Cullairbaun Estate

Appropriate Assessment

February 2025

Prepared for:

Paul Keogh Architects

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Prepared by	Mia Heigh BSc Graduate Ecologist
Reviewed by	Patricia Byrne BSc (Hons) PhD MCIEEM Principal Ecologist
Authorised by	Bernadette O'Connell Director

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Contract

JBA Project Manager	Conor O'Neill
Address	Second Floor, Lincoln House, Lincoln Ln, Arran Quay, Dublin, D07 Y75P
JBA Project Code	2024s1592

This report describes work commissioned by Ellen Mathews, on behalf of Paul Keogh Architects, by an instruction dated 12/09/2024. The Client's representative for the contract was Ellen Mathews of Paul Keogh Architects. Mia Heigh of JBA Consulting carried out this work.

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Abbreviations

AA…… Appropriate Assessment
CIEEM.....Chartered Institute of Ecology and Environmental Management
CJEU … .....Court of Justice of the European Union
DEHLG.....Department of the Environment, Heritage and Local Government
EC .....European Community
EIA .....Environmental Impact Assessment
EPA……..Environmental Protection Agency
ESRI.....Environmental Systems Research Institute Inc.
EU ….....European Union
GSI .....Geological Survey of Ireland
IAQM……Institute of Air Quality Management
IROPI……...Imperative Reasons of Overriding Public Interest
LAP……..Local Area Plan
NBDC……..National Biodiversity Data Centre
NIS……...Natura Impact Statement
NPF……..National Planning Framework
NPWS……..National Parks and Wildlife Services
OPR…….Office of the Planning Regulator
QI…….Qualifying Interest
RSES……...Regional Spatial and Economic Strategies
SAC.....Special Area of Conservation
SEA……..Strategic Environmental Assessment
SPA.....Special Protection Area
S-P-R……...Source-Pathway-Receptor
WFD .....Water Framework Directive
WWTP…….Waste Water Treatment Plant
ZoI…….Zone of Influence

1 Introduction

1.1 Background

This report, which contains information to assist the competent authority to undertake a screening for Appropriate Assessment (AA) in respect to the proposed works within Cullairbaun Estate, Athenry, Co. Galway. Construction of 14 houses have previously been consented at the site – this project consists of the reorientation of two houses and the additional construction of two further houses, leaving a total construction of 16 houses.

For the purposes of the assessment, this will be treated as full project i.e. 16 houses.

This report has been prepared by JBA Consulting Engineers and Scientists Ltd. (hereafter JBA) on behalf of Paul Keogh Architects.

The proposed project is not directly connected with, or necessary to the management of any Natura 2000 site and may have potential likely significant effects upon the Natura 2000 sites identified in Section 4. Therefore, the proposed project is subject to the requirements of the AA process

This Screening for Appropriate Assessment provides the results of the assessment conducted for the proposed project in accordance with Article 6(3) of the Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). It provides information on, and assesses the potential, in view of best scientific knowledge for the works to have likely significant effects, either individually or in combination with other plans or projects, on any Natura 2000 site.

1.2 Legislative Context

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora, known as the 'Habitats Directive' – provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Article 3-9 provides the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU wide network of sites known as Natura 2000 sites. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects affecting Natura 2000 sites.

Article 6(3) establishes the requirement for Appropriate Assessment:

"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 subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the 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."

Article 6(4) deals with the steps that should be taken when it is determined, as a result of Appropriate Assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in such a case.

Article 6(4) states:

"If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and / or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission to other imperative reasons of overriding public interest."

The requirements of Articles 6(3) and 6(4) of the Habitats Directive have been transposed into Irish legislation by means of inter alia the European Communities (Birds and Natural Habitats) Regulations 2011-2015 (S.I. 477 / 2011) as amended.

1.3 Appropriate Assessment Process

Guidance on the Appropriate Assessment (AA) process was produced by the European Commission in 2002, which was subsequently developed into guidance specifically for Ireland by the NPWS and Planning Divisions of the Department of Environment, Heritage and Local Government (DEHLG) (DoEHLG, 2010). Office of the Planning Regulator (OPR) produced a Practice Note in 2021, PN01 – Appropriate Assessment Screening for Development Management (OPR, 2021). These guidance documents identify a staged approach to conduction an AA, as shown in Figure 1-1.

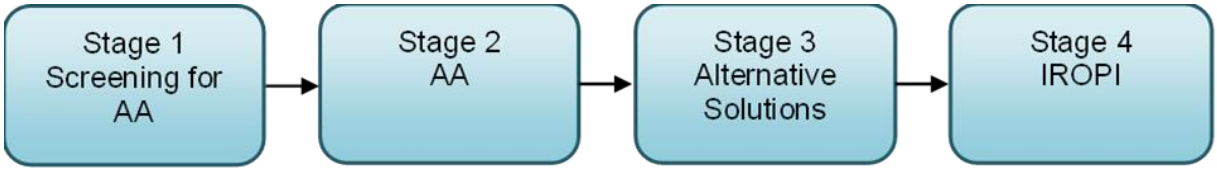


Figure 1-1: The Appropriate Assessment Process (from: Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, DEHLG, 2010).

1.3.1 Stage 1 - Screening for AA

The initial screening stage of the Appropriate Assessment is to determine:

Whether the proposed plan or project is directly connected with or necessary for the management of the European designated site for nature conservation (Natura 2000 site)

If it is likely to have a significant effect on the European designated site, either individually or in combination with other plans or projects.

For those sites where, potential likely significant effects are identified, either alone or in combination with other plans or projects, further assessment is necessary to determine if the proposals will have an adverse impact on the integrity of a European designated site, in view of the site's conservation objectives (i.e., the process proceeds to Stage 2).

1.3.2 Stage 2 – AA

This stage requires a more in-depth evaluation of the plan or project, and the potential direct and indirect impacts of them on the integrity and interest features of the European designated site(s), alone and in-combination with other plans and projects, taking into account the site's conservation objectives. Where required, mitigation or avoidance measures will be suggested.

The competent authority can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site(s) concerned. If this cannot be determined, and where mitigation cannot be achieved, then alternative solutions will need to be considered (i.e., the process proceeds to Stage 3).

1.3.3 Stage 3 – Alternative Solutions

Where adverse impacts on the integrity of Natura 2000 sites are identified, and mitigation cannot be satisfactorily implemented, alternative ways of achieving the objectives of the plan or project that avoid adverse impacts need to be considered. If none can be found, the process proceeds to Stage 4.

1.3.4 Stage 4 – IROPI

Where adverse impacts of a plan or project on the integrity of Natura 2000 sites are identified and no alternative solutions exist, the plan will only be allowed to progress if imperative reasons of overriding public interest (IROPI) can be demonstrated. In this case compensatory measures will be required.

The process only proceeds through each of the four stages for certain plans or projects. For example, for a plan or project, not connected with management of a site, but where no likely significant impacts are identified, the process stops at stage 1. Throughout the process, the precautionary principle must be applied, so that any uncertainties do not result in adverse impacts on a site.

This report is in support of a Stage 1 Screening for Appropriate Assessment.

1.3.5 Court of Justice of the European Union (CJEU) Rulings

The CJEU has been asked to issue rulings on development plans relevant to Appropriate Assessment process, which are used to inform this assessment.

- The CJEU issued a ruling on the consideration of avoidance and reduction measures as a result of People over Wind, Peter Sweetman v Coillte Teoranta (C-323/17) [2018]. This judgement stated that measures intended to reduce or avoid effects on a Natura 2000 site should only be considered within the framework of an Appropriate Assessment, and it is not permissible to take into account such measures at the screening stage. European Court Judgement (ECJ) (June 2018) People over Wind and Sweetman [Online] Available at: http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN
- More recently, the decision of the CJEU in case C-721/21 (Eco Advocacy CLG v An Bord Pleanála), delivered in June 2023, found that Article 6(3) of the Habitats Directive must be interpreted as meaning that: “in order to determine whether it is necessary to carry out an appropriate assessment of the implications of a plan or project for a site, account may be taken of the features of that plan or project which involve the removal of contaminants and which therefore may have the effect of reducing the harmful effects of the plan or project on that site, where those features have been incorporated into that plan or project as standard features, inherent in such a plan or project, irrespective of any effect on the site.” (Para. 53(3) of the Judgement).

  This recent judgement therefore clarifies that features which have been incorporated into a project as standard features, inherent in that project, and irrespective of any effect on any European site may be taken into account for the purposes of a Stage 1 Screening for Appropriate Assessment under Article 6(3) of the directive.
- The CJEU ruling in Grace & Sweetman (C-164/17) [2018] clarified the difference between avoidance and reduction (mitigation) measures and

compensation. Measures intended to compensate for the negative effects of a project cannot be taken into account in the assessment of the implications of a project, and instead are considered under Article 6(4). This means that any project where an effect on the integrity of a Natura 2000 site remains and can only be offset by compensation, would need to proceed under Article 6(4), demonstrating “imperative reasons of overriding public interest”.

- The CJEU ruling in the case of Holohan v An Bord Pleanála (C-461/17) [2018] also clarified the importance in Appropriate Assessment of taking into account habitat types and species outside the boundary of the Natura 2000 site where implications of the impacts on those habitat and species may impact the conservation objectives of the Natura 2000 site. In this assessment functionally linked and supporting habitat for species outside of Natura 2000 sites are assessed where they could potentially impact the conservation objectives of any screened in Natura 2000 sites.
- The CJEU ruling in response to questions referred by the Irish High Court in the Eco Advocacy CLG Case (C-721/21) [2023] indicated that an applicant for permission in its AA screening report/and a decision maker in undertaking its AA screening can take into account “standard features”, i.e. all the constituent elements of that project inherent in it/elements that are incorporated into a projects design not with the aim of reducing its negative effects (even where these have the effect of reducing harmful effects on a European site).

1.4 Methodology

The Screening for Appropriate Assessment has been prepared with regards to the Birds and Habitats Directives, the European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended and relevant jurisprudence of the EU and Irish courts. The following documents have also been used to provide guidance for the assessment:

- DEHLG (2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government.
- Office of the Planning Regulator (2021) OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management (OPR, 2021).
- EC (2019). Managing Natura 2000 sites: the provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC.(European Commission, 2019).
- EC (2021) Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission (European Commission, 2021).

- EC (2022) Guidance document on assessment of plans and projects in relation to Natura 2000 sites - A summary (European Commission. Directorate General for Environment., 2022)
- EC (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 interest, compensatory measures, overall coherence, opinion of the commission. European Commission Management (EC, 2007).
- EC, 2021) Guidance on strict protection of animal species of Community interest under the Habitats Directive.
- CIEEM (2024) Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater and Coastal, Second Ed. (Chartered Institute of Ecology and Environmental), (updated 2024) (CIEEM, 2024).

This report has been produced using currently available information, with the most up-to-date version available at the time.

1.4.1 Desktop Study

A desktop study was conducted of available published and unpublished information, along with a review of data available on the National Parks and Wildlife Service (NPWS) and National Biodiversity Data Centre (NBDC) web-based databases, to identify key habitats and species, including legally protected and species of conservation concern, that may be present within ecologically relevant distances from the project as explained below, A baseline habitat assessment was performed using satellite imagery of the site. The data sources below were consulted for the desktop study:

- EC (2013) Interpretation Manual of European Union Habitats Version EUR 28 (European Commission, 2013).National Parks and Wildlife Service (NPWS) (2019).
- The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report (NPWS, 2019c).
- NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitat Assessments. Unpublished NPWS report (NPWS, 2019d).
- NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments. Unpublished NPWS report (NPWS, 2019e).
- Aerial photography available from www.osi.ie and ESRI World Imagery.
- NPWS website (www.npws.ie) where Natura 2000 site synopses, data forms and conservation objectives were obtained along with Annex 1 habitat distribution data and status reports.

- River Basin Management Plans
- NBDC Biodiversity Maps (maps.biodiversityireland.ie)
- Catchments (www.catchments.ie)
- Environmental Protection Agency Maps (https://gis.epa.ie/EPAMaps)
- Geological Survey Ireland (GSI) (www.gsi.ie)
- GSI - Groundwater data viewer (https://dcenr.maps.arcgis.com)
- Planning Applications (myplan.ie)

1.4.2 Site Surveys

A general ecological walkover of the site was conducted by JBA Ecologists Johanna Healy and Mia Heigh on 12th November 2024. Static bat detectors and trail cameras were deployed for 17 days from 12th November to 27th November.

The ecological walkover survey recorded habitats and protected species, following the methods outlined in the documents below:

- Heritage Council (2011). Best Practice Guidance for Habitat Survey and Mapping (Smith et al., 2011).
- Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes (NRA, 2009).

Aerial photographs and site maps assisted the survey. Habitats have been named and described following Fossitt (2000). Nomenclature for higher plants follows that given in The New Flora of the British Isles 4th Edition (Stace, 2019). Identification of Irish plants generally follows Webb's An Irish Flora (Parnell et al., 2012).

1.4.3 Screening Methods

This screening assessment uses the source-pathway-receptor (S-P-R) model as outlines in guidance (OPR, 2021). Using the source-pathway-receptor model allows for the potential significant effects to be eliminated if no viable source, pathway, or receptor is present.

The S-P-R method uses an examination of the construction methods or project description allows sources of impact to be determined. This also allows a zone of influence for the project to be generated based on the size, scale and nature of the works involved. The pathways for impact are also analysed to see if a functional pathway for impact is present. This report analyses three pathways: surface water, groundwater and land. Using information gathered from desk sources (e.g. mapped qualifying interests from the Conservation Objectives for the site) and from the field survey, receptors within the zone of influence are identified. In some cases, sensitive receptors may also play a role in determining the Zone of Influence (ZOI). If any of the three parts to the model are not present (source-pathway-receptor) the potential for a likely significant effect from the project on the Natura 2000 network can be discounted.

The Zone of Influence was used to identify Natura 2000 sites that could be impacted by the project. For each of these sites, the Qualifying Interest features and their associated conservation objectives were identified, and the possibility of likely significant effect was determined by a combination of location, ecological and hydrological connectivity, sensitivity of receptor and magnitude of the source of impact.

1.4.4 Likely Significant Effect Test

The test for AA Screening is whether the project could have a 'likely significant effect' on any Natura 2000 site. A likely significant effect is defined as any effect that could undermine the conservation objectives of a Natura 2000 site, either alone or in combination with other plans or projects. There must be a causal connection between the project and the qualifying interest of the site which could result in possible significant effects on the site. The likely significant effect test is a lower threshold for the screening assessment than 'adverse effect on site integrity' considered at Appropriate Assessment stage (Stage 2) as screening is intended to be a preliminary examination for potential effects.

1.4.5 In-Combination effects

In relation to the assessment of potential in-combination effects, where there is no effect at all via a pathway, there is no possibility of in-combination effects. Where potential likely significant effects are identified, the in-combination assessment is carried forwards to a Stage 2 Appropriate Assessment

1.5 Limitations and Constraints

The screening assessment necessarily relies on some assumptions, and it was inevitably subject to some limitations. These would not affect the conclusion, but the following points are recorded to ensure the basis of the assessment is clear:

- The precautionary principle is utilised when determining potential ecological sensitivities within the proposed projects ZoI.
- Information on the works and conditions on site are based on the current knowledge at the time of writing. Changes to the site since this report was drafted cannot be accounted for. However, significant changes to the site are not foreseen to happen prior to the start of the project.
- This assessment is based on methodology for proposed works as described in this report. Where changes to methodology occur, an ecologist will need to be consulted to determine if the changes are likely to alter the ecological impacts and would therefore need reassessment.
- Data from biological record centres or online databases is historical information, datasets may be incomplete, inaccurate or missing. The absence of records for

an area may be due to the under recording in the area and not necessarily imply the absence of species. These records are therefore to be treated as minimum information available for the area.

2 Project Description

2.1 The Project

The project consists of the proposed works which include the construction of 16no. new dwellings at Cullairbaun Estate, Athenry, Co. Galway.

This is not directly connected with, or necessary to the management of any Natura 2000 site but may have potential adverse impacts upon the Natura 2000 sites identified in Section 4. Therefore, the proposed project is subject to the requirements of the AA process.

2.2 Site Location

The project will be undertaken in Cullairbaun Estate in Athenry, Co. Galway. The site is located within an existing housing estate on the R347, close to the Athenry train station (Figure 2-1).

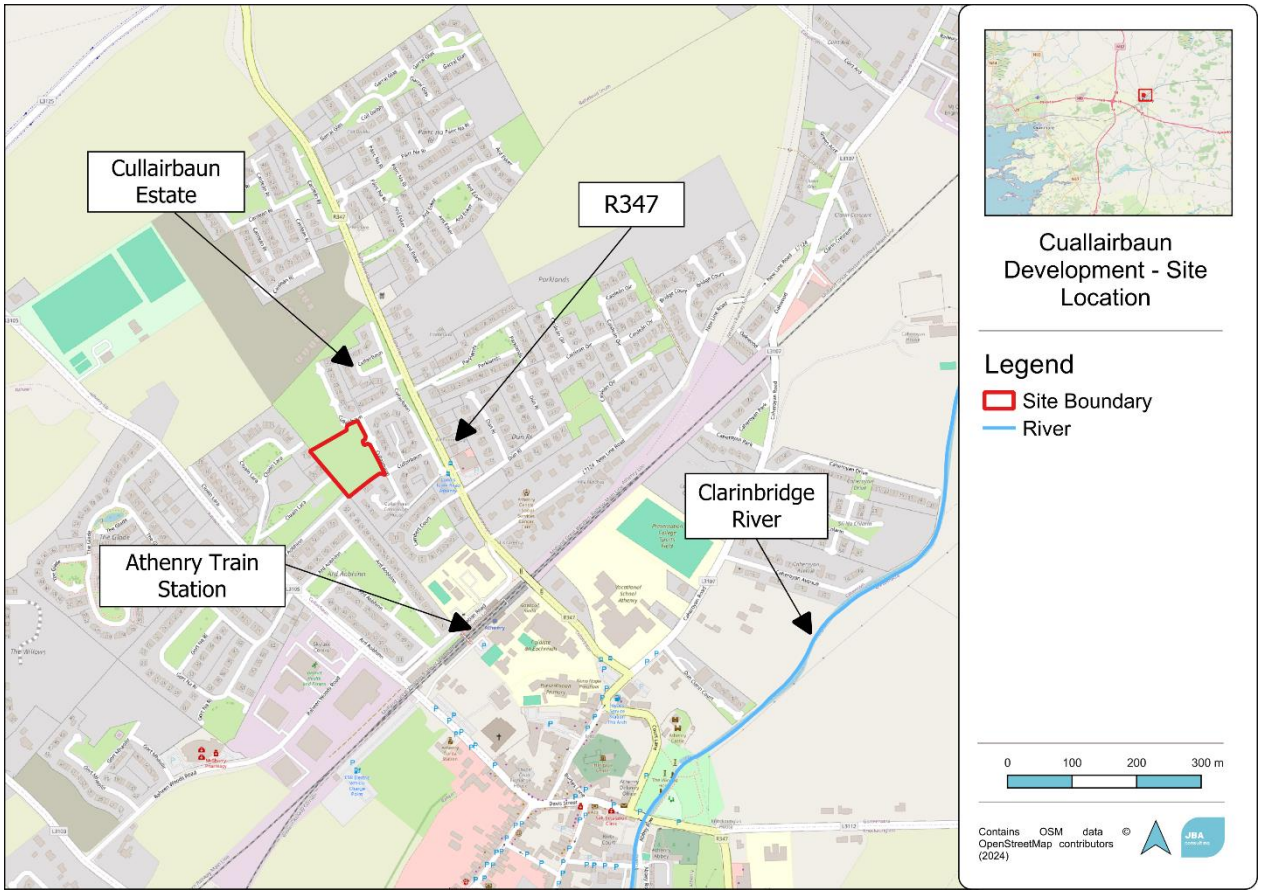


Figure 2-1: Site boundary.

2.3 Proposed Works

The proposed works for the development include (but are not limited to):

- The construction of 12 no. new semi-detached dwellings including for all site development works, services etc. within the curtilage of the site and the construction of new footpaths to tie into the old footpaths.
- The construction of a care home with 5 no. bedrooms, communal space and kitchen facilities including services.
- New foul drainage, surface water drainage, water, landscaping, gas, electrical, telecom services and diversion of existing services is also to be included as required.
- Landscaping including new trees, green spaces, planter beds, and raised planter allotments.

The proposed drainage plans indicate that foul water will connect to the existing foul system to the west of the site; as will the stormwater. An attenuation tank is to be installed near the southern boundary of the site underlying an area of landscaping. A silt trap and petrol interceptor have been included within the design of the stormwater drainage design.

The proposed site layout, drainage design, and lighting can be seen in Appendix C.

2.4 Zone of Influence

The Zone of Influence is considered using the Source-Pathway-Receptor model, therefore only designated sites that are connected to the project site are recorded and assessed. This zone of influence uses the precautionary principle, as the work is primarily anticipated to only impact the footprint of the site.

Connections are assessed for impacts relating to noise disturbance (300m), air pollution (emissions and dust) (250m), and any supporting habitats for SAC/SPA species beyond this distance that may have QI species that utilise the site. The ZoI for air pollution was considered as per the Institute of Air Quality Management (IAQM) Guidance on the Assessment of Dust from Demolition and Construction (IAQM, 2024), including ex-situ habitats used by QI Species associated with local Natura 2000 sites.

The project will primarily affect the site only, but a wider area of influence is used for impacts relating to the following:

- Surface water that is hydrologically connected (15km)
- Groundwater bodies connected to the site (10km)
- Land: noise disturbance (300m)
- Land: air pollution (250m) using (IAQM, 2024) and the precautionary principle;
- Land: supporting habitat(s) for SAC/SPA species (5km) for scoping, but species-specific based site/species characteristics and direct disturbance is likely to be much smaller. The zone of influence is based on the characteristics

of the site identified from the site visit. The site does not host Annex I habitat and is unlikely to be used by Annex II species.

3 Existing Environment

3.1 Baseline Conditions

Baseline ecology for the site is based on the ecological walkover survey carried out on 12th November 2024 by JBA Ecologists. Habitats and protected species were surveyed for.

3.2 Habitats

No Annex habitats are present on site. The habitats have been mapped in Figure 3-1, and

Table 3-1 details the habitats classified to Fossitt (2000).

3.2.1 Amenity Grassland Improved – GA2

The site largely consists of this habitat. It is a heavily manage grassland and small football pitch. The moss coverage was moderate across this habitat, at least 40-50%. Species recorded within the grassland consisted of Perennial Rye-grass *Lolium perenne*, Yorkshire Fog *Holcus lanatus*, Red Clover *Trifolium pratense*, White Clover *Trifolium repens*, Rough Hawkbit *Leontodon hispidus*, and Creeping Buttercup *Ranunculus repens* (Figure 3-2).

3.2.2 Stonewalls and other stone works – BL1

This habitat consists of brick boundary walls along the western and southern site boundary bordering existing housing. Ivy *Hedra hibernica* was noted growing on some areas of the walls.

3.2.3 Treelines

The treeline to the west is made up of Sycamore *Acer pseudoplatanus*. The treeline to the east consists of Japanese Larch *Larix kaempferi*.

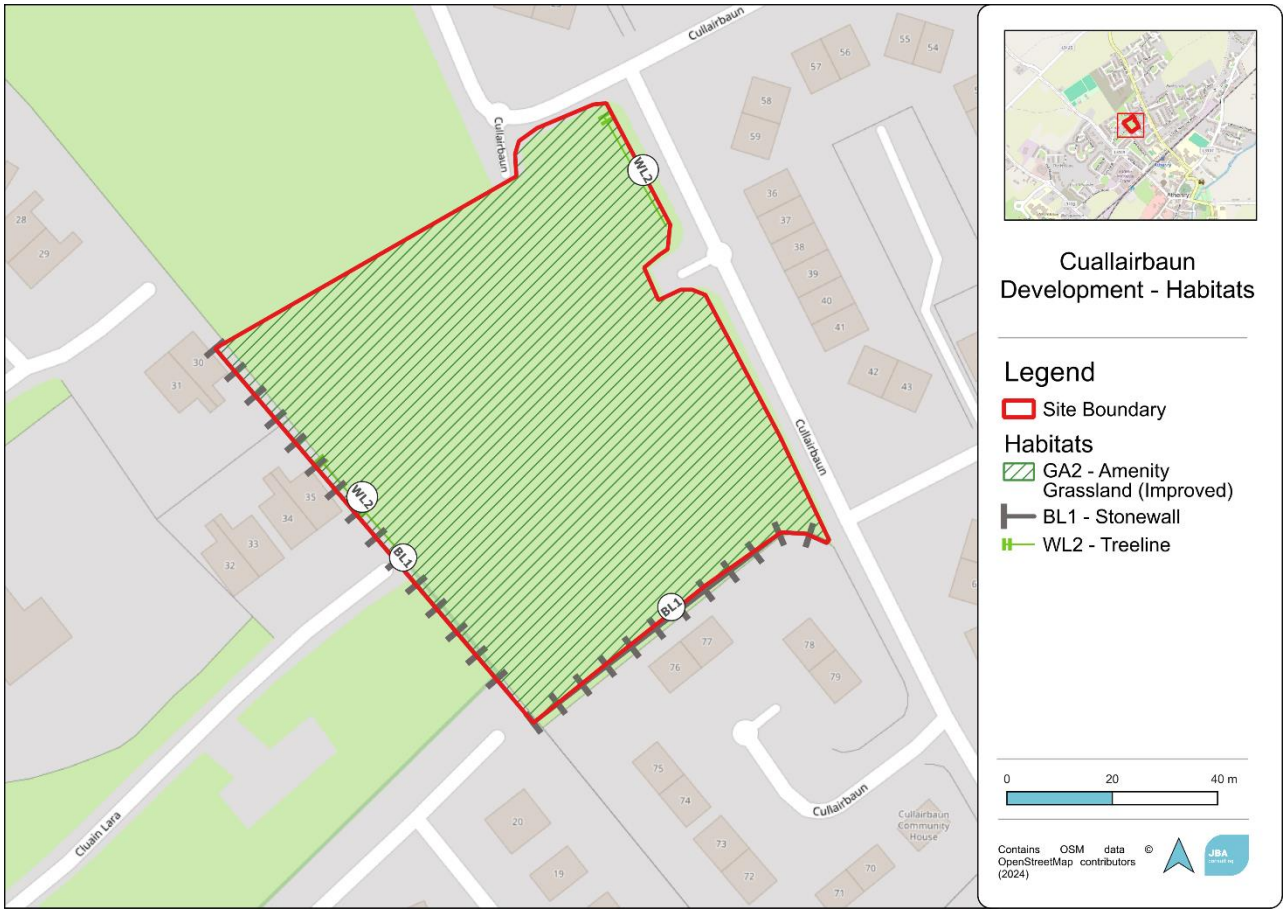


Figure 3-1: Habitats within the project boundary.

Table 3-1: Habitats on site classed to Fossitt 2000.

Fossitt Code	Habitat
GA2	Amenity Grassland Improved
BL1	Stonewalls and other stonework
WL2	Treeline

Figure 3-2: Photograph taken of proposed site.

3.3 Protected Species

No Annex species or supporting habitats were recorded on site.

No protected species were recorded on site. The text below outlines the records of protected flora and fauna collected from the NBDC database. A custom polygon covering the proposed site and a 5km buffer was queried for NBDC records since 01/01/2014, and with the full list of protected species listed in Appendix A.

The following Annex species have been recorded within 5km:

Birds Directive

- Common Coot *Fulica atra* (Annex II, Section I & Annex III, Section II; Birds Directive)
- Common Pheasant *Phasianus colchicus* (Annex II, Section I & Annex III, Section I; Birds Directive)
- Common Snipe *Gallinago gallinago* (Annex II, Section I 7 Annex III, Section III; Birds Directive)

- Common Wood Pigeon *Columba palumbus* (Annex II, Section I & Annex III, Section I; Birds Directive)
- Eurasian Curlew *Numenius arquata* (Annex II, Section II; Birds Directive)
- Eurasian Woodcock *Scolopax rusticola* (Annex II, Section I & Annex III, Section III; Birds Directive
- European Golden Plover *Pluvialis apricaria* (Annex I & Annex II, Section II & Annex III, Section III Birds Directive)
- Hen Harrier *Circus Cyaneus* (Annex I, Annex II, Section II & Annex III, Section III; Birds Directive)
- Little Egret *Egretta garzetta* (Annex I; Birds Directive)
- Northern Lapwing *Vanellus vanellus* (Annex II, Section II; Birds Directive)
- Peregrine Falcon *Falco peregrinus* (Annex I; Birds Directive)
- Rock Pigeon *Columba livia* (Annex II, Section I; Birds Directive)
- Whooper Swan *Cygnus cygnus* (Annex I; Birds Directive)

Habitats Directive

- Common Frog *Rana temporaria* (Annex V; Habitats Directive)
- Freshwater White-clawed Crayfish *Austropotamobius pallipes* (Annex II & IV; Habitats Directive)
- Marsh Fritillary *Euphydras aurinia* (Annex II; Habitats Directive)
- Brown Long-eared Bat *Plecotus auritus* (Annex IV; Habitats Directive)
- Lesser Noctule / Leisler's Bat *Nyctalus leisleri* (Annex IV; Habitats Directive)
- Pine Marten *Martes martes* (Annex V; Habitats Directive)
- Pipistrelle sp. *Pipistrellus pipistrellus sensu lato* (Annex IV; Habitats Directive)
- Soprano Pipistrelle *Pipistrellus pygmaeus* (Annex IV; Habitats Directive)

Some of the Annex II species protected under the Birds Directive are not directly protection though provision of SPAs, but Annex II birds maybe protected through restrictions on hunting. Rare birds may be protected through species based direct intervention.

None of these protected species are likely to be present on site. There is no suitable supporting habitat or likely commuting or foraging areas for any QIs or other Annex species in close proximity to the proposed development site.

Of these recorded species, the following are QIs of the Natura 2000 sites within the project ZoI:

- Whooper Swan (extremely unlikely to use terrestrial urban spaces such as this)
- Eurasian Golden Plover (extremely unlikely to use terrestrial urban spaces such as this)

- Eurasian Curlew (extremely unlikely to use terrestrial urban spaces such as this)

Other QIs recorded within 5km include Great Cormorant *Phalacrocorax carbo*. Cormorants are extremely unlikely to use terrestrial urban spaces such as this.

The closest known roost for Lesser Horseshoe Bat is over 2.5km from the site, and hence is outside of the Core Sustenance Zone for the species. No likely foraging grounds or commuting corridors occur within the site boundary or the surrounding area, as LHB are light sensitive species which forage in woodland and scrub (not present at this site). The site is surrounded by urban housing.

3.3.1 Trail Camera Results

The trail camera was placed on the site from 12th to 27th of November 2024. During this time, no protected species were recorded using the site.

3.3.2 Bat Static Recorder Result

A bat static recorder was deployed on site from 12th to 27th November 2024. Due to a fault, the recorder stopped recording after the 19th of November. Following data analysis, four species of bat were recorded using the site over 7 nights.

- Brown Long-eared Bat (Plecotus auritus)
- Common Pipistrelle (Pipistrellus pipistrellus)
- Soprano Pipistrelle (Pipistrellus pygmaeus)
- Leisler's Bat (Nyctalus leisleri)

It is likely that the bats recorded on the site were commuting to a feeding habitat, rather than using the site itself for feeding as the habitats on site has low foraging potential. Table 3-2 below outlines the number of calls recorded by the detector.

Table 3-2: Results of static recorder data from 12th to 19th November.

	13/11	14/11	15/11	16/11	17/11	19/11
Brown Long-eared	0	2	0	1	0	0
Common Pipistrelle	4	2	2	0	0	1
Soprano Pipistrelle	2	7	16	7	8	1
Leisler's	0	0	0	0	4	0

Additionally, during the site visit a preliminary roost feature search was conducted and no suitable features were noted by surveyors.

3.4 Invasive Species

No Third Schedule invasive species have been recorded within the footprint of the proposed development.

A full list of non-native invasive species recorded on the NBDC database in the last 10 years within a 5km radius of the site is listed in Appendix B. None of these species were recorded or likely to occur in the works area.

3.5 Surface Water

The site lies within the Clarinbridge_SC_010 sub catchment, which is part of the Shannon Estuary South catchment (Figure 3-3). The Clarinbridge River (Waterbody code: IE_WE_29C020400) flows c. 650m from the proposed development, which connects to the transitional waterbody of Dunbulcaun Bay (Not at Risk) about 14.4km downstream (EPA, 2024).

There is no clear connection from the site to these local waterbodies. However, many of the local drains have been culverted and outfall to the Clarinbridge River, approximately 650m southeast of the proposed development, is assumed. As the development proposes to connect into the existing surface water drainage network, this provides a potential hydrological connection between the proposed project and the greater Galway Bay. The river is classed as “At Risk” and has an overall status of “Moderate”.

Approximately 1.1km downstream of the proposed development lies the Athenry Wastewater Treatment Plant.

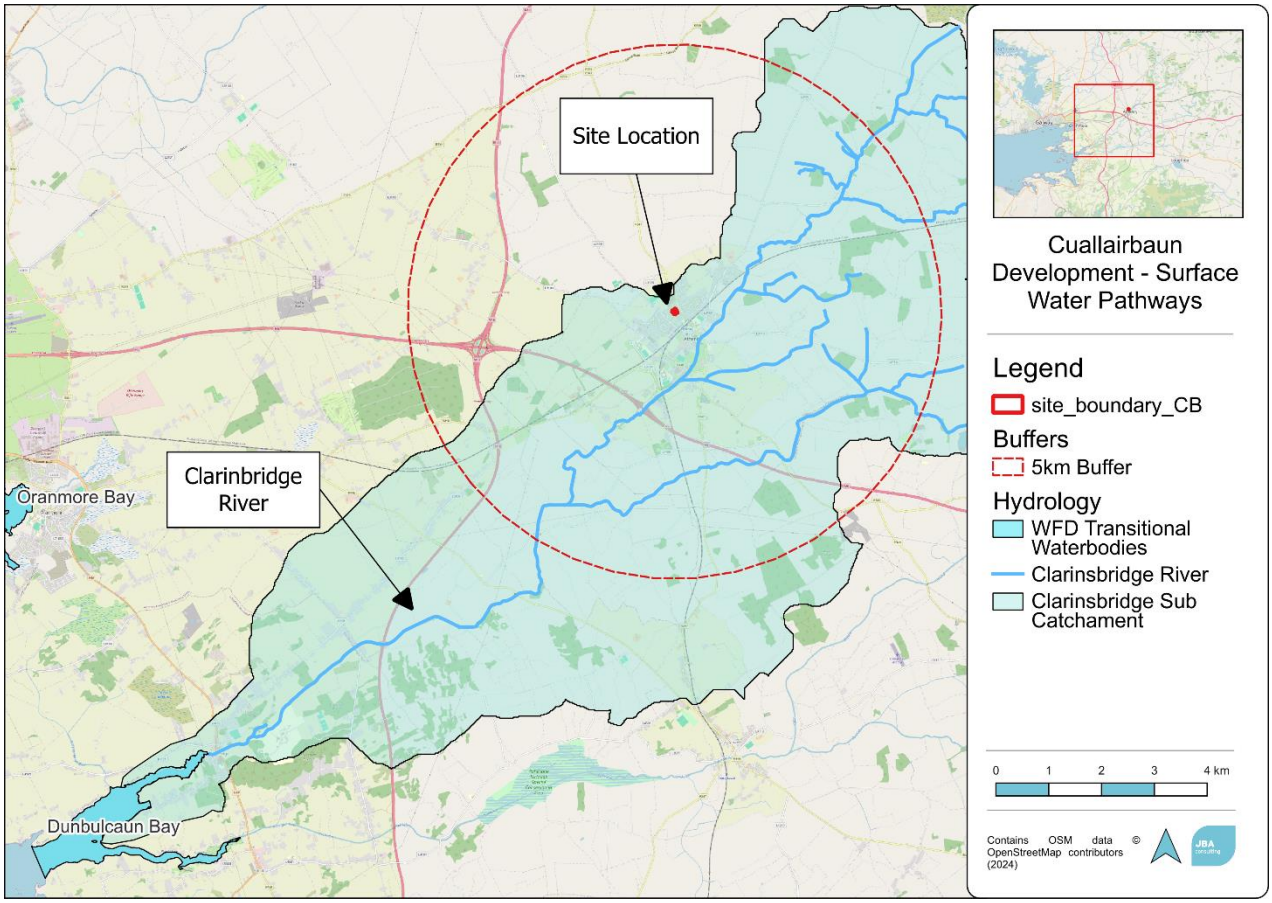


Figure 3-3: Surface water features associated with the proposed project.

3.6 Groundwater Bodies

The underlying soil type is urban, man-made surfaces; grassland is heavily managed. Subsoil permeability is classified as 'Moderate'. Underlying bedrock is pale grey clean skeletal limestone. The site occurs within a Regionally Important Aquifer - karstified which is generally moderately productive; an aquifer in which the network of fractures, fissures and joints through which groundwater flows is reasonably well-connected and dispersed throughout the rock, giving a moderate permeability and groundwater throughput. Aquifer storage is moderate and groundwater flow paths can be up to several kilometres in length; there is likely to be a substantial groundwater contribution to surface waters. The groundwater body the site is located in is the Clarinbridge IE_WE_G_0008 WFD groundwater body (Figure 3-4), which has overall status of 'Good' and is classed as 'Not at risk'. Groundwater vulnerability on-site is 'High' (Figure 3-5). (EPA, 2024).

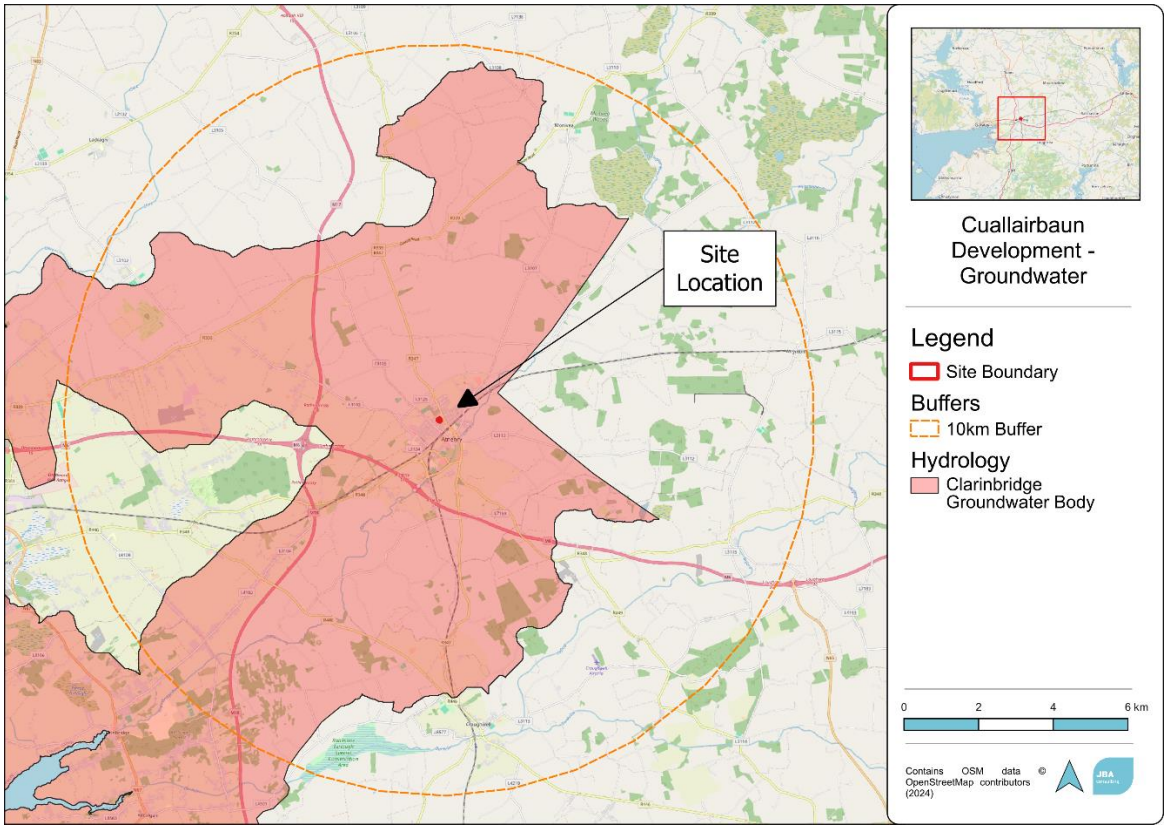


Figure 3-4: Groundwater associated with site.

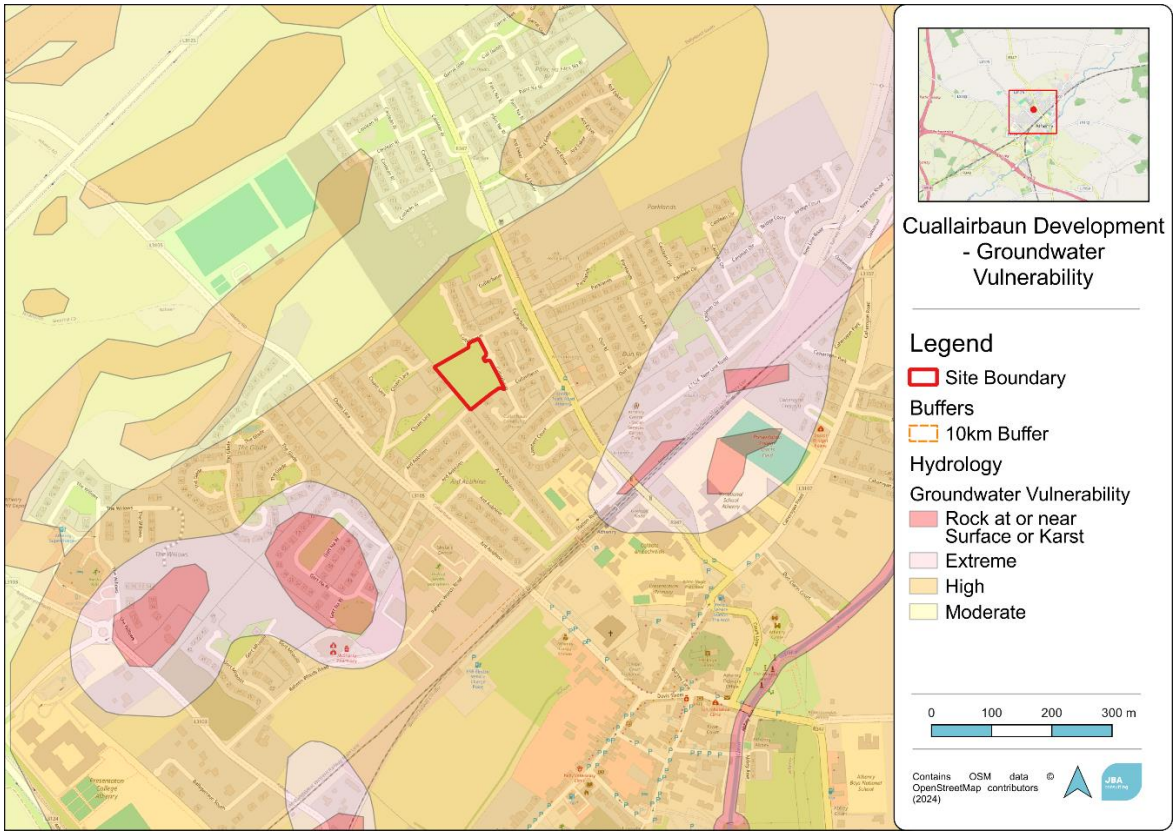


Figure 3-5: Groundwater vulnerability associated with the proposed site.

4 Natura 2000 Sites

The DEHLG (2009, rev 2010) guidance identifies that Screening for Appropriate Assessment of a plan or project should consider the following Natura 2000 sites:

- Any Natura 2000 sites within or adjacent to the plan or project area.
- Any Natura 2000 sites within the likely zone of impact of the plan or project. This is dependent on the scale and natura of the plan, within 15km generally recommended for plans, but potentially much less for projects.
- Any Natura 2000 sites that are more than 15km from the plan or project area, but may potentially be impacted upon, for example, through a hydrological connection.

The OPR guidance promotes the use Source-Pathway-Receptor model, therefore only directly connected sites will be retained (OPR, 2021).

Within the ZoI, 10 Natura 2000 sites were recorded (Table 4-1) and mapped in relation to the proposed site (Figure 4-1, Figure 4-2, Figure 4-3). Qualifying Interests (QIs), brief site descriptions, and potential relevant threats and pressures are also described for these Natura 2000 sites.

Table 4-1: Natura 2000 sites within the ZoI.

Natura 2000 site	Site Code	Approximate Distance from Site	Potential Hydrological Connection
Monivea Bog SAC	002352	6.9km	6.9km Via Groundwater
Lough Corrib SAC	000297	7.8km	No connection present
Rahasane Turlough SAC	000322	8.2km	No connection present
Rahasane Turlough SPA	004089	8.2km	No connection present
Galway Bay Complex SAC	000268	10.4km	14.1km via Surface water
Cregganna Marsh SPA	004142	11.8km	11.9km Via Groundwater
Inner Galway Bay SPA	004031	12km	14.1km Via Surface water
Castletaylor Complex SAC	000242	13km	14.5km via Groundwater
Lough Finall Complex SAC	000606	14.2km	14.4km Via Groundwater
Kiltiernan Turlough SAC	001285	14.8km	14.8km Via Groundwater
Ardrahan Grassland SAC	002244	14.9km	No connection present

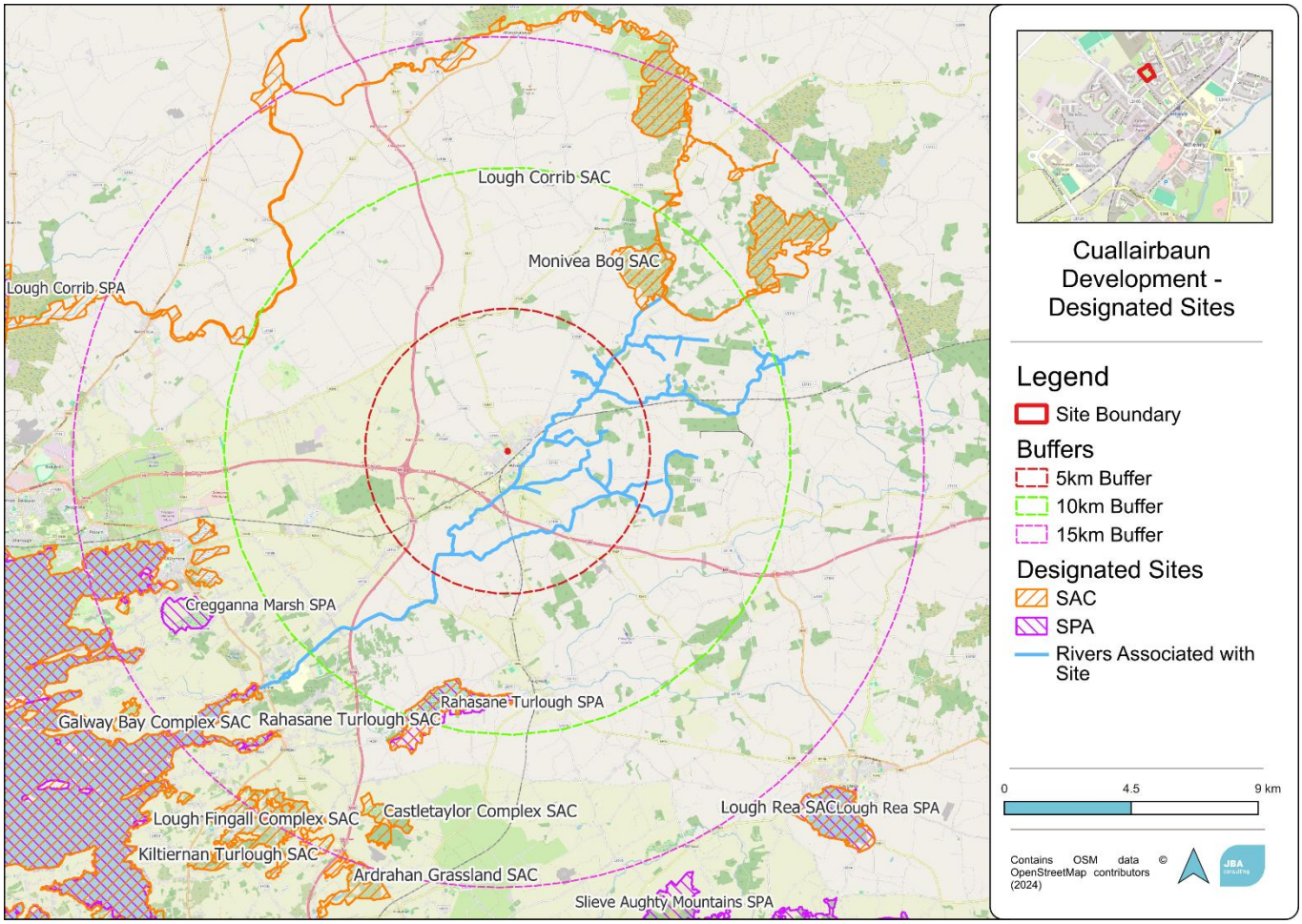


Figure 4-1: Natura 2000 sites within the project ZoI

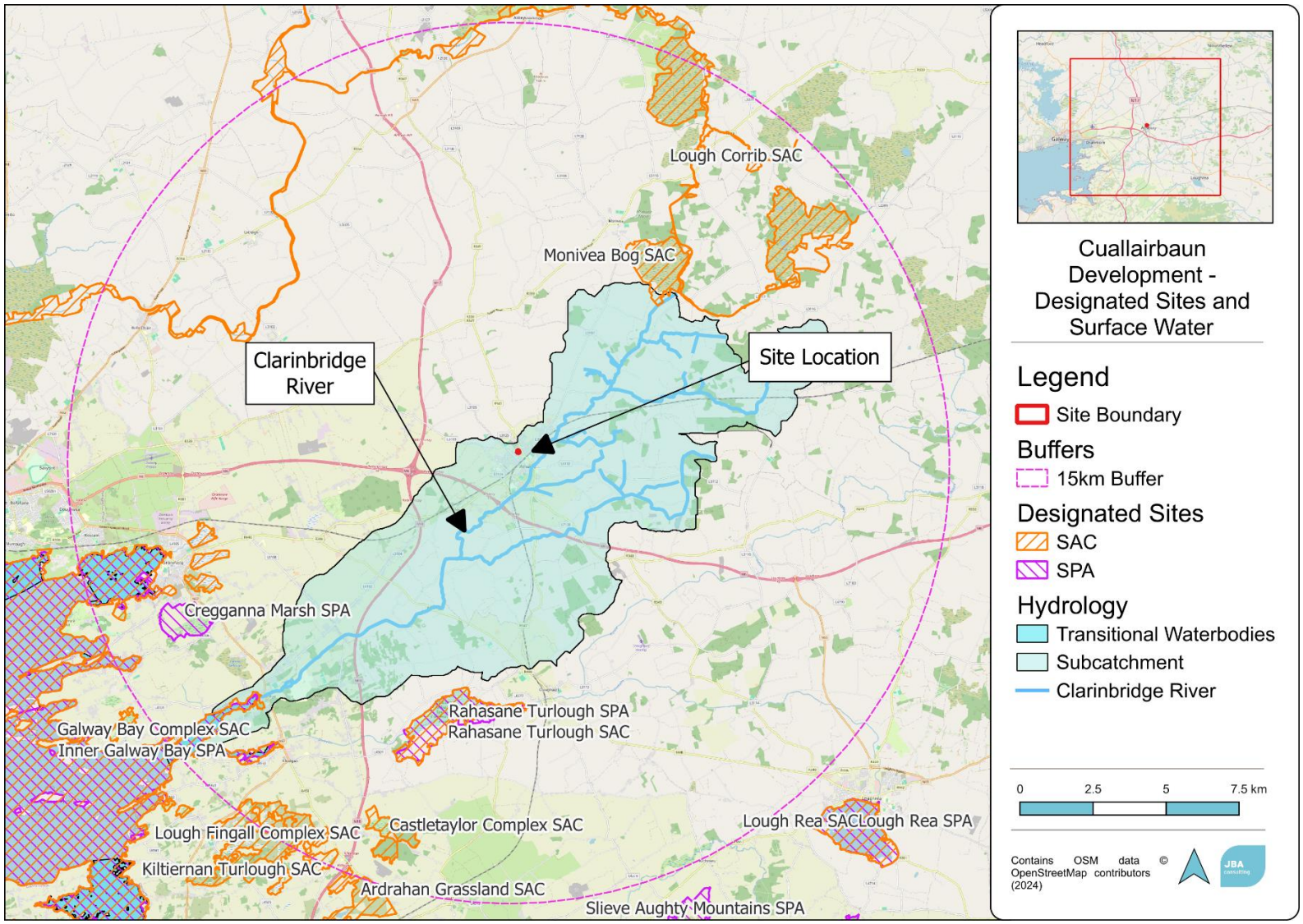


Figure 4-2: Natura 2000 sites within the ZoI and associated surface water.

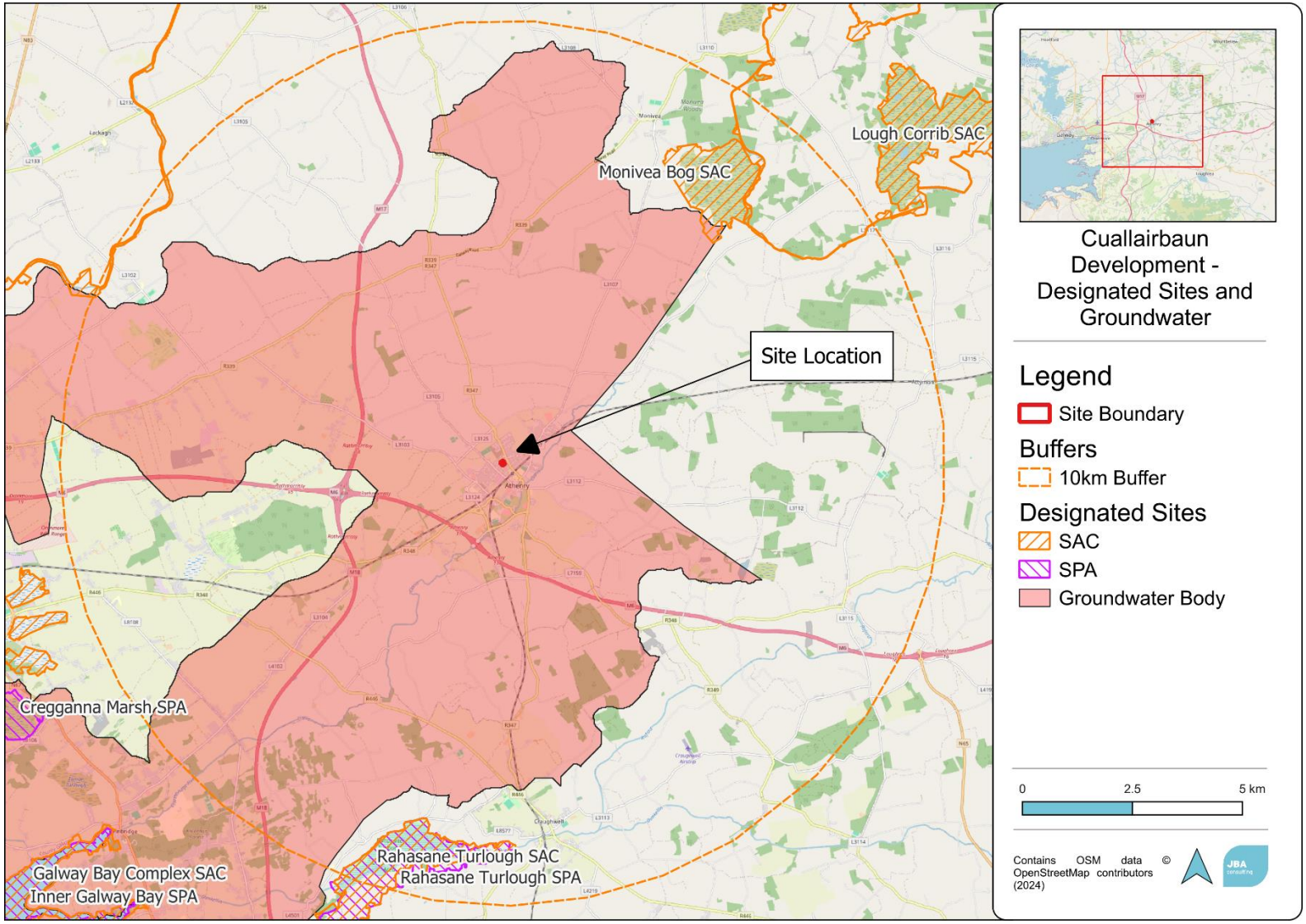


Figure 4-3: Natura 2000 sites within the ZoI and groundwater body associated with the site.

Table 4-2: Natura 2000 sites within the Zone of Influence, brief descriptions, lists of qualifying interests and pathways present.

Site Name	Brief and relevant conservation objectives	Qualifying interests	Project-relevant threats/pressures: Impact	Pathway Present
Monivea Bog SAC 002352	Monivea Bog is situated approximately 5 km north-east of Athenry, Co. Galway. It is located in the townlands of Corrantarrmud, Newcastle, Glenaslat and Lenamor. It is in an area of karstic limestone. (NPWS, 2014)	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] (NPWS, 2015a)	Mechanical removal of peat (High) Other human induced changes in hydraulic conditions (High) Artificial planiting on open ground (Medium) Burning down (Medium) Water abstractions from groundwater (Medium)	No Pathway Present – within 10km groundwater buffer but no connection present
Lough Corrib SAC 000297	Lough Corrib is situated to the north of Galway city and is the second largest lake in Ireland, with an area of approximately 18,240 ha (the entire site is 20,556 ha). The surrounding lands to the south and east are mostly pastoral farmland, while bog and heath predominate to the west and north. Several rivers are included within the SAC as they are important for Atlantic Salmon. These rivers include the Clare, Grange, Abbert, Sinking, Dalgan and Black to the east, as well as the Cong, Bealanabrack, Failmore, Cornamona, Drimneen and Owenriff to the west. In addition to the rivers and lake basin, adjoining areas of conservation interest, including raised bog, woodland, grassland and limestone pavement, have been incorporated into the site.	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130] Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230] Limestone pavements [8240] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	Agricultural intensification (High) Diffuse pollution to surface waters due to household sewage and waste waters (High) Invasive non-native species (High) Mechanical removal of peat (High) Other human intrusions and disturbances (High) Abandonment of pastoral systems, lack of grazing (Medium) Continuous urbanisation (Medium) Dispersed habitation (Medium) Fertilisation (Medium) Forest planting on open ground (Medium) Infilling of ditches, dykes, ponds, pools, marshes or pits (Medium) Other human induced changes in hydraulic conditions (Medium) Piers / tourist harbours or recreational piers (Medium) Removal of hedges and copses or scrub (Medium) Roads, paths and railroads (Medium) Disposal of household / recreational facility waste (Low) Sand and gravel extraction (Low)	No Pathway present

Site Name	Brief and relevant conservation objectives	Qualifying interests	Project-relevant threats/pressures: Impact	Pathway Present
	(NPWS, 2022)	Bog woodland [91D0] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Salmo salar (Salmon) [1106] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Lutra lutra (Otter) [1355] Najas flexilis (Slender Naiad) [1833] Hamatocaulis vernicosus (Slender Green Feather-moss) [6216] (NPWS, 2017)		
Rahasane Turlough SAC 000322	Rahasane Turlough lies in gently undulating land, approximately 2 km west of Craughwell, Co. Galway. It consists of two basins which are connected at times of flood but separated as the waters decline. The larger of these, the northern basin, takes the Dunkellin River westwards. (NPWS, 2013e)	Turloughs [3180] (NPWS, 2020)	Fertilisation (High) Intensive mixed animal grazing (High) Modification of hydrographic functioning, general (High) Agricultural intensification (Medium) Diffuse groundwater pollution due to agricultural and forestry activities (Medium) Diffuse pollution to surface waters due to household sewage and waste waters (Medium) Hunting (Medium) Landfill, land reclamation and drying out, general (Medium) Management of aquatic and bank vegetation for drainage purposes (Medium) Removal of hedges and copses or scrub (Medium)	No Pathway Present
Rahasane Turlough SPA 004089	Rahasane Turlough lies in gently undulating land, approximately 2 km west of Craughwell, Co. Galway. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation importance for the following species: Whooper Swan, Greenland Whitefronted Goose, Wigeon, Golden Plover	Whooper Swan (Cygnus cygnus) [A038] Wigeon (Anas penelope) [A050] Golden Plover (Pluvialis apricaria) [A140] Black-tailed Godwit (Limosa limosa) [A156] Greenland White-fronted Goose (Anser albifrons flavirostris) [A395] Wetland and Waterbirds [A999] (NPWS, 2023b)	Grazing (High) Fertilisation (Low) Hunting (Low)	No Pathway present

Site Name	Brief and relevant conservation objectives	Qualifying interests	Project-relevant threats/pressures: Impact	Pathway Present
	and Black-tailed Godwit. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. (NPWS, 2013e)			
Galway Bay Complex SAC 000268	Situated on the west coast of Ireland, this site comprises the inner, shallow part of a large bay which is partially sheltered by the Aran Islands. The Burren karstic limestone fringes the southern sides and extends into the sublittoral. West of Galway city the bedrock geology is granite. There are numerous shallow and intertidal inlets on the eastern and southern sides. Several small islands composed of glacial deposits are located along the eastern side. These include Eddy Island, Deer Island and Tawin Island. A diverse range of marine, coastal and terrestrial habitats, including several listed-on Annex I of the E.U. Habitats Directive, occur within the site, making the area of high scientific importance. (NPWS, 2015c)	Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Turloughs [3180] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] Alkaline fens [7230] Limestone pavements [8240] Lutra lutra (Otter) [1355] Phoca vitulina (Harbour Seal) [1365] (NPWS, 2013b)	Diffuse pollution to surface waters due to agricultural and forestry activities (High) Diffuse pollution to surface waters due to household sewage and waste waters (High) Industrial ports (High) Sea defense or coast protection works, tidal barrages (High) Shipping lanes, ports, marine constructions (High) Agricultural intensification (Medium) Hunting, fishing or collecting activities not referred to above (Medium) Invasive non-native species (Medium) Marine and Freshwater Aquaculture (Medium) Non intensive cattle grazing (Medium) Non intensive sheep grazing (Medium) Pipe lines (Medium) Reclamation of land from sea, estuary or marsh (Medium) Removal of beach materials (Medium) Sand and gravel extraction (Medium) Bait digging / collection (Low) Disposal of inert materials (Low) Estuarine and coastal dredging (Low) Golf course (Low) Modification of water flow (tidal & marine currents) (Low) Non-motorized nautical sports (Low) Paths, tracks, cycling tracks (Low)	Yes – Surface water pathway

Site Name	Brief and relevant conservation objectives	Qualifying interests	Project-relevant threats/pressures: Impact	Pathway Present
			Slipways (Low)	
Cregganna Marsh SPA 004142	Cregganna Marsh is situated about 3 km south of Oranmore, to the west of the Galway-Ennis Road. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Greenland White-fronted Goose. (NPWS, 2015b)	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395] (NPWS, 2023a)	Discontinuous urbanisation (Medium) Fertilisation (Medium) Grazing (Medium)	No – Same Groundwater body but outside the 10km Buffer
Inner Galway Bay SPA 004031	Inner Galway Bay SPA is a very large, marine-dominated site situated on the west coast of Ireland. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Black-throated Diver, Great Northern Diver, Cormorant, Grey Heron, Light-bellied Brent Goose, Wigeon, Teal, Redbreasted Merganser, Ringed Plover, Golden Plover, Lapwing, Dunlin, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Black-headed Gull, Common Gull, Sandwich Tern and Common Tern. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. (NPWS, 2005)	Black-throated Diver (Gavia arctica) [A002] Great Northern Diver (Gavia immer) [A003] Cormorant (Phalacrocorax carbo) [A017] Grey Heron (Ardea cinerea) [A028] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Red-breasted Merganser (Mergus serrator) [A069] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Lapwing (Vanellus vanellus) [A142] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Turnstone (Arenaria interpres) [A169] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Sandwich Tern (Sterna sandvicensis) [A191] Common Tern (Sterna hirundo) [A193] Wetland and Waterbirds [A999] (NPWS, 2013a)	Discharges (High) Reclamation of land from sea, estuary or marsh (High) Urbanised areas, human habitation (High) Dykes, embankments, artificial beaches, general (Medium) Fertilisation (Medium) Industrial or commercial areas (Medium) Leisure fishing (Medium) Marine and Freshwater Aquaculture (Medium) Nautical sports (Medium) Roads, motorways (Medium) Walking, horseriding and non-motorised vehicles (Medium) Grazing (Low)	Yes – Surface water pathway

Site Name	Brief and relevant conservation objectives	Qualifying interests	Project-relevant threats/pressures: Impact	Pathway Present
Castletaylor Complex SAC 000242	The Castletaylor Complex is situated approximately 4 km south-east of Kilcolgan in Co. Galway and lies in a gently undulating limestone topography. Although relatively small in area, the site contains a diverse range of habitats. (NPWS, 2013c)	Turloughs [3180] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Limestone pavements [8240] (NPWS, 2021a)	Landfill, land reclamation and drying out, general (High) Removal of hedges and copses or scrub (High) Diffuse groundwater pollution due to agricultural and forestry activities (Medium) Diffuse pollution to surface waters due to household sewage and waste waters (Medium) Intensive cattle grazing (Medium) Forest planting on open ground (Low)	No – Same Groundwater body but outside the 10km Buffer
Lough Fingall Complex SAC 000606	This site is situated immediately south-east of Ballindeereen in Co. Galway, and within 2-3 km of Galway Bay. It is within the stretch of flat low-lying bare limestones known as the Ardrahan limestones, which extend from the foot of the Burren hills northwards towards Craughwell. The site comprises a complex of habitats, the dominant being turloughs and limestone pavement. (NPWS, 2019a)	Turloughs [3180] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] Limestone pavements [8240] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] (NPWS, 2019a)	Landfill, land reclamation and drying out, general (High) Mining and quarrying (High) Modification of hydrographic functioning, general (High) Agricultural intensification (Medium) Diffuse groundwater pollution due to agricultural and forestry activities (Medium) Diffuse pollution to surface waters due to household sewage and waste waters (Medium) Disposal of household / recreational facility waste (Medium) Disposal of inert materials (Medium) Fertilisation (Medium) Infilling of ditches, dykes, ponds, pools, marshes or pits (Medium) Intensive cattle grazing (Medium)	No – Same Groundwater body but outside the 10km Buffer
Kiltiernan Turlough SAC 001285	Kiltiernan Turlough lies in a linear depression running south-westwards from the main Galway-Limerick Road, north-west of Ardrahan in Co. Galway. The site includes a low ridge on the south-eastern side. (NPWS, 2013d)	Turloughs [3180] (NPWS, 2021b)	Agricultural intensification (High) Fertilisation (High) Roads, motorways (High) Diffuse groundwater pollution due to agricultural and forestry activities (Medium) Diffuse pollution to surface waters due to household sewage and waste waters (Medium) Modification of hydrographic functioning, general (Medium)	No – Same Groundwater body but outside the 10km Buffer

Site Name	Brief and relevant conservation objectives	Qualifying interests	Project-relevant threats/pressures: Impact	Pathway Present
Ardrahan Grassland SAC 002244	This site lies immediately west and north of Ardrahan in south Co. Galway. The site contains a good example of limestone pavement, a priority habitat listed on Annex I of the E.U. Habitats Directive, a small though excellent example of the Annex I habitat alpine heath, areas of the Annex I priority habitat orchid-rich calcareous grassland, along with one other Annex I habitat, Juniper scrub. (NPWS, 2019b)	Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Limestone pavements [8240] (NPWS, 2024)	Abandonment of pastoral systems, lack of grazing (High) Disposal of inert materials (Medium) Fertilisation (Medium) Intensive horse grazing (Medium) Removal of hedges and copses or scrub (Medium) Roads, paths and railroads (Low) Stock feeding (Low) Structures, buildings in the landscape (Low)	No – Same Groundwater body but outside the 10km Buffer

In summary the Natura 2000 sites with pathways to the development include:

- Galway Bay Complex SAC
- Inner Galway Bay SPA

5 Other Relevant Plans and Projects

5.1 In-Combination Effects

As part of the Screening for an Appropriate Assessment, in addition to the proposed works. Other relevant projects and plans in the region that may induce in-combination effects must be considered at this stage. These are listed in sub-sections below and are assessed with the proposed project in the Screening Assessment.

5.2 Plans

5.2.1 Athenry Local Area Plan (LAP) 2024-2030

The Athenry Local Area Plan 2024-2030 was adopted by the Athenry/Oranmore Municipal District Members on the 9th of January 2024 and came into effect on the 20th of February 2024.

The successful implementation of the Plan intends to have a positive impact on Athenry ensuring that it develops in a sustainable manner and complements the implementation of the Galway County Development Plan. The plan also includes Strategic Environmental Assessment (SEA) Environmental Report, prepared in accordance with the Planning and Development (SEA) Regulations 2004 (as amended), an Appropriate Assessment (AA) Natura Impact Report, pursuant to Article 6 of the Habitats Directive 92/43/EEC.

Considering measures already in force through the Galway County Development Plan 2022-2028 and having incorporated mitigation measures into the Local Area Plan, it is concluded that the Athenry Local Area Plan 2024-2030 is not foreseen to give rise to any significant adverse effects to designated European sites, alone or in combination with other plans or projects. This evaluation was made in view of the conservation objectives of the habitats and/or species, for which these sites have been designated.

The Athenry Local Area Plan is not anticipated to contribute to cumulative or in-combination effects.

5.2.2 Galway County Development Plan 2022-2028

The Galway County Development Plan 2022 – 2028 sets out a range of proposed policy objectives with supporting narrative for development up to 2028. In accordance with national policy, the plan is seeking to develop in a sustainable and environmentally sensitive manner. It promotes the climate change agenda, and it sets out the housing and economic priorities for the relevant period. The Galway County Development Plan 2022 – 2028 has been prepared in accordance with the provisions of the Planning and Development Act 2000 (as amended). Since the adoption of the

existing Galway County Development Plan 2015 – 2021, there has been a significant amount of planning related changes in Ireland. New National and Regional policy has been adopted since 2018 which sets out a clear growth agenda in accordance with sustainable development over the coming years. The overarching national framework now in place is the National Planning Framework (NFP) with three Regional Spatial and Economic Strategies (RSES) providing for the implementation and delivery of the NPF. The county now forms part of the Northwest Region and the RSES now includes a Galway Metropolitan Area Strategic Plan. This Plan has considered this policy framework, and it has been set out in accordance therewith.

5.2.3 River Basin Management Plan of Ireland 2022-2027

The Water Framework Directive requires that all waters, including surface and groundwater sources, are protected and that measures are put in place to ensure quality of these waters is restored to at least 'good' status or good potential by 2027 at the latest. The directive required reporting of river basin management plans to assess the waterbodies, their pressures and relevant plans towards achieving good status. In implementing the river basin management plan, the objective is to ensure that natural waters are sustainably managed and that freshwater resources are protected so as to maintain and improve Irelan's water environment.

The River Basin Management Plan 2022-2027 is not anticipated to contribute to cumulative or in-combination effects.

5.3 Other Planning Applications

Planning applications in the vicinity of the proposed site which could act in-combination with the proposed development were sought on the planning website MyPlan.ie (Table 5-1). Planning applications from the last three years that have been granted permission are considered. Applications for home extensions, internal alterations and retentions are not considered.

Table 5-1: Planning applications lodged in the last 3 years, within 2km of the site.

Planning Reference	Summary of Development	Address	Date Permission Granted
2361035	for the proposed development will consist of: • construction of a 4no. storey medical device manufacturing facility providing warehousing, production areas, administration offices & restaurant (GIA: 40,226.6 m2); • construction of a central utilities compound to comprise a gas insulated switchgear substation building (GIA: 124.57 m2), pumphouse building (GIA: 84.79 m2) & MV building (GIA: 306.46 m2); • the development includes 4no. surface car park areas, which comprise a total of 500no. car parking spaces (including 100no. EV charging spaces & 18no. accessible spaces), 10no. motorcycle parking spaces & 178no. bicycle parking spaces; • provision of an outdoor landscaped 'Wild Plaza' & a 2.1km nature trail; • provision of roof mounted solar PV panels & plant equipment on the roof of the manufacturing facility; • provision of water, foul & surface water drainage infrastructure, including – o wastewater treatment plant, o processed wastewater holding, treatment, testing & filtration facility, & o pumping stations & attenuation areas, • provision of access roads, landscaping, alterations/removal of existing field boundaries, public lighting & all other site development works & services ancillary to the proposed development; • provision of pedestrian connectivity infrastructure on the R348, Prospect Road & L3103 including footpaths, pedestrian crossings & all associated works; • provision of temporary construction compound during the construction phase of the development. A Natura Impact Statement (NIS) & Environmental Impact Assessment Report (EIAR) will be submitted to the planning authority with the planning application	Newford Ballygarraun South & Prospect, Athenry, Co. Galway	24/10/2023
23196	of the construction of a new educational campus that will comprise of two school buildings. Gaelscoil Riada a part one & two-storey, 16 classroom primary school with single class base SEN & ancillary spaces with total floor area of circa 2890sqm. Colaiste an Eachraidh a part one, two & three-storey post primary school with 17 general classrooms, 12 specialist classrooms, sports hall, single class base SEN & ancillary spaces with a total floor area of circa 6985sqm. Proposed site works to include the construction of standalone ESB substation & bin store, 2no. plant enclosures, all new hard play areas, shared central grass play area, general purpose external amenity spaces, access road with lay-by set down, 84no. carparking spaces, 48no. covered bicycle stands, ancillary infrastructure works, including new vehicular access points & new pedestrian access, together with new boundary treatments & landscaping works	Caheroyn Road, Athenry, Co. Galway	17/8/2023
23229	of: a) revised levels & location of upper playing field area, previously approved under pl. ref:17/1883; b) retention of community walkway to perimeter of upper playing field area; c) retention of external exercise equipment, water font & bench seating alongside community walkway; d) retention of accessible ramp & external stairs; e) retention of spectator rail & ball stop fencing to pitch area; f) retention of diesel generator powering previously approved floodlights as per pl. ref: 17/1883; g) retention of revised floodlight locations as approved under pl. ref: 17/1883; h) provision of new pedestrian access to front boundary wall of site; i) provision of new pathway linking said entrance to the existing community walkway; j) provision of extended community walkway to run alongside perimeter of all playing pitches to aide accessibility to all pitches; k) provision of low level lighting to entirety of community walkway; l) provision of floodlighting to existing car park area (car park previously approved under pl. refs: 00/26 & 02/1583); m) provision of additional fencing & ball stop netting to existing all weather pitch & perimeter of running track area; n) provision of warm up area to interior of running track in an astro surface; o) provision of a high jump area to interior of running track in a synthetic surface to match track; p) provision of a shot putt throw area to interior of running track in a tarmacadam finish	Moanbaun, Athenry, Co. Galway	14/2/2024

Planning Reference	Summary of Development	Address	Date Permission Granted
	with sand/gravel landing pit area; q) provision of tarmac finish to existing rear service road onto L-3103 to facilitate emergency vehicle access to playing field area; r) provision of a long jump area to track side in a synthetic finish to match track surface; s) provision of storage compound to western end of site to house sports & maintenance equipment; t) provision of additional bench seating alongside community walkway		
2261321	for industrial development, the development will consist of: • the provision of a 2no. storey industrial warehousing unit & ancillary office space (8826.3sqm.); • the provision of a service yard plant & refuse area, distribution & circulation yard with 5no. level access loading bays; • the provision of solar PV panels; • the provision of 163no. car parking spaces & 163no. bicycle parking spaces; • the provision of internal roadways, pedestrian footpaths & associated landscaping; • the provision of a new vehicular & pedestrian access from Ballydavid South road; • the provision of signage & all other associated site development works intended to facilitate the proposed development	Moanbaun Raheen & CULLAIRBAUN, Athenry, County Galway	23/8/2023
23196	of the construction of a new educational campus that will comprise of two school buildings. Gaelscoil Riada a part one & two-storey, 16 classroom primary school with single class base SEN & ancillary spaces with total floor area of circa 2890sqm. Colaiste an Eachraidh a part one, two & three-storey post primary school with 17 general classrooms, 12 specialist classrooms, sports hall, single class base SEN & ancillary spaces with a total floor area of circa 6985sqm. Proposed site works to include the construction of standalone ESB substation & bin store, 2no. plant enclosures, all new hard play areas, shared central grass play area, general purpose external amenity spaces, access road with lay-by set down, 84no. carparking spaces, 48no. covered bicycle stands, ancillary infrastructure works, including new vehicular access points & new pedestrian access, together with new boundary treatments & landscaping works	Caheroyn Road, Athenry, Co. Galway	17/8/2023
2360427	for the construction of a residential development consisting of 15 no. houses. The development will consist of the construction of: 8no. 4 bed semi-detached (2 storey) houses, 2no. 3 bed semi-detached (2 storey) houses, 3no. 3 bed terraced (2 storey) houses, 2no. 2 bed terraced houses. The proposed development will also include for: provision of public open space, private open space, bicycle parking, footpath connections, public lighting, landscaping and revised boundary treatments; Provision of carparking including ducting to all spaces for future EV charging points; Provision of an uncontrolled pedestrian crossing to traverse the R-347 Regional road; Connection to existing mains water infrastructure and foul drainage networks including on site surface water attenuation to serve the development, together with all associated site works and services. A Natura Impact Statement will be submitted to the planning authority with this application	Knockaunglass, Athenry, Co. Galway	7/12/2023
2361431	for an infill residential development to the existing estate. The development will consist of the following: 1. decommissioning and removal of existing temporary on-site treatment plant and new connections to be made to existing public services; 2. construction of 38 no. residential dwellings consisting of: a. 8 no. 4 bedroom 2 story semidetached dwellings; b. 26 no. 3 bedroom 2 story semidetached dwellings; c. 4 no. 2 bedroom 2 story semidetached dwellings; 3. repositioning of existing substation; 4. revised road alignment to existing estate entrance; 5. new vehicular and pedestrian accesses onto the existing internal estate road; 6. provision of public and private open spaces, bicycle parking, site landscaping, play spaces and public lighting; 7. provision of residential carparking including ducting to all spaces for future electric charging points; 8. footpath connections, signage locations and all associated development works. Gross floor space of proposed works: 4290 sqm	Caherroyn, Cluain Na Cathrach, Athenry	1/2/2024

6 Screening Assessment

6.1 Introduction

The screening exercise will focus on assessing the likely adverse effects of the project on the Natura 2000 sites identified in Section 4.

Of the designated sites recorded within the Zone of Influence of the development, further assessment is required for the following sites using Source-Pathway-Receptor model.

Table 6-1: Natura 2000 sites with approximate distance from proposed site.

Natura 2000 Site	Site Code	Approximate Distance from Site
Galway Bay Complex SAC	000268	14.1km
Inner Galway Bay SPA	004031	14.1km

This section identifies the potential impacts which may arise as a result of the proposed project on these Natura 2000 sites. It then goes on to identify how these impacts could potentially affect the Natura 2000 sites listed above. The significance of potential impacts is also assessed, with any potential in-combination effects also identified.

6.2 Assessment Criteria

6.2.1 Describe the individual elements of the project (either alone or in combination with other plans and projects) likely to give rise to impacts on Natura 2000 sites.

Potential adverse impacts that could cause a significant effect on the qualifying interests of Natura 2000 sites, or the site as a whole during the construction and operational phases of the project, and considered using three main pathways: surface water, groundwater, and land and air pathways.

The proposed project is not anticipated to have likely significant effects on the qualifying interests of the Natura 2000 sites. The rationale for including and excluding specific impacts via the main pathways is given in more detail in the following sub-sections.

6.2.2 Surface Water Pathways

Between the proposed housing development and the Clarinbridge River, there is urban built ground (including buildings and Athenry Train Station). The Clarinbridge River runs 645m southeast of the proposed site boundary, hence discharge from the

works on the site is not likely to enter the surface water network at this location. The river flows 14.1km downstream entering the transitional waterbody Dunbulcaun Bay. Dunculcaun Bay connects the proposed site with Inner Galway Bay SPA and Galway Bay Complex SAC.

The foul and storm water drainage for the project will connect into the existing network within the estate and Athenry. New water mains, storm drains, and foul sewers are included in the drainage plan for the project, as well as a silt trap, petrol interceptor and an attenuation tank. Proposed drainage plans are provided in Appendix C.

Construction:

Surface water

During construction pollutants or sediments from site run-off is expected to be minimal as the proposed project is small in nature. There is approximately 650m of urban built land between the proposed site and the Clarinbridge River.

Additionally, in the event of any pollutants or sediment entering the Clarinbridge River it would experience a high level of dilution before entering the Natura 2000 sites 14km downstream.

The majority of surface water being generated during construction (i.e. from rainfall) will soak away naturally through the overburden so no formal surface water construction plan is present.

Foul Water

A new drainage system will be constructed that will connect to the existing Athenry wastewater drainage system.

Operation:

Storm water and foul water will connect to the existing drainage network in the estate and will then connect to the Athenry network, where water will be diverted to Athenry Wastewater Treatment Plant (WWTP), which currently has available capacity. Ambient water quality monitoring undertaken by Irish Water under the Athenry WWTP discharge licence has indicated that the water quality downstream has been compliant with the relevant environmental quality standards (Jacobs, 2023).

Due to the distance between the works and the Natura 2000 sites, no likely significant impacts are expected via surface water pathways to any Natura 2000 site from the construction or operational phase of this project.

6.2.3 Groundwater Pathways

The proposed site lies in the Clarinbridge IE_WE_G_0008 WFD groundwater body. This groundwater body does not provide connection to any designated sites within the 10km zone of influence of the proposed site boundary. The groundwater vulnerability on site is described as ‘High’, but the urban area means that recharge of the

groundwater table in the area is limited. The works are taking place on existing built land.

Excavations are not expected to exceed 2.92m and will be taking place on built land; groundwater strike is not anticipated. Ground Investigations (GI) were carried out on site and no strike was found. Discharges from the site above ground are not likely to enter the surface water network at this location. Hence, a groundwater to surface water pathway is not anticipated for the proposed project.

Due to the absence of a likely groundwater or groundwater-to-surface water pathway between the site and nearby networks, combined with the distance between the works and the Natura 2000 sites, no likely significant impacts are expected via groundwater pathways to any Natura 2000 site from the construction or operational phase of this project.

6.2.4 Land and Air Pathways

As there are no Natura 2000 sites located within the Zone of Influence for noise (300m) and air (250m), there is no likely significant effects anticipated via Land and Air pathways to any Natura 2000 sites.

Similarly, there is no supporting habitat for QIs of any SACs or SPAs located on-site that will be impacted by the proposed works. No impacts are anticipated to Annex species.

6.2.5 In-Combination Effects

As the proposed project is not anticipated to have any significant impact on QIs or conservation objectives on any Natura 2000 site and based on the screening statements of the above plans and planning applications, there is no potential for other plans or projects to act in combination with it to result in likely significant effects on Natura 2000 sites.

6.3 Summary

The proposed project is of a small scale and nature, that the significant levels of impact on any Natura 2000 site within the ZoI are not likely. No qualifying interests are anticipated to be impacted upon by the proposed project.

Due to the location of the proposed site, the scale of works, and the distance to the Natura 2000 sites that are within the Zone of Influence, the project is not anticipated to have any likely significant effects via surface water, groundwater, and air pathways to any Natura 2000 site.

6.3.1 Description of likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 sites

Project Elements	Comment		
Size and scale	The site area of this application covers c. 0.55ha. The proposed development includes the construction of 16no. semi-detached dwellings. All landscaping and ancillary works are included within the planning application.		
Land-take	There will be no direct land-take from any Natura 2000 sites.		
Distance from Natura 2000 site or key features of the site	**Natura 2000 site**	**Approximate direct distance**	**Approximate hydrological distance**
	Galway Bay Complex SAC	10.4km	**14.1km**
	Inner Galway Bay SPA	12km	**14.1km**
Resource requirements (water abstraction etc.)	There will be no resource abstraction requirements.		
Emissions (disposal to land, water or air)	<u>Construction Phase:</u> **Surface and Ground Water** Potential pollutants will be utilised at the site, including diesel and engine/hydraulic oils. Any accidental spills into drains at the site will be likely fall out within the confines of the site boundary and any discharge to storm drains is not anticipated to have a significant impact on any Natura 2000 site. Foul and storm water on site will connect to the infrastructure that already exists. Groundwater pathways to the SAC are unlikely due to the depth of excavations expected at the site. The groundwater to surface water pathway is weak (e.g., potential discharge of low volumes of water from dewatered excavations) due to the lack of natural water courses at the site and the distance to the SAC and SPA (14.1km). Standard environmental control measures will also be in place to control the discharge of any sedimented water such use of filtration devices such as a silt sock for any discharge into the attenuation tank during construction. **Land and disturbance (noise and visual)** No direct impacts are anticipated as the site is not suitable for any QIs of the SACs. Disturbance impacts are not anticipated due to the nature of the site. Due to this, and the scale of the project; and distance to receiving Natura 2000 sites, significant impacts are not anticipated via land pathways. **Air** The excavations and construction at the site will produce some dust and emissions from working machinery but due to the small scale of the works it is expected that this will be minimal and settle		

Project Elements	Comment
	out within the a few metres of the works. No Natura 2000 sites are within the zone of influence. <u>Operational phase:</u> All wastewaters (storm and foul) will be discharged to the existing drainage network in Cullairbaun, which ultimately ends up at Athenry WWTP, and no impact to surface or ground water is expected. Any accidental spillage of hydrocarbons will be intercepted by the onsite storm water drainage system which will pass through the hydrocarbon interceptor. The residential properties are not expected to have any other operational impacts to the Natura 2000 sites. Therefore, there will be no permanent effects on any Natura 2000 site.
Excavation requirements	Excavations of the site are expected to be no more than 2.92m.
Transportation requirements	Temporary Impacts: Levels of traffic to the site during the construction phase, while temporary in nature, will increase traffic to the area. All access to the site will be on pre-existing roads and transportation requirement will not pose a negative effect on Natura sites during construction. Permanent Impacts: Given the size, scale and location of the proposed project, transportation requirements will not permanently affect Natura 2000 sites.
Duration of construction, operation, decommissioning etc.	The works are expected to be ongoing for approximately 2 years, however this will likely be staggered work, with busy and quiet periods as is normal with construction of housing projects. Operation will be permanent.

6.3.2 Description of likely changes to the Natura 2000 sites

Potential Impact	Comments
Reduction of habitat area	There will be a partial change in use of the amenity grassland areas to residential within the site boundary. However, this land is not within nor connected to any Natura 2000 site. There will be no reduction in habitat area of any Natura 2000 site.

Potential Impact	Comments
Disturbance to key species	*Temporary Impacts:* The construction works will temporarily increase the noise level and disturbance locally but not significantly. No significant impacts are anticipated to key species given scale and nature of the construction phase and scale of the Natura 2000 sites. The site is outside the zone of influence for noise disturbance. *Permanent Impacts*: No disturbance to key species is anticipated during operation of the project.
Habitat or species fragmentation	There will be no temporary or permanent habitat or species fragmentation within any of the Natura 2000 sites.
Reduction in species density	There will be no temporary or permanent reduction in species density within any of the Natura 2000 sites, or any QIs of these sites.
Changes in key indicators of conservation value (water quality etc.)	There will be no temporary or permanent changes in key indicators of conservation value (surface water, groundwater and air quality).

6.3.3 Description of likely impacts on the Natura 2000 sites as a whole

Potential Impact	Comments
Interference with the key relationships that define the structure of the site	There will be no interference with the key relationships that define the structure of the sites.
Interference with key relationships that define the function of the site	There will be no interference with the key relationships that define the function of the sites.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

Potential Impact	**Indicators**
Loss (Estimated percentage of lost area of habitat)	The project is being constructed 2km from the nearest section of the boundary of the Lower River Shannon SAC. The project area is 0.55ha, and the site does not occur next to or within an SAC or SPA. There will be no loss of Natura 200 site habitat area.
Fragmentation	Fragmentation of habitat and/or species is not anticipated.
Disruption & disturbance	Disruption and/ or disturbance is not anticipated.
Change to key elements of the site (e.g., water quality etc.)	Potential temporary changes to key elements (i.e., water quality) of the site are not anticipated.

6.3.4 Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is unknown

Based upon best scientific judgement, no likely significant effects may be expected from the elements mentioned above; there are no elements where the scale or magnitude of impacts is unknown.

6.4 Concluding Statement

Following this initial screening of the Proposed Project it can be concluded that significant effects are not anticipated via surface water, groundwater, or land/air pathways on the following Natura 2000 sites:

- Galway Bay Complex SAC
- Inner Galway Bay SPA

Based on the screening carried out, it is unlikely that the proposed development will have any significant impacts on any designated European Sites, whether arising from the project itself or in combination with other plans and projects. This assessment is based on the best scientific knowledge available, and on the current project plans. If any changes occur in the design of these works, a new Screening for Appropriate Assessment is required.

In carrying out this AA screening, site specific mitigation measures have not been considered.

A Protected Species Recorded within 5km of the Site since 01/01/2014

These records correspond with the species covered by national legislation that are publicly available on the NBDC database with an online query (NBDC, 2024).

Species	Date of last record	Dataset	Designation
Amphibians			
Common Frog *Rana temporaria*	25/02/2023	Amphibians and reptiles of Ireland	Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts
Smooth Newt *Lissotriton vulgaris*	26/07/2020	Amphibians and reptiles of Ireland	Protected Species: Wildlife Acts
Birds			
Barn Owl *Tyto alba*	24/06/2020	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Red List
Barn Swallow *Hirundo rustica*	30/04/2023	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Amber List
Common Coot *Fulica atra*	20/03/2022	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex II, Section I & Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern >> Amber List
Common Kestrel *Falco tinnunculus*	08/06/2022	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Amber List
Common Linnet *Carduelis cannabina*	20/04/2021	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Amber List
Common Pheasant *Phasianus colchicus*	28/11/2020	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex II, Section I & Annex III, Section I Bird Species
Common Snipe *Gallinago gallinago*	12/04/2023	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex II, Section I & Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern >> Amber List
Common Starling *Sturnus vulgaris*	26/01/2023	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Amber List
Common Swift *Apus apus*	22/07/2023	Swifts of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Amber List
Common Wood Pigeon *Columba palumbus*	30/04/2023	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex II, Section I & Annex III, Section I Bird Species
Eurasian Curlew *Numenius arquata*	10/12/2020	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern >> Red List
Eurasian Woodcock *Scolopax rusticola*	28/11/2020	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex II, Section I & Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern >> Amber List

Species	Date of last record	Dataset	Designation
European Golden Plover *Pluvialis apricaria*	22/04/2018	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex I Bird Species || Protected Species: EU Birds Directive >> Annex II, Section II & Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern >> Red List
European Greenfinch *Carduelis chloris*	26/01/2023	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Amber List
Grey Wagtail *Motacilla cinerea*	05/06/2022	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Red List
Hen Harrier *Circus cyaneus*	12/10/2021	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern >> Amber List
House Sparrow *Passer domesticus*	26/01/2023	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Amber List
Little Egret *Egretta garzetta*	22/05/2017	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex I Bird Species
Meadow Pipit *Anthus pratensis*	20/04/2021	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Red List
Northern Lapwing *Vanellus vanellus*	29/12/2014	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern >> Red List
Northern Wheatear *Oenanthe oenanthe*	26/09/2017	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Amber List
Peregrine Falcon *Falco peregrinus*	27/01/2021	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex I Bird Species
Redwing *Turdus iliacus*	30/01/2023	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Red List
Rock Pigeon *Columba livia*	26/01/2023	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species
Whooper Swan *Cygnus cygnus*	20/11/2018	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern >> Amber List
Willow Warbler *Phylloscopus trochilus*	20/04/2021	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern >> Amber List
Crustaceans			
Freshwater White-clawed Crayfish *Austropotamobius pallipes*	31/12/2021	General Biodiversity Records from Ireland	Protected Species: EU Habitats Directive >> Annex II & V || Protected Species: Wildlife Acts
Flora			
Dense-flowered Orchid *Neotinea maculata*	20/04/2024	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Threatened Species: Near threatened

Species	Date of last record	Dataset	Designation
Greater Knapweed *Centaurea scabiosa*	29/08/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Threatened Species: Near threatened
Spring Gentian *Gentiana verna*	20/04/2024	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Threatened Species: Near threatened
Insects			
Dark Green Fritillary *Argynnis aglaja*	26/06/2019	Butterflies of Ireland pre-2022	Threatened Species: Vulnerable
Dingy Skipper *Erynnis tages*	26/05/2023	Butterflies of Ireland post 2021	Threatened Species: Near threatened
Marsh Fritillary *Euphydryas aurinia*	18/06/2021	Butterflies of Ireland pre-2022	Protected Species: EU Habitats Directive >> Annex II || Threatened Species: Vulnerable
Small Blue *Cupido minimus*	11/06/2023	Butterflies of Ireland post 2021	Threatened Species: Endangered
Small Heath *Coenonympha pamphilus*	11/06/2023	Butterflies of Ireland post 2021	Threatened Species: Near threatened
Large Red Tailed Bumble Bee *Bombus (Melanobombus) lapidarius*	26/05/2023	Bees of Ireland	Threatened Species: Near threatened
Mammals			
Brown Long-eared Bat *Plecotus auritus*	05/07/2022	National Bat Database of Ireland	Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
Eurasian Badger *Meles meles*	30/10/2022	Mammals of Ireland 2016-2025	Protected Species: Wildlife Acts
Eurasian Red Squirrel *Sciurus vulgaris*	10/04/2022	Mammals of Ireland 2016-2025	Protected Species: Wildlife Acts
Fallow Deer *Dama dama*	31/12/2008	Deer of Ireland Database	Invasive Species: Invasive Species >> High Impact Invasive Species || Invasive Species >> Regulation S.I. 477 (Ireland) || Protected Species: Wildlife Acts
Lesser Noctule *Nyctalus leisleri*	13/06/2022	National Bat Database of Ireland	Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
Natterer's Bat *Myotis nattereri*	11/10/2021	National Bat Database of Ireland	Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
Pine Marten *Martes martes*	05/01/2021	Mammals of Ireland 2016-2025	Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts
Pipistrelle *Pipistrellus pipistrellus sensu lato*	11/10/2021	National Bat Database of Ireland	Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts

Species	Date of last record	Dataset	Designation
Soprano Pipistrelle *Pipistrellus pygmaeus*	13/06/2022	National Bat Database of Ireland	Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
West European Hedgehog *Erinaceus europaeus*	10/12/2023	Hedgehogs of Ireland	Protected Species: Wildlife Acts

B Invasive Species Recorded within 5km of the Site Since 01/01/2024

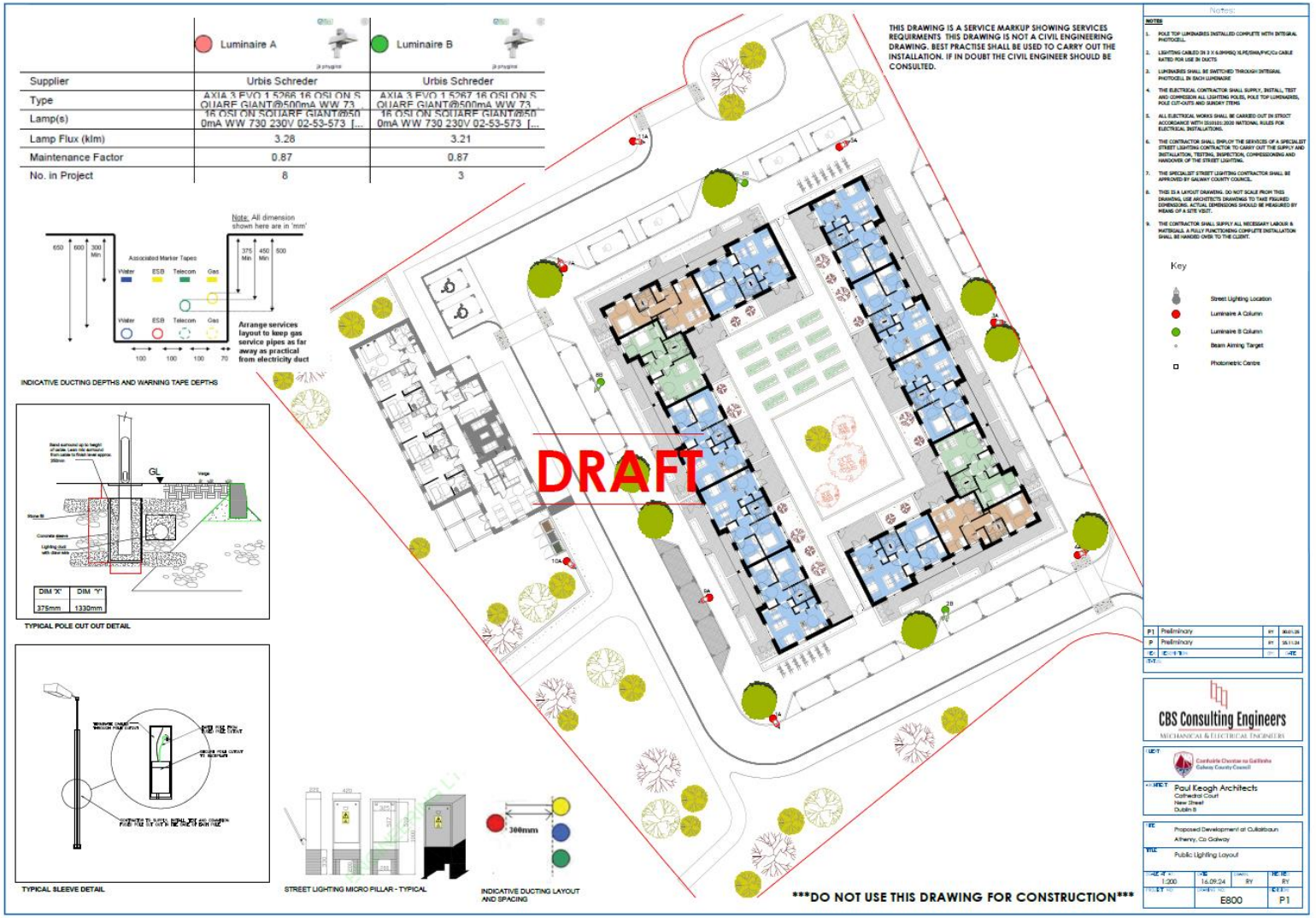
These records correspond with the species covered by national legislation that are publicly available on the NBDC database with an online query (NBDC, 2024).

Species	Date of last record	Dataset	Designation
Flora			
Himalayan Honeysuckle *Leycesteria formosa*	27/07/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Medium Impact Invasive Species
Sycamore *Acer pseudoplatanus*	25/07/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Medium Impact Invasive Species
Traveller's-joy *Clematis vitalba*	03/06/2019	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Medium Impact Invasive Species
Invertebrates			
Arthurdendyus triangulatus	03/06/2019	New Zealand Flatworm (Arthurdendyus triangulatus) Database	High Impact Invasive Species
Jenkins' Spire Snail *Potamopyrgus antipodarum*	22/07/2015	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	Medium Impact Invasive Species
Mammals			
American Mink *Mustela vison*	01/08/2017	Mammals of Ireland 2016-2025	High Impact Invasive Species || Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)
European Rabbit *Oryctolagus cuniculus*	16/06/2015	Atlas of Mammals in Ireland 2010-2015	Medium Impact Invasive Species
Fallow Deer *Dama dama*	31/12/2008	Deer of Ireland Database	High Impact Invasive Species || Invasive Species >> Regulation S.I. 477 (Ireland) || Protected Species: Wildlife Acts

C Design Plans

C.1 Drainage

C.2 Proposed Lighting



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Offices at:

Dublin
Limerick

Registered Office
24 Grove Island
Corbally
Limerick
Ireland

t: +353 (0) 61 345463
e:info@jbaconsulting.ie

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