surveying and setting out for structures. All required enabling works and site investigations, surveying and setting out for structures, archaeological impersonation (if required) etc. are carried out. Install granular fill for roads and footpaths. All mature trees will be retained. All spoil retained on site where possible and stockpiled on site. The excavation depth during construction will be c. 1.0 m below ground level.
Installation of Services	New electricity and telecommunications services ducts / infrastructure will be put in place to serve the various dwellings. This will be connections to existing mains and carried out in accordance with the requirements of the various service providers / authorities.
Foundations and Installation of Modular Houses	Foundations will generally be reinforced concrete pad footings incorporated into the concrete strips of pad foundations. The modular homes will be constructed off site in a series of and components and transported to the site. They will be assembled in place by the construction contractor utilizing a variety of plant equipment including lifting crane. The estimated duration of onsite construction works is 4- 6 months.
Landscaping	After the main construction works are completed the hard and soft landscaping and reinstatement works for that phase will be carried out in accordance with the proposed landscaping design.

3.1.2 Operational Phase

The most significant environmental effects are expected to arise during the construction phase, with the potential impacts with the proposed developments operational phase relatively minor.

The proposed development, when operational, will generate typical anthropogenic impacts associated with the usual operation of a, residential, and apartment complex. The main potential impacts are associated with additional traffic (associated air emissions), and surface and foul water emissions, visual impacts, biodiversity, and wastes generation due to changes from the current undeveloped site to a build environment.

In its operational phase, the proposed development will generate regular vehicular trips on the surrounding road network. The proposed development will be accessed via a new site entrance on Kilcoran Road. Within the development site, the private lane layout design ensure low vehicle speeds are maintained on development roads

providing a safe environment. Pedestrian footpaths are currently provided to the north of the site, and these will be maintained, to provide good pedestrian linkage with Rathdowney Town. Traffic movements would be predominately from the residents themselves, but also from ancillary users such as waste collection, maintenance of private units and communal areas. Car parking is provided for residential, staff and visitor uses, 44 no. on-street car parking spaces will be provided.

The proposed development will be served from the variety of public transport options available to visitors and residents at the subject site. There are pedestrian routes, cycle routes and bus routes within reach of the development, providing connectivity to Rathdowney Town Centre.

Connection to the existing mains that are in close proximity to the site will be established for foul water, potable water. The design of the stormwater drainage network for the proposed development has taken cognisance of the guidelines and requirements set out by the Laois County Council (LCC) Drainage Division, which requires all new developments to incorporate the principles of Sustainable Urban Drainage Systems (SuDS). The proposed SuDS method of water disposal at the Site will ensure that there are no negative impacts from stormwater leaving the Site. Proposed SuDS features include stormtech attenuation, filter drains, flow controls, and hydrocarbon interceptors to maintain the water environment at the site.

The proposed development will give rise to a variety of waste streams during the operational phase, i.e., when the project is completed, and fully operational. There will be designated waste collection areas on site, skips, bins, recycling etc.

In the context of the Temporary Protection Decision EU 2022/382 the maximum extended period for the duration of the permitted use *(temporary protection for displaced persons from the Ukraine)* of the units is three years; therefore, the operational effects of the proposed development, in the context of this EIA Screening report are deemed to be Short-term Effects (Effects lasting one to seven years).

3.2 CUMULATION WITH OTHER EXISTING OR PERMITTED DEVELOPMENT

As part of the assessment of the effects of the proposed development, account has been taken of other existing or permitted development (Appendix A) within the surrounding area that have the potential to combine with the proposed development and result in likely significant cumulative effects. Cumulative effects are the effects arising from the addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.

A preliminary assessment of potential cumulative effects on the environment is facilitated via the Source-Pathway-Receptor (SPR) model which is a multi-step process. The SPR methodology is a tool that ensures the most cautious means of assessment at the preliminary stages of a proposed development. The use of this tool ensures that all possible impacts are identified at a very early stage thus enabling further studies, mitigation measures or ameliorative actions to be put in place. The inherent use of the precautionary principle within the SPR methodology means that all potential for environmental impacts can be identified at a preliminary stage without any need for detailed studies, but rather upon available desktop information.

It is imperative to make clear that not all projects within a study area are capable of combining with the proposed development to result in potential cumulative effects. In order for there to be a potential cumulative effect all three elements of the SPR elements need to be present. If there is no pathway or functional link (direct or indirect)

between the proposed development and a receptor, there is no potential for effect. Additionally, if there is no receptor within the area of a potential impact, there is similarly no effect as it does not cause harm to the environment due to the lack of a receptor.

It is acknowledged that projects like the one proposed can have an impact on activity in a larger area that only the Site itself. Generally, the closer to the works, the greater the potential for impacts. The most significant environmental impacts are likely to be confined within 50-150 m of the proposed development. Some effects from the Proposed Development, including air quality and traffic, might have a larger area of effect, and these are addressed in further detail in the corresponding expert assessments that set out the reports submitted with the planning application.

The project being considered, is not expected to have Regional, National or International, or Transboundary impacts. Therefore, a general study area of 500 m from the Site location is included; this distance within an urban area is sufficient to capture any permitted development that may give rise to significant cumulative effects.

The National Planning Application Map was consulted for the previous 5 years to identify notable applications (proposed development), or applications granted permission (permitted development) within that period within 500m of the development site. The National Planning Application Map includes planning application data sourced from the 31 individual local authorities across Ireland. This list of consented development is shown in Appendix A at the end of this report.

The search also showed a significant number of small extensions, agricultural buildings and other minor alterations. These permissions were for established properties within the vicinity of the development and have been considered as a part of the overall project impact. Given their proximity to the proposed development, scale, and extent the majority of developments in Appendix A are not likely to result in any cumulative effect, with the proposed development. The proposed development is capable of combining with these permitted developments and resulting in cumulative effects. The potential for cumulative effects, in respect of traffic, noise, dust, and biodiversity during the construction and operational phases of the proposed development with these permitted developments, as outlined below, as well as relevant live planning applications, is discussed in further detail in Sections 5.10 of this EIA Screening Report.

The proposed development site is within an area zoned for *Tourism* according to the Laois County Development Plan 2021 – 2027 as shown in Figure 3.2 below.

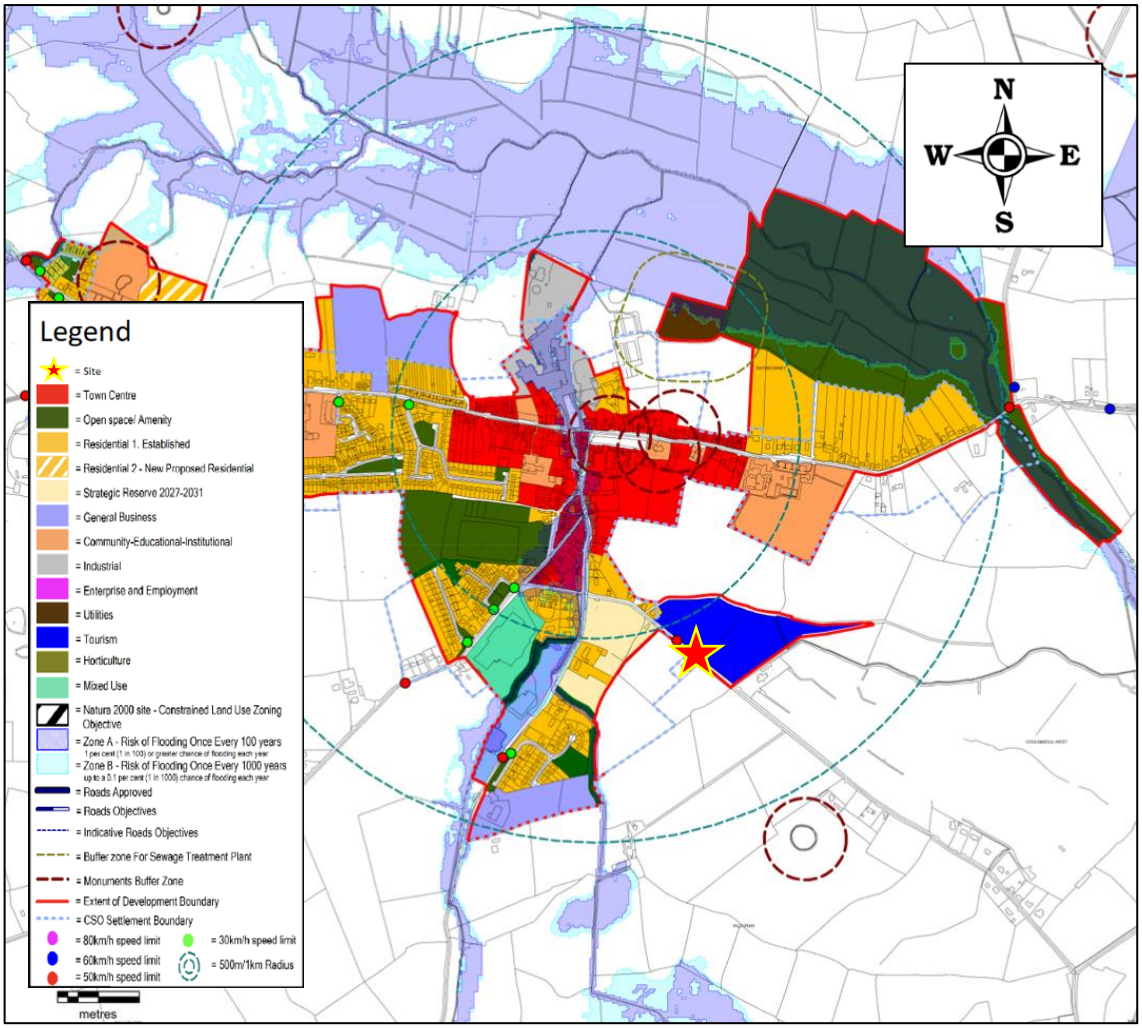

Figure 3-2 *Laois County Council Planning Zones (Source: Laois County Development Plan 2021 – 2027) inditicitive site identified with red star.*

3.3 NATURE OF ANY ASSOCIATED DEMOLITION WORKS

There are no structural demolition works proposed.

3.4 USE OF NATURAL RESOURCES (LAND, SOIL, WATER, BIODIVERSITY)

This section describes the proposed development in terms of the use of natural resources, in particular land, soil, water, and biodiversity.

Other resources used will be construction materials which will be typical raw materials used in construction of residential developments. The scale and quantity of the materials used will not be such that would cause concern in relation to significant effects on the environment.

Land and Soil

The proposed development will require the excavation and disturbance of soils and stone materials for the purposes of levelling, excavation for foundations, landscaping, access and services.

The greenfield site is not considered significant in the context of Ireland available land area.

There will be a requirement for deliveries of imported engineering fill, and other construction materials. Other construction activities will include site storage of cement and concrete materials, fuels for construction vehicles.

The proposed development will require the excavation and disturbance of soils and stone materials for the purposes of levelling, excavation for foundations, landscaping, access and services.

Any waste soils prior to being exported off-site, shall be classified as inert, non-hazardous or hazardous in accordance with the EPA's Waste Classification Guidance – List of Waste & Determining if Waste is Hazardous or Non-Hazardous document dated 1st June 2015 to ensure that the waste material is transferred by an appropriately permitted waste collection permit holder and brought to an appropriately permitted or licensed waste facility. Materials that can be reused will be notified to the EPA as a by-product. This ensures that waste and other materials removed from the Site will have no significant effect on the environment.

Causeway Geotech undertook soil sampling at the site of the proposed development in December 2022 and samples were analysed for a range of potential contaminants Samples were also tested for a Waste Acceptance Criteria (WAC) suite to assess the potential categorisation of waste from the site. From the samples tested for WAC analysis, results show the material from the site may potentially be classified as inert/non-hazardous. Any material excavated for off-site disposal would have to be classified under the guidance in the National Hazardous Waste Management Plan (EPA, 2014).

Water Consumption

The construction and operation of the scheme will not use such a quantity of water to cause concern in relation to significant effects on the environment.

During construction of the scheme, water will be required for offices and welfare facilities, this will be provided by either tanker or temporary connection to the public main by agreement between the Main Contractor and Irish Water. The construction phase will not use such a quantity of water to cause concern in relation to significant effects on the environment.

Once the development is completed and the development is occupied there will be a water primary demand for domestic for usage for showers, toilets and cooking, as well as for commercial consumption.

There is no proposed extraction of groundwater at the Site during the operational phase.

DBFL Consulting Engineers have calculated that the average daily domestic demand for potable water will be 17.01 m^3/day.

Biodiversity

Investigations into the implications on existing biodiversity including species and habitats has been undertaken through the Appropriate Assessment (AA) Screening

Report that have been prepared by Moore Group and included in Appendix B to this Report.

A habitat survey was carried out by Moore Group on 8 December 2022. Areas which were highlighted during desktop assessment were investigated in closer detail according to the Heritage Council Best Practice Guidance for Habitat Survey and Mapping (Smith *et al*., 2011). Habitats in the proposed development area were classified according to the Heritage Council publication "*A Guide to Habitats in Ireland*" (Fossitt, 2000). This publication sets out a standard scheme for identifying, describing and classifying wildlife habitats in Ireland. This form of classification uses codes to classify different habitats based on the plant species present. Species recorded in this report are given in both their Latin and English names. Latin names for plant species follow the nomenclature of "*An Irish Flora"* (Parnell & Curtis, 2012).

Signs of mammals such as badgers and otters were searched for while surveying the study area noting any sights, signs, or any activity in the vicinity especially along adjacent boundaries.

Birds were surveyed using standard transect methodology and signs were recorded where encountered during the field walkover surveys.

The proposed development is situated within a field of improved agricultural grassland (GA1), supporting typical species such as Perennial Rye Grass (Lolium perenne), Nettle (Urtica dioica), Curled Dock (Rumex crispus) and Creeping Buttercup (Ranunculus repens). The southwestern boundary of the site is defined by a stone wall, and a hedgerow runs along the northern boundary, growing along a shallow and relatively dry drainage ditch, with Hawthorn (Crataegus monogyna), Blackthorn (Prunus spinosa), Ivy (Hedera hibernica) and Bramble (Rubus fruticosus). This habitat is classified as (WL1).

No flora or terrestrial fauna species or habitats of national or international conservation importance were noted on site during the survey.

There were no invasive species recorded at the proposed development site.

3.5 PRODUCTION OF WASTE

Construction Phase

During the construction phase, waste will be produced from surplus materials such as broken or off-cuts of timber, plasterboard, concrete, tiles, bricks, etc. Waste from packaging (cardboard, plastic, timber) and oversupply of materials may also be generated. The construction contractor will be required to ensure that oversupply of materials is kept to a minimum and opportunities for reuse of suitable materials is maximised.

Waste will also be generated from construction workers e.g., organic/food waste, dry mixed recyclables (wastepaper, newspaper, plastic bottles, packaging, aluminium cans, tins and Tetra Pak cartons), mixed non-recyclables and potentially sewage sludge from temporary welfare facilities provided onsite during the construction phase. Waste printer/toner cartridges, waste electrical and electronic equipment (WEEE) and waste batteries may also be generated infrequently from site offices.

If material is removed off-site, it could be reused as a by-product (and not as a waste). If this is done, it will be done in accordance with Regulation 27 (By-products)

(Previously Article 27 and referred to as Article 27 in this report) of S.I. No. 323/2020 - European Union (Waste Directive) Regulations 2020, which requires that certain conditions are met and that by-product notifications are made to the EPA via their online notification form. Excavated material should not be removed from site until approval from the EPA has been received. The potential to reuse material as a by-product will be confirmed during the course of the excavation works, with the objective of eliminating any unnecessary disposal of material.

If any soils/stones are imported onto the Site from another construction site as a by-product, this will also be done in accordance with Article 27. Article 27 will be investigated to see if the material can be imported onto this site for beneficial reuse instead of using virgin materials.

It should be noted that until final materials and detailed construction methodologies have been confirmed it is difficult to predict with a high level of accuracy the construction waste that will be generated from the construction of the proposed development as the exact materials and quantities may be subject to some degree of change and variation during the construction process.

Operational Phase

The proposed development will give rise to a variety of everyday waste and recycling from the development during the operational phase, i.e., when the project is completed, and fully operational. The typical non-hazardous and hazardous wastes that will be generated at the proposed development will include the following:

- Dry Mixed Recyclables (DMR) - includes wastepaper (including newspapers, magazines, brochures, catalogues, leaflets), cardboard and plastic packaging, metal cans, plastic bottles, aluminium cans, tins and Tetra Pak cartons;
- Organic waste – food waste and green waste generated from internal plants / flowers;
- Glass; and
- Mixed Non-Recyclable (MNR)/General Waste.

In addition to the typical waste materials that will be generated at the development on a daily basis, there will be some additional waste types generated less frequently / in smaller quantities which will need to be managed separately including:

- Green / garden waste may be generated from external landscaping;
- Batteries (both hazardous and non-hazardous);
- WEEE (both hazardous and non-hazardous);
- Printer cartridges / toners;
- Chemicals (paints, adhesives, resins, detergents, etc.);
- Light bulbs;
- Textiles;
- Waste cooking oil (if any generated by the residents, crèche tenants, commercial tenants or work studio tenants);
- Furniture (and, from time to time, other bulky wastes); and
- Abandoned bicycles.

Wastes should be segregated into the above waste types to ensure compliance with waste legislation and guidance while maximising the re-use, recycling and recovery of waste with diversion from landfill wherever possible.

Table 3.2 sets out the estimated waste generation for the proposed development for the main waste types.

Table 3.2 *Estimated waste generation for the main waste types*

Waste type	Total Volume m^3/annually
Organic Waste	36.60
Mixed Dry Recyclables	250.28
Glass	7.08
Mixed Municipal Waste	145.51
Total	439.47

All waste contractors collecting waste from the Site must hold a valid collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO) and waste will only be brought to suitably registered/permitted/licenced facilities. It is essential that all waste materials are dealt with in accordance with regional and national legislation, as outlined previously, and that time and resources are dedicated to ensuring efficient waste management practices.

These measures will ensure the waste arising from the development is dealt with in compliance with the provisions of the *Waste Management Act 1996*, as amended, associated Regulations, the *Litter Pollution Act 1997* and the *EMR Waste Management Plan (2015 - 2021)*. It will also ensure optimum levels of waste reduction, reuse, recycling and recovery are achieved.

3.6 POLLUTION AND NUISANCES

There are potential short-term nuisances such as dust, noise, as well as the potential for pollution of groundwater associated with construction activities. The construction activities shall only take place in accordance with standard construction times or as otherwise specified in planning conditions. No activity, which would reasonably be expected to cause annoyance to residents in the vicinity, will take place outside of these hours. If there is any occasion when work must be complete outside these hours advance notice will be provided to the local authority, businesses and residents in the vicinity.

A CEMP will be prepared by the construction contractor to include the measures set out within this EIA Screening report and accompanying appendices, as well as best practice construction measures for the mitigation and management of air quality control (dust), noise and vibration, surface water runoff, dewatering of excavations, traffic, spills and leaks and sediment control that will be undertaken during the construction phase. All mitigation measures outlined therein will be implemented.

This CEMP will be maintained by the contractors during the construction and operational phases and covers all potentially polluting activities and include an emergency response procedure. All personnel working on the Site will be trained in the implementation of the procedures.

3.7 RISK OF MAJOR ACCIDENTS AND/OR DISASTERS

Landslides, Seismic Activity and Volcanic Activity

There have been no recorded landslide events at the Site. Due to the local topography and the underlying strata, there is a negligible risk of a landslide event occurring at the Site. There is a very low risk of seismic activity to the proposed development site. There are no active volcanoes in Ireland so there is no risk from volcanic activity.

Flooding/Sea Level Rise

The potential risk of flooding on the Site was reviewed with regard to incidences of historical, regional and local flooding relevant to the area of the subject site. Flood maps and CFRAM maps provided by Floodinfo.ie were consulted to assess the potential risk of flooding on the site.

The record of historic flood events in the vicinity of the proposed site was extracted from the National Flood Hazard Mapping Website www.floodmaps.ie. It is observed from OPW Flood Map Report for the Area that there have been no recorded historic flood events on the proposed site.

The review concludes that the development type is classed as a highly vulnerable development defined by *The Planning System and Flood Risk Management – Guidelines for Planning Authorities* and the overall development site is located on lands classified to Flood Zone C (low probability). The latest CFRAM Flood Zone mapping from OPW floodinfo.ie is shown on Figure 3.3. The review of the OPW floodinfo.ie maps revealed there is little or no risk of Fluvial, Tidal/Coastal or Groundwater flooding.

The Proposed Development has been designed so that all residential units remain outside any of the Flood Zone designations located on the site. Therefore, avoiding all areas that are risk of flooding. The Proposed Development is acceptable for this location in accordance with *The Planning System and Flood Risk Management – Guidelines for Planning Authorities.*

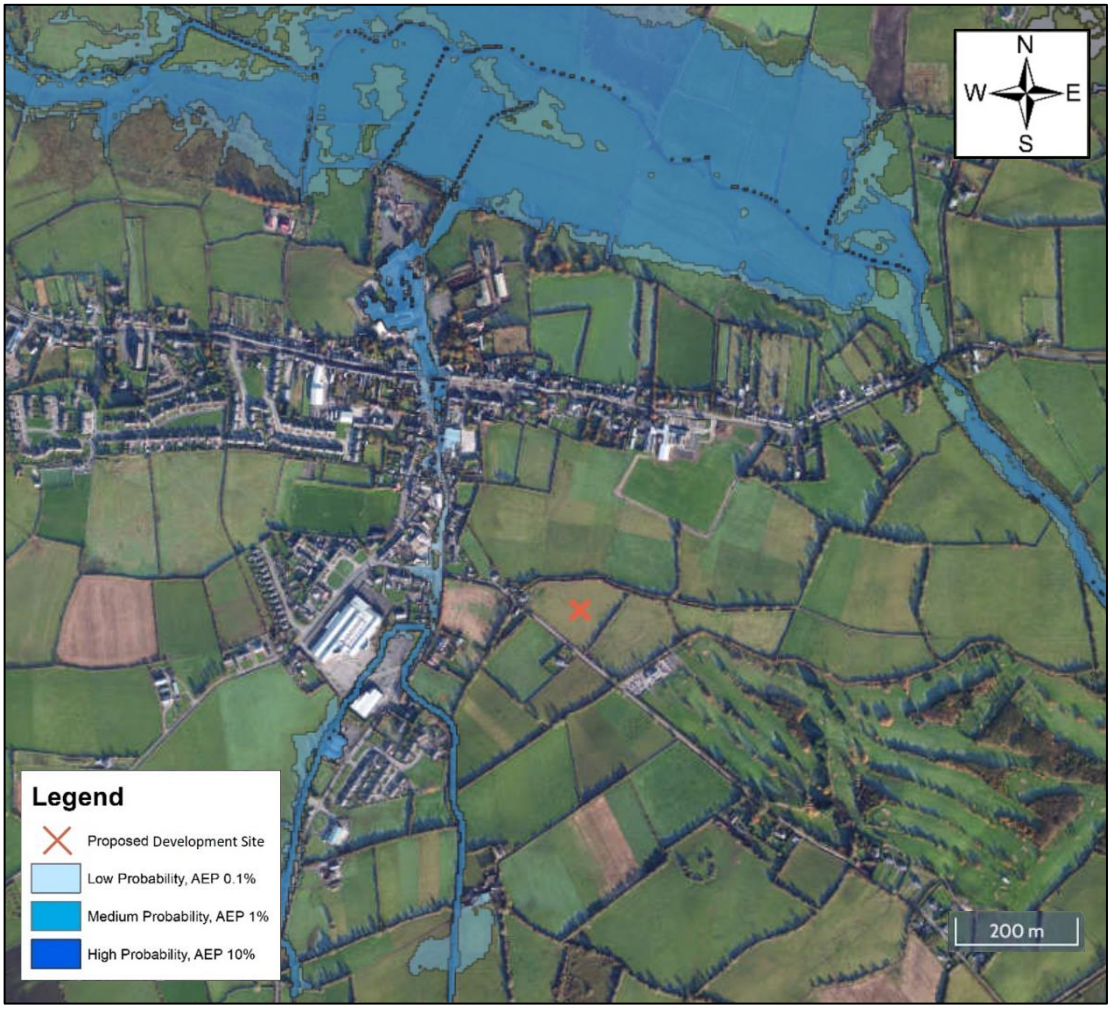

Figure 3-3 *CFRAM River Flood Extent Map*

Major Accidents/Hazards

The proposed development is not within the consultation distance of any Seveso Site, nor is the proposed development a Seveso/COMAH facility.

The closest Seveso site to the proposed development is the Enva Portlaoise site, an Upper Tier establishment located c. 29 km northeast of the development site at Clonminam Industrial, Knockmay, Portlaoise, Co. Laois. The proposed development is not within the consultation distance of the site therefore due to the separation distance there is no interaction with the proposed development at this location.

The proposed development has been designed in accordance with the Safety, Health and Welfare at Work Act 2005 (S.I. 10 of 2005) as amended and the Safety, Health and Welfare at Work (General Application) Regulations 2007 to 2016 (S.I. 299 of 2007, S.I. 445 of 2012, S.I. 36 of 2016) as amended and associated regulations.

Minor Accidents/Leaks

There is a potential impact on the receiving environment as a result of minor accidents/leaks of fuel/oils during the construction. However, the implementation of the mitigation measures set out in this report (Section 5, below) and the CEMP

accompanying the application will ensure that the residual effect on the environment is imperceptible.

3.8 RISKS TO HUMAN HEALTH

The EPA guidance explains that the scope of population and human health is project dependant but should consider significant impacts likely to affect aspects such as: convenience (expanded range of transport options); nuisance/ disturbance from lighting; displaced settlement patterns (residential); employment opportunities; settlement patterns; land use patterns; access for tourism, amenity, health impacts and/or nuisance due to noise, dust or water pollution; and health and safety.

The characteristics of the proposed development, in terms of the risks to human health (for example, due to water contamination or air pollution) have been considered. The primary potential impacts of the proposed development on human health would be the potential for increased air pollution, noise, or pollution of groundwater/watercourses as a result of the proposed development during the construction phase. Once the proposed development is operational there are potential impacts in respect of visual impact and traffic are also potential but perhaps lesser significant impacts (based on the location and the nature of the proposed development).

The CEMP will include the measures set out within this EIA Screening report and accompanying appendices, as well as best practice construction measures for the mitigation and management for the control of dust generation, traffic and noise, as well as the management of impacts on groundwater or the existing drainage ditches during the construction phase. Any impacts associated with construction dust generation, traffic, and noise will be short term.

The proposed development is small in scale and mass, by way of a considered architectural approach, combined with due regard to the zoning of the Site, and the surrounding residential properties, will have an insignificant impact on the local landscape amenity.

There will be no significant negative impact on local parks. It is not anticipated that the proposed development will have a significant negative on local tourism or shopping amenities.

Geological Survey of Ireland (GSI) data indicates that the Site does not lie within a drinking water protection area. The area is serviced by mains water supply therefore it is unlikely that any wells are used for potable water supply. The proposed mitigation measures during the construction phase, including the implementation of a CEMP will ensure that there are no impacts on groundwater or the stormwater mains.

The proposed development design includes an appropriately designed stormwater network that will ensure that during the operational phase the risk from diesel spills through the carparks or unloading areas is minimised. Foul wastewater from the proposed development will be of domestic origin and will connect to mains supplies that will be treated off-site at Rathdowney (D0288-01) Wastewater Treatment Plant (WWTP). The wastewater treatment plant in Rathdowney has been upgraded as part of the “Six Towns” Wastewater Scheme Project initiated by LCC in 2012.

DBFL Consulting Engineers have calculated that the average wastewater discharge from the proposed development will be 18.7 m^3/day. Following treatment at Rathdowney WWTP this wastewater will not have a potential impact on local amenities or the local population. Consultation has taken place with IW to confirm capacity, and

Irish Water have confirmed the Rathdowney Town WWTP has capacity to deal with the additional demand.

Reference to the 2019 Annual Environmental Report shows that it has a peak hydraulic capacity of 2,358 m³/day and the current hydraulic loading annual max is 1,915 m³/day. The average hydraulic loading to the Treatment Plant 643 m³/day.

The proposed development does not pose any significant risk to human health, given its nature, scale and location. The potential impacts likely to affect population and human health have been considered in Section 5.1 below.

IW note that the proposal is feasible, but local network upgrade is required.

4.0 LOCATION AND CONTEXT OF THE PROPOSED DEVELOPMENT

4.1 EXISTING AND APPROVED LAND USE

The site exists at present as a greenfield site off Kilcoran Road. The development site is currently vacant grass land.

The proposed development will be served from a variety of public transport options available to visitors and residents at the subject site. There are pedestrian routes, cycle routes and bus routes within reach of the development, providing significant connectivity to Rathdowney Town Centre.

Nearby recreational facilities include numerous public parks including Rathdowney Playground, Rathdowney Golf Club, Clover United Football Club and Rathdowney GAA Club, are all located in close proximity (less than 1.5 km) to the Site.

4.2 RELATIVE ABUNDANCE, AVAILABILITY, QUALITY AND REGENERATIVE CAPACITY OF NATURAL RESOURCES IN THE AREA AND ITS UNDERGROUND

4.2.1 Hydrogeology

Causeway Geotechnical undertook a ground investigation at the location of the proposed development between the 21st and the 23rd of November 2022. Groundwater was encountered during dynamic sampling through soil as water strikes at depths ranging from 1.4 to 2.1 mbgl. It should be noted that the casing used in supporting the borehole walls during drilling may have sealed out any groundwater strikes and the possibility of encountering groundwater during excavation works should not be ruled out. It should be noted that groundwater levels usually vary due to seasonal and other effects and may at times differ to those recorded during the investigation.

Presently, from the GSI (2023) National Bedrock Aquifer Map, the GSI classifies the bedrock aquifer beneath the subject site as a ‘Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones’. The proposed development is within the ‘Rathdowney’ groundwater body (Figure 4.1) (EPA Code: IE_SE_G_114) the majority of which is classified as ‘moderately productive bedrock only in local zones’. The most recent WFD groundwater status for this water body (2013-2018) is ‘Good’ with a current WFD risk score of ‘Not at risk’ (Figure 4.2).

Figure 4-1 *WFD Groundwater Bodies*

Figure *4-2* Aquifer Classification

The GSI/Teagasc (2023) mapping database of the quaternary sediments in the area of the subject site describes the principal subsoil type in the area as Till derived chiefly from limestone.

Figure 4-3 Bedrock Geology

Mapping from the Geological Society of Ireland (GSI, 2023) indicates the majority of bedrock underlying the Site is part of the Ballysteen Formation Formation and made up of dark-grey limestone, see Figure 4.3.

Figure 4-4 GSI Well Card Index Map

The GSI Well Card Index is a record of wells drilled in Ireland, water supply and site investigation boreholes. It is noted that this record is not comprehensive as licensing of wells is not currently a requirement in the Republic of Ireland. This current index does not show any wells drilled or springs at the Site, there are a number of wells and springs in the general area (See Figure 4.4) which are listed for Agriculture and Domestic use however it is unsure if they are still active. The area is serviced by Local Authority mains therefore it is unlikely that any wells are used for potable supply. The site is not located near any public groundwater supplies or group schemes. There are no groundwater source protection zones in the immediate vicinity of the Site.

There are no sensitive soil receptors, no identified areas of geological heritage or groundwater supplies in the vicinity of the Site boundary.

4.2.2 Hydrology

The proposed development site lies within the Nore Catchment (Hydrometric Area 15) (WFD name: Nore_SC_015) (EPA, 2023).

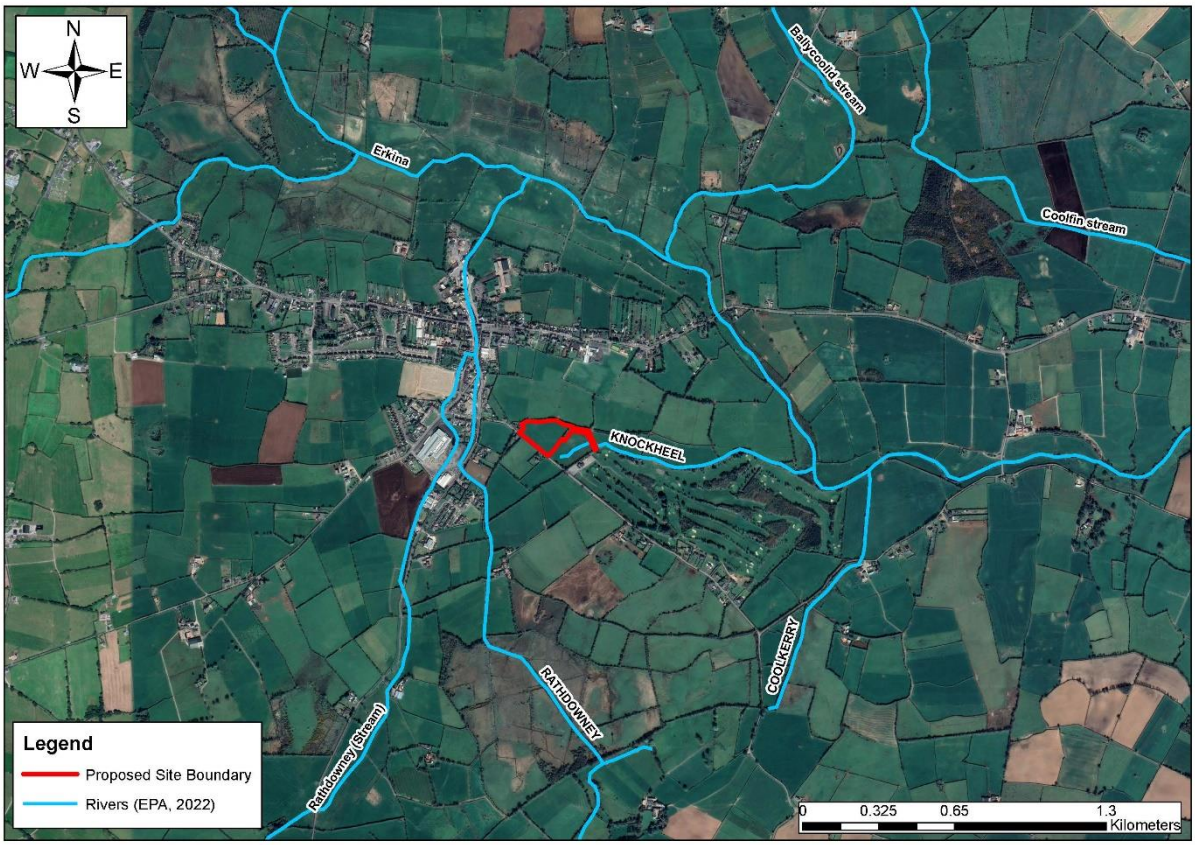

Figure 4-5 EPA Rivers

The closest named surface water feature borders the development to the south named the Knockheel (EPA Name) Stream (Figure 4.5). The Knockheel Stream flows for approximately 1.16 km before discharging into the Erkina River, which in turn is connected to the River Nore.

The Environmental Protection Agency (EPA, 2023) on-line mapping presents the available water quality status information for water bodies in Ireland. The Erkina River has a 2013-2018 WFD status of poor and belongs to the Erkina_040 WFD surface waterbody which has a 'Moderate' Status (EPA, 2023). The nearest downstream Water quality monitoring station to the proposed development is Coolkerry Bridge located c. 1900m downstream from the development site (ID: RS15E010250).

The foul water during operational phase will be pumped to the local foul sewer and will flow to the Rathdowney Wastewater Treatment Plant (WWTP) where it will be treated to EPA Licence standards and discharged to Rathdowney Stream.

There is no direct pathway from the proposed development to any designated European sites.

During the construction phase there will be an indirect source pathway linkage between the proposed development and the River Barrow and River Nore SAC via discharge to the Knockheel Stream which flows for 1.16 km to the Erkina River which ultimately flows towards the River Barrow and River Nore SAC c. 6.66 km total downstream to the east.

There is also indirect hydrological connection to the River Barrow and River Nore SAC via the foul sewer which will eventually outflow to the Rathdowney WWTP and ultimately discharges to Rathdowney Stream which flows into the Erkina River to the

River Barrow and River Nore SAC . Consultation has taken place with IW to confirm capacity, and Irish Water have confirmed the Rathdowney Town WWTP has capacity to deal with the additional demand.

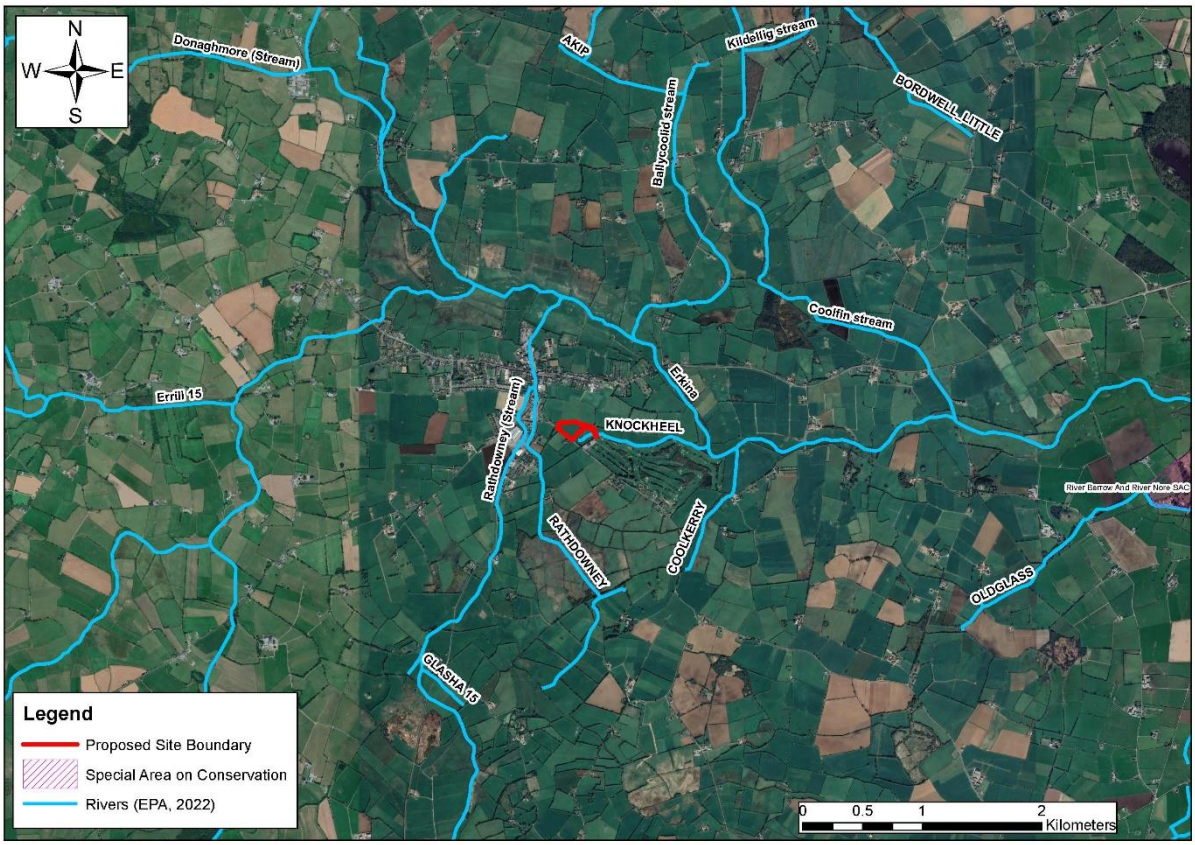

Figure 4-6 European Protected Sites

4.2.3 Biodiversity and Areas of Conservation

The potential ecological impacts of proposed development have been considered in terms of the sensitivity of the location through the Appropriate Assessment (AA) Screening Report that have been prepared by Moore Group and is included as Appendix B of this report.

A habitat survey was carried out by Moore Group on 8 December 2022. The proposed development is situated within a field of improved agricultural grassland (GA1), supporting typical species such as Perennial Rye Grass (Lolium perenne), Nettle (Urtica dioica), Curled Dock (Rumex crispus) and Creeping Buttercup (Ranunculus repens). The southwestern boundary of the site is defined by a stone wall, and a hedgerow runs along the northern boundary, growing along a shallow and relatively dry drainage ditch, with Hawthorn (Crataegus monogyna), Blackthorn (Prunus spinosa), Ivy (Hedera hibernica) and Bramble (Rubus fruticosus). This habitat is classified as (WL1).

No flora or terrestrial fauna species or habitats of national or international conservation importance were noted on site during the survey.

The nearest European site to the Proposed Development is the Galmoy Fen SAC (Site Code 001858), approximately 4.5km to the south; however there is no connectivity to this site. The River Barrow and River Nore SAC (Site Code 002162) lies 4.8km to the east. A review of aerial photography, Ordnance Survey Ireland (OSI) mapping and OSI

Geographical Information System (GIS) data for rivers and streams indicates that there are no notable surface water features onsite and no direct hydrological pathways to offsite surface water bodies. This was confirmed during fieldwork on habitat assessment on 8 December 2022.

The AA Screening Report (Moore Group, 2022) (Appendix B) has assessed the potential for significant effects of the construction phase and operational phases of the proposed development on Natura 2000 sites and habitat loss/alteration, habitat/species fragmentation, disturbance and/or displacement of species, change in population density and changes in water quality. It has been objectively concluded by Moore Group Environmental Services that:

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

4.3 ABSORPTION CAPACITY OF THE NATURAL ENVIRONMENT

The proposed development due to its size and localised nature will not have any significant negative effect on wetlands, riparian areas, river mouths, coastal zones and the marine environment, mountain and forest areas, nature reserves and parks, or densely populated areas.

EPA maps (https://gis.epa.ie/EPAMaps/default) confirm that the development site is not located within or adjoining an Architectural or General Conservation Area; is not located within or adjoining a Native Woodland Trust; and is not covered by protected views, scenic routes or viewpoints.

5.0 TYPES AND CHARACTERISTICS OF POTENTIAL IMPACTS

This section sets out the likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2 (as set out in Sections 4 and 5 above), with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) of the definition of 'environmental impact assessment report' in Section 171A of the Act (as amended).

The quality, magnitude and duration of potential impacts are defined in accordance with the criteria provided in the *Guidelines on Information to be Contained in Environmental Impact Assessment Reports* (EPA 2022) this criteria is duplicated in Table 5.1.

Table 5.1 *Schedule of Impacts following EPA Guidelines*

Characteristic	Term	Description
Quality of Effects	Positive	A change which improves the quality of the environment
	Neutral	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
	Negative/Adverse	A change which reduces the quality of the environment
Describing the Significance of 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 Effects	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
	Moderate Effects	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends
	Significant Effects	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 most of a sensitive aspect of the environment.
	Profound Effects	An effect which obliterates sensitive characteristics
Describing the Extent and Context of Effects	Extent	Describe the size of the area, the number of sites, and the proportion of a population affected by an effect.
	Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions (is it the biggest, longest effect ever?)
Describing the Probability of Effects	Likely Effects	The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.
	Unlikely Effects	The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.
Describing the Duration and Frequency of Effects	Momentary Effects	Effects lasting from seconds to minutes
	Brief Effects	Effects lasting less than a day
	Temporary Effects	Effects lasting less than a year
	Short-term Effects	Effects lasting one to seven years.
	Medium-term Effects	Effects lasting seven to fifteen years
	Long-term Effects	Effects lasting fifteen to sixty years
	Permanent Effects	Effects lasting over sixty years
	Reversible Effects	Effects that can be undone, for example through remediation or restoration
	Frequency of Effects	Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)
Describing the Type of Effects	Indirect Effects (a.k.a secondary or Off-site effects)	Effects on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway.
	Cumulative Effects	The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.
	'Do Nothing Effects	The environment as it would be in the future should the subject project not be carried out
	`Worst case' Effects	The effects arising from a project in the case where mitigation measures substantially fail

	Indeterminable Effects	When the full consequences of a change in the environment cannot be described
	Irreversible Effects	When the character, distinctiveness, diversity, or reproductive capacity of an environment is permanently lost
	Residual Effects	The degree of environmental change that will occur after the proposed mitigation measures have taken effect
	Synergistic Effects	Where the resultant effect is of greater significance than the sum of its constituents (e.g. combination of Sox and Nox to produce smog)

5.1 POPULATION AND HUMAN HEALTH

5.1.1 Construction phase

The potential impacts of the proposed development on population human health and populations would be nuisances such as increased air pollution (dust), noise, traffic, and visual impact of the construction and demolition phases. The likely potential impact of the proposed development with respect to population and human health during the demolition and construction phase can be considered to be ***negative, not significant*** and ***temporary.***

These potential short-term impacts during the construction will be mitigated in accordance with the CEMP, and through implementation of binding hours of construction.

There is no significant risk of pollution of soil, groundwater or watercourses associated with the proposed development. The demolition and construction phase of the proposed development will provide for the temporary employment of construction workers which will provide benefits for local businesses providing retail or other services to construction workers and potential additional employment in the area.

The construction contractor will develop a CEMP that will implement the mitigation measures set out in this report; in the form of requirements and standards in relation to construction noise, traffic, and dust generation that must be met during the construction phase. All mitigation measures outlined therein will be implemented The development will be undertaken in accordance with current European and British industrial standards, with all mitigation and safety measures put in place to ensure a responsibly managed construction process.

The residual impact of the proposed development with respect to population human health during the demolition and construction phase after the implementation of mitigation measures set out in this report, is ***negative***, ***not significant***, and ***temporary***.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of population and human health impacts during the demolition and construction phase. Therefore, a requirement for subthreshold EIA does not arise.

5.1.2 Operational Phase

The proposed development will not result in any off-site exceedance of the relevant ambient air quality standards, see Section 5.5 for further detail. The proposed development is not a noise sensitive use.

There are no planned direct discharges to water or land, although the risk of accidental discharge or spills exists. Design measures are proposed to prevent the contamination of groundwater during the operational phase as described in Section 5.2.

The design of the proposed development has due regard of the sensitivity of the surroundings, and is not likely to adversely impact on local populations. Landscape and Visual impacts are discussed further in Section 5.6.

The residual impact of the proposed development with respect to populations and human health during the operational phase is ***positive***, ***not significant*** and ***short-term***.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of population and human health impacts during the operational phase. Therefore, a requirement for subthreshold EIA does not arise.

5.2 LAND, SOILS, GEOLOGY, HYDROGEOLOGY, HYDROLOGY

Causeway Geotechnical undertook a ground investigation at the location of the proposed development between the 21st and the 23rd of November 2022.

As part of the investigation, select samples were tested for Waste Acceptance Criteria (WAC) suite to assess the potential categorisation of waste from the site. From the samples tested for WAC analysis, results show the material from the site may potentially be classified as inert/non-hazardous. Any material excavated for off-site disposal would have to be classified under the guidance in the National Hazardous Waste Management Plan (EPA, 2014)

5.2.1 Construction phase

Potential for increased sediment and runoff from excavation, soil handling, removal and compaction

Land clearing, earthworks and excavations will be required construction phase operations to facilitate site clearance, construction of new buildings, foundations and installation of services. This will include site levelling, construction, and building foundation excavation, and will necessitate the removal of vegetation cover and the excavation of soil and subsoils.

The gradual introduction of impermeable surfaces and the compaction of soils across the construction site will reduce the infiltration capacity and increase the rate and volume of direct surface run-off. The potential impact of this is a possible increase in surface water run-off and sediment loading, which could potentially impact local drainage if not adequately mitigated.

The construction contractor will put in place a treatment system to to ensure adequate silt removal prior to discharging to the foul drainage system subject to approval from LCC / Irish Water.

Movement of material will be minimised to reduce the degradation of soil structure and generation of dust. Excavations will remain open for as little time as possible before the placement of fill. This will help to minimise the potential for water ingress into

excavations. Soil from works will be stored away from existing drainage features to avoid any potential impact.

The site preparation, excavations and levelling works required to facilitate construction of foundations, access roads and the installation of services will require excavation of soil, stones, made ground and bedrock (if encountered). Excavated soil will arise during the construction period and will be stored (if required) on site prior to being removed by a specialist contractor. Any material, which is exported from site, if not correctly managed or handled, could impact negatively on human beings (onsite and offsite) as well as water and soil environments.

All excavated materials will be visually assessed for signs of possible contamination such as staining or strong odours. Should any unusual staining or odour be noticed, samples of this soil will be analysed for the presence of possible contaminants in order to ensure that historical pollution of the soil has not occurred. Should it be determined that any of the soil excavated is contaminated, this will be disposed of by a licensed waste disposal contractor.

Stockpiles of soil and construction aggregate can have the potential to cause negative impacts on air and water quality. The effects of soil stripping and stockpiling will be mitigated against through the implementation of appropriate earthworks handling protocol during construction.

In respect of the foregoing, the residual impact as a result of the potential for increased sediment and runoff from excavation works on, land, soils, geology, hydrogeology, and hydrology during construction phase is considered to be ***negative, imperceptible*** and ***temporary***.

Potential for contamination from Accidental Spills and Leaks

There is potential for water (rainfall and/or discontinuous perched groundwater) to become contaminated with pollutants associated with construction activity. Contaminated water which arises from construction sites can pose a significant short-term risk to water quality for the duration of the construction if contaminated water is allowed percolate to the aquifer or accidental discharges into surface water.

Machinery activities on site during the construction phase may result in run off of contaminated waters into surface water networks or ground water. Potential impacts could arise from accidental spillage of fuels, oils, paints, cement, etc. which could impact surface water if allowed to runoff into surface water systems and/or receiving watercourses or groundwaters.

The potential impacts during the construction phase are required to be mitigated by ensuring best practice construction with respect to storage of any hazardous substances (fuels, chemicals and other construction materials that may pose a risk to the environment).

In respect of the foregoing, the residual impact in respect of the potential for impacts related to contamination from accidental spills on, soils, geology, hydrogeology, and hydrology during construction phase is considered to be ***negative, imperceptible*** and ***temporary.***

Dewatering, Run-off and Sediment Loading

There is the potential for contaminated surface water run-off from site preparation, levelling, landscape contouring and excavations during the construction phase may contain increased silt levels or become polluted from construction activities. Silt water can arise from excavations, exposed ground, stockpiles, and access roads.

Construction water containing large amounts of silt or other contaminants such as hydrocarbons has the potential to cause negative, and short-term impacts receiving surface water bodies, or surface water networks, if not adequately mitigated.

A Construction Surface Water Management Plan (SWMP) will be prepared by the construction contractor. This SWMP will ensure that management of surface water during construction does not lead to contamination as a result of construction activities including as a result of:

- Suspended solids: arising from ground disturbance and excavation;
- Hydrocarbons: accidental spillage from construction plant and storage depots;
- Faecal Coliforms: contamination from coliforms can arise if there is inadequate containment and treatment of onsite toilet and washing facilities; and
- Concrete /cementitious products: arising from construction materials.

Where dewatering is required during the construction phase, dirty water will be fully and appropriately attenuated being appropriately discharged. No silty or contaminated water from the construction works will be discharged to any stormwater network or to the Knockheel Stream.

During the construction phase there will be an indirect source pathway linkage between the proposed development and the River Barrow and River Nore SAC via discharge to the Knockheel Stream which flows for 1.16 km to the Erkina River which ultimately flows towards the River Barrow and River Nore SAC c. 6.66 km total downstream to the east.

In line with good practice, appropriate and effective mitigation measures will be included in the construction design, management of construction programme and during the operational phase of the proposed development. With regard the construction phase, adequate mitigation measures are incorporated in the CEMP. these specific measures will provide protection to the receiving soil and water environments.

Considering the extent of loading of contaminant, distance between the source and River Barrow and River Nore SAC is c. 6.66 km downstream and the significant dilution in the Knockheel Stream and the Erkina River will ensure any released contaminants are at background levels (i.e., with no likely impact above water quality objectives as outlined in S.I. No. 272 of 2009, S.I. No. 386 of 2015 and S.I. No. 77 of 2019)..In respect of the foregoing, the residual impact in respect of the potential for impacts related to dewatering on, soils, geology, hydrogeology, and hydrology during construction phase is considered to be ***negative, imperceptible*** and ***temporary.***

Foul Water During Construction

Welfare facilities will be provided for the contractors on site during the construction works. During construction, portable sanitary facilities will be provided with waste collected and disposed of appropriately. There are no predicted adverse impacts on wastewater during construction.

No silty or contaminated water from the construction works will be discharged to any stormwater network but should any discharge of contaminated construction water be required during the construction phase; the discharge will be to foul sewer following agreement with LCC / Irish Water.

With due consideration to the characteristics of the proposed development and the Site location, there are no likely potential significant impacts of the proposed development in relation to foul water during construction, under the environmental factor of land, soils, geology, hydrogeology, and hydrology.

Conclusions

Having regard to the foregoing, there is no real likelihood of significant effects on the environment arising from the proposed development in respect of land, soils, geology, hydrogeology and hydrology impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.2.2 Operational Phase

Storm Wastewater Discharges

The design of the stormwater drainage network for the proposed development has taken cognisance of the guidelines and requirements set out by the Laois County Council Drainage Division, which requires all new developments to incorporate the principles of SuDS. The proposed SuDS method of water disposal at the Site will ensure that no negative impacts to stormwater leaving the Site will arise due to the attenuation measures planned, with the proposal improving the water environment at the location.

The surface water runoff from the footpaths will drain through planted swales (wet) located within verges adjacent to roads and car parking bays. Planted Swales are broad, shallow drainage channels covered in grass which can treat, convey and attenuate runoff, at source, and can infiltrate to the ground where the subgrade is suitable. Swales also can promote biodiversity. These are located adjacent to footpaths and car parking bays.

The implementation of the SuDS are best practice stormwater management system are and not relied upon for the protection of downstream European sites.

The surface water from the Site will ultimately discharge to the land drain to the east of the site via proposed SuDS measures. The residual impact on land, soils, geology, hydrogeology, and hydrology during operation is considered to be ***neutral, imperceptible*** and ***short-term.***

Foul Wastewater Discharges

Foul wastewater from the proposed development will be of domestic origin and will connect to mains supplies that will be treated off-site at Rathdowney (D0288-01) Wastewater Treatment Plant (WWTP). DBFL Consulting Engineers have calculated that the average wastewater discharge from the proposed development will be 17.8 m^3/day.

There is an indirect hydrological connection to the River Barrow and River Nore SAC via the foul sewer which will eventually outflow to the Rathdowney WWTP and

ultimately discharges to Rathdowney Stream which flows into the Erkina River to the River Barrow and River Nore SAC.

The proposed development design includes an appropriately designed stormwater network that will ensure that during the operational phase the risk from diesel spills through the carparks or unloading areas is minimised.

Consultation has taken place with IW to confirm capacity, and Irish Water have confirmed the Rathdowney WWTP has capacity to deal with the additional demand. Reference to the 2019 Annual Environmental Report shows that it has a peak hydraulic capacity of 2,358 m³/day and the current hydraulic loading annual max is 1,915 m³/day. The average hydraulic loading to the Treatment Plant 643 m³/day.

The residual impact on land, soils, geology, hydrogeology, and hydrology during operation is considered to be ***neutral, imperceptible*** and ***short-term.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of land, soils, geology, hydrogeology, and hydrology during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.3 BIODIVERSITY

5.3.1 Construction phase

The potential impact from the proposed development on biodiversity with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive has been considered as a part of the Appropriate Assessment (AA) Screening Report that have been prepared by Moore Group and included as Appendix B.

The measures associated with the construction phase required to avoid or reduce any potential harmful effects on biodiversity are set out below These measures are not included as mitigation to protect European Sites.

- The Site manager shall ensure that all personnel working on-site are trained and aware of the mitigation measures detailed below;,
- If protected or notable species are encountered during operations at the Site the EcoW or NPWS will be contacted for advice.
- If protected or notable species are encountered during operations at the Site the EcoW or NPWS will be contacted for advice.
- Trees that are to be retained, both within and adjacent to the proposed development boundary (where the root protection area of the tree extends into the proposed development boundary), will be fenced off at the outset of works and for the duration of construction to avoid structural damage to the trunk, branches or root systems of the trees. Temporary fencing will be erected at a sufficient distance from the tree so as to enclose the Root Protection Area (RPA) of the tree. The RPA will be defined based upon the recommendation of a qualified arborist.
- Where fencing is not feasible due to insufficient space, protection for the tree/hedgerow will be afforded by wrapping hessian sacking (or suitable equivalent) around the trunk of the tree and strapping stout buffer timbers around it
- The area within the RPA will not be used for vehicle parking or the storage of materials (including soils, oils and chemicals). The storage of hazardous

materials (e.g. hydrocarbons) or concrete washout areas will not be undertaken within 10 m of any retained trees, hedgerows and treelines.
- Ideally and where feasible, vegetation (e.g., hedgerows, trees, scrub and grassland) will not be removed, between the 1st March and the 31st August, to avoid direct impacts on nesting birds. Where the construction programme does not allow this seasonal restriction to be observed, then these areas will be inspected by a suitably qualified ecologist for the presence of breeding birds prior to clearance. Areas found not to contain nests may be cleared within 3 days of the nest survey, otherwise repeat surveys will be required.

As described in Section 5.2.1 above while an indirect hydrological connection exists due to operation distances and dilution effects of the c. 6.66 km downstream distance, here are no pollutant linkages which could result in a water quality impact which could alter the habitat requirements of the River Barrow and River Nore SAC 6.66km downstream to the east.

Based on the foregoing, and with regard to the evidence set out within AA Screening Report, the potential effects on local biodiversity and ecology are **neutral**, **imperceptible**, and **temporary** for the construction phase.

5.3.2 Operational Phase

The proposed development will result in small areas of habitat loss within the proposed development boundary. Considering the relatively small areas of habitat lost and the proposed retention of trees and proposed rear garden spaces, this will not be significant at any geographic scale.

The relevant mitigation measures which will be incorporated and adhered to during the operational phase of the proposed development include:

- Any light spill affecting habitats outside of the proposed development boundary will be minimised as far as is practically possible. Public lighting design in circulation and car parking areas will be designed in accordance with EN13201-2 and Local Authority requirements. Light overspill will be minimised using appropriate siting, column height and choice of luminaires.
- The landscape design will ensure that the biodiversity value of the habitats to be retained and created as part of the proposed development are maximised in order to compensate for any habitat loss.

As described in Section 5.2.2 above while an indirect hydrological connection exists that there are no pollutant linkages which could result in a water quality impact which could alter the habitat requirements of the River Barrow and River Nore SAC 6.66km downstream to the east.

Based on the above and with regard to the evidence set out within the AA Screening Report, the potential effects on local biodiversity and ecology are **neutral**, **slight**, and **short-term** for the operational phase.

5.4 AIR QUALITY AND CLIMATE

5.4.1 Construction phase

Construction stage traffic is expected to be the dominant source of greenhouse gas emissions because of the construction phase of the development. Construction

vehicles, generators etc., may give rise to some CO_2 and N_2O emissions. However, due to short-term nature of these works, the impact on climate will be ***not significant***, and ***temporary***.

Nevertheless, some site-specific mitigation measures will be implemented during the construction phase of the proposed development to ensure emissions are reduced further. In particular the prevention of on-site or delivery vehicles from leaving engines idling, even over short periods. Minimising waste of materials due to poor timing or over ordering on site will aid to minimise the embodied carbon footprint of the Site.

The greatest potential impact on air quality during the construction phase of the proposed development is from construction dust emissions and the potential for nuisance dust and PM10/PM2.5 emissions. While construction dust tends to be deposited within 350 m of a construction site, the majority of the deposition occurs within the first 50 m based on Transport Infrastructure Ireland (TII) guidance (2011).

The scheme has limited potential for dust impacts during construction due to the separation distance between the Site and the nearest sensitive receptors. The key sensitive receptor are the residences located along Kilcoran Road on the eastern boundary of the site. Therefore, during construction, there is limited potential for dust impacts on these sensitive receptors which would be considered in the absence of mitigation ***negative, moderate*** and ***temporary.***

In summary the measures which will be implemented will include:

- A speed restriction of 20 km/hr shall be applied as an effective control measure for dust for on-site vehicles using unpaved haul roads.
- Construction access to the Site will be directly from the KIlcoran Road to the west of the Site.
- Bowsers or suitable watering equipment will be available during periods of dry weather throughout the construction period.
- Hard surface roads will be swept to remove mud and aggregate materials from their surface while any un-surfaced roads will be restricted to essential site traffic.
- Any road that has the potential to give rise to fugitive dust must be regularly watered, as appropriate, during dry and/or windy conditions.
- During periods of very high winds (gales), construction activities likely to generate significant dust emissions should be postponed until the gale has subsided.
- Overburden material will be protected from exposure to wind by storing the material in sheltered regions of the Site. Where possible storage piles should be located downwind of sensitive receptors
- Where feasible, hoarding will be erected around site boundaries. This will have the benefit of reducing the impact of larger particles on nearby sensitive receptors.
- Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays will be used as required if particularly dusty activities such as rock blasting or earthworks are necessary during dry or windy periods.
- Vehicles exiting the Site will be adequately inspected and will make use of a wheel wash facility where appropriate, prior to entering onto public roads.
- Vehicles delivering or collecting material with potential for dust emissions shall be enclosed or covered with tarpaulin at all times when practicable to restrict the escape of dust.

- Public roads outside the Site shall be regularly inspected for cleanliness, as a minimum on a daily basis, and cleaned as necessary.

At all times, these procedures will be strictly monitored and assessed. In the event of dust nuisance occurring outside the Site boundary, movements of materials likely to raise dust would be curtailed and satisfactory procedures implemented to rectify the problem before the resumption of construction operations.

During construction, the proposed development will give rise to dust in the short term. Mitigation measures proposed in the accompanying CEMP will ensure dust suppression techniques so as to remain within acceptable levels. These include road sweeping, wheel washing and covered vehicles.

The residual effects on air quality and climate will be ***negative, slight,*** and ***temporary*** during the construction phase***.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of air quality impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.4.2 Operational Phase

In relation to the operational phase of the proposed development, the proposed development will not result in any significant emissions of air quality pollutants or greenhouse gases once operational. Therefore, the potential impact to air quality from the operational phase of the proposed development is expected to be insignificant. Therefore, no site specific mitigation measures are required.

Current EPA guidance states that a development may have an influence on global climate where it represents “a significant proportion of the national contribution to greenhouse gases” (EPA, 2003). The “*Guidelines On The Information To Be Contained In Environmental Impact Assessment Reports*” (EPA 2022) states that impacts relevant to adaptation to climate change should be assessed and that projects should be assessed in terms of their vulnerability to climate change Therefore, the impact to climate from the operational phase of the proposed Project is expected to be imperceptible in terms of national CO_2 emissions and Ireland’s agreed limit under the Kyoto Protocol (Framework Convention on Climate Change, 1997, 1999) and the EU Effort Sharing Agreement (“20-20-20” Targets). The proposed Project will not result in any impacts relevant to adaptation therefore the project will not be vulnerable to climate change.

On the basis of the above the potential effects on Air Quality are ***neutral***, ***imperceptible,*** and ***short-term*** for the operational phase. Therefore, the residual impact of the proposed project on ambient air quality is deemed to be ***imperceptible***.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of air quality impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.5 NOISE AND VIBRATION

5.5.1 Construction phase

During construction phase it is expected that there will be some temporary impact on the nearest residential nearest residential receptors, such as residences on KIlcoran Road to the north of the site, due to noise emissions from the plant equipment required for construction.

The magnitude of noise generated will be dependent on a number of factors including the proximity of noise sensitive receptors, construction methods employed, the selection of plant and the construction programming. A variety of items of construction methods and plant items will be required during the various phases of the construction project. Noise will be generated primarily from the onsite construction activity however noise can be generated during haulage of construction and waste materials to and from site.

There is no published statutory Irish guidance relating to the maximum permissible noise level that may be generated during the construction phase of a project.

The application of avoidance measures, such as binding hours of construction, along with implementation of appropriate noise and vibration control measures, will ensure that noise and vibration impact will not be excessively intrusive. Any impacts will be short term in duration for the construction phase. The CEMP prepared by the construction contractor will include minimisation measures to ensure nuisance noise arising from, site clearance and construction activities is prevented where possible and managed in accordance with best practice..

The relevant measures include the following that will be adhered to, and set out in the contractors CEMP:

- No plant used on site will be permitted to cause an ongoing public nuisance due to noise.
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of the contract.
- All site access roads will be kept even to mitigate the potential for noise and vibration from lorries.
- Compressors will be attenuated models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use and all ancillary pneumatic tools shall be fitted with suitable silencers.
- Machinery that is used intermittently will be shut down or throttled back to a minimum during periods when not in use.
- Noise and vibration during the construction phase will be controlled with reference to the best practice control measures within BS 5228 (2009 +A1 2014) Code of Practice for Noise and Vibration Control on Construction and Open Sites Parts 1 and 2. The contractor will ensure that all best practice noise and vibration control methods will be used as necessary in order to ensure impacts to nearby residential noise sensitive locations are not significant. This will be particularly important during site preparation works and piling works.
- Limiting the hours during which site activities which are likely to create high levels of noise or vibration are permitted.
- Monitoring levels of noise and vibration during critical periods and at sensitive locations.

- Establishing channels of communication between the contractor/ developer, LCC and residents so that receptors are aware of the likely duration of activities likely to generate higher noise or vibration.
- The Contractor appointing a Site Environmental Manager (SEM) responsible for matters relating to noise and vibration.

Noise and vibration effects on the environment following the implementation of standard construction mitigation measures, the residual impact can be characterised as ***negative***, ***slight to moderate,*** and ***temporary*** for the construction phase.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of noise and vibration impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.5.2 Operational Phase

The operation of the proposed development will remain consistent with the residential area and activity of the surrounding area.

The proposed development will give rise to additional road traffic on public roads; this additional traffic from residential developments can give rise to ***slight to moderate*** impacts in respect of noise to residential receptors.

There is no likelihood of potential significant effects, and therefore no mitigation measures are proposed during the operational phase for noise and vibration. The residual effects on noise and vibration are considered to be ***neutral***, ***imperceptible***, and ***short term*** for the operational phase.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of noise and vibration impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.6 LANDSCAPE AND VISUAL IMPACT

5.6.1 Construction phase

The change of use of the Site from its existing use to that of a construction site will give rise to short term and substantially localised effects on landscape character. The initial construction operations created by the clearance of the Site and the construction of the modular buildings will give rise to short-term impacts on the landscape character, through the introduction of new structures, machinery, ancillary works etc. There will also be a change to the landscape character as a result of a land-use change.

It is likely that construction equipment will be visible from the Site during construction. This will have a temporary slight negative impact.

The residual impact on landscape and visual impact during demolition and construction will be ***neutral to negative, moderate,*** and ***temporary***.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of landscape and visual impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.6.2 Operational Phase

The proposed development is temporary and will not give rise to any long-term significant townscape or visual impacts resulting from the proposed development.

The proposed development would result in a positive contribution to the townscape character and urban fabric of Rathdowney Town and the wider area.

Semi-mature specimen tree planting is proposed in open green spaces and road verges: Acer, Rowan and Hawthorn. Native woodland sapling planted buffer zones will supplement existing hedgerow boundaries. Topsoil from site works will be reused on site to create soft landscaped berms / mounding. Native beech hedging and screening is also proposed.

The existing boundaries of hedges will be left undisturbed where possible and supplemented with native woodland saplings. The existing stone wall boundary along the main road is to be opened up to create pedestrian and vehicular access.

In this regard, the significance of impacts from the development is predicted to be ***moderate,*** and ***short-term and reversable effect.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of landscape and visual impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.7 CULTURAL HERITAGE AND ARCHAEOLOGY

5.7.1 Construction phase

The Archaeological, Architectural and Cultural Heritage Preliminary Appraisal prepared by CRDS (2022) (Appendix C to this Report), has outlined a number of recommendations to mitigate the impact of the proposed development on any underlying archaeological layers.

The proposed development will include the excavation of topsoil from the site for the digging of pad foundations and services, up to a depth of c. 1m. As the site has been developed in the past and the risk of sub-surface archaeological remains surviving is very low, no archaeological or architectural heritage mitigation is required for this development. The residual impact on cultural heritage and archaeological are considered to be ***neutral, imperceptible*** and ***permanent.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of cultural heritage and archaeology during the construction phase. The residual effect is not significant, and therefore a requirement for sub-threshold EIA does not arise.

5.7.2 Operational Phase

The operational phase of the proposed development is not predicted to have any impact on archaeological, architectural and cultural heritage.

In this regard any impacts upon cultural heritage and archaeological are considered to be ***neutral, imperceptible*** and ***short-term*** in nature.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of cultural heritage and archaeology impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.8 MATERIAL ASSETS

5.8.1 Construction phase

Utilities: Foul Sewer, Stormwater and Potable Water

The proposed development will have an impact upon other material assets and 'built services and infrastructure' (set out in the EPA Guidelines 2022) such as electricity, telecommunications and water supply.

Welfare facilities (canteens, toilets etc.) will be available within the construction compound and this will remain in place for the construction of the proposed development. The offices and site amenities will initially need to have their own power supply (generator), water deliveries and foul water collection until connections are made to the mains networks.

Electrical connections will be made by suitably qualified personnel following consultation with the relevant authorities and will be cognisant of subsequent construction works. High voltage connections will be established for heavy duty equipment and site facilities, as required. All electrical works, including connection to the ESB network will be carried out by a suitably qualified contractor. The power and electrical supply requirements during construction phase are relatively minor, and there is no potential impact anticipated on existing users.

Water supply required for welfare facilities, dust suppression and general construction activities will be sourced from the existing public piped supplies running into the Site. Although before connections are established to the water supply it may need to be trucked onto site. As with electrical works, this will be carried out by a suitably qualified contractor. It will be necessary to service the Site with a reliable and safe water supply.

Site welfare facilities will be established to provide sanitary facilities for construction workers on site. The main contractor will ensure that sufficient facilities are available at all times to accommodate the number of employees on site. Foul water from the offices and welfare facilities on the Site will be self-contained and foul water collected by a licensed waste sewerage contractor.

Irish Water network upgrades are required to establish connection for the foul sewer. These work will be located within the public domain, within the bed of Kilcoran Road. The works will include the installation of 22 m of foul sewer. Potable water connection to the existing water supply on Kilcoran Road will be utilised.

In respect of the foregoing, the predicted impacts upon foul sewer, stormwater and potable water are considered to be ***neutral, imperceptible*** and ***temporary***.

Traffic and Transportation

During the construction phase of the proposed development, there will be additional traffic movements to/from the Site from construction personnel, security staff, professional staff (i.e. design team, utility companies), excavation plant, dumper trucks and deliveries/removal of materials (waste/spoil).

The frequency of vehicles accessing the Site will vary throughout the construction phase. A site-specific Construction Traffic Management Plan will be prepared by the contractor..

Following the implementation of a Construction Traffic Management Plan the potential impacts on Traffic and Transportation are ***negative*****,** ***moderate*****,** and ***short term*** for the construction phase.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of traffic and transportation impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

Waste and Waste Management

There will be some waste materials produced in the construction of the proposed scheme which will be disposed of using licensed waste disposal facilities and contractors. The scale of the waste production in conjunction with the use of licensed waste disposal facilities and contractors does not cause concern for likely significant effects on the environment.

The construction contractor will prepare a Construction and Demolition Waste Management Plan also known as a Resource Waste Management Plan (RWMP) in accordance with EPA guidance this will detail the methodologies employed for the control, management, monitoring and disposal of waste from the Site. The RWMP will be prepared in line with the *'Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects'* published by the EPA in 2021.

Other than waste generated from materials necessary for the construction of the building the proposed development will not produce significant volumes of waste.

All waste arising during the construction phase will be managed and disposed of in a way that ensures the provisions of the Waste Management Act 1996 as amended and associated amendments and regulations and the Waste Management Plan. In the event, there is excess material with no defined purpose, it will be transported to an authorised soil recovery site or notified to the EPA as a by-product when it will be beneficially used.

It is considered that the proposed development will not have any significant impact in terms of resources or waste generation.

A carefully planned approach to waste management will ensure that the impact on the environment will be ***neutral***, ***imperceptible,*** *and* ***temporary.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of material assets impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.8.2 Operational Phase

Utilities: Foul Sewer, Stormwater and Potable Water

The proposed development will have an impact upon other material assets such as 'built services and infrastructure' (set out in the EPA Guidelines 2022) such as electricity, telecommunications, gas and water supply.

The proposal will have an impact on servicing and utilities infrastructure in the area, requiring connections to water and electricity, as well as connecting to the existing road network.

Foul water, and potable water connections to existing mains will be utilised. Connections will comply with Local Authority and Irish Water's requirements, specification and standard required to withstand any surcharging effect to the internal network. Consultation has taken place with Irish Water, and ESB and they have confirmed that there is capacity within their respective networks to facilitate the proposed development. Surface water will be managed on site (subject to detailed design and site investigations) through use of SuDS.

In respect of the foregoing, the predicted impacts upon foul sewer, stormwater and potable water are considered to be ***neutral, imperceptible*** and ***short-term***.

Traffic and Transportation

The site is within proximity to public transport networks, including frequent bus services. The application site also has good connectivity to the local and strategic road network. The subject site is easily accessible to pedestrians who benefit from a comprehensive range of retail / business / leisure and educational facilities within Rathdowney Town centre a convenient walk / cycle distance.

On the basis of the above the potential effects on Traffic and Transportation are ***neutral***, ***imperceptible***, and ***short term*** for the operational phase.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of traffic and transport impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

Waste and Waste Management

The proposed development will give rise to a variety of waste streams during the operational phase, i.e., when the project is completed, and fully operational. The majority of waste will be generated from packaging for equipment deliveries to the facility which is likely to be at its peak in the early months of operation.

During the operational phase, a structured approach to waste management will promote resource efficiency and waste minimisation. Provided the mitigation measures are implemented and a high rate of waste prevention, reuse, recycling and recovery is achieved, the predicted impact of the operational phase on the environment will be ***short-term, neutral*** and ***imperceptible***.

5.9 ASSESSMENT OF POTENTIAL IMPACTS FROM INTERACTIONS

This section discusses the potential interactions and inter-relationships between the environmental factors discussed in the preceding sections. This section covers both the construction phase and operational phases of the proposed development.

In accordance with the guidance not only are the individual significant impacts required to be considered when assessing the impact of a development on the environment, but so must the interrelationships between these factors be identified and assessed.

The majority of the interactions that are considered to have a neutral effect (i.e., no effects or effects that are imperceptible, within the normal bounds of variation or within the margin of forecasting error).

The interaction of the foregoing impacts, described above, would not give rise to any significant negative impacts on the environment. The principal cumulative effect with other existing or approved development will be during the construction phase.

There is a potential interaction between land, soil geology, hydrogeology and hydrology through poorly managed surface water run-off during the construction phase of the proposed development. There is a potential for the construction activity in terms of air quality and of dust generated to impact on human health and biodiversity. There is a potential impact of noise and vibration on human health.

However, these potential interactions are short-term and associated with the construction phase. The CEMP will outline mitigations measures to ensure that pollution and nuisances arising from site clearance and construction activities is prevented where possible and managed in accordance with best practice and any subsequent planning conditions relevant to the proposed development.

It is considered that there will be no likely significant interactions which would warrant preparation of an EIAR.

5.10 ASSESSMENT OF POTENTIAL FOR CUMULATIVE IMPACTS

As part of the assessment of the proposed development, the likelihood of potential cumulative impact of the proposed development has been considered with any future development (as far as practically possible) and the cumulative impacts with developments in the locality (including planned and permitted developments).

As outlined in Section 3.2, above, a list of notable consented developments located in close proximity to the development site is included in Appendix A of this report.

Cumulative impacts are those impacts that relate to incremental / additive impacts of the planned development in addition to historical, present or foreseeable future actions. Cumulative impacts can be thought of as occurring through two main pathways: first, through persistent additions or losses of the same materials or resource, and second, through the compounding effects because of the coming together of two or more effects.

Mitigation is included in the project design to minimise impacts on the receiving environment. Each project currently permitted in the wider area is subject to planning conditions which include appropriate mitigation measures to minimise environmental impacts. Provided that mitigation measures for other developments are implemented as permitted, there will be no significant cumulative effects.

Any future development will be required to incorporate appropriate mitigation measures (e.g., noise management, dust management, traffic management, management of water quality in run-off water, landscape, etc) during the construction phase as such any cumulative development will not have a significant effect on human health, material assets, land, soils, geology, hydrogeology, and hydrology.

Any future development proposed on the surrounding lands should be cognisant with the zoning and will be subject to EIA and/or planning conditions which include appropriate mitigation measures to minimise environmental impacts.

Based on the assessment of the environmental sensitivities in the existing environment and consideration of potential cumulative impacts, it is concluded that there are no likely cumulative environmental impacts which would warrant preparation of an EIAR.

6.0 FINDINGS AND CONCLUSIONS

On the basis of the evaluation set out in Section 2.0 an EIA for the proposed Project is not mandatory. The proposed project is considered to be a sub-threshold development and therefore it is required to assess whether the proposed development is likely to have significant effects on the environment in order to determine whether the submission of an EIAR is required. The information necessary to enable this screening assessment has been provided in this report and the methodology used has been informed by the available guidance, legislation and directives.

It is concluded having regard to the nature, scale and location of the subject site, there is no real likelihood of significant effects on the environment arising from the proposed development on the environment (direct, indirect or cumulatively with other development) and therefore it is considered that the requirement for sub-threshold EIA does not arise.

The EIA Screening prepared by AWN Consulting has been reviewed and based on the information provided in this report the OPW, as the competent authority, have determined that EIA is not required for the Proposed Development.

7.0 REFERENCES

European Union. Environmental Impact Assessment of Projects Guidance on Screening. EU Luxembourg: 2017.

European Union. Guidance on the preparation of the Environmental Impact Assessment Report. EU Luxembourg: 2017.

Department of Housing, Planning and Local Government. Guidelines for Planning Authorities and An Bord Pleanala on carrying out Environmental Impact Assessment. DHPLG: 2018.

Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report, European Commission, 2017 http://ec.europa.eu/environment/eia/eia-support.htm

Environmental Impact Assessment Screening, OPR Practice Note PN02 (Office of the Planning Regulator, 2021).

Environmental Protection Agency. Guidelines on the Information to be contained in Environmental Impact Assessment Reports. EPA 2022.

Report for the purposes of Appropriate Assessment Screening, OPW Rathdowney Modular Homes. Moore Group, 2022.

Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes. Transport Infrastructure Ireland (2011).

Appendix A - Relevant Permitted Development

Application details	Description	Decision & Date
Applicant: Dawn Meats Ireland UC **Reference:** 22673 **Location:** Rathdowney Townland, Rathdowney, Co. Laois	Develop as follows: A ten-year planning permission for a solar energy development comprising photovoltaic solar panels on mounting frames; transformer unit; underground electrical and communications cabling; access tracks; security fencing; pole-mounted security cameras; and all associated and ancillary site development, landscaping and reinstatement works. The operational lifetime of an activity requiring an Integrated Pollution Control Licence and an Industrial Emissions Licence.	**Decision:** Further Information Requested **Date:** 19/12/2022
Applicant: Hugh Finn **Reference:** 22678 **Location:** Conoboro Road, Rathdowney, Co. Laois, R32 X7P1	Construct new dormer style dwelling, domestic garage, access road, connection to public utilities and associated siteworks to include amending existing site boundaries.	**Decision:** Grant Permission **Date:** 16/12/2022
Applicant: Rathdowney Veterinary Clinic **Reference:** 22266 **Location:** Casade Street, Rathdowney, Co. Laois	Change of use of a domestic garage to a veterinary practice, including all associated works.	**Decision:** Grant Permission **Date:** 14/11/2022
Applicant: Liam Doherty **Reference:** 21671 **Location:** Rathdowney, Co. Laois	Construct extension to an existing dwelling, comprising of both two storey and single storey extensions to the rear and a single storey extension to the front, widen and set back existing entrance, new garage and all associated site works.	**Decision:** Grant Permission **Date:** 02/02/2022
Applicant: Thomas & Ann Creagh **Reference:** 21483 **Location:** Ballybuggy, Rathdowney, Co. Laois	Construct single storey extensions to dwellinghouse to include garage, carport, living / games room, bedroom, extension to kitchen / living room and all associated site works.	**Decision:** Grant Permission **Date:** 18/01/2022
Applicant: David Lynch **Reference:** 21656 **Location:** F Hill House, Conoboro Road, Rathdowney, Co. Laois, R32 C9V9	Extend and renovate existing dwelling house. Permission is also sought to convert existing coach house residence to part of existing main house, new connection to town sewerage, decommission septic tank and all associated site works.	**Decision:** Grant Permission **Date:** 18/01/2022
Applicant: Flodale Ltd **Reference:** 21673 **Location:** The Commercial Inn, Church Street, Rathdowney, Co. Laois	Develop as follows: 1) Retain the removal of the roof structure over the newly built courtyard and walls; 2) Retain the timber cladding to the rear and surrounding buildings; 3) Retain the additional floor space, 3 no. bedrooms at second floor level to the rear of the building; 4) Retain the additional floor space 3 no. bedrooms at first floor level to the rear of the building; 5) Retain the change of use of 2 no. stores to bedrooms to the rear of the building including first and second floor bedrooms as per 3 and 4 above; 6) Planning permission for the change of use from Public House, Restaurant, Night Club & Residential Accommodation, including accommodation for persons seeking Internal Protection, to Guest House including accommodation for persons seeking Internal Protection, either on a short-term or long-term basis, at ground floor level including first and second floor bedrooms which are subject to retention above, including all associated site and ancillary works at this address in accordance with the drawings as submitted.	**Decision:** Grant Permission **Date:** 20/12/2021
Applicant: Lisgorm Services Ltd **Reference:** 21614	Change condition number 1 of the grant permission number 20/282 for the child care facility.	**Decision:** Grant Permission

Application details	Description	Decision & Date
Location: Mooreville, Rathdowney, Co. Laois		**Date:** 29/11/2021
Applicant: Rathdowney Development Group **Reference:** 21513 **Location:** Parish Shrine, Main Street, Rathdowney, Co. Laois	Develop parish shrine site. Works include the enhancement of the green area behind the current carparking area, into a community park with paving, seating and a performance area. The development will also consist of the part removal of front boundary wall to allow for two new fully compliant accessible car park spaces, and the installation of new bollards to part of the front boundary and all ancillary site works.	**Decision:** Grant Permission **Date:** 12/10/2021
Applicant: Grainne Kavanagh **Reference:** 2131 **Location:** Johnstown Road, Rathdowney, Co. Laois	(A) Retain change of use from outbuildings to veterinary clinic with signage and (B) permit to construct proposed extension to veterinary clinic with signage and all associated site works.	**Decision:** Grant Permission **Date:** 20/07/2021
Applicant: Rory Maher & Helen Maher **Reference:** 21218 **Location:** Conoboro Road, Rathdowney, Co. Laois	To amend previously granted planning file no. 20/458. Amendments include changes to house plan and elevations and all associated site works.	**Decision:** Grant Permission **Date:** 28/06/2021
Applicant: James Ryan **Reference:** 20564 **Location:** Coolkerry, Rathdowney, Co. Laois	Construct a new dwelling house, septic tank system, percolation area and associated site works.	**Decision:** Grant Permission **Date:** 14/06/2021
Applicant: Lisgorm Services Ltd **Reference:** 2196 **Location:** Mooreville, Rathdowney, Co. Laois	Retain and complete alterations to child care facility which was previously granted planning with 20/282 comprising of increasing the area of porch to accommodate a lift shaft, closing one window on ground floor and one window on first floor, opening fire exit door on first floor for an external fire escape stairs, also altering one window opening on front façade and adding a Velux window in roof and all associated & necessary site works.	**Decision:** Grant Permission **Date:** 11/05/2021
Applicant: Rory & Helen Maher **Reference:** 20458 **Location:** Conoboro Road, Rathdowney, Co. Laois, R32 K5P6	Permission for A) new dwelling house, domestic garage, new site entrance and all associated site works, B) permission to demolish existing porch, amendments to elevation and alter site boundaries of existing dwelling house and associated site works, C) permission is also sought for a mobile home on site for the duration of construction.	**Decision:** Grant Permission **Date:** 03/02/2021
Applicant: Laois Offaly Education and Training Board **Reference:** 20501 **Location:** St Fergal's College, Church Street, Rathdowney, Co. Laois, R32 ED72	Construct a new sports hall, male and female changing rooms, toilet accommodation, store, social area, entrance lobby and canopy. Site works to include 6 no. new parking spaces, 2 no. new ball courts, relocating existing bl wall, re-routing of semi-public walkway and all ancillary site works at St Fergal's College.	**Decision:** Grant Permission **Date:** 21/12/2020
Applicant: Lisgorm Services Ltd **Reference:** 20282 **Location:** Mooreville, Rathdowney, Co. Laois	Change of use of existing house from residential to child care facility including a porch to the front façade, internal layout modifications, upgrade fenestration and securing boundaries around play area, additional and all ancillary & associated site works. Also planning permission for signage.	**Decision:** Grant Permission **Date:** 05/11/2020
Applicant: Padraig & Samantha Gill	Demolish existing garage and construct an extension to the side and rear of house, construct a single storey detached garage and retain a previously constructed extension to the rear of existing house.	**Decision:** Grant Permission

Application details	Description	Decision & Date
Reference: 20367 **Location:** 24 O'Daly Terrace, Rathdowney, Co. Laois		**Date:** 05/11/2020
Applicant: Christina & Margaret Kelly **Reference:** 20234 **Location:** Ballybuggy, Rathdowney, Co. Laois	Renovate and extend existing dwelling house consisting of single storey and two storey extensions to the rear of the house, also car port and attached garage and to alter existing fenestration and decommission existing septic tank and install a new proprietary wastewater treatment system and polishing filter, close existing site entrance and open new entrance and all associated and necessary site works. Also planning permission to demolish existing garage.	**Decision:** Grant Permission **Date:** 27/10/2020
Applicant: MK Flynns Pharmacy Ltd **Reference:** 20174 **Location:** 33 Chapel Street, Rathdowney, Co. Laois	Demolish the part two storey / part single storey former hotel structure to the rear of the street façade of the building and erect a new single storey pharmacy building to the rear of the street façade, a new shop front and associated site works.	**Decision:** Grant Permission **Date:** 13/08/2020
Applicant: Vento Ludens Ltd **Reference:** 18674 **Location:** Kilcoran, Rathdowney, Co. Laois	Construct and complete, for a period of 5 years, a Solar PV Energy development with a total site area of 67.6 hectares, to include two single storey, 38 kV electrical substation buildings & associated infrastructure within a compound, inverter station modules, spare parts container, solar PV panels ground mounted on support structures, internal access tracks, security fencing, electrical cabling and ducting, CCTV and other ancillary infrastructure, drainage, additional landscaping and habitat enhancement as required and associated site development works including vehicular access works.	**Decision:** Grant Permission **Date:** 06/01/2020
Applicant: Cignal Infrastructure Ltd **Reference:** 19413 **Location:** Rathdowney Hub, Glosha, Rathdowney, Co. Laois	Construct telecommunications infrastructure comprising of a 21 metre multi-operator lattice tower with antenna and dishes attached, associated equipment and cabinets, fencing and use of existing access.	**Decision:** Grant Permission **Date:** 04/12/2019
Applicant: M. Ryan **Reference:** 19308 **Location:** Rathdowney, Co. Laois	Construct a slatted cattle house and all ancillary works and services.	**Decision:** Grant Permission **Date:** 21/08/2019
Applicant: Kieran O'Sullivan – Clandonagh Craft Beers **Reference**: 18715 **Location**: Main St, Rathdowney, Co. Laois	Change the use of an existing animal feeds warehouse to craft brewery, internal alterations including provision of a self-contained brewing room and all associated site works.	**Decision**: Grant Permission **Date**: 11/06/2019
Applicant: Andrew & Ann Vernon **Reference:** 19111 **Location:** Johnstown Glebe, Rathdowney, Co. Laois	Change the plan of previously granted permission (planning Ref No. 16/470) to a dormer type dwelling with garage, entrance, septic tank and percolation area with all associated site works.	**Decision:** Grant Permission **Date:** 27/05/2019
Applicant: Jack Daly c/o Clover Utd. AFC **Reference:** 18487 **Location:** Knockheel, Rathdowney, Co. Laois	Construct a storage shed and all associated site works.	**Decision:** Grant Permission **Date:** 30/10/2018

Application details	Description	Decision & Date
Applicant: Pat & Pauline Gill **Reference**: 18189 **Location**: Harp Road, Rathdowney, Co. Laois	Demolish existing garage and construct an extension to the side of existing house.	**Decision**: Grant Permission **Date**: 29/08/2018
Applicant: Michael Cummins **Reference**: 18348 **Location**: Pound Street, Rathdowney, Co. Laois	Construct two storey extension to existing dwellinghouse, internal alterations and new window to south elevation of existing dwelling and all associated site works.	**Decision**: Grant Permission **Date**: 29/08/2018
Applicant: Brian Campion **Reference**: 17661 **Location**: Knockheel, Rathdowney, Co. Laois	Construct an external under covered slatted tank, feed barrier and ancillary feeding area and all associated site works.	**Decision**: Grant Permission **Date**: 05/03/2018
Applicant: Howard & Caroline Coburn **Reference**: 17283 **Location**: Main Street, Rathdowney, Co. Laois	Construct an extension to the rear of Flynn's Medical Hall , Main Street, Rathdowney, Co. Laois along with all ancillary services and associated site works. Please note that the proposed works are to a protected structure and also within the curtilage of a protected structure RPS292.	**Decision**: Grant Permission **Date**: 05/02/2018

APPENDIX B

APPROPRIATE ASSESSMENT SCREENING

PREPARED BY MOORE GROUP

Report for the purposes of Appropriate Assessment Screening

OPW Modular Homes, Rathdowney

Prepared by: Moore Group – Environmental Services

28 April 2023

On behalf of The Commissioners of Public Works in Ireland on behalf of the Department for Children, Equality, Disability, Integration and Youth

Project Proponent	Office of Public Works
Project	OPW Modular Homes Rathdowney
Title	Report for the purposes of Appropriate Assessment Screening OPW Modular Homes Rathdowney

Project Number	22161	**Document Ref**	22161 OPW Mod Homes Rathdowney AAS1 Rev2	
Revision	**Description**	**Author**		**Date**
Rev2	Amended Surface Water	G. O'Donohoe		28 April 2023
Moore Archaeological and Environmental Services Limited				

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Abbreviations

AA	Appropriate Assessment
EEC	European Economic Community
EPA	Environmental Protection Agency
EU	European Union
GIS	Geographical Information System
LAP	Local Area Plan
NHA	Natural Heritage Area
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Service
OSI	Ordnance Survey Ireland
pNHA	proposed Natural Heritage Area
SAC	Special Area of Conservation
SPA	Special Protection Area
SuDS	Sustainable Drainage System
WFD	Water Framework Directive

1. Introduction

1.1. General Introduction

This report for the purposes of Appropriate Assessment (AA) Screening contains information required for the competent authority to undertake screening for Appropriate Assessment (AA) in respect of the construction and operation of a development of modular homes at Rathdowney, Co. Laois (hereafter referred to as the Proposed Development) to determine whether it is likely individually or in combination with other plans and projects to have a significant effect on any European sites, in light of best scientific knowledge.

Having regard to the provisions of the Planning and Development Act 2000 – 2021 (the "Planning Acts") (section 177U), the purpose of a screening exercise under section 177U of the PDA 2000 is to assess, in view of best scientific knowledge, if the proposed development, individually or in combination with another plan or project is likely to have a significant effect on a European site.

If it cannot be *excluded* on the basis of objective information that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site then it is necessary to carry out a Stage 2 appropriate assessment under section 177V of the Planning Acts.

When screening the project, there are two possible outcomes:

- the project poses no potential for a likely significant effect and as such requires no further assessment; and
- the project has potential to have likely significant effect (or this is uncertain) unless mitigation measures are applied, and therefore an AA of the project is necessary.

This report has been prepared by Moore Group - Environmental Services to enable the competent authority to carry out AA screening in relation to the Proposed Development. The report was compiled by Ger O'Donohoe (B.Sc. Applied Aquatic Sciences (GMIT, 1993) & M.Sc. Environmental Sciences (TCD, 1999)) who has over 27 years' experience in environmental impact assessment and has completed numerous Appropriate Assessment Screening Reports and Natura Impact Statements on terrestrial and aquatic habitats for various development types.

1.2. Legislative Background - The Habitats and Birds Directives

Article 6(3) and 6(4) of the Habitats Directive is transposed into Irish Law inter alia by the Part XAB of the Planning Acts (in particular section 177U and 177V) which governs the requirement to carry out appropriate assessment screening and appropriate assessment, where required, per Section 1.1 above.

The Habitats Directive (Council Directive 92/43/EEC of 21 May 1992) on the conservation of natural habitats and of wild fauna and flora) is the main legislative instrument for the protection and conservation of biodiversity in the European Union (EU). Under the Habitats Directive, Member States are obliged to designate Special Areas of Conservation (SACs) which contain habitats or species considered important for protection and conservation in a EU context.

The Birds Directive (Council Directive 2009/147/EC) on the conservation of wild birds), transposed into Irish law by the Bird and Natural Habitats Regulations 2011 as amended, and the Wildlife Act 1976, as amended, is concerned with the long-term protection and management of all wild bird species and their habitats in the EU. Among other things, the Birds Directive requires that Special Protection Areas (SPAs) be established to protect migratory species and species which are rare, vulnerable, in danger of extinction, or otherwise require special attention.

SACs designated under the Habitats Directive and SPAs, designated under the Birds Directive, form a pan-European network of protected sites known as Natura 2000. The Habitats Directive sets out a unified system for the protection and management of SACs and SPAs. These sites are also referred to as European sites.

Articles 6(3) and 6(4) of the Habitats Directive set out the requirement for an assessment of proposed plans and projects likely to have a significant effect on Natura 2000 sites.

Article 6(3) establishes the requirement to screen all plans and projects and to carry out an appropriate assessment if required (Appropriate Assessment (AA)). Article 6(4) establishes requirements in cases of imperative reasons of overriding public interest:

> ***Article 6(3):*** *"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to an appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."*

2. Methodology

The Commission's methodological guidance (EC, 2002, 2018, 2021 see Section 2.1 below) promotes a four-stage process to complete the AA and outlines the issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

Stages 1 and 2 deal with the main requirements for assessment under Article 6(3). Stage 3 may be part of Article 6(3) or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step of Article 6(4).

Stage 1 Screening: This stage examines the likely effects of a project either alone or in combination with other projects upon a Natura 2000 site and considers whether it can be objectively concluded that these effects will not be significant. In order to screen out a project, it must be excluded, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site.

Stage 2 Appropriate Assessment: In this stage, there is a consideration of the impact of the project with a view to ascertain whether there will be any adverse effect on the integrity of the Natura 2000 site either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are predicted impacts, an assessment of the potential mitigation of those impacts is considered.

Stage 3 Assessment of Alternative Solutions: This stage examines alternative ways of implementing the project that, where possible, avoid any adverse impacts on the integrity of the Natura 2000 site.

Stage 4 Assessment where no alternative solutions exist and where adverse impacts remain: Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the sites will be necessary.

To ensure that the Proposed Development complies fully with the requirements of Article 6 of the Habitats Directive and all relevant Irish transposing legislation, Moore Group compiled this report to enable Laois County Council to carry out AA screening in relation to the Proposed Development to determine whether the Proposed Development, individually or in combination with another plan or project will have a significant effect on a Natura 2000 site.

2.1. Guidance

This report has been compiled in accordance with guidance contained in the following documents:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 rev.)(soon to be superseded by EC Guidance in prep.).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 & PSSP 2/10.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC, 2018).
- Guidance document on the strict protection of animal species of Community interest under the Habitats Directive (EC, 2021).
- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2021).

- Office of the Planning Regulator (OPR) Practice Note PN01 Appropriate Assessment Screening for Development Management (OPR, 2021).

2.2. Data Sources

Sources of information that were used to collect data on the Natura 2000 network of sites, and the environment within which they are located, are listed below:

- The following mapping and Geographical Information Systems (GIS) data sources, as required:
    - National Parks & Wildlife (NPWS) protected site boundary data;
    - Ordnance Survey of Ireland (OSI) mapping and aerial photography;
    - OSI/Environmental Protection Agency (EPA) rivers and streams, and catchments;
    - Open Street Maps;
    - Digital Elevation Model over Europe (EU-DEM);
    - Google Earth and Bing aerial photography 1995-2022;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie including:
    - Natura 2000 - Standard Data Form;
    - Conservation Objectives;
    - Site Synopses;
- National Biodiversity Data Centre records;
    - Online database of rare, threatened and protected species;
    - Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2019); and
- Relevant Development Plans;
    - Laois County Development Plan 2021-2027

3. Description of the Proposed Development

The Proposed Development will consist of 42 no. single storey semi-detached units; all units will be accessed by an entrance off the Kilcoran Road, to the southeast of Rathdowney. Each unit with have private rear garden spaces and semi-private front curtilage areas. Works will include pavements, public lighting, planting strips and verges, roads and car parking areas. The development will be connected to the existing wastewater treatment infrastructure.

A habitat survey was carried out by Moore Group on 8 December 2022. Areas which were highlighted during desktop assessment were investigated in closer detail according to the Heritage Council Best Practice Guidance

for Habitat Survey and Mapping (Smith *et al*., 2011). Habitats in the proposed development area were classified according to the Heritage Council publication "A Guide to Habitats in Ireland" (Fossitt, 2000). This publication sets out a standard scheme for identifying, describing and classifying wildlife habitats in Ireland. This form of classification uses codes to classify different habitats based on the plant species present. Species recorded in this report are given in both their Latin and English names. Latin names for plant species follow the nomenclature of "An Irish Flora" (Parnell & Curtis, 2012).

Signs of mammals such as badgers and otters were searched for while surveying the study area noting any sights, signs or any activity in the vicinity especially along adjacent boundaries.

Birds were surveyed using standard transect methodology and signs were recorded where encountered during the field walkover surveys.

The proposed development is situated within a field of improved agricultural grassland (GA1), supporting typical species such as Perennial Rye Grass (*Lolium perenne*), Nettle (*Urtica dioica*), Curled Dock (*Rumex crispus*) and Creeping Buttercup (*Ranunculus repens*). The southwestern boundary of the site is defined by a stone wall, and a hedgerow runs along the northern boundary, growing along a shallow and relatively dry drainage ditch, with Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Ivy (*Hedera hibernica*) and Bramble (*Rubus fruticosus*). This habitat is classified as (WL1).

No flora or terrestrial fauna species or habitats of national or international conservation importance were noted on site during the survey.

There were no invasive species recorded at the proposed development site.

Figure 1 shows the Proposed Development location and Figure 2 shows a detailed view of the Proposed Development boundary on recent aerial photography. Figure 3 shows the layout of the Proposed Development.

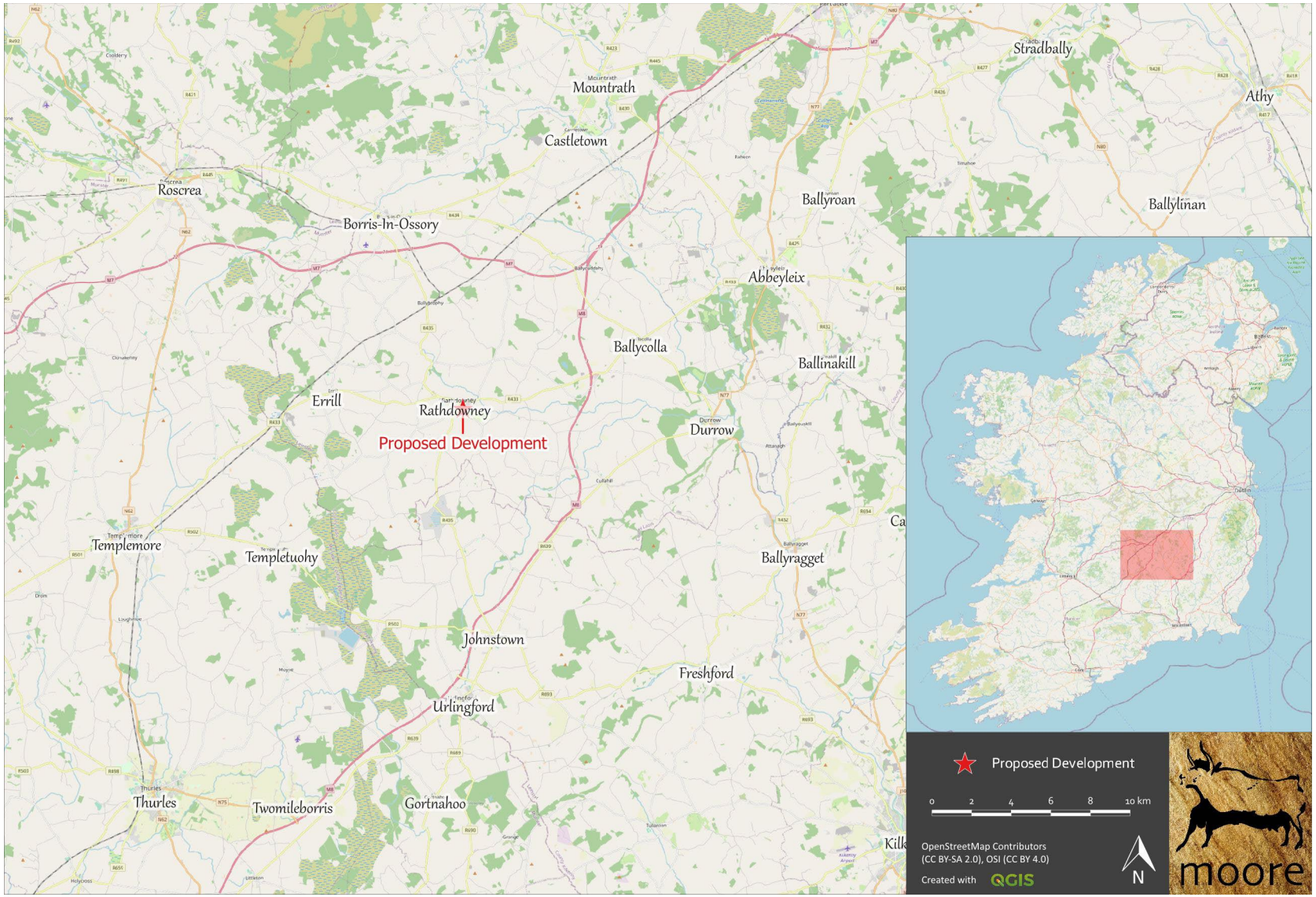

Figure 1. Showing the Proposed Development location at Rathdowney.

Figure 2. Site of proposed development on recent aerial photography.

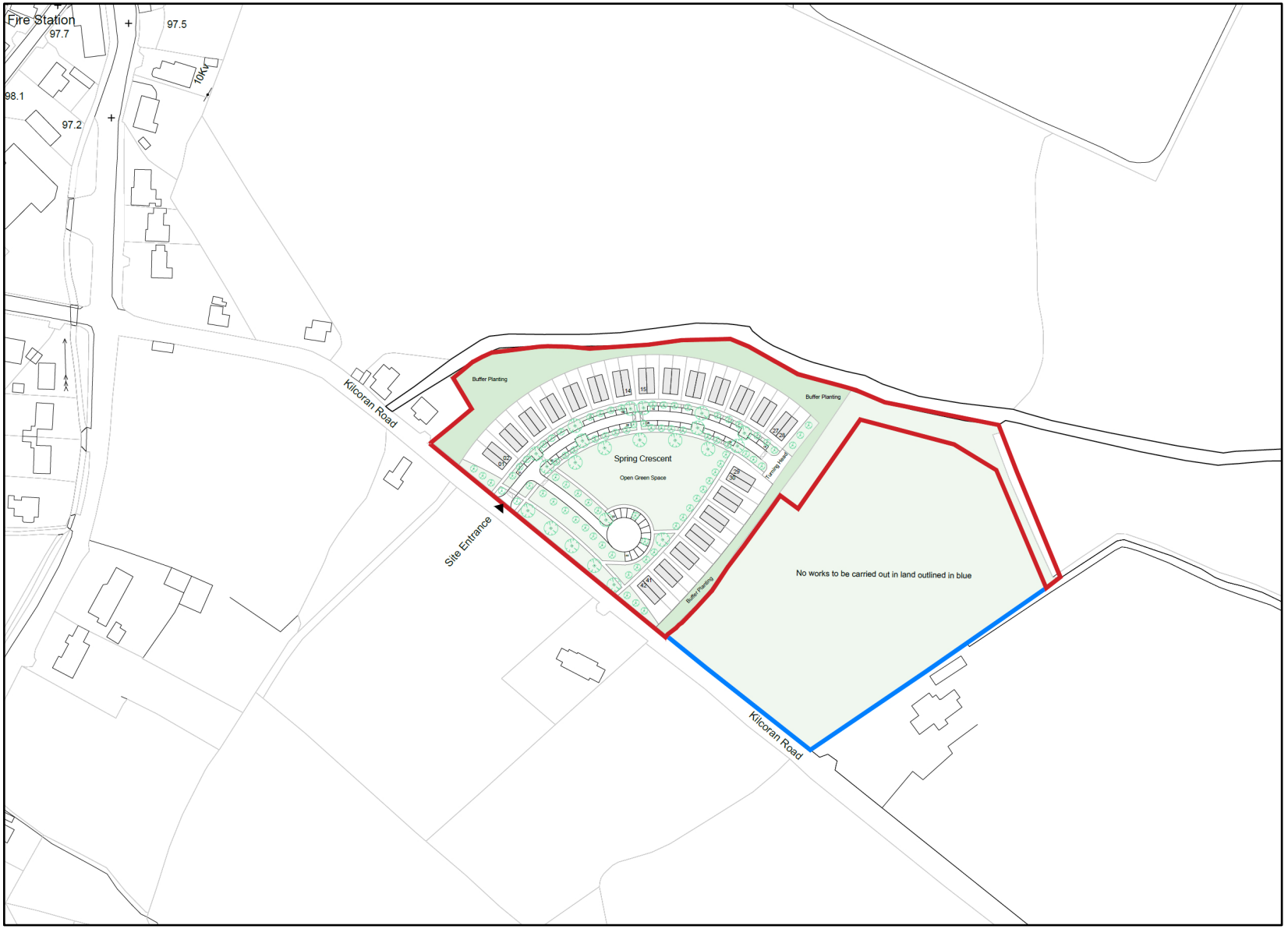

Figure 3. Plan of the Proposed Development.

4. Identification of Natura 2000 Sites

4.1. Description of Natura Sites Potentially Significantly Affected

A Zone of Influence (ZoI) of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. In accordance with the OPR Practice Note, PN01, the ZoI should be established on a case-by-case basis using the Source- Pathway-Receptor framework.

The European Commission's "*Assessment of plans and projects in relation to Natura 2000 sites guidance on Article 6(3) and (4) of the Methodological Habitats Directive 92/43/EEC*" published 28 September 2021 states at section 3.1.3:

Identifying the Natura 2000 sites that may be affected should be done by taking into consideration all aspects of the plan or project that could have potential effects on any Natura 2000 sites located within the zone of influence of the plan or project. This should take into account all of the designating features (species, habitat types) that are significantly present on the sites and their conservation objectives. In particular, it should identify:

- *any Natura 2000 sites geographically overlapping with any of the actions or aspects of the plan or project in any of its phases, or adjacent to them;*
- *any Natura 2000 sites within the likely zone of influence of the plan or project Natura 2000 sites located in the surroundings of the plan or project (or at some distance) that could still be indirectly affected by aspects of the project, including as regards the use of natural resources (e.g. water) and various types of waste, discharge or emissions of substances or energy;*
- *Natura 2000 sites in the surroundings of the plan or project (or at some distance) which host fauna that can move to the project area and then suffer mortality or other impacts (e.g. loss of feeding areas, reduction of home range);*
- *Natura 2000 sites whose connectivity or ecological continuity can be affected by the plan or project.*

The range of Natura 2000 sites to be assessed, i.e. the zone in which impacts from the plan or project may arise, will depend on the nature of the plan or project and the distance at which effects may occur. For Natura 2000 sites located downstream along rivers or wetlands fed by aquifers, it may be that a plan or project can affect water flows, fish migration and so forth, even at a great distance. Emissions of pollutants may also have effects over a long distance. Some projects or plans that do not directly affect Natura 2000 sites may still have a significant impact on them if they cause a barrier effect or prevent ecological linkages. This may happen, for example, when plans affect features of the landscape that connect Natura 2000 sites or that may obstruct the

movements of species or disrupt the continuity of a fluvial or woodland ecosystem. To determine the possible effects of the plan or project on Natura 2000 sites, it is necessary to identify not only the relevant sites but also the habitats and species that are significantly present within them, as well as the site objectives.

The Zone of Influence may be determined by considering the Proposed Development's potential connectivity with European sites, in terms of:

- Nature, scale, timing and duration of all aspects of the proposed works and possible impacts, including the nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of potential pathways (dilution and dispersion; intervening 'buffer' lands, roads etc.); and
- Location of ecological features and their sensitivity to the possible impacts.

The potential for source pathway receptor connectivity is firstly identified through GIS interrogation and detailed information is then provided on sites with connectivity. European sites that are located within a potential Zone of Influence of the Proposed Development are presented in Figures 4 and 5 below. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website (www.npws.ie) on 28 April 2023. This data was interrogated using GIS analysis to provide mapping, distances, locations and pathways to all sites of conservation concern including pNHAs, NHA and European sites.

The nearest European site to the Proposed Development is the Galmoy Fen SAC (Site Code 001858), approximately 4.5km to the south; however there is no connectivity to this site. The River Barrow and River Nore SAC (Site Code 002162) and River Nore SPA (004233) lies 4.8km directly to the east.

Surface water will be contained on site using appropriate SuDS features prior to discharge to the Knockheel Stream to the east which runs along the northern boundary the golf course further to the east for a distance of 1.2 river km before joining the Erkina River c. 5.8 river km downstream. The Erkina joins the River Nore at a total distance of c. 7 river km downstream. The Erkina River is not designated until the confluence of the River Barrow where the River Nore is part of the River Barrow and River Nore SAC and River Nore SPA.

The Qualifying Interests (QIs) and Special Conservation Interests (SCIs) of the European sites in the Zone of influence of the Proposed Development are provided in Table 2 below.

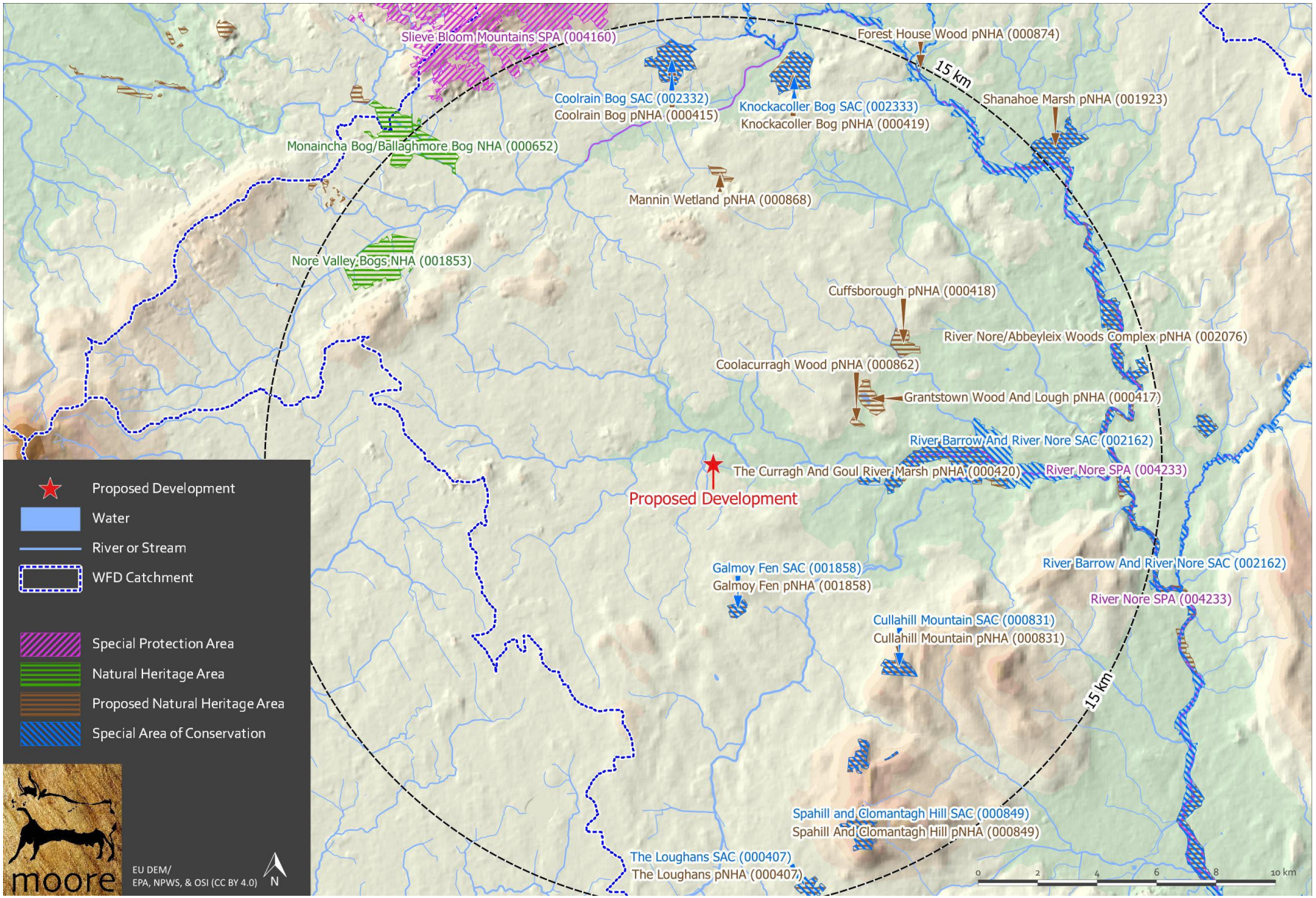

Figure 4. Showing European sites and NHAs/pNHAs within the wider Potential Zone of Influence of the Proposed Development.

*Table 1. Identification of relevant European sites using Source-Pathway-Receptor model and compilation of information QIs and conservation objectives. *Priority Habitats*

European site name & Site code	Location Relative to the Proposed Development Site	Connectivity – Source-Pathway-Receptor	Considered further in Screening – Y/N
River Barrow and River Nore SAC (002162) The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest: 1016 Desmoulin's whorl snail *Vertigo moulinsiana* 1029 Freshwater pearl mussel *Margaritifera margaritifera* 1092 White-clawed crayfish *Austropotamobius pallipes* 1095 Sea lamprey *Petromyzon marinus* 1096 Brook lamprey *Lampetra planeri* 1099 River lamprey *Lampetra fluviatilis* 1103 Twaite shad *Alosa fallax* 1106 Atlantic salmon (*Salmo salar*) (only in fresh water) 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1310 *Salicornia* and other annuals colonizing mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1355 Otter *Lutra lutra* 1410 Mediterranean salt meadows (Juncetalia maritimi) 1421 Killarney fern *Trichomanes speciosum* 1990 Nore freshwater pearl mussel *Margaritifera durrovensis* 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation 4030 European dry heaths 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels 7220 * Petrifying springs with tufa formation (Cratoneurion) 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles	4.79km to the east of the Proposed Development	There is a very distant pathway c. 7 river km to the River Nore.	Yes, considered further in Table 2 below.

European site name & Site code	Location Relative to the Proposed Development Site	Connectivity – Source-Pathway-Receptor	Considered further in Screening – Y/N
91E0 * Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) NPWS (2011) Conservation Objectives: River Barrow and River Nore SAC 002162. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.			
River Nore SPA (004233) A229 Kingfisher *Alcedo atthis* NPWS (2022) Conservation objectives for River Nore SPA [004233]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	4.79km to the east of the Proposed Development	There is a very distant pathway c. 7 river km to the River Nore.	Yes, considered further in Table 2 below.

4.2. Ecological Network Supporting Natura 2000 Sites

A concurrent GIS analysis of the proposed Natural Heritage Areas (pNHA) and designated Natural Heritage Areas (NHA) in terms of their role in supporting the species using Natura 2000 sites was undertaken along with GIS investigation of European sites. It was assumed that these supporting roles mainly related to mobile fauna such as mammals and birds which may use pNHAs and NHAs as ecological corridors or "stepping stones" between Natura 2000 sites.

Article 10 of the Habitats Directive and the Habitats Regulations 2011 place a high degree of importance on such non-Natura 2000 areas as features that connect the Natura 2000 network. Features such as ponds, woodlands and important hedgerows were taken into account in the decision process and during the preparation of this AA Screening report.

The NHAs and pNHAs identified in Figure 4 are located outside the Zone of Influence. There are no areas of supporting habitat that will be impacted by the proposed development.

5. Identification of Potential Impacts & Assessment of Significance

The Proposed Development is not directly connected with or necessary to the management of the sites considered in the assessment and therefore potential impacts must be identified and considered.

5.1. Assessment of Likely Significant Effects

The consideration of all potential direct and indirect impacts that may result in significant effects on the conservation objectives of a European site, taking into account the size and scale of the Proposed Development are presented in Table 2.

Table 2. Assessment of Likely Significant Effects.

Identification of all potential direct and indirect impacts that may result in significant effects on the conservation objectives of a European site, taking into account the size and scale of the project.	
Impacts:	**Significance of Impacts:**
Construction phase e.g. Vegetation clearance Demolition Surface water runoff from soil excavation/infill/landscaping (including borrow pits) Dust, noise, vibration Lighting disturbance Impact on groundwater/dewatering Storage of excavated/construction materials Access to site Pests	None The Proposed Development site is located within the boundary of a field of improved agricultural grassland. The discharge of surface water after SuDS on site via a local drainage ditch leading to the Knockheel Stream will have no significant effects on the Erkina River or the River Nore over 7km downstream.
Operational phase e.g. Direct emission to air and water Surface water runoff containing contaminant or sediment Lighting disturbance Noise/vibration Changes to water/groundwater due to drainage or abstraction Presence of people, vehicles and activities Physical presence of structures (e.g. collision risks)	All foul water, once the Proposed Development is operational, will be contained on site and discharged to urban drainage systems. The discharge of surface water after SuDS on site via a local drainage ditch leading to the Knockheel Stream will have no significant effects on the Erkina River or the River Nore over 7km downstream. There is no real likelihood of any significant effects on European Sites in the wider catchment area. The Proposed Development is located at a distance of removal such that there will be

Potential for accidents or incidents	no disturbance to qualifying interest species in any European sites.
Describe any likely changes to the European site:	
Examples of the type of changes to give consideration to include: Reduction or fragmentation of habitat area Disturbance to QI species Habitat or species fragmentation Reduction or fragmentation in species density Changes in key indicators of conservation status value (water quality etc.) Changes to areas of sensitivity or threats to QI Interference with the key relationships that define the structure or ecological function of the site Climate change	None The Proposed Development site is not located within or adjacent to a European site, therefore there is no risk of habitat loss or fragmentation or any effects on QI habitats or species directly or ex-situ. The discharge of surface water after SuDS on site via a local drainage ditch leading to the Knockheel Stream will have no significant effects on the Erkina River or the River Nore over 7km downstream.

On the basis of the information supplied, which is considered adequate to undertake a screening determination and having regard to:

- the nature and scale of the proposed development,
- the intervening land uses and distance from European sites,
- the lack of direct connections with regard to the Source-Pathway-Receptor model,

It may be concluded that the proposed development, individually or in-combination with other plans or projects, would not be likely to have a significant effect on the above listed European sites or any other European site, in view of the said sites' conservation objectives.

5.2. Assessment of Potential In-Combination Effects

In-combination effects are changes in the environment that result from numerous human-induced, small-scale alterations. In-combination effects can be thought of as occurring through two main pathways: first, through persistent additions or losses of the same materials or resource, and second, through the compounding effects as a result of the coming together of two or more effects.

As part of the Screening for an Appropriate Assessment, in addition to the Proposed Development, other relevant plans and projects in the area must also be considered at this stage. This step aims to identify at this

early stage any possible significant in-combination effects of the Proposed Development with other such plans and projects on European sites.

A review of the National Planning Application Database was undertaken. The first stage of this review confirmed that there were no data gaps in the area where the Proposed Development is located. The database was then queried for developments granted planning permission within 500m of the Proposed Development within the last three years, these are presented in Table 3 below.

Table 3. Planning applications granted permission in the vicinity of the Proposed Development.

Planning Ref.	Description of development	Comments
19413	construct telecommunications infrastructure comprising of; a 21 metre multi-operator lattice tower with antenna and dishes attached, associated equipment and cabinets, fencing and use of existing access	No potential for in-combination effects given the scale and location of the project.
19467	retain indefinitely, domestic stores & car port as constructed to the rear of the dwelling	No potential for in-combination effects given the scale and location of the project.
20367	demolish existing garage and construct an extension to the side and rear of house; construct a single storey detached garage and retain a previously constructed extension to the rear of existing house	No potential for in-combination effects given the scale and location of the project.
20501	construct a new sports hall, male and female changing rooms, toilet accommodation, store, social area, entrance lobby and canopy. Site works to include 6 no. new parking spaces, 2 no. new ball courts, relocating existing ball wall, re-routing of semi-public walkway and all ancillary site works at St. Fergal's College	No potential for in-combination effects given the scale and location of the project.
2097	construct an extension to existing dwelling	No potential for in-combination effects given the scale and location of the project.
21371	construct a single storey extension to the rear of an existing dwelling and all associated site works	No potential for in-combination effects given the scale and location of the project.
21673	develop as follows: 1. retain the removal of the roof structure over the newly built courtyard and walls; 2. retain the timber cladding to the rear and surrounding buildings; 3. retain the additional floor space, 3 no. bedrooms at second floor level to the rear of the building; 4. retain the additional floor space 3 no. bedrooms at first floor level to the rear of the building; 5. retain the change of use of 2 no. stores to bedrooms to the rear of the building including first and second floor bedrooms as per 3 and 4 above; 6. planning permission for the change of use from Public House, Restaurant, Night Club & Residential Accommodation, including accommodation for persons seeking Internal Protection, to Guest House including accommodation for persons seeking Internal Protection, either on a short-term or long-term basis, at ground floor level including first and second floor bedrooms which are the subject to retention above, including all associated site and ancillary works at this address in accordance with the drawings as submitted	No potential for in-combination effects given the scale and location of the project.
22265	erect flood lights , generator enclosure and all associated site works	No potential for in-combination effects given the scale and location of the project.
22266	change of use of a domestic garage to a veterinary practice, including all associated works	No potential for in-combination effects given the scale and location of the project.

Planning Ref.	Description of development	Comments
22467	retain the demolished outbuilding and toilet block, also retention permission for an extension to rear of the premises on the footprint of the original toilet block to accommodate a stairs and a new window and retention permission for converted shop door and screen to a window at Church Street and planning permission to install a ramp to the end existing door to shop and construct a replacement storage building on the footprint of the original shed to accommodate staff lockers, W.C., sluice room and storage, also an external bin storage area and all ancillary and necessary site works	No potential for in-combination effects given the scale and location of the project.
22473	retain first floor extension to dwellinghouse and all associated site works	No potential for in-combination effects given the scale and location of the project.
22501	retain extension to dwelling house and all associated site works	No potential for in-combination effects given the scale and location of the project.

There are no predicted in-combination effects given that it is predicted that the Proposed Development will have no effect on any European site.

The Laois County Development Plan in complying with the requirements of the Habitats Directive requires that all Projects and Plans that could affect the Natura 2000 sites in the same potential Zone of Influence of the Proposed Development site would be initially screened for Appropriate Assessment and if requiring Stage 2 AA, that appropriate employable mitigation measures would be put in place to avoid, reduce or ameliorate negative impacts. In this way any, in-combination impacts with Plans or Projects for the proposed development area and surrounding townlands in which the proposed development site is located, would be avoided.

The listed developments have been granted permission in most cases with conditions relating to sustainable development by the consenting authority in compliance with the relevant Local Authority Development Plan and in compliance with the Local Authority requirement with regard to the Habitats Directive. The development cannot have received planning permission without having met the consenting authority requirement in this regard.

Any new applications for the Proposed Development area will be assessed on a case by case basis *initially* by Laois County Council which will determine the requirement for AA Screening as per the requirements of Article 6(3) of the Habitats Directive.

6. Conclusion

There are no predicted effects on any European sites given:

- The Proposed Development is to be connected to the existing public sewer network for the treatment of wastewater.

- There are no predicted emissions to air, water or the environment during the construction or operational phases that would result in significant effects.

It has been objectively concluded by Moore Group Environmental Services that:

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

It can be *excluded*, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site.

An appropriate assessment is not, therefore, required.

A final determination will be made by the consenting authority in this regard.

7. References

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European Commission (2007) Guidance document on Article 6(4) of the 'Habitats Directive '92/43/EEC: Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interests, compensatory measures, overall coherence and opinion of the Commission. European Commission, Brussels.

European Commission (2018) Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.

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NPWS (2019) The Status of EU Protected Habitats and Species in Ireland. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin.

NPWS (2023) National Parks and Wildlife Service Metadata available online at https://www.npws.ie/maps-and-data

Office-of-the-Planning-Regulator (2021) Appropriate Assessment Screening for Development Management OPR Practice Note PN01. March 2021

Parnell, J. and T. Curtis (2012) Webb's An Irish Flora. Laois University Press.

Smith, G.F., O'Donoghue, P., O'Hora, K. and E. Delaney (2011) Best Practice Guidance for Habitat Survey and Mapping. The Heritage Council.

APPENDIX C

ARCHAEOLOGICAL, ARCHITECTURAL AND CULTURAL HERITAGE SCOPING REPORT

PREPARED BY CRDS LTD.

CRDS Ltd., 2 Grosvenor Terrace, Monkstown, Co. Dublin, Ireland.
Tel: +353 (0)87 853 9909 Email: info@crds.ie Web: www.crds.ie

Archaeological, Architectural and Cultural Heritage

SCOPING REPORT

Rathdowney,

County Laois

May 2023

Dr Stephen Mandal MIAI PGeo EurGeol

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1. Executive Summary

On behalf of AWN Consulting (for the OPW), CRDS Ltd have undertaken an archaeological scoping assessment for the proposed development lands at Rathdowney, County Laois (ITM 628275 677901). The study comprised an examination of available archaeological, architectural heritage and historical sources, including the following:

- Recorded archaeological sites and monuments
- Topographical finds
- Archaeological Excavations
- Architectural Heritage
- Cartographic sources
- Aerial Photography

The potential archaeological, architectural and cultural Heritage risk at the site can be summarised as follows:

- There are no recorded archaeological site within the proposed development lands.
- There are seven recorded archaeological sites within c. 500m of the proposed development lands. None of these sites will be impacted, either directly or indirectly, by the proposed development works. However, they are indicative of the landscape having been populated since at least the Early Medieval Period (ringfort LA02-057003).
- There are records of two archaeological excavations in the area in advance of development works, but neither of these have identified archaeological remains.
- A desk-top survey of the lands proposed for development, did not highlight any additional, previously unrecorded, archaeological features.
- Cartographic and aerial photography research indicates that the land on which the proposed development is sited has been agricultural land in open pasture since at least the early part of the 19th century.

Therefore, there is the potential for previously unrecorded sub-surface archaeological remains to survive within the proposed development footprint.

- There are thirteen recorded architectural heritage sites within c. 500m of the proposed development lands, as listed in the National Inventory of Architectural Heritage for Co. Laois; of these, twelve are listed in the Record of Monuments and Places in the Laois County Development Plan 2021-2027. None of these sites will be impacted, either directly or indirectly, by the proposed development works.

The proposed development will include the excavation of topsoil from the site for the digging of pad foundations and services, up to a depth of c. 1m. Although, as noted above, there is the potential for previously unrecorded archaeological material to be uncovered during the course of development works. In order to mitigate against the archaeological risks of developing this site, the following is recommended:

1. The appointment of a suitably qualified archaeological consultant to oversee the project at construction phase.
2. The archaeological consultant should consult with the National Monuments Service and the design team, and implement a monitoring strategy, if required, in areas that have not been subjected to significant disturbance in the recent past.
3. Any archaeological features identified during monitoring in areas where they will be impacted on by the development, will require permission from the National Monuments Service for the excavation (preservation by record) of these remains.

Please note that the recommendations given here are subject to the approval of the National Monuments Service, Department of the Culture, Heritage and the Gaeltacht.

2. Baseline Survey

2.1. Introduction

The proposed development is located in the townland of Rathdowney, County Laois, c. 500m southeast of the centre of Rathdowney village (ITM 628275 677901; see Figure 1). To set the proposed development within its wider archaeological, architectural and cultural heritage landscape, and to assess the potential of encountering such features on the site, a high level paper survey of archaeological, architectural heritage, historical and cartographic sources was undertaken. A study are of approximately 500m radius around the proposed development site was chosen.

2.2. Recorded archaeological sites and monuments

The Record of Monuments and Places was consulted for the relevant parts of Co. Laois. This is a list of archaeological sites known to the National Monuments Service. The relevant files for these sites contain details of documentary sources and aerial photographs, early maps, OS memoirs, OPW Archaeological Survey notes and other relevant publications. There are seven recorded archaeological monuments within the study area (see Figure 1, Table 1 and Appendix 1) [Please note that www.archaeology.ie appears to incorrectly locate two monuments, LA028-057001- and LA028-057002- to the east of Rathdowney].

2.3. Topographical finds

Published catalogues of prehistoric material were studied: Raftery (1983 - Iron Age antiquities), Eogan (1965; 1993; 1994 - bronze swords, Bronze Age hoards and goldwork), Harbison (1968; 1969a; 1969b - bronze axes, halberds and daggers) and the Irish Stone Axe Project Database (Archaeology Dept., U.C.D.). No finds were recorded. It is important to noted that the topographical files in the National Museum of Ireland were not consulted. This is the National archive of all known finds recorded by the National Museum. It relates primarily to stray artefacts.

2.4. Archaeological Excavations

The excavation bulletin website (www.excavations.ie) was consulted to identify previous excavations that have been carried out within c. 500m of the proposed development and within the townland of Rathdowney. This database contains summary accounts of excavations carried out in Ireland from 1970 to 2022. There are two archaeological excavations recorded from the study area, neither of which uncovered archaeological remains (see Figure 1, Table 2 and Appendix 2).

2.5. Down Survey

Taken in the years 1656-1658, the Down Survey of Ireland is the first ever detailed land survey on a national scale anywhere in the world. The survey, led by William Petty, sought to measure all the land to be forfeited by the Catholic Irish in order to facilitate its redistribution to Merchant Adventurers and English soldiers (www.downsurvey.tcd.ie). The Down Survey map for the area is given as Figure 2.

2.6. Architectural Heritage

The National Inventory of Architectural Heritage (NIAH) is a systematic programme of identification, classification, and evaluation of the architectural heritage of the State. The Minister for Arts, Heritage and the Gaeltacht is currently using the Inventory as the basis for making recommendations for the NIAH. There are thirteen structures included in the NIAH within the study area.

2.7. Cartographic sources

Analysis of cartographic sources is important in tracing the development of the site. Sources included:

- Ordnance Survey 1st Edition – Scale 6 inches: 1 mile (1838-1842). The first comprehensive series of maps covering the whole of Ireland, which was the first country in the world to be mapped in this manner (Figure 3).
- Ordnance Survey 25-inch Maps: Scale 25-inches: 1 mile. Mostly date from the 1890s up to c. 1915 with later printings (Figure 4)

2.8. Aerial Photography

Available online sources for aerial photography were consulted, including the Ordnance Survey, Geological Survey and National Monuments Service collections (see Figure 5).

2.9. County Development Plan

The Laois County Draft Development Plan 2021-2027 was also consulted (www.laois.ie). The plan includes policy objectives for the protection of the County's archaeological, architectural and cultural heritage. The Record of Protected Structures (RPS) contained within the plan includes every structure which is of special architectural, archaeological, artistic, cultural, scientific, social or technical interest within the county boundaries. There are twelve RPSs within the study area (see Table 3; see also Figure 6).

3. Archaeological and historical background

3.1. Introduction

The proposed development is located in the townland Rathdowney, which is in the Electoral Division of Rathdowney, in the Civil Parish of Rathdowney, in the Barony of Clandonagh, in the County of Laois. The Irish name for Rathdowney is *Ráth Domhnaigh*, which translates as the ring-fort of (the) church (http://www.logainm.ie/en/28095).

The recorded archaeology within approximately 500m of the proposed development lands is shown below in Tables 1 and 2 (see also Figure 1 and 2 and Appendices 1 and 2).

SMR No.	Class	Townland	Next RMP
LA028-055001-	Church	Rathdowney	Yes
LA028-055003-	Castle - ringwork	Rathdowney	Yes
LA028-055004-	Graveyard	Rathdowney	Yes
LA028-057001-	Church	Kilcoran	Yes
LA028-057002-	Graveyard	Kilcoran	Yes
LA028-057003-	Ringfort - rath	Kilcoran	Yes
LA028-112----	Historic town	Rathdowney	Yes

Table 1. Recorded archaeological monuments and places within 500m of the proposed development lands (source www.archaeology.ie; see Figure 1 and Appendix 1)

Excavation no.	Site name	Licence no.	Site type
2008:750	Rathdowney	07E1170	Urban; No archaeological significance
2014:171	Mountrath, Stradbally, Clonaslee, Durrow, Abbeyleix and Rathdowney, Co. Laois	14E0057	Urban; No archaeological significance

Table 2. Recorded archaeological excavations within c. 500m of the proposed development / within the townland of Rathdowney (source www.excavations.ie; www.heritagemaps.ie; see Figure 1 and Appendix 2)

Reg. No	Cat of Special Interest	Original Use	Date	RPS
12900808	Architectural, Artistic	House	1910 - 1930	295
12900810	Architectural, Artistic	Shop/retail outlet	1870 - 1890	-
12900811	Architectural, Artistic	House	1800 - 1840	293_A
12900812	Architectural, Artistic	Public house	1885 - 1910	293_B
12900814	Architectural, Artistic	Gate lodge	1860 - 1890	281
12900815	Architectural, Artistic	House	1800 - 1840	282
12900816	Architectural	House	1800 - 1840	284
12900817	Architectural, Artistic	Bank/financial institution	1870 - 1880	765
12900818	Architectural, Artistic, Social	Church/chapel	1815 - 1820	280
12900819	Architectural, Artistic	Rectory/glebe/vicarage/curate's house	1810 - 1820	766
12900820	Architectural, Historical	Court house	1810 - 1840	767
12900821	Architectural, Artistic	School	1890 - 1910	768
12900824	Artistic	Fountain	1915 - 1925	771

Table 3. Recorded architectural heritage sites within c. 500m of the proposed (source www.archaeology.ie; www.buildingsofireland.ie; www.laois.ie; see Figure 1 and Appendix 3)

3.2. Early Medieval (c. 400 – 1100 AD)

The earliest evidence of human habitation in the study area dates to the early medieval period. During this period, defensive enclosures known as ringforts were constructed to protect farmsteads. These are one of the most frequently recorded archaeological site types and c. 50,000 examples are recorded in the Irish landscape. Ringforts are regarded as defended family homesteads and the dating evidence to date suggests they were primarily built between the 7th and 9th centuries AD (Stout 1997, 22–31). There is a recorded ringfort (LA028-057003-) c. 500m to the southeast of the proposed development site (see Figure 1 and Appendix 1). A church (LA028-057001-) and graveyard (LA028-057002-) are recorded as being located within this rath [although note that www.archaeology.ie incorrectly locates these to the east of Rathdowney]. The record of monuments and places describes the sites as follows:

In undulating countryside. Not marked on the 1841 or 1908 editions of the OS 6-inch maps. Human bones were discovered, in 1889, in Kilconran rath (LA028-057003-) which is thought to have been the site of a church associated with St Cobhran (Carrigan 1905, vol. 2, 341). No visible surface remains.

Described by Carrigan as 'The church of Kilcoran stood a quarter of a mile from Rathdowney, within what is now commonly known as "Kilcoran Rath". The rath (LA028-057003-) is a circular mound 65 yards in diameter, rising irregularly from 2 to 8 ft. in height, with an almost obliterated rampart, and the usual fosse. Running east and west, partly through the centre of the rath, there are traces of a curved earthen fence, which divided it into two almost equal parts. In the southern division human bones were dug up in 1889, and appears to have been the site of an ancient churchyard (LA028-057002-). The church stood in the northern division. Its walls have been gone for ages, but the

foundation still marked by the withered grass in very dry summers, show that they were about 30 ft. long; a very large limestone marks the position of the west gable. The tradition of a church having been ever here has almost died out.' (Carrigan 1905, vol. 2, 341).

3.1. Later Medieval (c. 1150 – 1550 AD)

Ireland was invaded by the Anglo-Norman's in May 1169, with the conquest starting in county Wexford in the southeast. The expansion into Leinster had an impact on the Irish landscape that lasts to this day. Most of the province of Leinster came under Strongbow's control after the conquest. During this period, the Anglo-Normans built castles of stone construction or large flat-topped mounds or mottes with timber structures atop (Harbison 1992) in order to defend their recently acquired lands. By the end of the 12th century Norman settlement was effective over the whole county.

The town of Rathdowney may get its name from a ringwork castle that is recorded as having been built by Adam de Hereford between 1207-1213. It was levelled in 1840 and five cart loads of human bones were removed from it; possible site of ancient church (LA028-055002-) (Carrigan 1905, vol. 2, 339, 340). No visible surface remains. This monument may have been a ringwork that was situated beside the old medieval church of Rathdowney (LA028-055002-), and inside the graveyard that enclosed this medieval church.

Ringworks have been increasingly recognised within the landscape in recent decades (see Arbuthnot 2011), including notable examples such as Carrick and Hugh de Lacy's 'house' in Trim (Hayden 2011; Sweetman 1978). Generally being simple and efficient to construct, they can exceed 60m in diameter but are usually smaller (McNeill 1997).

3.2. Post- Medieval (c. 1550 –)

The Civil survey 1654-56 lists the townland of Rathdowney as Morgan Caskin in 1641 and Thomas Bryor in 1670 – both Protestant. The 1659 census lists the population as 71, of which 61 are English and 10 Irish (see also Figure 2).

The first edition of the Ordnance Survey map of Ireland, dating to the 1830s depict the land in which the proposed development is sited in two fields separated by a field boundary which runs northwest – southeast through the site. The site is bounded on the north and southwest by local roads; the southwest boundary appears to be lined with trees. A house and small land holding is depicted to the immediate west of the site, and a small rectangular land holding is evident at the northwest corner of the site (see Figure 3).

By the time of the second edition Ordnance Survey map, dating to the early 20th century, the site of the proposed development is in one large field, with internal field boundaries removed in the intervening period. The buildings to the immediate west of the site have been enlarged (see Figure 4).

There is remarkably little change in the landscape between the early 20th century and the present day. The site comprises one large field in open pasture, bounded to the north and southwest by local roads, and to the southeast by a field boundary and further field in open pasture (see Figure 5).

The land on which the proposed development is planned is zoned for tourism in the Laois County Council Development Plan 2021-2027 (see Figure 6).

4. Archaeological, Architectural and Cultural Heritage Risk

The potential archaeological, architectural and cultural heritage risk at the site can be summarised as follows:

- There are no recorded archaeological site within the proposed development lands.
- There are seven recorded archaeological sites within c. 500m of the proposed development lands. None of these sites will be impacted, either directly or indirectly, by the proposed development works. However, they are indicative of the landscape having been populated since at least the Early Medieval Period (ringfort LA02-057003).
- There are records of two archaeological excavations in the area in advance of development works, but neither of these have identified archaeological remains.
- A desk-top survey of the lands proposed for development, did not highlight any additional, previously unrecorded, archaeological features.
- Cartographic and aerial photography research indicates that the land on which the proposed development is sited has been agricultural land in open pasture since at least the early part of the 19th century.

Therefore, there is the potential for previously unrecorded sub-surface archaeological remains to survive within the proposed development footprint.

There are thirteen recorded architectural heritage sites within c. 500m of the proposed development lands, as listed in the National Inventory of Architectural Heritage for Co. Laois; of these, twelve are listed in the Record of Monuments and Places in the Laois County Development Plan 2021-2027. None of these sites will be impacted, either directly or indirectly, by the proposed development works.

5. Potential Impact of the Proposed Development

The proposed development will include the excavation of topsoil from the site for the digging of pad foundations and services, up to a depth of c. 1m. Although, as noted above, the potential for encountering previously unrecorded archaeological sub-surface remains is low, there is the potential for previously unrecorded archaeological material to be uncovered during the course of development works.

6. Recommended Mitigation Measures

In order to mitigate against the archaeological risks of developing this site, the following is recommended:

1. The appointment of a suitably qualified archaeological consultant to oversee the project at construction phase.
2. The archaeological consultant should consult with the National Monuments Service and the design team, and implement a monitoring strategy, if required, in areas that have not been subjected to significant disturbance in the recent past.
3. Any archaeological features identified during monitoring in areas where they will be impacted on by the development, will require permission from the National Monuments Service for the excavation (preservation by record) of these remains.

Please note that the recommendations given here are subject to the approval of the National Monuments Service, Department of the Culture, Heritage and the Gaeltacht.

7. References

Arbuthnot, 2011. *The Ringwork Castles of Medieval Leinster and Meath*. Unpublished PhD Thesis for Trinity College Dublin.

Carrigan, W. (1905) The history and antiquities of the diocese of Ossory. Dublin. Sealy, Bryers & Walker, vol 2 229

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Stout, M. 1997. *The Irish Ringfort*. Dublin: Four Courts Press.

Sweetman, D. 1978. Archaeological Excavations at Trim Castle, Co. Meath, 1971-4. Proceedings of the Royal Irish Academy. 78(6).

Online resources:

- the Irish Stone Axe Project Database (Archaeology Dept., U.C.D.)
- www.archaeology.ie
- www.buildingsofireland.ie
- www.downsurvey.tcd.ie
- www.excavations.ie
- www.heritagemaps.ie
- www.laois.ie

Figures

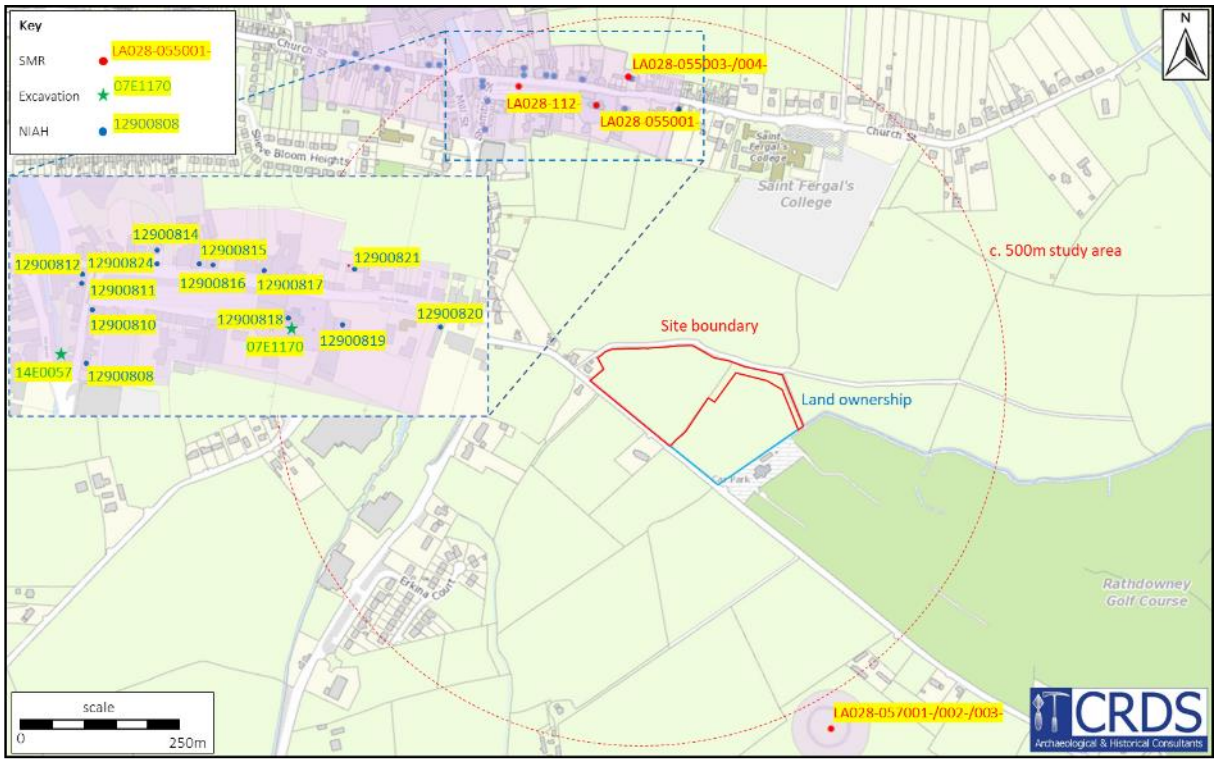

Figure 1. Site location map showing recorded archaeological monuments and places, archaeological excavations and architectural heritage sites within c. 500m of the proposed development lands (source www.archaeology.ie; www.buildingsofireland.ie; www.heritagemaps.ie).

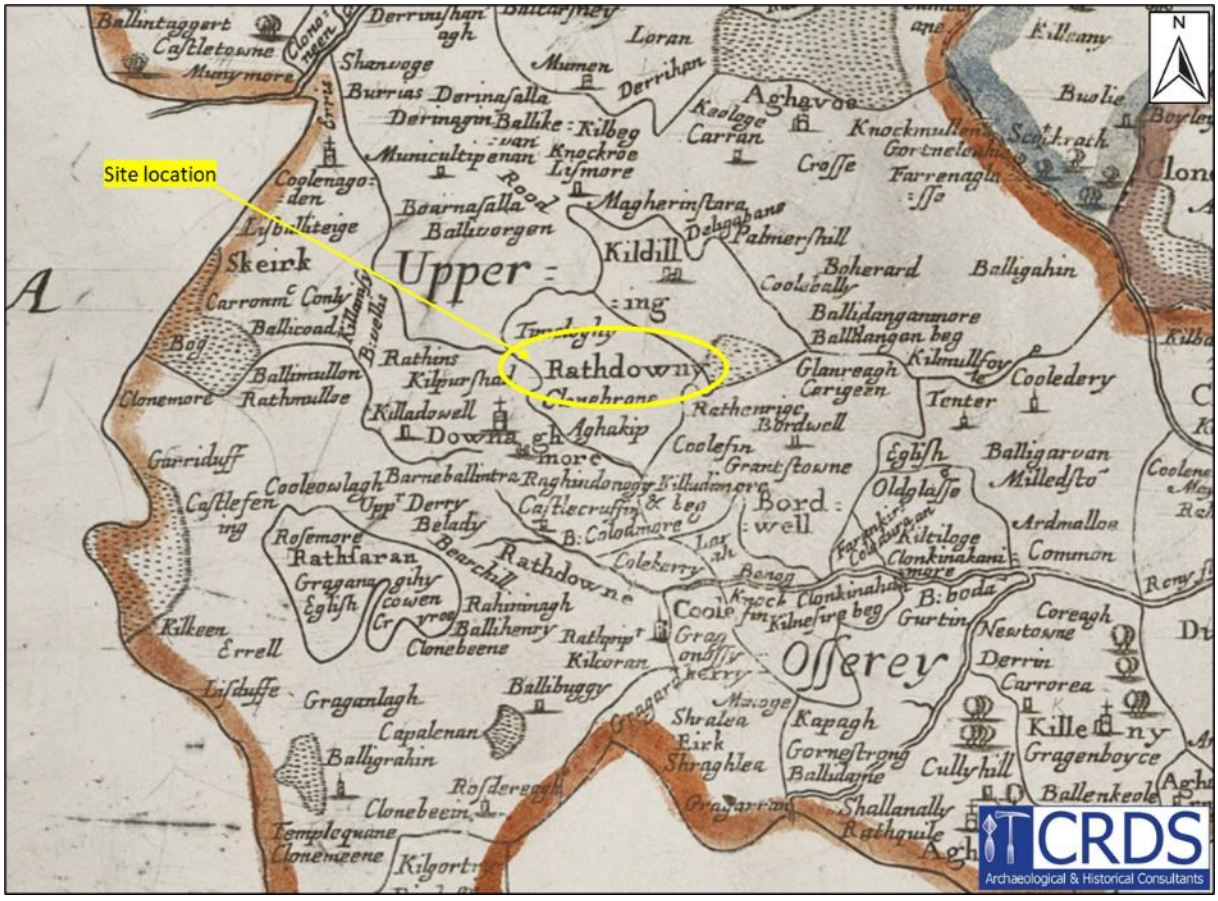

Figure 2. Extract from William Petty's (1660) map of Laois (source www.downsurvey.tcd.ie).

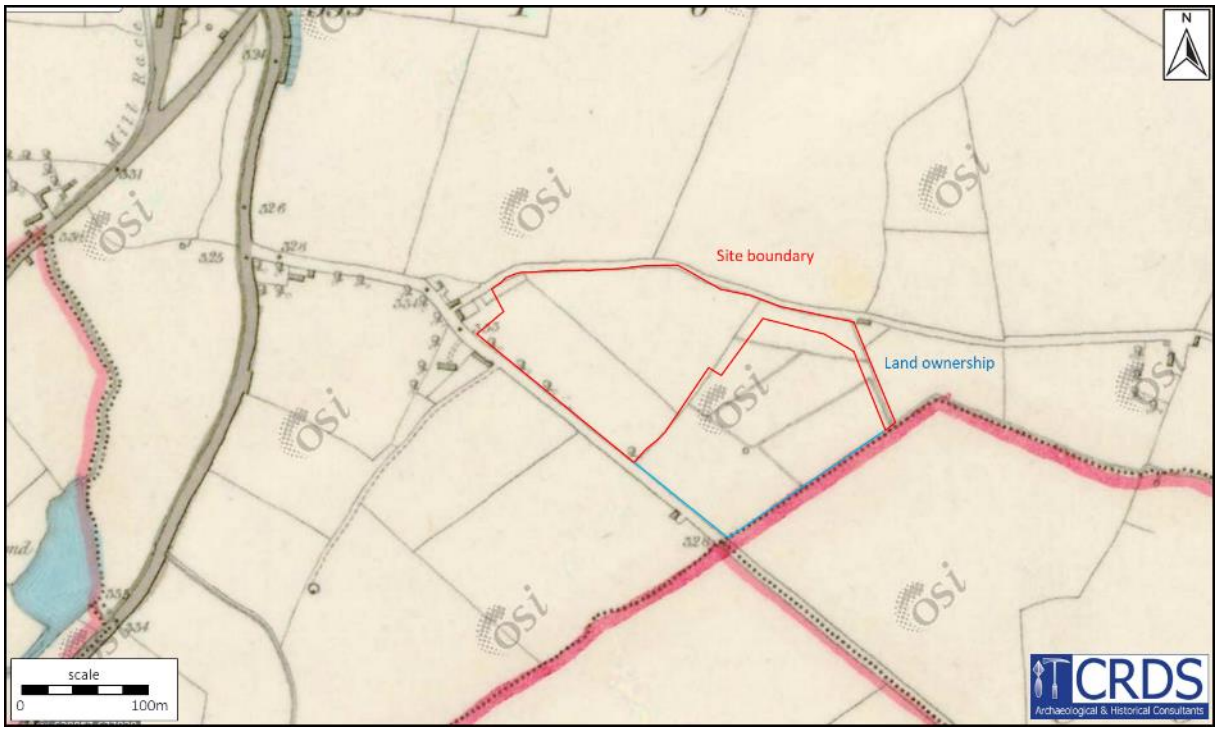

Figure 3. Extract from 1st edition Ordnance Survey map (1830s; source www.archaeology.ie).

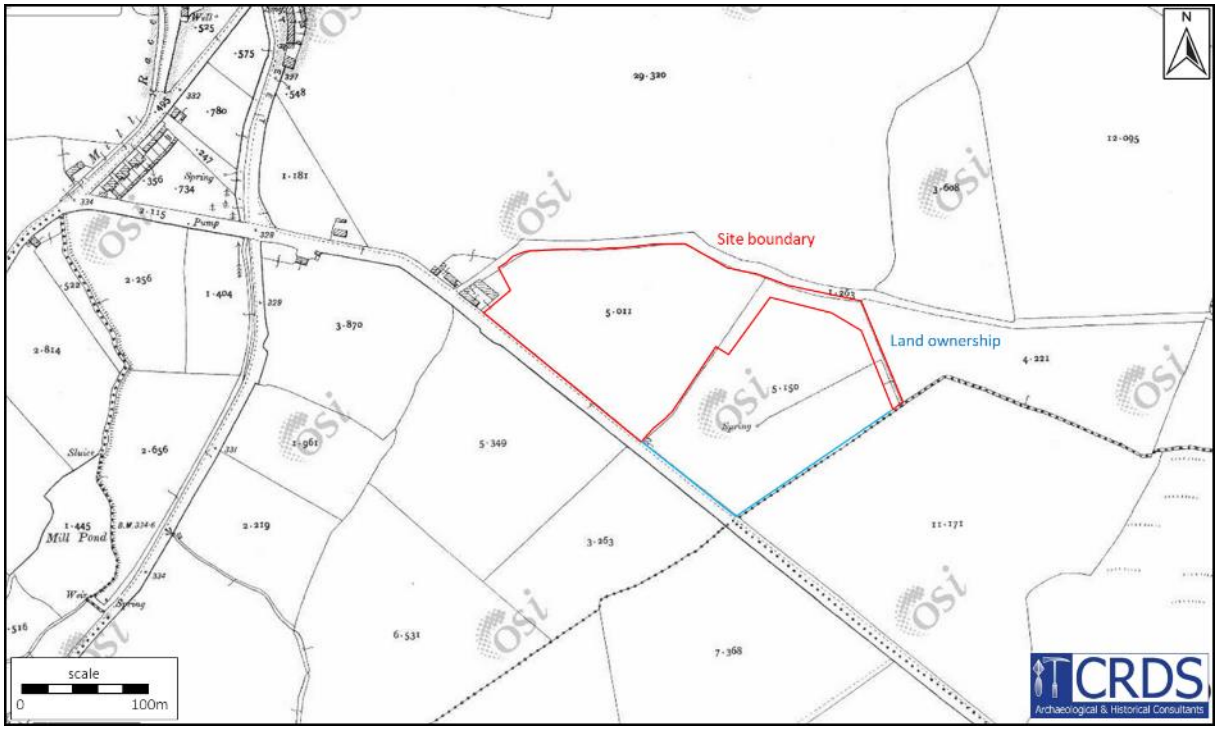

Figure 4. Extract from 2nd edition Ordnance Survey map (1910s; source www.archaeology.ie).

Figure 5. Aerial photograph of the proposed development lands (source www.archaeology.ie).

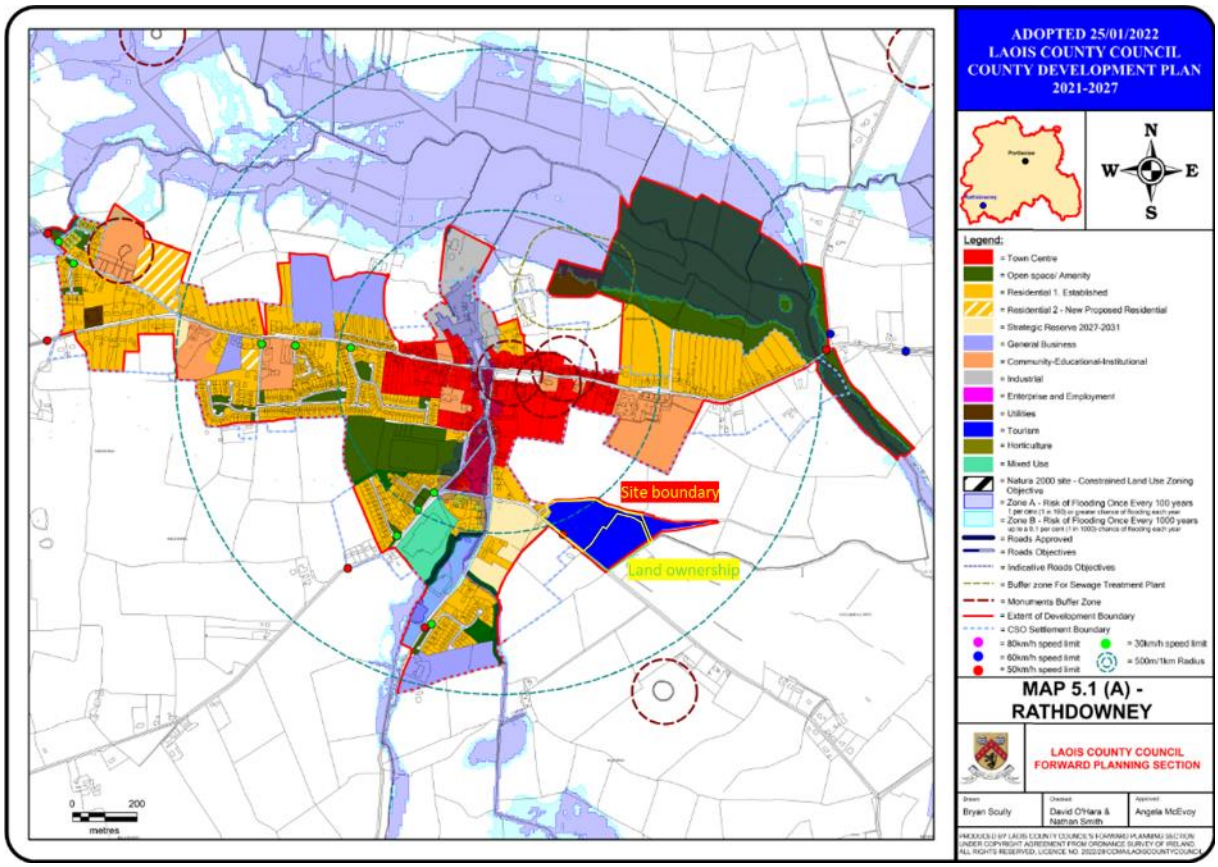

Figure 6. Laois County Council Planning Zones for Rathdowney 2021-2027(source www.laois.ie).

Appendices

Appendix 1. Recorded Archaeological Monuments and Places
Appendix 2. Archaeological Excavations
Appendix 3. National Inventory of Architectural Heritage

Appendix 1. Recorded Archaeological Monuments and Places

The recorded monuments and places within c. 500m of the proposed development are listed below, all noted in the Record of Monuments and Places for Co. Laois (source www.archaeology.ie).

SMR No.: LA028-055001-
Class: Church
Townland: RATHDOWNEY
Description: The pre-Reformation parish church, dedicated to the Most Holy Trinity, was demolished in 1818 (Carrigan 1905, vol. 2, 340). No visible surface remains. Its site is now occupied by the 19th century Church of Ireland church.
Rathdowney derives its name from 'Rath Domhnaiagh, the Rath of the Domhnach or Church'(LA028-055003-) (Carrigan 1905, vol. 2, 339) where a large quantity of human bones were discovered in 1840 possibly indicating the site of an ancient church and graveyard (LA028-055004-). The pre-Reformation parish church was dedicated to the Most Holy Trinity and was demolished in 1818 (Carrigan 1905 vol. 2, 339-40). Church of Ireland church was probably built on site of the earlier church. No visible surface remains of medieval church. 'In 1465 Dermod Hoily, cleric of Ossory Diocese, bound himself, as principal, to the Camera Apostolica, for the annats of the perpetual vicariate of the parochial church of Draithdonhnaigh (Rathdowney), in the said Diocese of Ossory, vacant by the deprivation of John Olanrn' (Carrigan 1905, vol. 2, 340).
The above description is derived from the published 'Archaeological Inventory of County Laois' (Dublin Stationery Office, 1995) compiled by P. David Sweetman, Olive Alcock and Bernie Moran. In certain instances the entries have been revised and updated in the light of recent research.
Scheduled for inclusion in the next revision of the RMP
Date of upload: 17 December 2007

SMR No.: LA028-055003-
Class: Castle - ringwork
Townland: RATHDOWNEY
Description: Not marked on the 1841 or 1908 editions of the OS 6-inch maps. 135m NE of Rathdowney Protestant church (LA028-055001-) was a circular flat-topped enclosure (diam. 22.5-7m, H c. 2.43m). It was levelled in 1840 and five cart loads of human bones were removed from it; possible site of ancient church (LA028-055002-) (Carrigan 1905, vol. 2, 339, 340). No visible surface remains.
Earthwork was levelled around 1804 and was replaced by a school house that was subsequently knocked down and replaced by a handball alley and CYMS building that is now used as a snooker club. This monument may have been a ringwork that was situated beside the old medieval church of Rathdowney (LA028-055002-), and inside the graveyard that enclosed this medieval church. Could have been the site of the thirteenth century castle that was built by Adam de Hereford between 1207-1213.
Described by Carrigan as 'Rath Domhnaigh, the Rath of the Domhnach or Church. 'The 'Rath' from which the name has its origin, was situated at the north side of Rathdowney Square, in Mr. Patrick Murphy's yard and garden, 150 yards north-east of the Protestant church. It was circular in shape, 25 or 30 yards in diameter and flat at the top, and raised about 8ft. Over the surrounding land. The presence of such a great quantity of human bones would certainly point to the rath as the site of an ancient churchyard, and, consequently, of a Domhnach or Church' (Carrigan 1905, vol. 2, 339-40). In 1207 and 1213 Adam de Hereford was granted the 'tuath of Mamocle in which his castle of Radouney stands' (Cunningham 1987, 166). Could be the same site as the unlocated castle within townland that is mentioned in the OS letters as 'About that time the royal palace (castle?) of that territory which is called rath Bacain, began to be erected from the foundation' (O'Flanagan 1933, vol. 2, p. 12).
The above description is derived from the published 'Archaeological Inventory of County Laois' (Dublin Stationery Office, 1995) compiled by P. David Sweetman, Olive Alcock and Bernie Moran. In certain instances the entries have been revised and updated in the light of recent research.
Scheduled for inclusion in the next revision of the RMP
Date of upload: 17 December 2007

SMR No.: LA028-055004-
Class: Graveyard
Townland: RATHDOWNEY
Description: In Rathdowney town. All visible headstones are post 1700 AD. Square shaped graveyard (int. dims. 41m N-S; 59m E-W) enclosed by a stone wall as indicated on current edition of the OS 6-inch map. C of I church in centre of graveyard, this church may have been built on the site of an earlier medieval church (LA028-055001-). The medieval graveyard may have extended northwards across the public road and into the properties to the NE of the church. Possible ringwork (LA028-055003-) may have been situated within the grounds of this medieval graveyard.
The above description is derived from the published 'Archaeological Inventory of County Laois' (Dublin Stationery Office, 1995) compiled by P. David Sweetman, Olive Alcock and Bernie Moran. In certain instances the entries have been revised and updated in the light of recent research.
Scheduled for inclusion in the next revision of the RMP
Date of upload: 17 December 2007

SMR No.: LA028-057001-
Class: Church
Townland: KILCORAN (note this appears to be incorrectly located on www.archaeology.ie)
Description: In undulating countryside. Not marked on the 1841 or 1908 editions of the OS 6-inch maps. Human bones were discovered, in 1889, in Kilconran rath (LA028-057003-) which is thought to have been the site of a church associated with St Cobhran (Carrigan 1905, vol. 2, 341). No visible surface remains.
Described by Carrigan as 'The church of Kilcoran stood a quarter of a mile from Rathdowney, within what is now commonly known as "Kilcoran Rath". The rath (LA028-057003-) is a circular mound 65 yards in diameter, rising irregularly from 2 to 8 ft. in height, with an almost obliterated rampart, and the usual fosse. Running east and west, partly through the centre of the rath, there are traces of a curved earthen fence, which divided it into two almost equal parts. In the southern division human bones were dug up in 1889, and appears to have been the site of an ancient churchyard (LA028-057002-). The church stood in the northern division. Its walls have been gone for ages, but the foundation still marked by the withered grass in very dry summers, show that they were about 30 ft. long; a very large limestone marks the position of the west gable. The tradition of a church having been ever here has almost died out.' (Carrigan 1905, vol. 2, 341).
The above description is derived from the published 'Archaeological Inventory of County Laois' (Dublin Stationery Office, 1995) compiled by P. David Sweetman, Olive Alcock and Bernie Moran. In certain instances the entries have been revised and updated in the light of recent research.
Scheduled for inclusion in the next revision of the RMP
Date of upload: 17 December 2007

SMR No.: LA028-057002-
Class: Graveyard
Townland: KILCORAN (note this appears to be incorrectly located on www.archaeology.ie)
Description: In undulating countryside. Not marked on the 1839 or 1908 eds OS 6-inch maps. Human bones were discovered in 1889 (Carrigan 1905, vol. 2, 341).
Described by Carrigan as 'The church (LA028-057001-) of Kilcoran stood a quarter of a mile from Rathdowney, within what is now commonly known as "Kilcoran Rath". The rath (LA028-057003-) is a circular mound 65 yards in diameter, rising irregularly from 2 to 8 ft. in height, with an almost obliterated rampart, and the usual fosse. Running east and west, partly through the centre of the rath, there are traces of a curved earthen fence, which divided it into two almost equal parts. In the southern division human bones were dug up in 1889, and appears to have been the site of an ancient churchyard. The church stood in the northern division. Its walls have been gone for ages, but the foundation still marked by the withered grass in very dry summers, show that they were about 30 ft. long; a very large limestone marks the position of the west gable. The tradition of a church having been ever here has almost died out.' (Carrigan 1905, vol. 2, 341).

The above description is derived from the published 'Archaeological Inventory of County Laois' (Dublin Stationery Office, 1995) compiled by P. David Sweetman, Olive Alcock and Bernie Moran. In certain instances the entries have been revised and updated in the light of recent research.
Scheduled for inclusion in the next revision of the RMP
Date of upload: 17 December 2007

SMR No.: LA028-057003-
Class: Ringfort - rath
Townland: KILCORAN
Description: A circular area (diam. c. 43m) defined by a scarp from SW-E and elsewhere by an earthen bank (Wth c. 2.8m, int. H c. 0.3m, ext. H c. 1.4m). Remains of an external fosse (Wth c. 3.5m) are visible. Tradition of church site (LA028-057001-) in interior.
Described by Carrigan as 'The church (LA028-057001-) of Kilcoran stood a quarter of a mile from Rathdowney, within what is now commonly known as "Kilcoran Rath". The rath (LA028-057003-) is a circular mound 65 yards in diameter, rising irregularly from 2 to 8 ft. in height, with an almost obliterated rampart, and the usual fosse. Running east and west, partly through the centre of the rath, there are traces of a curved earthen fence, which divided it into two almost equal parts. In the southern division human bones were dug up in 1889, and appears to have been the site of an ancient churchyard (LA028-057002-). The church stood in the northern division. Its walls have been gone for ages, but the foundation still marked by the withered grass in very dry summers, show that they were about 30 ft. long; a very large limestone marks the position of the west gable. The tradition of a church having been ever here has almost died out.' (Carrigan 1905,vol. 2, 341).
The above description is derived from the published 'Archaeological Inventory of County Laois' (Dublin Stationery Office, 1995) compiled by P. David Sweetman, Olive Alcock and Bernie Moran. In certain instances the entries have been revised and updated in the light of recent research.
Scheduled for inclusion in the next revision of the RMP
Date of upload: 17 December 2007

SMR No.: LA028-112----
Class: Historic town
Townland: RATHDOWNEY
Description: Described by Carrigan as 'a town, Rathdowney cannot boast of any great antiquity. It must have been a very small village in 1665, as only about a dozen persons paid hearth money in the whole townland of Rathdowney in this year' (Carrigan 1905, vol. 2, 340). Described by Feehan as 'Rathdowney takes its name from a 'rath' (LA028-055003-) which stood until 1840 at the north end of the town square, close to the site of the medieval parish church (LA028-055001-) of Rathdowney, which was where the Protestant church stands. The ringfort may have been the seat of the Gaelic civil power in the local lordship in early medieval times, and together with the church made the place a natural focus for settlement which attracted the Normans in the late twelfth century' (Feehan 1983, 397-8).
In the thirteenth century the manor of Rathdowney figures prominently in the Ormond Deeds (Cunningham 1987, 166). Between 1207 and 1213 Adam de Hereford was granted the 'tuath of Mamocle in which his castle (LA028-055003-) of Radouney[Rathdowney] stands' (Cunningham 1987, 166). The historical references to the manor of Rathdowney along with the presence of a medieval church and thirteenth century castle all suggest that the present village of Rathdowney is built on the site of a thirteenth century settlement. This settlement is lkely to have been located on either side of the main street from the Church (LA028-055001-) and ringwork (LA028-055003-) at the Northern end of the town stretching southwards towards the River at the southern end of the modern village of Rathdowney.
Scheduled for inclusion in the next revision of the RMP
Compiled by: Caimin O'Brien
Date of upload: 17 December 2007

SMR No.:	DU013-025----
Class:	House - 16th/17th century
Townland:	CORDUFF (Castleknock By.)
Description:	There is a large multi-gabled dwelling marked on the Down Survey (1655-6) map compiled. The Civil Survey (1654-6) mentions a 'stone house, slated' (Simington 1945, 246). Possibly incorporated into the make-up of the later Corduff House. Test excavation and monitoring (Licence no. 05E0360) were undertaken in advance of the construction of a sports hall. The vestiges of eight rooms representing the foundation level of the later house, part of a tiled area from the ground floor and remnants of a pond 20m north of the house location were excavated (Carroll, 2006). Scheduled for inclusion in the next revision of the RMP
Compiled by:	Geraldine Stout
Updated by:	Christine Baker
Date of upload:	20 January 2015
References:	Simington, R.C. (ed.) 1945 The Civil survey, AD 1654-1656. Vol. VII: county of Dublin. Dublin. Irish Manuscripts Commission. Carroll, J. 2006 Archaeological Excavation, Corduff Community Campus, Corduff Park, Blanchardtown, Dublin 15 (Licence no. 05E0360). Unpublished report submitted to the National Monuments Service, Department of Arts, Heritage and the Gaeltacht.

Appendix 2. Archaeological Excavations

The excavation bulletin website (www.excavations.ie) was consulted to identify previous excavations that have been carried out within the town/townland of Rathdowney. This database contains summary accounts of excavations carried out in Ireland from 1970 to 2022.

Excavation no.: 2008:750
Site name: Rathdowney
SMR No.: LA028–055
Licence no.: 07E1170
Author: Denis Shine, Cultural Resource Development Services Ltd, Unit 4, Dundrum Business Park, Dundrum, Dublin 14.
Site type: Urban; No archaeological significance
ITM: E 628185m, N 678319m
Description: CRDS Ltd have been retained by Laois County Council to act as the archaeological consultants on the Wastewater Improvement Scheme for County Laois, to be carried out in six towns or villages: Abbeyleix, Clonaslee, Durrow, Mountrath, Rathdowney and Stradbally. The development will consist in total of c. 15,000m of pipe trench and differs slightly for each location, with some of the sewer networks being upgraded or repaired. The scheme will make river crossings in Abbeyleix, Clonaslee, Durrow, Mountrath and Stradbally. New treatment facilities have also been proposed for each location. In total c. 2000m will be laid in Rathdowney.
The scheme crosses the constraint ring of a church site (LA020–055). Testing was undertaken at this location in advance of works. Two linear test-trenches were excavated on the site on 12 February 2008. These were 10m in length and 0.6m wide and were excavated to the level of natural subsoil at 0.23–0.45m in depth. No features or finds of archaeological significance were uncovered during the test excavation.

Excavation no.: 2014:171
Site name: Mountrath, Stradbally, Clonaslee, Durrow, Abbeyleix and ***Rathdowney***, Co. Laois
SMR No.: N/A
Licence no.: 14E0057
Author: Tim Coughlan, IAC Ltd, Unit G1, Network Enterprise Park, Kilcoole, Co. Wicklow
Site type: Urban; No archaeological significance
ITM: E 634589m, N 695266m
Description: This project involved the improvement of wastewater treatment works and pipeline scheme at six locations: Mountrath, Stradbally, Clonaslee, Durrow, Abbeyleix and Rathdowney, Co. Laois. The maximum width of the wayleave for the proposed pipeline was 20m. Monitoring was carried out between December 2013 and September 2014.
With the exception of a number of post-medieval walls and drains in Mountrath, nothing of archaeological significance was identified during the course of the works.
The segment of wall identified during pipe laying on the laneway south of Patrick Street and west of the Whitehorse River in Mountrath represented an earlier river boundary wall. It is clear from the 25-inch OS map of the area that the river has been realigned since this map was made and it seems likely that the walls identified represent former boundaries. The wall identified at the south of a laneway represents an earlier river boundary wall, probably early modern in date. A second section was identified within 'Excavation Area 2' and reported under a separate licence – 14E0055. This represents another earlier boundary wall which had been cut by an existing sewer. Much of this area was disturbed due to the successive re-alignment of the river boundary walls. The monitoring has confirmed features associated with the peripheral development of a 17th-century plantation town..

Appendix 3. National Inventory of Architectural Heritage

The recorded archaeological sites within c. 500m of the proposed development are listed below, all noted in the National Inventory of Architectural Heritage (NIAH) for Co. Laois (www.archaeology.ie; www.buildingsofireland.ie/).

Reg No	**12900808**

Mary Tuohy, Shamble Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Artistic
Date	1910 - 1930
Coordinates	228070, 178245
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	End-of-terrace four-bay two-storey house, c. 1920, with integral carriageway and timber pub front to ground floor.

Reg No	**12900810**

J.C. Ryan, The Square, Shamble Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Artistic
Historical Use	Shop/retail outlet
Date	1870 - 1890
Coordinates	228072, 178287
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	End-of-terrace two-bay two-storey house, c. 1880. Renovated, c. 1920, with shopfront inserted to ground floor. Now disused to ground floor.

Reg No 12900811

The Square, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Artistic
Date	1800 - 1840
Coordinates	228058, 178316
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	Terraced three-bay two-storey house, c. 1820, with integral carriageway. Renovated, c. 1920, with pubfront inserted to ground floor. Now amalgamated with building to right.

Reg No 12900812

J.A. O'Malley, The Square, Church Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Artistic
Original Use	Public house
In Use As	Public house
Date	1885 - 1910
Coordinates	228058, 178324
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	End-of-terrace two-bay two-storey house, c. 1900, with render pubfront to ground floor and four-bay two-storey lateral range.

Reg No 12900814

The Lodge, Church Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Artistic
Previous Name	Eastholme
Original Use	Gate lodge
In Use As	House

Date	1860 - 1890
Coordinates	228126, 178346
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	Detached two-storey Tudor Gothic style gate lodge, c. 1885, with canted bay window. Extended comprising two-storey range.

Reg No **12900815**

Richard Williams and Sons, Church Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Artistic
Date	1800 - 1840
Coordinates	228165, 178334
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	Terraced four-bay two-storey house, c. 1835. Renovated, c. 1890, with shopfronts inserted to ground floor including projecting shopfront to left.

Reg No **12900816**

H.G. Perry and Son, Church Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural
Date	1800 - 1840
Coordinates	228175, 178334
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	Terraced three-bay two-storey house, c. 1835, with integral carriageway. Renovated, c. 1940, with pubfront inserted to ground floor.

Reg No **12900817**

Munster Bank, Church Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Artistic
Previous Name	Munster Bank
Original Use	Bank/financial institution
In Use As	Bank/financial institution
Date	1870 - 1880
Coordinates	228218, 178328
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	Terraced four-bay two-storey bank with dormer attic, c. 1875, with integral carriageway.

Reg No **12900818**

Saint Andrew's Church (Rathdowney), The Square, Church Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Artistic, Social
Original Use	Church/chapel
In Use As	Church/chapel
Date	1815 - 1820
Coordinates	228239, 178286
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	Detached Georgian Gothic Church of Ireland church, dated 1818, with tower having needle spire. Renovated, c. 1865, with projecting porch and chancel added. Extended, c. 1990, with plant room added to chancel. Carved plaque to north porch; plaque reads : "A.D. 1818/Revd Marcus Monk Vicar/William Quinn/John Patterson/ C. Wardens. Richd Dowling Sculpt Kilkenny"

Reg No **12900819**

Church Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Artistic
Original Use	Rectory/glebe/vicarage/curate's house
In Use As	House
Date	1810 - 1820
Coordinates	228282, 178276
Date Recorded	26/08/2004

Date Updated	--/--/--
Description	Detached five-bay two-storey former glebe house, c. 1815, with curved flanking screen walls having piers with castellated coping. Extended to rear comprising two-storey return. Now in private residential use.

Reg No 12900820

Rathdowney Courthouse, Church Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Historical
Original Use	Court house
In Use As	House
Date	1810 - 1840
Coordinates	228362, 178270
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	Detached five-bay two-storey former courthouse, c. 1830, with three-bay single-storey range. Now in residential use.

Reg No 12900821

Rathdowney Christian Young Mens' Society, Church Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Architectural, Artistic
Previous Name	Rathdowney National School
Original Use	School
Date	1890 - 1910
Coordinates	228293, 178327
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	Detached three-bay two-storey former school, c. 1910. Renovated, c. 1975, with single-storey entrance bay added to right to accommodate use as hall.

Reg No	**12900824**

Perry Memorial Fountain, Church Street, RATHDOWNEY, Rathdowney, LAOIS

Rating	Regional
Cat. of Spec. Int.	Artistic
Original Use	Fountain
In Use As	Fountain
Date	1915 - 1925
Coordinates	228128, 178331
Date Recorded	26/08/2004
Date Updated	--/--/--
Description	Freestanding limestone memorial fountain, c. 1920, on a moulded base with inscription. Spout removed. Now in use as planting box. Inscription reads : - "In memory/of/Geraldine/wife of/Alfred William Perry/Erkindale Rathdowney/died June 1918"