

Gort Mhaoilir Estate

Appropriate Assessment

Final

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Prepared for:

Paul Keogh Architects



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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. Johanna Healy of JBA Consulting carried out this work.

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Abbreviations

AA.....	Appropriate Assessment
CDP	County Development Plan
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
ELV	Emission Limit Value
EPA.....	Environmental Protection Agency
ESRI.....	Environmental Systems Research Institute Inc.
EU	European Union
GSI.....	Geological Survey of Ireland
IROPI.....	Imperative Reasons of Overriding Public Interest
LHB	Lesser Horseshoe Bat
LAP	Local Area Plan
MASP	Metropolitan Area Strategic 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
Zol.....	Zone of Influence

1 Introduction

1.1 Background

This report contains information to assist the competent authority to undertake a screening for Appropriate Assessment (AA) in respect to the proposed works. The proposed development is located in the existing Gort Mhaoilir estate in Athenry, Co. Galway and includes the construction of 43 no. new dwellings, including 31 no. houses and 12 no. apartments.

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.

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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) (DEHLG, 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 conducting an AA, as shown in Figure 1-1.

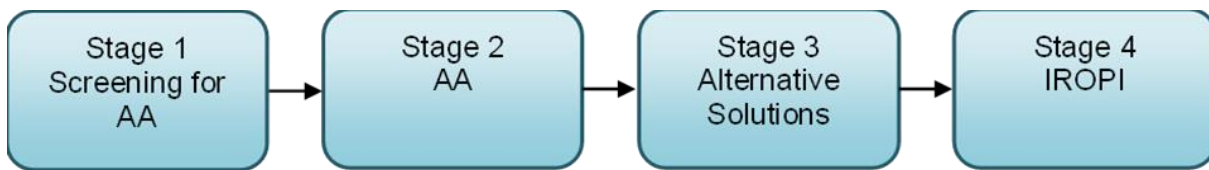


Figure 1-1: The Appropriate Assessment Process (from: Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, DEHLG, 2010)

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 (2021) The Strict Protection of Animal Species of Community Interest under the Habitats Directive. Guidance document: a summary.
- CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater and Coastal, Second Ed. (Chartered Institute of Ecology and Environmental), (V. 1.3 updated 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, 2019a).
- NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitat Assessments. Unpublished NPWS report (NPWS, 2019b).
- NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments. Unpublished NPWS report (NPWS, 2019c).
- 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 (www.catchments.ie)
- 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. One static bat detector and two trail cameras were deployed for 15 days from 12th November to 27th November 2024.

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 and Curtis, 2012).

1.4.3 Screening Methods

This screening assessment uses the source-pathway-receptor (S-P-R) model as outlined 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. 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 Zone of Influence (Zol).
- 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.

- Site surveys were undertaken during suboptimal period for habitat and flora surveys, and for bat activity (November 2024). Hence numbers/species recorded may not be representative of activity or diversity during the optimal surveying period (April to September inclusive).
 - While the site visit was sub-optimal for habitat classification, plants were identified vegetatively.

2 Project Description

2.1 The Project

The project consists of the proposed works which includes the construction of 43 no. new dwellings (31 no. houses and 12 no. apartments) in Gort Mhaoilir Estate in Athenry, Co. Galway, including:

- 14no. 2-bedroom housing units
- 16no. 3-bedroom housing units
- 1no. 4-bedroom housing unit
- 6no. 2-bedroom duplex units; and
- 6no. 1-bedroom duplex units.

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 Gort Mhaoilir Estate in Athenry, Co. Galway. The site is located within an existing housing state in Athenry on the R347, close to the Athenry train station (Figure 2-1).

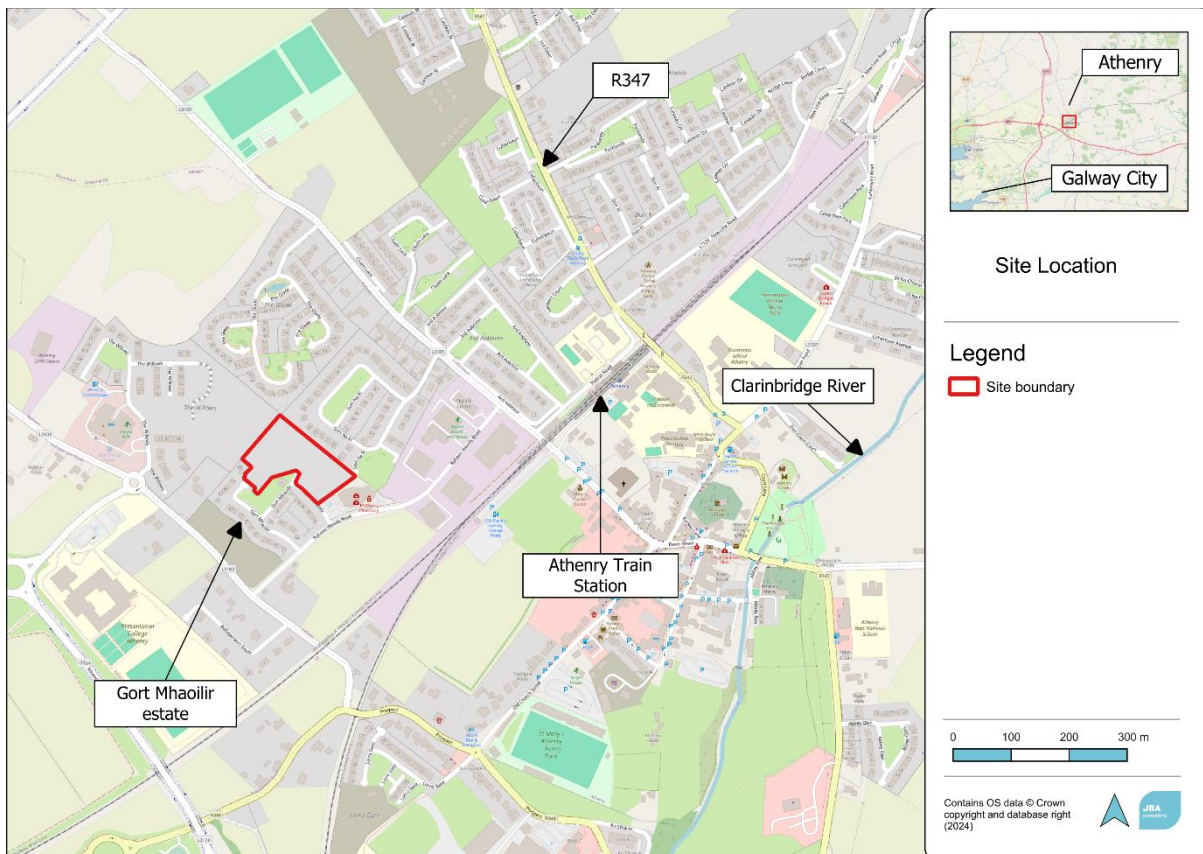


Figure 2-1: Site location and boundary

2.3 Proposed Works

The proposed development includes the construction of 43 no. new dwellings. Site layout is included in Appendix A.

Ancillary site works include the provision of access roads, car parking and landscaping.

The site covers an area of c. 1.4 ha and currently consists of a fenced off greenfield area.

2.3.1 Site Drainage Design

The drainage for the project will connect into the existing network within Athenry/Gort Mhaolir estate, with new water mains, storm water drains and foul sewers included in the drainage plan for the development. The existing surface water drainage network is assumed to outfall to the Clarinbridge River 700m from the proposed site. Proposed drainage plans are provided in Appendix B.

2.3.1.1 Surface Water Drainage

Surface water leaving the site will pass through a silt trap and class 1 petrol interceptor and enter a graf eco bloc attenuation tank before discharging to the existing storm water system. These standard environmental measures are not currently in place for the site and will be constructed as part of the development.

All water infrastructure to be designed and constructed in accordance with Irish Water guidance:

- Code Of Practice For Water Infrastructure, Connections And Developer Services, Design And Construction Requirements For Self-Lay Developments; July 2020 (revision 2); IW-CDS-5020-03
- Water Infrastructure Standard Details, Connections And Developer Services, Construction Requirements For Self-Lay Developments; July 2020 (revision 04); IW-CDS-5020-01

Where the above documents are revised by Irish Water, the latest revision of the relevant document shall be used.

All pipe materials shall be in compliance with section 3.9 of the Irish Water Code Of Practice.

2.3.1.2 Foul Water Drainage

Foul water will be diverted to Athenry Wastewater Treatment Plant (WWTP), which currently has potential spare capacity; applications are to be considered on an individual basis considering their specific load requirements (Irish Water, 2022).

All wastewater infrastructure to be designed and constructed in accordance with Irish Water guidance:

- Code Of Practice For Wastewater Infrastructure, Connections And Developer Services, Design And Construction Requirements For Self-Lay Developments; July 2020 (revision 2); IW-CDS-5030-03
- Wastewater Infrastructure Standard Details, Connections And Developer Services, Construction Requirements For Self-Lay Developments; July 2020 (revision 04); IW-CDS-5030-01

Where the above documents are revised by Irish Water, the latest revision of the relevant document shall be used.

All pipe materials shall be in compliance with section 3.9 of the Irish Water Code Of Practice.

2.3.2 Site Investigations

A report detailing site investigations undertaken for the proposed site at Gort Mhaoilir was prepared by Site Investigations Ltd (Site Investigations Ltd, 2024). Cable percussion boreholes were undertaken at 6 locations. 7 no. trial pits were excavated, with soil samples for geotechnical testing taken at each. Soakaway tests were completed at 5 no. locations. A slit trench was completed to investigate potential contamination from an old septic tank leaking on an adjacent site.

The following is a summary of findings relevant to this assessment:

- No groundwater was recorded in any boreholes or trial pits.
 - A caveat was noted in this report that boreholes and trial pit logs do not in general give an accurate indication of groundwater conditions. An extended period of groundwater monitoring is required for more accurate information. Pumping tests would be required to determine likely seepage rates and persistence into excavations taken below groundwater level.
- Soils on site are unsuitable for soakaways.
- Environmental testing and waste classification reports showed that material on site can be classified as non-hazardous. Soils tested can be treated as Inert Waste.

2.3.3 Landscape Plan

The proposed landscape plan shown in Figure 2-2 and included in Appendix C is the full plan for the development, which has been prepared by JBA Consulting. All existing habitats at the site will be lost during the construction of the proposed development.

A wildflower meadow is proposed along to the east of the development. Numerous areas of tree planting and amenity grassland areas are included across the site. Ornamental planting will be included in private garden areas.

The proposed planting list has been reviewed by suitably qualified Ecologists and does not include any potential invasive species.



Figure 2-2: Landscape plan

2.3.4 Duration of the Works

The expected duration of works is approximately 2 years.

2.3.5 Excavation requirements

Strip foundations are proposed for the development, with an estimated minimum excavation depth of 900mm below ground level. Maximum excavations are expected to be 3.18m for foul / surface water manholes to connect to existing lines.

2.3.6 Lighting Plans

The proposed lighting plan is included in Appendix D. Lighting across the majority of the proposed housing area will have horizontal illuminance levels of 1.5lux with 1.0lux closer to the estate edges. The southwestern area with kickabout, playground, grass and tree planting areas are darker with a larger proportion of this area predicted to have 1.0lux horizontal illuminance.

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) or 25km in Freshwater Pearl Mussel Catchments
- Groundwater bodies connected to the site (10km)
- 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.

3.2 Habitats

Habitats recorded during site visit are laid out in Table 3-1 and mapped in Figure 3-1.

Table 3-1: Habitats recorded on site classified by Fossitt (2000)

Habitat	Annex I Potential
BL1 Stone walls and other stonework	No
GS2 Dry meadows and grassy verges	No
WL1 Hedgerows	No
WS1 Scrub	No

No Annex I habitats are present on site.

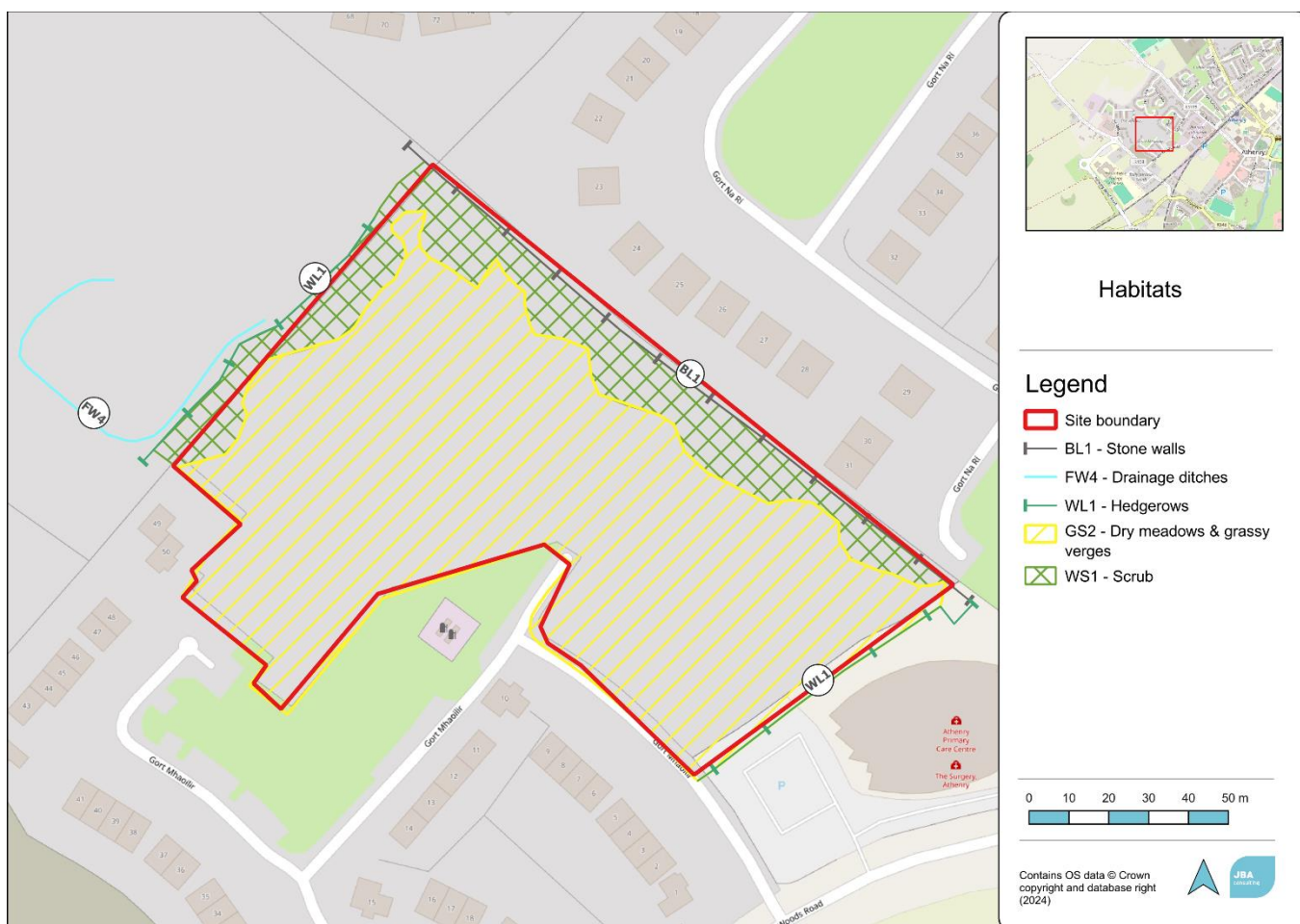


Figure 3-1: Habitats within the project boundary

3.2.1 BL1 – Stone walls and other stonework

This habitat consists of brick boundary walls along the eastern site boundary bordering existing housing. This habitat was not considered to be of ecological significance and is not likely to support local flora and fauna.



Figure 3-2: Example of brick wall bordering the site

3.2.1 FW4 – Drainage ditch

A drainage ditch was noted near the northwestern boundary of the site just outside the proposed development's footprint. The ditch was full of stagnant water with no signs of flow and high cover of Common Duckweed *Lemna minor*. It is not likely to connect to any other waterbodies based on observations made during the site survey and an inspection of satellite imagery of the area.



Figure 3-3: Drainage ditch near project boundary

3.2.2 GS2 – Dry meadows and grassy verges

The site mainly consists of rank GS2 grassland. Grass cover is high, at least 90% with some areas of bare ground across the site. This habitat was dominated by grass species including False Oat-grass *Arrhenatherum elatius*, Yorkshire-fog *Holcus lanatus* and Cock's-foot *Dactylis glomerata* with Creeping Thistle *Cirsium arvense* frequent across the site also. Other species recorded include Bush Vetch *Vicia sepium* and Broad-leaved Dock *Rumex obtusifolius*.



Figure 3-4: Rank grassland recorded on site

3.2.3 WL1 – Hedgerows

The hedgerows bordering the site are of low value, with large gaps between this and adjacent hedgerows/treelines, providing poor connectivity and cover for commuting mammals, birds and bats, and contained species including Willow *Salix* spp., Ash *Fraxinus excelsior* and Bramble *Rubus fruticosus* agg.



Figure 3-5: Hedgerow observed along site boundary

3.2.4 WS1 – Scrub

The scrub on site consists mainly of Bramble, with some other species such as Nettle *Urtica dioica*, Willowherb *Epilobium* spp. and Cleavers *Galium aparine* occurring in lower proportions throughout. The majority of the scrub habitat was inaccessible to surveyors during the site walkover, however signs of mammal activity were noted throughout the site and passing through scrub areas.



Figure 3-6: Example of scrub habitat

3.3 Protected Species

A site visit was conducted on 12th November. No Annex species or supporting habitats were recorded on site. The EclA prepared for the development discusses non-Annex species recorded on site.

This section 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 C.

The following Annex species have been recorded within 5km (species highlighted in blue are species of Qualifying Interest (QIs) for Natura 2000 sites within the project Zol):

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 & 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 *Euphydryas 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 protected through provision of SPAs, but Annex II birds may be 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 Zol:

- 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 (LHB) is over 2.5km from the site, and hence is outside of the Core Sustainance 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.

3.4 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 D. 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 subcatchment, which is part of the Galway Bay South East catchment. The Clarinbridge River (waterbody code: IE_WE_29C020200) flows c. 700m from the proposed development, which enters Dunbulcaun Bay approximately 14.5km downstream (see Figure 3-7).

There is no clear connection from the site to the local waterbodies, however it is assumed that many of the local drains have been culverted and outfall to the Clarinbridge River approximately 700m southeast of the proposed development. As the development proposes to connect into the existing surface water drainage network, this provides a potential hydrological connection between the proposed project and greater Galway Bay. The river is classed as 'At Risk' and has an overall ecological status of 'Moderate'. This river is under significant pressure from urban wastewater (agglomeration of population equivalent (PE) 2,001 to 10,000). Further sections of the Clarinbridge River downstream are also under similar pressures (nutrients and organic waste from urban wastewater, urban runoff and agriculture) and are 'At risk' and of 'Poor' ecological status (WFD, 2019; EPA, 2024b, 2024a).

The river discharges to the WFD transitional waterbody Dunbulcaun Bay (waterbody code: IE_WE_160_0800), which is classed as 'Not as risk' and has an overall ecological status of 'Good' (EPA, 2024c). This waterbody connects to the wider Galway Bay.

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

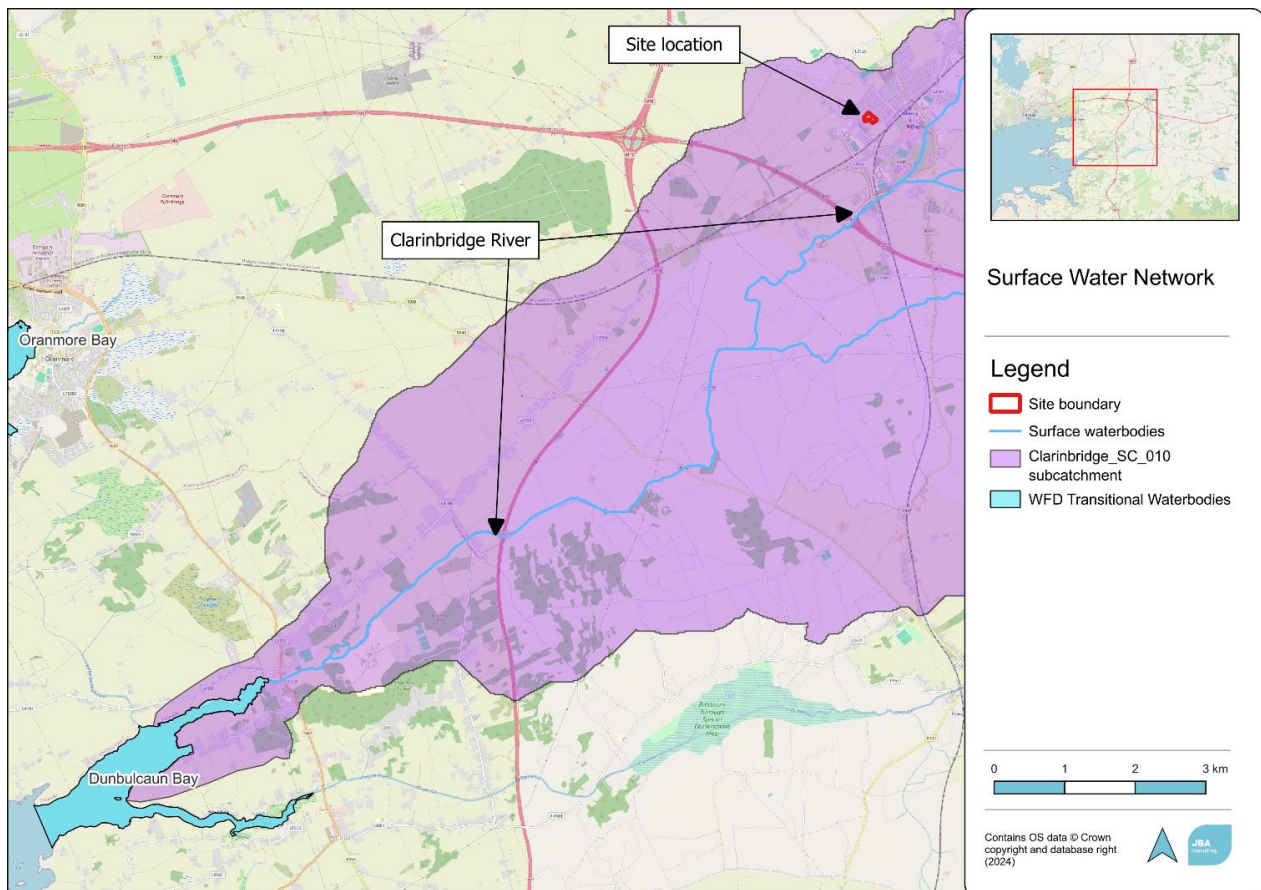


Figure 3-7: Surface water features associated with the proposed project

3.6 Groundwater Bodies

The underlying soil type is fine loamy drift with limestones; subsoil type is limestone till, with a small portion of the southeastern boundary underlain by karstified limestone bedrock at the surface. Subsoil permeability is classified as 'Moderate'. Underlying bedrock is pale grey clean skeletal limestone (Burren Formation). The site occurs within a Regionally Important Aquifer – karstified (conduit); an aquifer in which there is an uneven distribution of permeability throughout the rock. Drainage is largely underground, with most flow occurring through the more permeable, solutionally-enlarged, interconnected conduit zones, which may be several kilometres long. Karst landforms at the surface such as swallow holes, caves or dry valleys can provide direct access for recharge/surface water to enter the aquifer. Aquifer storage is frequently low and groundwater flow is mainly via conduit; velocity through conduits is

high. There is a strong interconnection between surface water and groundwater in this aquifer type.

The groundwater body the site is located in is the Clarinbridge IE_WE_G_0008 WFD groundwater body, which has overall status of 'Good' and is classed as 'Not at risk'. Groundwater vulnerability on-site is 'Extreme' with a small area of karst/rock at or near the surface along the southeastern boundary. The average recharge coefficient of the underlying groundwater body is 60-85% (GSI, 2017, 2024; EPA, 2024b).

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 nature 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 Zol, 10 Natura 2000 sites were recorded (Table 4-1) and mapped in relation to the proposed site (Figure 4-1). 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 Zol

Natura 2000 site	Site Code	Approximate Direct Distance from Site	Potential Hydrological Connection
Monivea Bog SAC	002352	7.4km	7.4km via Groundwater
Lough Corrib SAC	000297	8.3km	10km via Groundwater
Rahasane Turlough SAC	000322	7.7km	No connection present
Rahasane Turlough SPA	004089	7.7km	No connection present
Galway Bay Complex SAC	000268	9.9km	14.5km via Surface water
Cregganna Marsh SPA	004142	11.3km	11.9km via Groundwater
Inner Galway Bay SPA	004031	11.6km	14.5km via Surface water

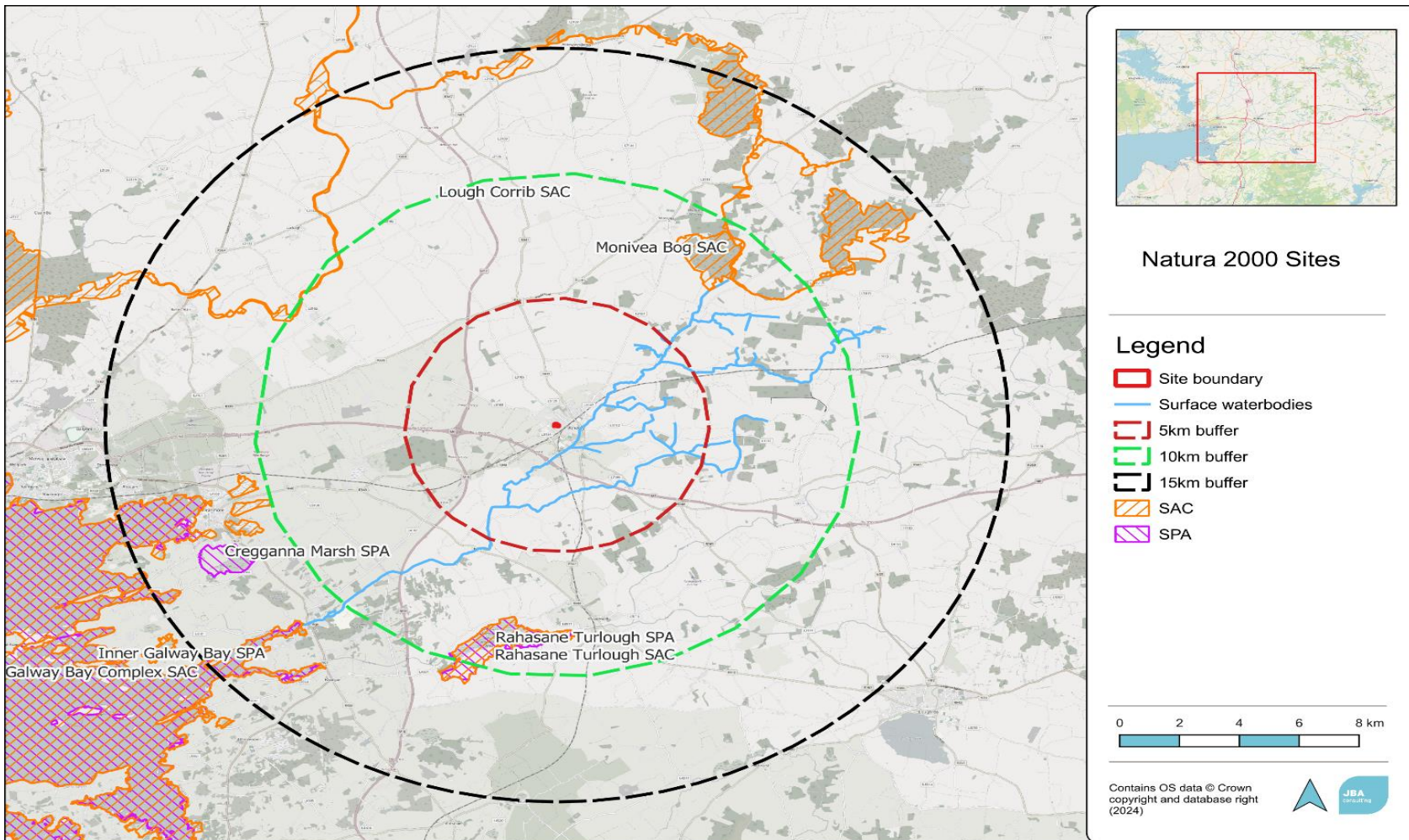


Figure 4-1: Natura 2000 sites within the project ZOI

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 Corrantarmud, 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)	Yes - Groundwater Pathway 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. (NPWS, 2022)	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	No Pathway present

Site Name	Brief and relevant conservation objectives	Qualifying interests	Project-relevant threats/pressures: Impact	Pathway Present
		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)	scrub (Medium) Roads, paths and railroads (Medium) Disposal of household / recreational facility waste (Low) Sand and gravel extraction (Low)	
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

Site Name	Brief and relevant conservation objectives	Qualifying interests	Project-relevant threats/pressures: Impact	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 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)	Whooper Swan (<i>Cygnus cygnus</i>) [A038] Wigeon (<i>Anas penelope</i>) [A050] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] Wetland and Waterbirds [A999] (NPWS, 2023b)	Grazing (High) Fertilisation (Low) Hunting (Low)	No Pathway present
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 (<i>Glaucopuccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Turloughs [3180] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] Alkaline fens [7230]	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)	Yes – Surface water pathway

Site Name	Brief and relevant conservation objectives	Qualifying interests	Project-relevant threats/pressures: Impact	Pathway Present
		Limestone pavements [8240] Lutra lutra (Otter) [1355] Phoca vitulina (Harbour Seal) [1365] (NPWS, 2013b)	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) 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	Black-throated Diver (Gavia arctica) [A002] Great Northern Diver (Gavia immer) [A003] Cormorant (Phalacrocorax carbo) [A017] Grey Heron (Ardea cinerea) [A028]	Discharges (High) Reclamation of land from sea, estuary or marsh (High) Urbanised areas, human habitation	Yes – Surface water pathway

Site Name	Brief and relevant conservation objectives	Qualifying interests	Project-relevant threats/pressures: Impact	Pathway Present
	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)	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Wigeon (<i>Anas penelope</i>) [A050] Teal (<i>Anas crecca</i>) [A052] Red-breasted Merganser (<i>Mergus serrator</i>) [A069] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Lapwing (<i>Vanellus vanellus</i>) [A142] Dunlin (<i>Calidris alpina</i>) [A149] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Curlew (<i>Numenius arquata</i>) [A160] Redshank (<i>Tringa totanus</i>) [A162] Turnstone (<i>Arenaria interpres</i>) [A169] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Sandwich Tern (<i>Sterna sandvicensis</i>) [A191] Common Tern (<i>Sterna hirundo</i>) [A193] Wetland and Waterbirds [A999] (NPWS, 2013a)	(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)	

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

- Monivea Bog SAC
- 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 Galway County Development Plan (CDP) 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 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 (MASP). This Plan has considered this policy framework, and it has been set out in accordance therewith.

SS3 Strategic Potential (Level 3) Support the development of Athenry as a town of Strategic Potential as outlined in the Core Strategy and Settlement Strategy in order to sustain a strong, vibrant urban centre which will act as an important driver for the local economy, reduce travel demand and support a large rural hinterland, while providing a complementary role to the Key Towns and MASP and the smaller towns and villages in the County.

The Galway County Development Plan is not anticipated to contribute to cumulative or in-combination effects.

5.2.2 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 January 2024 and came into effect on the 20th February 2024.

The proposed development site is identified as an opportunity for residential development as part of Phase 1 of the LAP. 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. (CAAS Ltd., 2024)

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

5.2.3 River Basin Management Plan (RBMP) 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 Ireland's water environment.

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

5.3 Other Projects

Planning applications for other projects 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 m ²); • construction of a central utilities compound to comprise a gas insulated switchgear substation building (GIA: 124.57 m ²), pumphouse building (GIA: 84.79 m ²) & MV building (GIA: 306.46 m ²); • 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 tarmac finish 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	Moanbaun, Athenry, Co. Galway	14/2/2024

Planning Reference	Summary of Development	Address	Date Permission Granted
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	Caheroy 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	Caherroy, 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
Monivea Bog SAC	002352	7.4km
Galway Bay Complex SAC	000268	9.9km
Inner Galway Bay SPA	004031	11.6km

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.

This small-scale housing project could have the following impacts:

- Surface water runoff that might make its way to a local watercourse via the stormwater system e.g. washing of concrete into the stormwater system during construction.
- Groundwater strike or pumping during construction that may make its way to the surface water system.
- Pollutants such as hydrocarbons from accidental fuel spills entering underlying groundwater aquifer.
- Dust associated with construction and traffic to and from the site.
- Disturbance from with increased activity at construction stage.

- Traffic during the operation phase.

These impacts will be 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. The Clarinbridge River runs 700m southeast of the proposed site boundary, and hence surface water runoff/discharge from the site during construction works is not likely to enter the surface water network at this location. The Clarinbridge River flows into the Dunbulcaun Bay transitional waterbody 14.5km downstream, which is connected to the wider Galway Bay; hence providing a connection between the proposed site and the Galway Bay Complex SAC and Inner Galway Bay SPA.

Construction:

Potential pollutants will be utilised at the site, including diesel and engine/hydraulic oils. During construction, pollutants or sediment in surface water runoff from the site is anticipated to be minimal as the proposed project is small in scale. Any accidental spills at the site will likely fall out within the confines of the site boundary.

A new drainage system will be constructed that is assumed to outfall into the existing Athenry network. There is continuous urban built land between the proposed site and the Clarinbridge River 700m to the southeast.

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. If any water is generated/pooling at the site it will be gathered to the attenuation tank, where sediments will settle out before discharge. Standard environmental control measures will also be in place to control the discharge of any sedimented water such as the use of filtration devices such as a silt trap for any discharge into the attenuation tank during construction before discharging to the existing storm water system.

Operation:

Any discharge to storm drains during operation will be subject to standard environmental measures including a silt trap, petrol interceptor and attenuation tank before being discharged to the existing storm water network.

Foul water is assumed to be diverted to Athenry Wastewater Treatment Plant (WWTP), which currently has potential spare capacity; applications are to be

considered on an individual basis considering their specific load requirements (Irish Water, 2022). Athenry WWTP has been found to not be compliant with emission limit values (ELVs) for total ammonia and ortho-phosphate set in the Wastewater Discharge Licence. The discharge from the WWTP has not been found to have an observable impact on water quality or observable negative impact on the WFD status in the 2023 Annual Environmental Report for Athenry. (Irish Water, 2023)

With standard environmental control measures already in place for the construction of the project, combined with 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

Minimum excavation depth will be 900mm below ground level, maximum depths will not exceed 3.18m. Groundwater vulnerability at the proposed site is classified as extreme, with some areas of karst/bedrock near the surface. No exposed bedrock was observed during the site surveys. Site investigations at the site did not encounter groundwater strike in any locations (see Section 2.3.1 for full details of site investigations). If groundwater is contaminated during construction via the accidental release of pollutants, effects on Natura 2000 sites are not likely to occur due to distance between the proposed project and sites within the ZOI. The only Natura 2000 site within the 10km ZOI for groundwater impacts is Monivea Bog SAC, located 7.4km from the site. A small portion of the Monivea Bog SAC is underlain by the Clarinbridge groundwater body; it is likely mainly fed by the Clare-Corrib groundwater body.

As there is not likely to be interaction between the proposed project and underlying groundwater, there are no likely effects via a groundwater to surface water pathway 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 are 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 likely significant effects are anticipated to any 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 levels of impact on any Natura 2000 site within the ZOI are not likely to be significant. 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, the distance to the Natura 2000 sites that are within the Zone of Influence, and the habitat between the site and Natura 2000 sites, 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. 1.4ha. The proposed development includes the construction of 43no. 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
	Monivea Bog SAC	7.4km	7.4km
	Galway Bay Complex SAC	9.9km	14.5km
	Inner Galway Bay SPA	11.6km	14.5km
Resource requirements (water abstraction etc.)	There will be no resource abstraction requirements.		

Project Elements	Comment
Emissions (disposal to land, water or air)	<u>Construction Phase:</u> Surface and Ground Water Any accidental spills at the site will likely fall out within the confines of the site boundary and any discharge to storm drains will be subject to standard environmental measures for the construction phase. Groundwater pathways to the Monivea Bog 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; the surface water drainage control measures are already in place; and the distance to the Monivea Bog SAC, Galway Bay Complex SAC and Inner Galway Bay SPA is 10km+. Land and disturbance (noise and visual) No direct impacts are anticipated as the site is not suitable for any QIs of Monivea Bog SAC, Galway Bay Complex SAC or Inner Galway Bay SPA. 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 demolitions 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 out within the a few metres of the works. No Natura 2000 sites are within the zone of influence. <u>Operational phase:</u> All wastewater will be discharged to the existing foul sewer network in Gort Mhaoilir/Athenry, which ultimately ends up at Athenry WWTP, and no impact to surface or ground water is expected. Storm water will pass through a silt trap, petrol interceptor and attenuation tank before being discharged to the existing storm water network in the Gort Mhaoilir estate, which is assumed to discharge to the Clarinbridge River in Athenry. 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 3.18m .

Project Elements	Comment
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 any Natura 2000 sites within the project ZOI (Monivea Bog SAC, Galway Bay Complex SAC and Inner Galway Bay SPA).
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 the SAC and no loss of habitat to the QI habitats or species of the Monivea Bog SAC, Galway Bay Complex SAC or Inner Galway Bay SPA will occur.
Disturbance to key species	<i>Temporary Impacts:</i> 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. <i>Permanent Impacts:</i> 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	There will be no temporary or permanent changes in key indicators of conservation value (surface water, groundwater

Potential Impact	Comments
quality etc.)	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 7.4km from the nearest section of the boundary of any Natura 2000 sites. The project area is 1.4ha, and the site does not occur next to or within an SAC or SPA. There will be no loss of 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 any Natura 2000 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:

- Monivea Bog SAC
- 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 Site Layout



SITE INFORMATION	
SITE AREA	18,435m ² / 1.8435 ha
GFA	3,688m ²
PLOT RATIO	0.20 : 1
UNITS PER HECTARE	23
SITE COVERAGE	14.3%
CAR PARKING SPACES	57no.
VISITOR BICYCLE PARKING	36no.
GREEN SPACE	0.5065 ha / 27%

UNIT TYPE SCHEDULE			
APARTMENT UNIT MIX			
UNIT TYPE A	2B / 3P	74.5m ²	6 no.
UNIT TYPE B	1B / 2P	60.8m ²	6 no.
HOUSING UNIT MIX			
UNIT TYPE C	2B / 4P	81.4m ²	14 no.
UNIT TYPE D1	3B / 5P	100m ²	8 no.
UNIT TYPE D2	3B / 5P	100m ²	3 no.
UNIT TYPE E	3B / 4P	89m ²	4 no.
UNIT TYPE F	3B / 6P	118.9m ²	1 no.
UNIT TYPE G	5B / 9P	162m ²	1 no.
TOTAL NUMBER OF UNITS		43 no.	

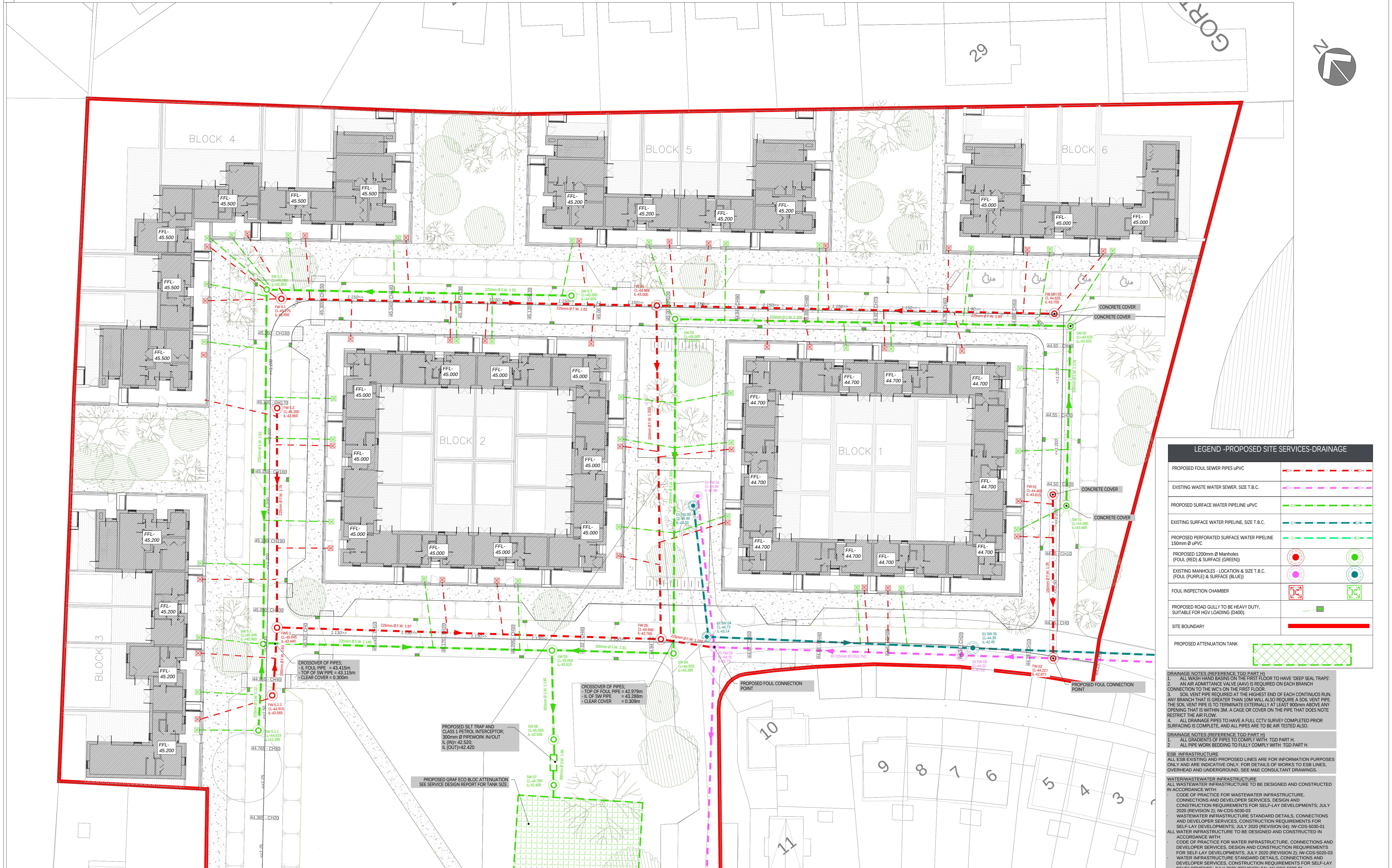
DRAFT

REVISIONS		STATUS		DRAWN	CHECKED
A	07/04/2025	FA	ISSUED FOR APPROVAL		
STATUS : PR - PRELIMINARY ISSUE; FI - FOR INFORMATION; FA - FOR APPROVAL; FP - FOR PRICING; FC - FOR CONSTRUCTION					

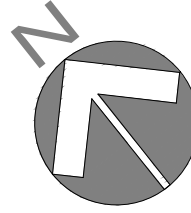
PROJECT: Social Housing Development Athenry			
DRAWING: Proposed Site Plan - Ground Floor			
JOB NO: 2429		CLIENT: Galway County Council	
DATE: JAN '24		SCALE: 1:500 @ A1 / 1:1000 @ A3	
PAUL KEOGH ARCHITECTS, CATHEDRAL COURT, NEW ST. DUBLIN 8			
TEL NO: 01 6791551		FAX NO: 01 6793476 E-MAIL: info@pka.ie	
DRAWING NO.: 2429 / PA / 001 / A			
NOTIFY ARCHITECT OF ANY DISCREPANCIES - CHECK DIMENSIONS ON SITE - DO NOT SCALE.			



B Drainage Plans



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WATER/WASTEWATER INFRASTRUCTURE
ALL WASTEWATER INFRASTRUCTURE TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH:
- CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE, CONNECTIONS AND DEVELOPER SERVICES, DESIGN AND CONSTRUCTION REQUIREMENTS FOR SELF-LAY DEVELOPMENTS, JULY 2020 (REVISION 2), IW-CDS-5030-03
- WASTEWATER INFRASTRUCTURE STANDARD DETAILS, CONNECTIONS AND DEVELOPER SERVICES, CONSTRUCTION REQUIREMENTS FOR SELF-LAY DEVELOPMENTS, JULY 2020 (REVISION 04), IW-CDS-5030-01
ALL WATER INFRASTRUCTURE TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH:
- CODE OF PRACTICE FOR WATER INFRASTRUCTURE, CONNECTIONS AND DEVELOPER SERVICES, DESIGN AND CONSTRUCTION REQUIREMENTS FOR SELF-LAY DEVELOPMENTS, JULY 2020 (REVISION 2), IW-CDS-8020-03
- WATER INFRASTRUCTURE STANDARD DETAILS, CONNECTIONS AND DEVELOPER SERVICES, CONSTRUCTION REQUIREMENTS FOR SELF-LAY DEVELOPMENTS, JULY 2020 (REVISION 04), IW-CDS-8020-01
WHERE THE ABOVE DOCUMENTS ARE REVISED BY IW, THE LATEST REVISION OF THE RELEVANT DOCUMENT SHALL BE USED.

DRAINAGE NOTES (REFERENCE TGD PART H)
1. ALL WASH HAND BASINS ON THE FIRST FLOOR TO HAVE 'DEEP SEAL TRAPS'.
2. AN AIR ADMITTANCE VALVE (AAV) IS REQUIRED ON EACH BRANCH CONNECTION TO THE WC'S ON THE FIRST FLOOR.
3. SOIL VENT PIPE REQUIRED AT THE HIGHEST END OF EACH CONTINUOUS RUN. ANY BRANCH THAT IS GREATER THAN 10M WILL ALSO REQUIRE A SOIL VENT PIPE. THE SOIL VENT PIPE IS TO TERMINATE EXTERNALLY AT LEAST 900mm ABOVE ANY OPENING THAT IS WITHIN 3M. A CAGE OR COVER ON THE PIPE THAT DOES NOT RESTRICT THE AIR FLOW.
4. ALL DRAINAGE PIPES TO HAVE A FULL CCTV SURVEY COMPLETED PRIOR SURFACING IS COMPLETE, AND ALL PIPES ARE TO BE AIR TESTED ALSO.

DRAINAGE NOTES (REFERENCE TGD PART H)
1. ALL GRADIENTS OF PIPES TO COMPLY WITH TGD PART H.
2. ALL PIPE WORK BEDDING TO FULLY COMPLY WITH TGD PART H.

ESB INFRASTRUCTURE
ALL ESB EXISTING AND PROPOSED LINES ARE FOR INFORMATION PURPOSES ONLY AND ARE INDICATIVE ONLY. FOR DETAILS OF WORKS TO ESB LINES, OVERHEAD AND UNDERGROUND, SEE M&E CONSULTANT DRAWINGS.

LEGEND - PROPOSED SITE SERVICES-DRAINAGE	
PROPOSED FOUL SEWER PIPES uPVC	
EXISTING WASTE WATER SEWER, SIZE T.B.C.	
PROPOSED SURFACE WATER PIPELINE uPVC	
EXISTING SURFACE WATER PIPELINE, SIZE T.B.C.	
PROPOSED PERFORATED SURFACE WATER PIPELINE 150mm Ø uPVC	
PROPOSED 1200mm Ø Manholes (FOUL (RED) & SURFACE (GREEN))	
EXISTING MANHOLES - LOCATION & SIZE T.B.C. (FOUL (PURPLE) & SURFACE (BLUE))	
FOUL INSPECTION CHAMBER	
PROPOSED ROAD GULLY TO BE HEAVY DUTY, SUITABLE FOR HGV LOADING (D400).	
SITE BOUNDARY	
PROPOSED ATTENUATION TANK	

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2. Do Not Scale from this Drawing. -Metric Figured Dimension only are to be used.			
3. It is "The Contractors" responsibility to ensure that all works are carried out in accordance with the requirements of the current Building Regulations and all other statutory documents relevant to this project including the grant of planning permission, Fire Safety Certificate and Disability Access Certificate.			
4. SDS (Structural Design Solutions) Ltd./ SDS-UK (Structural Design Solutions) Ltd. bear no liability for unilateral changes/modifications made during the course of construction based on the drawing prepared, without prior consultation and confirmation of acceptance of the revision by SDS (Structural Design Solutions) Ltd./ SDS-UK (Structural Design Solutions) Ltd.			
PL.2	11.04.2025	MW	UPDATED FROM COMMENTS
PL.1	31.01.2025	MW	ISSUED FOR PLANNING
REV.	DATE:	BY:	DESCRIPTION:

Client: GALWAY COUNTY COUNCIL

Project Title: PROPOSED HOUSING DEVELOPMENT AT GORT MHAOLIR, ATHENRY, CO GALWAY

Drawing Title: SITE LAYOUT - SERVICES: WASTEWATER & SURFACE WATER. SHEET 2

Scale:	1:250	Paper Size:	A1	Status:	PLANNING
Drawn by:	MW	Date:	JANUARY 2025	Checked:	CD
P:\2025\2025 - Galway CC - PPA - Athenry Housing Scheme\Drawings\3.1A-PLANNING-A-GORT MHAOLIR-2025-002.dwg					
Project No:	24181-A	Drawing No:	3023	Revision:	PL.2

C Landscape Plan



1. ALL DIMENSIONS SHOWN ARE IN METRES UNLESS OTHERWISE STATED AND LEVELS ARE IN METRES ABOVE ORDNANCE DATUM.

2. DO NOT SCALE FROM THIS DRAWING. ALL DIMENSIONS MUST BE CHECKED/VERIFIED ON SITE.

3. ANY DISCREPANCIES NOTED ON SITE ARE TO BE REPORTED TO JBA CONSULTING IMMEDIATELY.

4. THE LOCATIONS OF ANY KNOWN SERVICES SHOWN ON THIS DRAWING ARE APPROXIMATE AND FOR GUIDANCE ONLY. THE TRUE LOCATIONS OF ALL SERVICES SHALL BE CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS.

5. THE ELECTRONIC VERSION OF THIS DRAWING IS NOT TO BE USED FOR SETTING OUT.

LEGEND

Site Boundary

PROPOSED SOFT LANDSCAPE

Proposed Street Tree Planting

Proposed Open Space Tree Planting

Proposed Small Ornamental Tree Planting

Proposed Formal Hedging

Proposed Wildflower Meadow

Proposed Ornamental Planting

Proposed Mowed Grass

Proposed Reduced Mowed Grass

Proposed Rear Garden Grass

Proposed Root Barrier

PROPOSED HARD LANDSCAPE

Proposed Resin Bound Path
Barley Butter Finish
(supplied by <https://www.sureset.co.uk/> or similar approved)

Proposed Resin Bound Finish to Street Trees
Pearl Jam Finish
(supplied by <https://www.sureset.co.uk/> or similar approved)

Proposed Concrete Block paving to patios
Newgrange Block Paving 60mm depth, dim. 240 x 160mm, Buff Granite
(supplied by https://www.kilsaran.co.uk or similar approved)

Proposed Brushed Concrete Footpath
Refer to Engineer Specification

Proposed Concrete Brick Pavers to Parking
Refer to Engineer Specification

Proposed Asphalt Road
Refer to Engineer Specification

PROPOSED STREET FURNITURE

Proposed Seat - powder coated stainless steel & hardwood or composite timber with back support and side armrests-
(supplied by <https://www.hartecast.com/all-products/seats-and-benches/timber-composite-range/age-friendly-seats/>)

Proposed Bike Stands

PROPOSED LIGHTING

Proposed Lighting Column
Refer to Engineer's Drawings

PROPOSED BOUNDARY TREATMENTS

Proposed concrete block wall between back gardens

Proposed rendered blockwork wall adjacent to housing

Proposed vernacular stonework wall to front gardens
(blue limestone or similar approved)

Proposed vernacular stonework wall to front gardens
with galvanized steel railings
(blue limestone or similar approved)

Proposed masonry blockwork wall
Refer to Engineer's Specification for Details.

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consulting

Project Title

HOUSING AT GORT MHAOILIR,
ATHENRY

Drawing Title

LANDSCAPE MASTERPLAN

Client

PAUL KEOGH ARCHITECT

Parent Model

OHZ-JBAI-XX-XX-M2-L-0001-S0.P01.02-LANDSCAPE_MASTERPLAN_Gort Mhaolilr.dwg

Security Classification

OFFICIAL

Scale

1:500

Author

LK

Designer

LK

Checker

ES

Approver

COF

Suitability

PUBLISHED DEFINITION

Status

A3

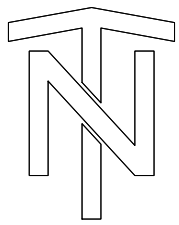
Revision

P01

Information Container

OHZ-JBAI-XX-XX-DR-L-0001

A1 Sheet Size



Area Under Construction



GENERAL NOTES

- ALL DIMENSIONS SHOWN ARE IN METRES UNLESS OTHERWISE STATED AND LEVELS ARE IN METRES ABOVE ORDINANCE DATUM.
- DO NOT SCALE FROM THIS DRAWING. ALL DIMENSIONS MUST BE CHECKED/VERIFIED ON SITE.
- ANY DISCREPANCIES NOTED ON SITE ARE TO BE REPORTED TO JBA CONSULTING IMMEDIATELY.
- THE LOCATIONS OF ANY KNOWN SERVICES SHOWN ON THIS DRAWING ARE APPROXIMATE AND FOR GUIDANCE ONLY. THE TRUE LOCATIONS OF ALL SERVICES SHALL BE CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- THE ELECTRONIC VERSION OF THIS DRAWING IS NOT TO BE USED FOR SETTING OUT.

LEGEND

Site Boundary

PROPOSED SOFT LANDSCAPE

Proposed Street Tree Planting with resin bound finish:

PpF - Prunus padus 'Fastigiata'

Proposed Native Tree Planting:

Qr - Quercus robur

Bp - Betula pendula

Pa - Prunus avium

Sa - Sorbus aucuparia

Proposed Open Space Tree Planting:

Qp - Quercus pubescens

Proposed Formal Hedging

Proposed Wildflower Meadow

Proposed Ornamental Planting

Proposed Mowed Grass

Proposed Reduced Mowed Grass

Proposed Rear Garden Grass

Proposed Root Barrier

PROPOSED LIGHTING

Proposed Lighting Column
Refer to Engineer's Drawings

PROPOSED BOUNDARY TREATMENTS

Proposed concrete block wall between back gardens

Proposed rendered blockwork wall adjacent to housing

Proposed vernacular stonework wall to front gardens
(blue limestone or similar approved)

Proposed vernacular stonework wall to front gardens
with galvanized steel railings
(blue limestone or similar approved)

Proposed masonry blockwork wall
Refer to Engineer's Specification for Details.

PLANTING SCHEDULE - TO BE READ IN CONJUNCTION WITH LANDSCAPE PLAN & PLANTING PLAN

Proposed Street Tree Planting									
CODES	Species	Girth / Form / Height	Density	No.	Comments	Establishment Maintenance Period 18 months	Management year 1.5 - 5		
PpF	Prunus padus 'Fastigiata'	10-12cm (Standard Tree), minimum 2-3m in height	As shown on plan	5	Preference for a mixed provenance locations south of the site. Irish provenance to be selected for native planting. To be planted in positions shown on drawing. To be double staked.	Defective (dead or dying) plants to be replaced after year 1. Monthly tasks: -Trees stakes/ties to be checked, loosened and removed as necessary -Water weekly to soil saturation during dry weather -Check weeds at 0.5m radius around the base of tree -Fertilise at base of tree	Every 3 years: -Trees to be pruned as necessary to be kept away from overhead lines -Tree ties and staking to be removed at start of management period. -Fertilise at base as required.		
		5							
	Total								
Proposed Native Tree Planting									
CODES	Standard Trees Species	Girth / Form / Height	Density	No.	Comments	Management year 1-5	Management year 5-10		
Bp	Betula pendula	14-16cm, RB Extra Heavy, minimum 3m in height	As shown on plan	24	Irish provenance to be selected for native planting. Trees to be planted 2.5m apart. To be double staked.	Defective (dead or dying) plants to be replaced after year 1. Monthly tasks: -Water weekly during dry weather -Weed removal at base of tree -Fertilise at base of tree -After 3 years tree ties and staking to be removed	Every 3 years: -Trees to be thinned and pruned. If over crowding of tree crown has occurred then alternate trees to be coppiced to a height of 1m above ground level -Tree ties and staking to be removed		
Pa	Prunus avium	14-16cm, RB Extra Heavy, minimum 3m in height		33					
Sa	Sorbus aucuparia	14-16cm, RB Extra Heavy, minimum 3m in height		13					
Qr	Quercus robur	16-18cm, RB Extra Heavy, minimum 4m in height		6					
				Total	76				
Proposed Open Space Tree Planting									
CODES	Species	Height/ Form	Planting Density m2	No.	Comments	Establishment Maintenance Period 18 months	Management year 1.5 - 5		
Qp	Quercus pubescens	16-18cm, RB Extra Heavy, minimum 4m in height	As shown on plan	8	Preference for a mixed provenance. To be planted in front and rear gardens, in positions shown on drawing. Syringa species not to be planted at rear gardens. To be double staked.	As above.	As above.		
				Total				8	
Proposed Formal Hedge									
	Species	Height	% in mix	Planting Density (m ²)	Length (m)	Total No.	Comments	Management year 1-5	Management year 5-10
FH	Phloxia x Fraseri 'Red Robin'	60-90cm/BR	100	5	113	667	Hedge species to be planted at 0.5m centres. Temporary support/ protection might be required. Preference for biodegradable options.	Defective (dead or dying) plants to be replaced after year 1. Monthly tasks: -Water weekly to soil saturation during dry weather -Check weeds at base of whip/shrub -Fertilise at base of whip/shrub	To be kept trimmed to final height and width.
Proposed Wildflower Meadow									
	Mix	Sowing Rate (g/m ²)			Total Area (m2)	Total No. (kg)	Comments	Establishment Maintenance Period 18 months	Management year 1.5 - 5
WM	Basic General Purpose Meadow Mixture EM1 by Emorsgate or similar (20-80)	5			1187	6	To be sown on weed free, Stone free, firm but not compacted, ground rotavate to a min depth of 300mm, before sowing.	To be rolled with Cambridge roller after sow cut 2-3 time in year 1 Follow at Ireland pollinator plant guidelines to achieve full grown covering sward	Cut 1-2 times per year as required. Less regular cutting cycles can be implemented where vegetational succession is desirable.

Proposed Ornamental Planting							
Species	Height	% in mix	Planting Density	Total Area	Total No.	Comments	Establishment Maintenance Period 18 months
OP	Standard bulb size 10cm pot Standard bulb size 10cm pot Standard bulb size 10cm pot	30 20 20 15	10	63	189 126 126 95	Bulbs to be planted within their own groups at a depth equal to 2 x their length and between the new plants. Plant crocuses and aquapathus in separate groups. Plant cyclamen closely to trees.	Do not cut back when the foliage of bulbs has turned yellow. If foliage is cut while green, the bulbs will need to be replanted.
				Total:	85		
Proposed Mown Grass							
Mix	Sowing Rate (g/m ²)			Total Area (m ²)	Total No. (kg)	Comments	Establishment Maintenance Period 18 months
MG	Basic General Purpose Meadow Mixture EM1 by Emorsgate or similar (20-80), for both frequent and infrequent mowing in areas (as identified in landscape plan), or similar and approved	5		2078	10	To be sown on weed free, Stone free, firm but not compacted, ground rotavated to a min depth of 300mm before sowing. Differentiate frequency as required by the use of the area.	To be rolled with Cambridge roller after sow cut 2-3 time in year 1. Follow all Ireland pollinator plant guidelines to achieve full grown covering sward.
Proposed Reduced Mown Grass							
Mix	Sowing Rate (g/m ²)			Total Area (m ²)	Total No. (kg)	Comments	Establishment Maintenance Period 18 months
RMG	Basic General Purpose Meadow Mixture EM1 by Emorsgate or similar (20-80), for both frequent and infrequent mowing in areas (as identified in landscape plan), or similar and approved	5		788	4	To be sown on weed free, Stone free, firm but not compacted, ground rotavated to a min depth of 300mm before sowing. Differentiate frequency as required by the use of the area.	To be rolled with Cambridge roller after sow cut 2-3 time in year 1. Follow all Ireland pollinator plant guidelines to achieve full grown covering sward.
Proposed Rear Garden Grass							
General Purpose Grass Mix	Sowing Rate (g/m ²)			Total Area (m ²)	Total No. (kg)	Comments	Establishment Maintenance Period 18 months
RG	No. 3 Lawn Seed - Hard Wearing 50% Creeping Red Fescue, 50% Dwarf Ryegrass, https://mcguinnessseeds.com/, or similar and approved	40		1491.7	60	To be sown on weed free, Stone free, firm but not compacted, ground rotavated to a min depth of 300mm and level before sowing	Keep soil moist during establishment.

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Project Title

HOUSING AT GORT MHAOLIR, ATHENRY

Drawing Title

PLANTING PLAN & SCHEDULE

Client

PAUL KEOGH ARCHITECTS

Parent Model

OHZ-JBAI-XX-XX-M2-L-0002-S0.P01-PLANTING_PLAN_&_SCHEDULE_Gort Mhaolir.dwg

Security Classification

OFFICIAL

Scale

1:500

Author

LK

Designer

LK

Checker

ES

Approver

COF

Suitability

PUBLISHED DEFINITION

Status

A3

Revision

P01

Information Contained

OHZ-JBAI-XX-XX-DR-L-0002

A1 Sheet Size

D Lighting Plan

E 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 <i>Rana temporaria</i>	25/02/2023	Amphibians and reptiles of Ireland	Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts
Smooth Newt <i>Lissotriton vulgaris</i>	26/07/2020	Amphibians and reptiles of Ireland	Protected Species: Wildlife Acts
Birds			
Barn Owl <i>Tyto alba</i>	24/06/2020	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Red List
Barn Swallow <i>Hirundo rustica</i>	30/04/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Amber List
Common Coot <i>Fulica atra</i>	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 <i>Falco tinnunculus</i>	08/06/2022	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Amber List
Common Linnet <i>Carduelis cannabina</i>	20/04/2021	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Amber List
Common Pheasant <i>Phasianus colchicus</i>	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 <i>Gallinago gallinago</i>	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 <i>Sturnus vulgaris</i>	26/01/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Amber List
Common Swift <i>Apus apus</i>	22/07/2023	Swifts of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Amber List
Common Wood Pigeon <i>Columba palumbus</i>	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 <i>Numenius arquata</i>	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

Species	Date of last record	Dataset	Designation
Eurasian Woodcock <i>Scolopax rusticola</i>	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
European Golden Plover <i>Pluvialis apricaria</i>	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 <i>Carduelis chloris</i>	26/01/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Amber List
Grey Wagtail <i>Motacilla cinerea</i>	05/06/2022	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Red List
Hen Harrier <i>Circus cyaneus</i>	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 <i>Passer domesticus</i>	26/01/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Amber List
Little Egret <i>Egretta garzetta</i>	22/05/2017	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex I Bird Species
Meadow Pipit <i>Anthus pratensis</i>	20/04/2021	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Red List
Northern Lapwing <i>Vanellus vanellus</i>	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 <i>Oenanthe oenanthe</i>	26/09/2017	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Amber List
Peregrine Falcon <i>Falco peregrinus</i>	27/01/2021	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex I Bird Species
Redwing <i>Turdus iliacus</i>	30/01/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Red List
Rock Pigeon <i>Columba livia</i>	26/01/2023	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex II, Section I Bird Species
Whooper Swan <i>Cygnus cygnus</i>	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 <i>Phylloscopus trochilus</i>	20/04/2021	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern >> Amber List
Crustaceans			
Freshwater White-clawed Crayfish <i>Austropotamobius pallipes</i>	31/12/2021	General Biodiversity Records from Ireland	Protected Species: EU Habitats Directive >> Annex II & V Protected Species: Wildlife Acts
Flora			

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

F 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 <i>Leycesteria formosa</i>	27/07/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Medium Impact Invasive Species
Sycamore <i>Acer pseudoplatanus</i>	25/07/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Medium Impact Invasive Species
Traveller's-joy <i>Clematis vitalba</i>	03/06/2019	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Medium Impact Invasive Species
Invertebrates			
New Zealand Flatworm <i>Arthurdendyus triangulatus</i>	03/06/2019	New Zealand Flatworm (Arthurdendyus triangulatus) Database	High Impact Invasive Species
Jenkins' Spire Snail <i>Potamopyrgus antipodarum</i>	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 <i>Mustela vison</i>	01/08/2017	Mammals of Ireland 2016-2025	High Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)
European Rabbit <i>Oryctolagus cuniculus</i>	16/06/2015	Atlas of Mammals in Ireland 2010-2015	Medium Impact Invasive Species
Fallow Deer <i>Dama dama</i>	31/12/2008	Deer of Ireland Database	High Impact Invasive Species Invasive Species >> Regulation S.I. 477 (Ireland) Protected Species: Wildlife Acts

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