

Portumna Housing Development



Screening for Appropriate Assessment

Prepared By:



Delichon Ecology

Prepared For:

Simon J Kelly Architects/ Galway County Council

Portumna Housing Development Screening for Appropriate Assessment

Revision	Document Number	Description	Prepared by	Checked by	Date
0	24_2025	Screening for Appropriate Assessment	ED	ED	14/05/2025
1	24_2025	Screening for Appropriate Assessment	ED	ED	20/05/2025

Table of Contents

1. INTRODUCTION.....	1
1.1 Legislative Context for Appropriate Assessment.....	1
2 METHODOLOGY	5
2.1.1 Stage 1 – Screening for Appropriate Assessment.....	5
2.1.2 Stage 2 – Appropriate Assessment (Natura Impact Statement).....	5
2.1.3 Guidance	6
2.1.4 Information Consulted for this Report	7
3 PROJECT DESCRIPTION AND EUROPEAN SITES	8
3.1 Proposed Development	8
3.2 European Sites	10
3.2.1 Zone of Influence	10
3.2.2 Source-Pathway-Receptor Model	10
3.2.3 Likely Significant Effect.....	11
3.2.4 Assessment of Significant Effects.....	11
3.2.5 Limitations	11
3.3 Potential Pathway Vectors to European Sites	12
3.4 European Sites within the Project Zone of Influence	13
3.4.1 Summary of Connectivity Analysis.....	21
3.4.2 European Site Descriptions	23
3.4.3 Lough Derg North-east Shore SAC (002241)	23
3.4.4 Lough Derg (Shannon) SPA (004058)	23
3.4.5 Middle Shannon Callows SPA (004096)	23
3.4.6 River Shannon Callows SAC (000216)	24
3.4.7 Lower River Shannon SAC (Site Code: 002165)	24
3.4.8 River Shannon and River Fergus Estuaries SPA (Site Code: 004077)	24
3.4.9 Conservation Objectives of European Sites.....	25
4 EXISTING ENVIRONMENT	27
4.1 Ecological Receptors	27
4.1.1 Habitats.....	27
4.1.2 Evaluation of Habitats	27
4.1.3 Birds	28



4.1.4	Mammals	28
4.1.5	Bats.....	29
4.1.6	Amphibians and Reptiles.....	29
4.1.7	Invasive Species	29
4.1.8	Surface Watercourses.....	30
4.2	Flooding	33
4.3	Geology, Hydrology and Hydrogeology	33
5	SCREENING FOR APPROPRIATE ASSESSMENT	34
5.1.1	Conclusion of Cumulative Impact Assessment.....	43
5.2	Screening for AA Conclusion.....	46
	APPENDIX A – PROPOSED LAYOUT.....	47

Table

Table 3-1: European Sites within the proposed development’s potential Zone of Influence.....	16
Table 4-1 - Evaluation of habitats within the proposed housing scheme	27
Table 5-1: Screening Assessment Criteria	34
Table 5-2: In-combination Effects associated with the proposed development.	38
Table 5-3: Screening Assessment Criteria	43

Figures

Figure 1-1: Proposed Site Location	3
Figure 1-2: Proposed Site Layout Plan	4
Figure 2-1: Four Stages of Appropriate Assessment	5
Figure 3-1: European Sites within the potential project Zone of Influence	22
Figure 4-1: Habitats within the proposed development Site.	32

1. INTRODUCTION

Delichon Ecology have been commissioned by Simon J. Kelly Architects / Galway County Council (GCC) to carry out a Screening for Appropriate Assessment (AA) for a proposed social housing development at St. Joseph's Road, Portumna, Co. Galway. The layout of the proposed housing development is presented in **Figure 1-1** while the site location is presented in **Figure 1.2**.

This Screening for Appropriate Assessment report has been prepared to provide the competent authority, Galway County Council, with the relevant scientific information to conduct the Appropriate Assessment (AA). This information will allow Galway County Council to determine, in view of best scientific knowledge, if the proposed project, individually or in combination with other plans and projects is likely to have a significant effect on a European site and, where necessary, to ascertain whether or not the proposed project would adversely affect the integrity of a European site.

1.1 Legislative Context for Appropriate Assessment

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as "The Habitats Directive", provides legal protection for habitats and species of European importance. Articles 3 to 9 provide 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.

Natura 2000 sites are defined under the Habitats Directive (Article 3) as a coherent European ecological network of special areas of conservation, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. In Ireland, these sites are designated as European Sites and include Special Protection Areas (SPAs), established under the EU Birds Directive (79/409/EEC, as codified by 2009/147/EC) for birds and Special Areas of Conservation (SACs), established under the Habitats Directive 92/43/EEC for habitats and species.

The Habitats Directive has been transposed into Irish law by Part XAB of the Planning and Development Act, 2000 - 2015 and the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477/2011) as amended.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to adversely affect the integrity of European Sites (Annex 1.1).

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

Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.



Article 6(3) of the Habitats Directive, transposed into Irish Law relevant to this project includes Part XAB of the Planning and Development Act, 2000 (as amended) and the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).

Natura 2000 sites in Ireland (herein referred to as European sites) that form part of the Natura 2000 network of protected sites include Special Areas of Conservation (SACs) designated due to their significant ecological importance for species and habitats protected under Annexes I and II respectively of the Habitats Directive, and Special Protected Areas (SPAs), designated for the protection of populations and habitats of bird species protected under the EU Birds Directive (Council Directive 2009/409/EEC). Features for which SACs and SPAs are designated are termed Qualifying Interests and Special Conservation Interests respectively. Collectively, Qualifying Interests and Special Conservation Interests are herein referred to as Qualifying Features.

As the proposed project is not directly connected with or necessary to the management of any European Site, Galway County Council as the competent authority, is obliged to assess, in view of best scientific knowledge, if the proposed development, individually or in combination with other plans or projects, is likely to have a significant effect on European Sites.

The staged assessment process undertaken to meet Article 6(3) obligations is described in **Section 2** below.



Figure 1-1: Proposed Site Location

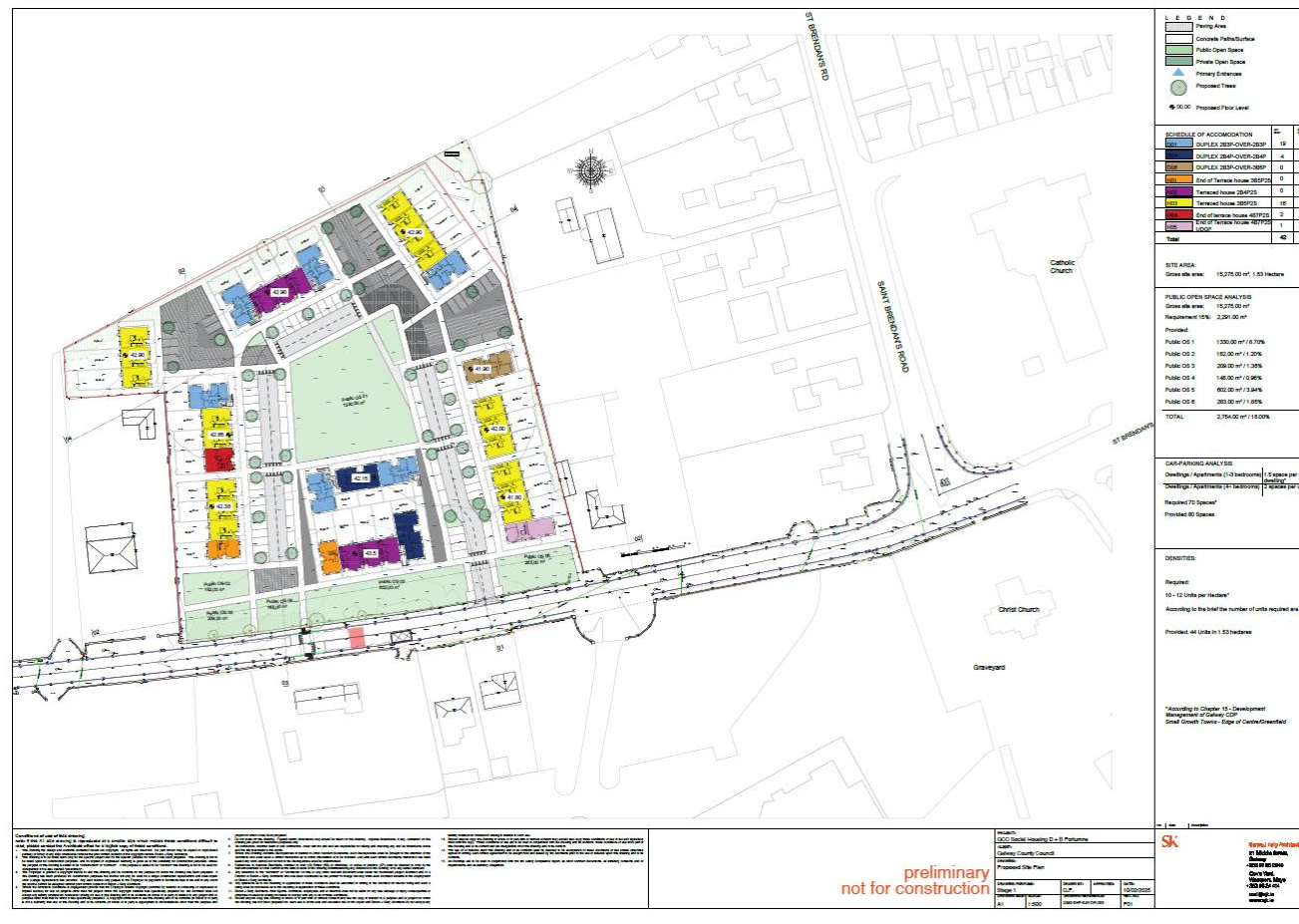


Figure 1-2: Proposed Site Layout Plan

2 METHODOLOGY

The Department of the Environment, Heritage and Local Government guidelines (DEHLG, 2009, rev. 2010) outlines the European Commission's methodological guidance (EC, 2002) promoting a four-stage process to complete the AA, and outlines the issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

The four stages are summarised diagrammatically in **Figure 2-1**. Stages 1-2 deal with the main requirements for assessment under Article 6(3). Stage 3 may be part of the Article 6(3) Assessment or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step of Article 6(4).

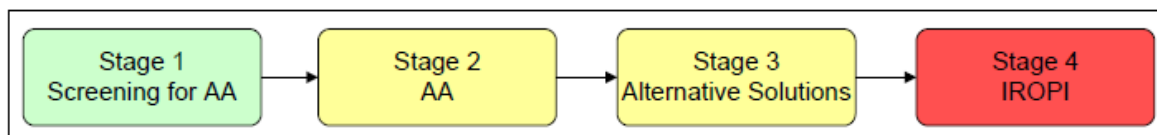


Figure 2-1: Four Stages of Appropriate Assessment

2.1.1 Stage 1 – Screening for Appropriate Assessment

Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3):

Whether a plan or project is directly connected to or necessary for the management of the site, and whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site in view of its conservation objectives.

If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA). Screening should be undertaken without the inclusion of mitigation, unless potential impacts clearly can be avoided through the modification or redesign of the plan or project, in which case the screening process is repeated on the altered plan. The greatest level of evidence and justification will be needed in circumstances when the process ends at screening stage on grounds of no impact.

2.1.2 Stage 2 – Appropriate Assessment (Natura Impact Statement)

The aim of Stage 2 of the AA process is to identify any adverse impacts that the plan or project might have on the integrity of relevant European sites. As part of the assessment, a key consideration is 'in combination' effects with other plans or projects. Where adverse impacts are identified, mitigation measures can be proposed that would avoid, reduce or remedy any such negative impacts and the plan or project should then be amended accordingly, thereby avoiding the need to progress to Step 3.

This stage considers whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a European site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects. The proponent of the plan or project will be required to submit a Natura Impact Statement, i.e. the report of a targeted professional scientific examination of the plan or project and the relevant European sites, to identify and characterise any possible implications for the site in view of the site's conservation objectives, taking account of in-

combination effects. This should provide information to enable the public authority to carry out the AA.

The information required in a Natura Impact Statement, is outlined in Regulation 42(5) (a) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011) as amended, as follows:

A Natura Impact Statement shall, in addition to addressing the issues referred to in the interpretation contained in Regulation 2(1), include such information or data as the public authority considers necessary, and specifies in a notice given under paragraph (3), to enable it to ascertain if the plan or project will affect the integrity of the site.

Where appropriate, a Natura Impact Statement shall include, in addition—

- i. the alternative solutions that have been considered and the reasons why they have not been adopted,
- ii. the imperative reasons of overriding public interest that are being relied upon to indicate that the plan or project should proceed notwithstanding that it may adversely affect the integrity of a European site,
- iii. the compensatory measures that are being proposed.

If the assessment is negative, i.e. adverse effects on the integrity of a site cannot be excluded, then the process must proceed to Stage 3, or the plan or project should be abandoned. The competent authority must make a determination to that effect before proceeding to the next stage.

2.1.3 Guidance

This Screening for AA and NIS report has been prepared with regard to the relevant provisions of the EU Council Directive 92/43/EEC and Ireland's EU (Birds and Natural Habitats) Regulations 2011 (as amended).

The methodology followed for this assessment has had regard to the following guidance and legislation:

- DoEHLG (2009, rev. 2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government;
- European Commission (EC) (2018), Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats Directive' 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission;
- EC (2002) 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;
- EC (2021) Assessment of Plans and Projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC;



- EC (2007a) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. European Commission;
- EC, (2007b), Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC. European Commission;
- EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Commission;
- Chartered Institute of Ecology and Environmental Management (CIEEM) Version 1.1 (September 2019), Guidelines for Ecological Impact Assessment in the UK and Ireland;
- NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitat Assessments. Unpublished NPWS report;
- NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments. Unpublished NPWS report;
- Office of the Planning Regulator (OPR) (2021) Practice Note PN01 - Appropriate Assessment Screening for Development Management.
- The European Communities (Birds and Natural Habitats) Regulations 2011 as amended;
- The Planning and Development Act 2000 as amended;
- The Planning and Development Regulations 2001 as amended; and
- Recent Irish and European case law on the Habitats Directive.

2.1.4 Information Consulted for this Report

This assessment has been informed by the following sources of data:

- Information on the location, nature and design of the proposed project as provided by the client;
- Department of Housing, Planning, Community and Local Government (DHPCLG) online land-use mapping (www.myplan.ie/en/index.html);
- Office of Public Works (OPW) National Flood Hazard Mapping website (www.floodmaps.ie);
- Review of the National Biodiversity Data Centre (NBDC) webmapper <https://maps.biodiversityireland.ie/Map>
- Geological Survey of Ireland - National Draft Bedrock Aquifer map;
- Geological Survey of Ireland - Groundwater Database (www.gsi.ie);
- Environmental Protection Agency (EPA) geoportal mapping tool (<https://gis.epa.ie/EPAMaps/>);
- National Parks and Wildlife Service protected site and species information and data (<https://www.npws.ie/protected-sites>);
- Spatial data in respect of Article 17 reporting, available online at <https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17>.
- Spatial data in respect of Article 12 reporting, available online at <https://www.npws.ie/maps-and-data/habitat-and-species-data/article-12-data>.
- National Biodiversity Data Centre (www.biodiversityireland.ie); and
- Ordnance Survey of Ireland mapping and aerial photography (www.osi.ie).

3 PROJECT DESCRIPTION AND EUROPEAN SITES

This section provides the information required for the competent authority (Galway County Council) to undertake a Screening for AA and determine in view of best scientific knowledge, whether the proposed works, individually or in combination with other plans and projects, is likely to have a significant effect on the European site. Specifically, it aims to:

- Provide information on, and assess the potential for the proposed works to significantly impact on European sites; and
- Determine whether the activities proposed, alone or in combination with other projects, are likely to have significant effects on European sites in view of their Conservation Objectives.

This screening assessment provides information to address the following elements:

1. Description of the plan or project, and local site or plan area characteristics. The description covers the full scope of the proposed plan or project (i.e. site set up, operational and restoration phase).
2. Description of the receiving environment setting of the proposed plan or project and its surrounds.
3. Identification of relevant European sites within the projects the potential zone of influence. A preliminary assessment to determine connectivity between the proposed works and receptors (i.e. European sites and/ or features for which the sites are designated). Where connectivity exists, the receptors in question are brought forward in the screening assessment process.
4. For receptors that exhibit potential connectivity to the proposed work a screening assessment is undertaken to establish whether the plan or project is likely to have a direct, indirect or cumulative effect on receptors based on a consideration of likely impacts (i.e. an assessment of significance of effect).
5. Screening statement with conclusions on whether or not an AA is necessary for the relevant a Qualifying Feature.

3.1 Proposed Development

The proposed housing development site is located in Portumna adjoining the west of the town centre, and accessed to the north of St Joseph's Road, with 127-meter road frontage. An existing single storey dwelling is to the east of the site on the town side, and the eastern boundary is generally the rear boundary of this house and properties at St Bendan's Road. There is an existing two storey dwelling and garden along the western boundary. An Aldi supermarket is located west of the site. To the north of the site, and in a small pocket to the east, are potentially future development lands. The site is 1.53 hectares in area.

The proposed housing development provides for 38 dwellings as briefed following design development and refinement of the brief with Galway County Council during a 6-month design and consultation period November 2024 – May 2025, and consists of:

- 2 bedroomed houses – 10 no;
- 3 bedroomed houses – 26 no;

- 4 bedroomed houses – 2 no; and
- TOTAL Bedrooms - 38 no.

The design response to this site to provide the GCC brief for 38 new dwellings is as follows:

- 1) Propose a street-front of new 2-storey houses so that the new housing feels part of Portumna town, in alignment with the established building line to the east, with a continuous linear park green amenity between the houses and the existing St. Joseph's Road and step the scale down with a special house type that steps down to a single storey element adjoining the neighbouring context to the east;
- 2) Align new houses to the west with the building line established by existing 2-storey house to the west;
- 3) Reconcile the two building lines at an open space that provides pedestrian access to and from the new scheme to the footpath leading to the supermarket to the west;
- 4) Propose new terraces of houses fully overlooking a central open space amenity at the heart of the new housing scheme;
- 5) Provide 7no. single storey terraced houses facing the central park (4 to the north, 3 to the south as a "mews terrace" behind the street front to St Joseph's Road;
- 6) Provide 3 smaller "home zone" area that also serve as potential future linkages to the identified possible future housing development sites to north and east;
- 7) Propose a design strategy that the new houses follow traditional and vernacular rural Irish townhouses principles of vertically proportioned windows, 47-degree roof gables over ca. 6m deep buildings, traditional render finish and all corners turned so that there are no dead spaces not overlooked by neighbours;
- 8) Provide a single vehicular entrance and multiple pedestrian linkages and open visibility to and from St Joseph's road to assist the new housing integrate visually and socially with Portumna's existing context.

A new foul water connection to the public drainage network is required for this development. Correspondence with Uisce Eireann has confirmed that foul water connection proposals are feasible and do not require any infrastructure upgrades. Surface water will be managed via soakaways, with a partial outfall to the Galway County Council surface water network. Lighting proposed for the project will be hooded, targeted and downward facing.

The layout of the proposed housing scheme is displayed in **Appendix A** below.

3.2 European Sites

3.2.1 Zone of Influence

The proximity of the proposed development to European sites, and more importantly QIs/SCIs of European sites, is of importance when identifying potentially likely significant effects. During the initial scoping of this report, a 15km ZOI was applied for impact assessment. A conservative approach has been used, which minimises the risk of overlooking distant or obscure effect pathways, while also avoiding reliance on buffer zones within which all European sites should be considered. This approach assesses the complete list of all QIs/SCIs of European sites in Ireland (i.e. potential receptors), instead of listing European sites within buffer zones. This follows Irish departmental guidance on AA:

“For projects, the distance could be much less than 15 km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects” (DoEHLG, 2010, p. 32).

Following the guidance set out by the NRA (2009), the proposed development has been evaluated based on an identified ZOI with regard to the potential impact pathways to ecological features (e.g. mobile and static). The ZOI of the proposed development on mobile species (e.g. birds, mammals, and fish), and static species and habitats (e.g. saltmarshes, woodlands, and flora) is considered differently. Mobile species have ‘range’ outside of the European site in which they are QI/SCI. The range of mobile QI/SCI species varies considerably, from several meters (e.g. in the case of whorl snails *Vertigo* spp.), to hundreds of kilometres (in the case of migratory wetland birds). Whilst static species and habitats are generally considered to have ZOIs within close proximity of the proposed development, they can be significantly affected at considerable distances from an effect source; for example, where an aquatic QI habitat or plant is located many kilometres downstream from a pollution source.

Hydrological linkages between the proposed development and European sites (and their QIs/SCIs) can occur over significant distances; however, any effect will be site specific depending on the receiving water environment and nature of the potential impact. A reasonable worst-case ZOI for water pollution from the proposed development site, considering the coastal location of the proposed development, is considered to include all Water Framework Directive (WFD) coastal water bodies directly connected with the proposed development.

3.2.2 Source-Pathway-Receptor Model

The likely effects of the proposed development on European sites has been appraised using a source-pathway-receptor model, where:

- A ‘source’ is defined as the individual element of the proposed development that has the potential to impact on a European site, its qualifying features and its conservation objectives;
- A ‘pathway’ is defined as the means or route by which a source can affect the ecological receptor; and
- A ‘receptor’ is defined as the Special Conservation Interests of Special Protection Areas (SPA) or Qualifying Interests (QI) of Special Areas of Conservation (SAC) for which Conservation Objectives have been set for the European sites being screened.



A source-pathway-receptor model is a standard tool used in environmental assessment. In order for an effect to be likely, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism results in no likelihood for the effect to occur. The source-pathway-receptor model was used to identify a list of European sites, and their QIs/SCIs, with potentially links to European site.

3.2.3 Likely Significant Effect

The threshold for a Likely Significant Effect (LSE) is treated in the screening exercise as being above a de minimis level. The opinion of the Advocate General in CJEU case C-258/11 outlines:

“the requirement that the effect in question be ‘significant’ exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on a European site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill.”

In this report, therefore, ‘relevant’ European sites are those within the potential ZOI of activities associated with the proposed development, where LSE pathways to European sites were identified through the source-pathway-receptor model.

3.2.4 Assessment of Significant Effects

The conservation objectives of the European sites identified to lie within the ZOI were reviewed and assessed in order to establish whether the construction and operation of the proposed housing development has the potential to have a negative impact on any of the QIs and/or conservation objectives listed for the site.

The assessment framework is taken from the best practice guidelines issued by the European Commission, i.e., “Assessment of plans and projects significantly affecting Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC”.

The potential for significant effects that may arise from the proposed housing development was considered through the use of key indicators:

- Habitat loss or alteration.
- Habitat/species fragmentation.
- Disturbance and/or displacement of species.
- Changes in population density.
- Changes in water quality and resource. In addition, information pertaining to the conservation objectives of the European sites, the ecology of the designated habitats and species and known or perceived sensitivities of the habitats and species were considered.

3.2.5 Limitations

No limitations were encountered which would prevent robust conclusions from being drawn as to the potential impacts of the Proposed Development and therefore the likely significant effects on the European Site, in view of the Site’s conservation objectives.

3.3 Potential Pathway Vectors to European Sites

Surfacewater / Hydrological pathways

A review of EPA river routes data (<https://gis.epa.ie/EPAMaps/>) and the findings of the site walkover survey, confirms that the proposed development site does not support permanent or ephemeral watercourses. The nearest waterbody to the proposed development site is Lough Derg located >700m south of the proposed development site. There is no surfacewater connectivity between the proposed development site and this watercourse. Therefore, there are no hydrological or surfacewater pathways linking the proposed housing development site with the surrounding environment. Therefore, groundwater / hydrogeological pathways between the proposed housing development and these European Sites are not considered likely.

Groundwater / Hydrogeological pathways

The proposed works area is underlain by the Tynagh groundwater body (IE_SH_G_236), which also overlaps the boundaries of the Middle Shannon Callows SPA, the River Shannon Callows SAC, Lough Derg North-east Shore SAC and Lough Derg SPA. There will be no emissions to groundwater as a result of the proposed works and no deep excavations are required for the proposed works. Therefore, groundwater / hydrogeological pathways between the proposed housing development and these European Sites are not considered likely.

Visual Disturbance

Construction and operational phase activities can contribute towards visual disturbance to mobile species associated with European Sites, such as waders and wildfowl or mobile mammal species such as otter. Waterbird species including geese and swans are susceptible to anthropogenic disturbance should activities overlook feeding or roosting grounds. However, the proposed works are not located within the footprint of a European Site. The nearest European Sites are Lough Derg North-east Shore SAC and Lough Derg SPA, both of which are located 715m south. This separation distance is considered to be sufficient to remove noise disturbance as a potential vector / pathway to European Sites and their features of Qualifying Interest.

Noise disturbance

Generally, noise levels of 120dB at source have been shown to have the capacity to impact on within a range of 300m (Cutts *et al.*, 2013)¹.

The proposed works are not located within the footprint of a European Site. The nearest European Site is Lough Derg North-east Shore SAC and Lough Derg SPA, both of which are located 715m south. This separation distance is considered to be sufficient to remove in-situ noise disturbance as a potential vector / pathway to European Sites and their features of Qualifying Interest.

¹ Cutts, N, Hemingway K and Spencer J (2013). The Waterbird Disturbance Mitigation Toolkit Informing Estuarine Planning and Construction Projects. Produced by the Institute of Estuarine and Coastal Studies (IECS). Version 3.2.

Emissions to Air

Emissions to air in the form of release of dust particles during the project construction phase can contribute negative impacts to features of biodiversity interest. Holman *et al.* (2020)² presents a risk assessment for ecological impacts arising from dust deposition. Under this risk assessment, European Sites are considered to be highly sensitive to dust deposition and associated air quality impacts.

The proposed works are not located within the footprint of a European Site. The nearest European Site is Lough Derg North-east Shore SAC and Lough Derg SPA, both of which are located 715m south. Therefore, dust deposition to air is not considered to be a viable vector / pathway for the proposed project.

Ex-situ Pathways to Mobile Species

Mobile species of qualifying interest can occur outside of European Site boundaries. Should they occur outside of European Site boundaries, such species may be susceptible to disturbance if they come into contact with a development activity. Such disturbance effects are considered to be ex-situ of the European Site boundary. Where projects are located outside of a European Site boundary, the proposed project activities or the proposed project site and environs should be considered if they may contribute towards disturbance activities to mobile species of Qualifying Interest, including, but not limited to, otter, lesser horseshoe bat or over-wintering avifauna. However, the proposed development site provides poor suitability to support feeding, foraging or commuting habitat for mobile species associated with European Sites within the project Zone of Influence.

Spread of Invasive Non-native Species

The proposed construction works have the potential to influence the spread of invasive alien plant species as a result of the introduction of contaminated aggregate material and machinery into the site during the project construction phase. Furthermore, the proposed works have the potential to spread nearby or adjacent stands of invasive species into the proposed development site as a result of construction and project operation. The proposed works footprint do not support invasive alien plant species. The north-eastern corner of the field supporting the proposed development site supports a stand of Japanese knotweed (*Reynoutria japonica*). This stand is located outside of the proposed development footprint and boundary and has been avoided, with appropriate buffer zones and setbacks, by the proposed site design and development layout.

3.4 European Sites within the Project Zone of Influence

This stage of the screening for AA process describes European Sites within the Zone of Influence (Zoi) of the proposed project.

Section 3.2.3 of the Guidance for Planning Authorities (DoEHLG, 2010) states that the approach to Appropriate Assessment screening can be different for different plans and projects depending on the scale of the plan, project or programme and the likely associated effects. The overriding criteria determining whether a European Site will be impacted and potentially consequently effected by a

² Holman *et al* (2020). A guide to the assessment of air quality impacts on designated nature conservation sites – version 1.1, Institute of Air Quality Management, London



proposal is the distance between proposal and a European Site and whether there are pathways for effect linking the proposal to European Sites.

Both UK (Scott Wilson *et al.*, 2006) and Irish guidance (DoEHLG, 2010) outline that a distance of 15km may suffice as a likely Zone of Impact (Zol) in the case of plans on European Sites and may be sufficient to cover the geographic extent over which significant ecological effects are likely to occur. However for certain projects, the DoEHLG (2010) guidance recognises that the likely Zol could be 'much less than 15km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects'.

Recent guidance from Office of the Planning Regulator (2021) indicates that the zone of influence for a proposal is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European Site. This guidance indicates that the zone of influence should be established on a case-by-case basis using the Source-Pathway-Receptor framework. Using the Source » Pathway » Receptor approach and having regard for the location, the nature of the works, and the small size and scale of the works, it is considered for the purpose of this assessment that the likely Zol on European Sites is the zone immediately around the proposed works, in addition to any sites with a hydrological or hydrogeological connection downstream or overlapping the project and/or with an ecological connection, where distance would be dependent on the qualifying interests of the site. To that end the following sites are potentially located within the Source» Pathway » Receptor zone of influence of the proposed housing development.

- Lough Derg North-east Shore SAC (002241);
- Lough Derg SPA (004058);
- Middle Shannon Callows SPA (004096);
- River Shannon Callows SAC (000216);
- River Shannon and River Fergus Estuaries SPA (004077); and
- Lower River Shannon SAC (002165).

The assessment of connectivity between the European Sites and the proposed works follows the potential source-pathway-receptor model, which identifies the source of likely significant impacts, if any, the pathway (land, air, hydrological, hydrogeological pathways, etc) along which those impacts may be transferred from the source to the receiving environmental receptors (i.e. European Sites and/or features for which the sites are designated).

Where it is evident that there is no connectivity between the proposed work and receptors (i.e. European Sites and/or features for which the sites are designated), the receptors are excluded from the AA process. Similarly, where connectivity exists between the proposed work and receptors but is deemed not to result in likely significant effects to the receptor, the receptor can be screened out (i.e. likely significant effects to receptors excluded; receptor not considered further in AA process).

In contrast to the above, where it is not possible to exclude likely significant effects on the basis of best scientific knowledge, a more detailed scientific assessment of the proposed works is required



which focuses on the European Sites likely to be affected and the relevant designated feature in question.

The integrity of a European Site (referred to in Article 6.3 of the EU Habitats Directive) is determined based on the Conservation Status of the features (habitats and/ or species) for which SACs and SPAs are designated. The Qualifying Interests (QI) and Special Conservation Interests (SCIs) for protected sites have been obtained through a review of the Conservation Objectives documents available from the NPWS website www.npws.ie.

Figure 3-1 shows the European sites within the potential zone of influence of the proposed development site. **Table 3-1** provides details on the distance and connectivity of European Sites within the potential zone of influence of the proposed works.

Table 3-1: European Sites within the proposed development's potential Zone of Influence

Site Code	Site Name	Qualifying Features / Special Conservation Interest Species ³	Distance from Study Area ⁴	S-P-R Connectivity
002241	Lough Derg North-east Shore SAC	5130 <i>Juniperus communis</i> formations on heaths or calcareous grasslands 7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> * 7230 Alkaline fens* 8240 Limestone pavements* 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)* 91J0 <i>Taxus baccata</i> woods of the British Isles?	715m south	There is no hydrological or hydrogeological connectivity between the proposed development site and this European Site. There are no environmental vectors linking the proposed development site with the surrounding environment and consequently European Sites.
004058	Lough Derg SPA	A017 Cormorant <i>Phalacrocorax carbo</i> A061 Tufted Duck <i>Aythya fuligula</i> A067 Goldeneye <i>Bucephala clangula</i> A193 Common Tern <i>Sterna hirundo</i> A999 Wetlands	715m south	There is no hydrological or hydrogeological connectivity between the proposed development site and this European Site. There are no environmental vectors linking the proposed development site with the surrounding environment and consequently European Sites. The proposed housing development and immediate environs do not support suitable

³*Indicates priority Annex I habitats

⁴Indicates the nearest straight-line distance unless otherwise quoted.



Site Code	Site Name	Qualifying Features / Special Conservation Interest Species ³	Distance from Study Area ⁴	S-P-R Connectivity
				foraging, roosting or breeding habitat for SCI species for this SPA, all of which are primarily associated with large watercourses and waterbodies.
000216	River Shannon Callows SAC	1355 Otter <i>Lutra lutra</i> 6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) 6510 Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) 7230 Alkaline fens 8240 Limestone pavements* 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)*	929m south-east via the nearest straight line distance	There is no hydrological or hydrogeological connectivity between the proposed development site and this European Site. There are no environmental vectors linking the proposed development site with the surrounding environment and consequently European Sites.
004096	Middle Shannon Callows SPA	A038 Whooper Swan <i>Cygnus cygnus</i> A050 Wigeon <i>Anas penelope</i> A122 Corncrake <i>Crex crex</i> A140 Golden Plover <i>Pluvialis apricaria</i> A142 Lapwing <i>Vanellus vanellus</i> A156 Black-tailed Godwit <i>Limosa limosa</i> A179 Black-headed Gull <i>Chroicocephalus ridibundus</i> A999 Wetlands	942m south-east via the nearest straight line distance	There is no hydrological or hydrogeological connectivity between the proposed development site and this European Site. There are no environmental vectors linking the proposed development site with the surrounding environment and consequently European Sites. The proposed housing development and immediate environs do not support suitable foraging, roosting or breeding habitat for SCI



Site Code	Site Name	Qualifying Features / Special Conservation Interest Species ³	Distance from Study Area ⁴	S-P-R Connectivity
				species for this SPA, all of which are primarily associated with large watercourses, waterbodies and river floodplain habitats.
004077	River Shannon and River Fergus Estuaries SPA	A017 Cormorant <i>Phalacrocorax carbo</i> breeding + wintering A038 Whooper Swan <i>Cygnus cygnus</i> wintering A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i> wintering A048 Shelduck <i>Tadorna tadorna</i> wintering A050 Wigeon <i>Anas penelope</i> wintering A052 Teal <i>Anas crecca</i> wintering A054 Pintail <i>Anas acuta</i> wintering A056 Shoveler <i>Anas clypeata</i> wintering A062 Scaup <i>Aythya marila</i> wintering A137 Ringed Plover <i>Charadrius hiaticula</i> wintering A140 Golden Plover <i>Pluvialis apricaria</i> wintering A141 Grey Plover <i>Pluvialis squatarola</i> wintering A142 Lapwing <i>Vanellus vanellus</i> wintering A143 Knot <i>Calidris canutus</i> wintering A149 Dunlin <i>Calidris alpina</i> wintering	>65km south via the open waters of Lough Derg.	There is no hydrological or hydrogeological connectivity between the proposed development site and this European Site. There are no environmental vectors linking the proposed development site with the surrounding environment and consequently European Sites. The proposed housing development and immediate environs do not support suitable foraging, roosting or breeding habitat for SCI species for this SPA, all of which are primarily associated with large watercourses and waterbodies. Furthermore, the proposed housing development is located outside of the core foraging range for the SCI species associated with this European Site.



Site Code	Site Name	Qualifying Features / Special Conservation Interest Species ³	Distance from Study Area ⁴	S-P-R Connectivity
		A156 Black-tailed Godwit <i>Limosa limosa</i> wintering A157 Bar-tailed Godwit <i>Limosa lapponica</i> wintering A160 Curlew <i>Numenius arquata</i> wintering A162 Redshank <i>Tringa totanus</i> wintering A164 Greenshank <i>Tringa nebularia</i> wintering A179 Black-headed Gull <i>Chroicocephalus ridibundus</i> wintering A999 Wetlands		
002165	Lower River Shannon SAC	1029 Freshwater Pearl Mussel <i>Margaritifera margaritifera</i> 1095 Sea Lamprey <i>Petromyzon marinus</i> 1096 Brook Lamprey <i>Lampetra planeri</i> 1099 River Lamprey <i>Lampetra fluviatilis</i> 1106 Atlantic Salmon <i>Salmo salar</i> (only in fresh water) 1110 Sandbanks which are slightly covered by sea water all the time 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1150 *Coastal lagoons	>35km south via the open waters of Lough Derg	There is no hydrological or hydrogeological connectivity between the proposed development site and this European Site. There are no environmental vectors linking the proposed development site with the surrounding environment and consequently European Sites.



Site Code	Site Name	Qualifying Features / Special Conservation Interest Species ³	Distance from Study Area ⁴	S-P-R Connectivity
		1160 Large shallow inlets and bays 1170 Reefs 1220 Perennial vegetation of stony banks 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 1310 <i>Salicornia</i> and other annuals colonizing mud and sand 1330 Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) 1349 Bottlenose Dolphin <i>Tursiops truncatus</i> 1355 Otter <i>Lutra lutra</i> 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation 6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) 91E0 *Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)		



3.4.1 Summary of Connectivity Analysis

The proposed development site does not support connectivity with European Sites and there are no environmental or ecological vectors linking the proposed development site with the surrounding environment.

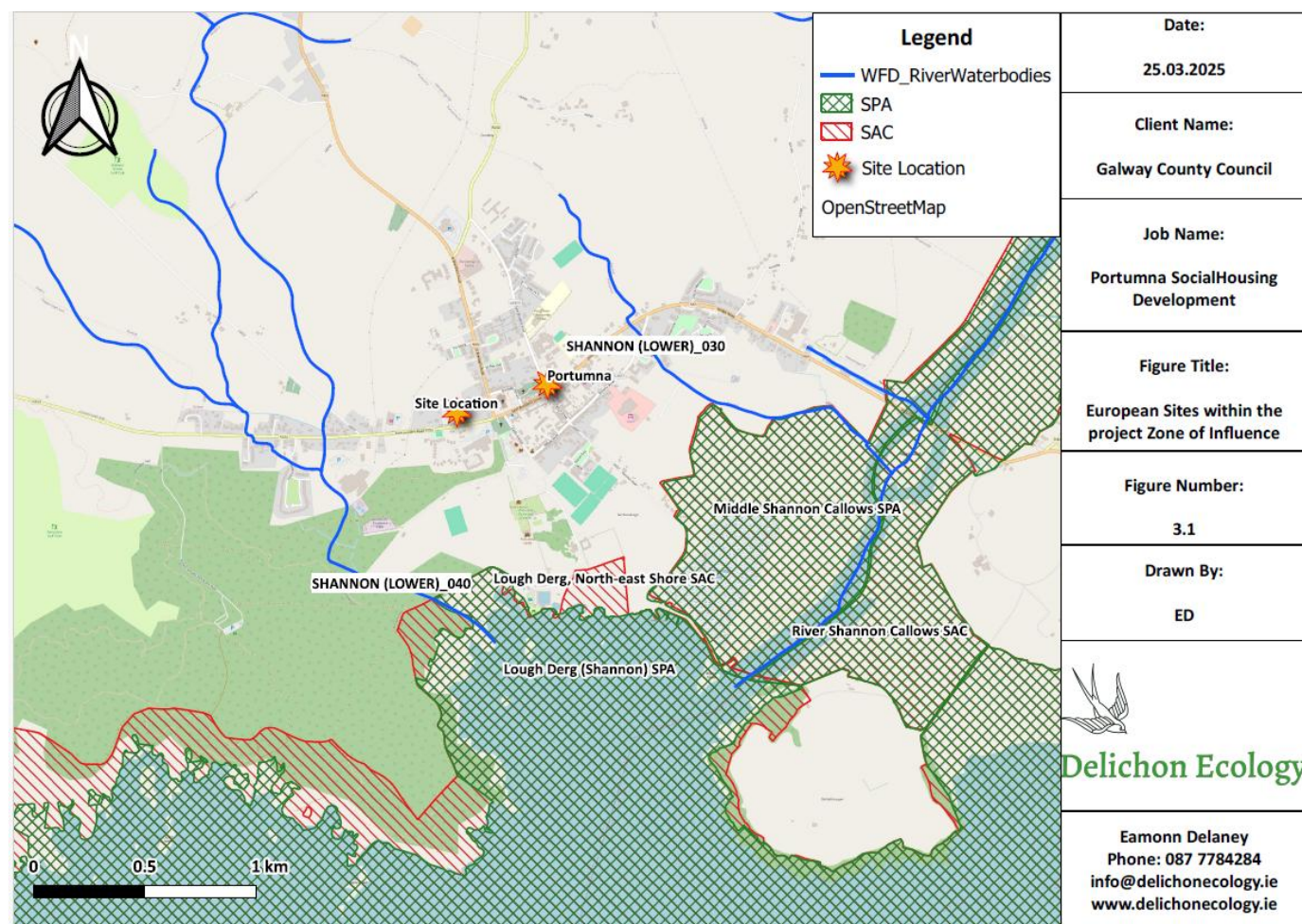


Figure 3-1: European Sites within the potential project Zone of Influence

3.4.2 European Site Descriptions

Site descriptions for European Sites within relative proximity are presented below.

3.4.3 Lough Derg North-east Shore SAC (002241)

Lough Derg, the lowest order lake on the River Shannon, is one of the largest bodies of freshwater in Ireland. This SAC, however, only includes the northern shore of the lake from the mouth of the Cappagh River in the north-west to just below Black Lough at the north-eastern shore. The greater part of this site lies on Carboniferous limestone, although there is Old Red Sandstone on the southern shores of the eastern section. This is a site of significant ecological interest, with six habitats listed on Annex I of the E.U. Habitats Directive. Four of these are priority habitats - Cladium fen, alluvial woodland, limestone pavement and Yew woodland. Other annexed habitats present include alkaline fen and Juniper scrub formations on heath and calcareous grasslands. In addition, the lake itself is an SPA that supports important numbers of wintering wildfowl, Greenland White-fronted Goose, Common Tern and Cormorant, a number of which are listed under Annex I of the E.U. Birds Directive. (NPWS, 2014)⁵.

3.4.4 Lough Derg (Shannon) SPA (004058)

Lough Derg lies within counties Tipperary, Galway and Clare and is the largest of the River Shannon Lakes, being some 40 km long. Its maximum breadth across the Scarriff Bay -Youghal Bay transect is 13 km but for most of its length it is less than 5 km wide. The lake is relatively shallow at the northern end being mostly 6 m in depth but in the middle region it has an axial trench and descends to over 25 m in places. The narrow southern end of the lake has the greatest average depth, with a maximum of 34 m. Lough Derg (Shannon) SPA is of high ornithological importance as it supports nationally important breeding populations of Cormorant and Common Tern. In winter, it has nationally important populations of Tufted Duck and Goldeneye, as well as a range of other species including Whooper Swan. The presence of Whooper Swan, Greenland White-fronted Goose, Hen Harrier and Common Tern is of particular note as these are listed on Annex I of the E.U. Birds Directive. Parts of Lough Derg (Shannon) SPA are a Wildfowl Sanctuary (NPWS, 2014)⁶.

3.4.5 Middle Shannon Callows SPA (004096)

The Middle Shannon Callows SPA is a long and diverse site which extends for approximately 50 km from the town of Athlone to the town of Portumna; it lies within Counties Galway, Roscommon, Westmeath, Offaly and Tipperary. The site averages about 0.75 km in width though in places is up to 1.5 km wide. Water levels on the site are greatly influenced by the very small fall between Athlone and Portumna and by the weir at Meelick. The site has extensive areas of callow, or seasonally flooded, semi-natural, lowland wet grassland, along both sides of the river. The callows are mainly too soft for intensive farming but are used for hay or silage or for summer grazing. Other habitats of smaller area which occur alongside the river include lowland dry grassland, freshwater marshes, reedbeds and wet woodland.

The Middle Shannon Callows SPA is an internationally important site that supports an assemblage of over 20,000 wintering waterbirds. It holds internationally important populations of two species - Whooper Swan and Black-tailed Godwit. In addition, there are four species that have wintering

⁵ <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY002241.pdf>

⁶ <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004058.pdf>



populations of national importance. The site also supports a nationally important breeding population of Corncrake. Of particular note is that several of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan, Corncrake and Golden Plover. (NPWS, 2012)⁷.

3.4.6 River Shannon Callows SAC (000216)

The River Shannon Callows is a long and diverse site which consists of seasonally flooded, semi-natural, lowland wet grassland, along and beside the river between the towns of Athlone and Portumna. It is approximately 50 km long and averages about 0.75 km wide (reaching 1.5 km wide in places). Along much of its length the site is bordered by raised bogs (many, but not all, of which are subject to large-scale harvesting), esker ridges and limestone-bedrock hills. The soils grade from siltyalluvial to peat. This site has a common boundary, and is closely associated, with two other sites with similar habitats, River Suck Callows and Little Brosna Callows.

The Shannon Callows has by far the largest area of lowland semi-natural grassland and associated aquatic habitats in Ireland, and one in which there is least disturbance of natural wetland processes. Botanically, it is extremely diverse with two legally protected species of plants and many scarce species. Excellent examples of two habitats listed on Annex I of the E.U. Habitats Directive occur within the site – Molinia meadows and lowland hay meadows with good examples of a further three Annex habitats (two with priority status). In winter the site is internationally important for numbers and species of waterfowl. In spring it feeds large numbers of birds on migration, and in summer it holds very large numbers of breeding waders, rare breeding birds and the endangered Corncrake, as well as a very wide variety of more common grassland and wetland birds. The presence of Otter, an Annex II species, adds further importance to the site (NPWS, 2020)⁸.

3.4.7 Lower River Shannon SAC (Site Code: 002165)

This very large site stretches along the Shannon valley from Killaloe in Co. Clare to Loop Head/ Kerry Head, a distance of some 120 km. The site thus encompasses the Shannon, Feale, Mulkear and Fergus estuaries, the freshwater lower reaches of the River Shannon (between Killaloe and Limerick), the freshwater stretches of much of the Feale and Mulkear catchments and the marine area between Loop Head and Kerry Head. This site is of great ecological interest as it contains a high number of habitats and species listed on Annexes I and II of the E.U. Habitats Directive, including the priority habitats lagoon and alluvial woodland, the only known resident population of Bottle-nosed Dolphin in Ireland and all three Irish lamprey species. A good number of Red Data Book species are also present, perhaps most notably the thriving populations of Triangular Club-rush (NPWS, 2013)⁹.

3.4.8 River Shannon and River Fergus Estuaries SPA (Site Code: 004077)

The estuaries of the River Shannon and River Fergus form the largest estuarine complex in Ireland. The site comprises the entire estuarine habitat from Limerick City westwards as far as Doonaha in Co. Clare and Dooneen Point in Co. Kerry. The River Shannon and River Fergus Estuaries SPA is an internationally important site that supports an assemblage of over 20,000 wintering waterbirds. It holds internationally important populations of four species, i.e. Light-bellied Brent Goose, Dunlin, Black-tailed Godwit and Redshank. In addition, there are 17 species that have wintering populations of national importance. The site also supports a nationally important breeding population of

⁷ <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004096.pdf>

⁸ <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY000216.pdf>

⁹ <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY002165.pdf>

Cormorant. Of particular note is that three of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan, Golden Plover and Bar-tailed Godwit. Parts of the River Shannon and River Fergus Estuaries SPA are Wildfowl Sanctuaries (NPWS, 2015)¹⁰.

3.4.9 Conservation Objectives of European Sites

European and national legislation places a collective obligation on Ireland and its citizens to maintain at favourable conservation status areas designated as SAC and SPA. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

Favourable conservation status of a habitat is achieved when:

- Its natural range, and area it covers within that range, are stable or increasing; and
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The integrity of a European site (referred to in Article 6.3 of the EU Habitats Directive) is determined based on the conservation objectives and of the site. The Qualifying Interests (QI) and Special Conservation Interests (SCI) are obtained through a review of the most recently published (web-published or otherwise) Conservation Objective supporting documents and Site-Specific Conservation Objectives documents (where available) for the European site.

3.4.9.1 Conservation Objectives of proximal European Sites

The features of Qualifying Interest for European Sites within the project Zone of Influence are listed in **Table 3-1**. Further details on Conservation Objectives for this European Site are provided below.

Lough Derg North-east Shore SAC (002241)

The detailed conservation objectives for Lough Derg North-east Shore SAC are provided in the Conservation Objectives document available on the NPWS website, as follows;

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002241.pdf

Lough Derg SPA (004058)

The detailed conservation objectives for Lough Derg SPA are provided in the Conservation Objectives document available on the NPWS website, as follows;

¹⁰ https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004077.pdf



https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004058.pdf

Middle Shannon Callows SPA (004096)

The detailed conservation objectives for the Middle Shannon Callows SPA are provided in the Conservation Objectives document available on the NPWS website, as follows;

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004096.pdf

River Shannon Callows SAC (000216)

The detailed conservation objectives for River Shannon Callows SAC are provided in the Conservation Objectives document available on the NPWS website, as follows;

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000216.pdf

Lower River Shannon SAC (Site Code: 002165)

The detailed conservation objectives for Lower River Shannon SAC are provided in the Conservation Objectives document available on the NPWS website, as follows;

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002165.pdf

River Shannon and River Fergus Estuaries SPA (Site Code: 004077)

The detailed conservation objectives for River Shannon and River Fergus Estuaries SPA are provided in the Conservation Objectives document available on the NPWS website, as follows;

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004077.pdf.

4 EXISTING ENVIRONMENT

4.1 Ecological Receptors

4.1.1 Habitats

The findings of the Phase 1 habitat survey are described below, while a habitat map showing the extent of habitats within the proposed development site are presented in **Figure 4-1**. Site walkover surveys were undertaken on December 11th 2024 and May 09th 2025.

The proposed development site comprises a large expansive improved agricultural grassland (GA1)¹¹ field, fringed by a hedgerow (WL1) along its northern boundary. Topography within the proposed development site boundary is generally flat throughout. The improved agricultural grassland habitat (GA1) shows no signs of recent or ongoing grazing, but is likely to receive at least annual mowing. Plant species composition of the improved grassland habitat indicates that the grassland is semi-improved with past but not recent reseeding or fertilisation. Plant species composition includes sweet vernal grass (*Anthoxanthum odoratum*), meadow foxtail (*Alopecurus pratensis*), perennial rye grass (*Lolium perenne*), red fescue (*Festuca rubra*), occasional cock's-foot (*Dactylis glomerata*) creeping buttercup (*Ranunculus repens*), meadow buttercup (*Ranunculus acris*), common sorrel (*Rumex acetosa*), red clover (*Trifolium pratense*), white clover (*Trifolium repens*), dandelion (*Taraxacum* agg.) and smooth hawk's beard (*Crepis capillaris*). The southernmost extent of the grassland area supports occasional cowslip (*Primula veris*) scattered throughout the grassland sward. Areas of rough improved grassland are located along the field boundary margins / headlands. These linear grassland areas have not been subject to recent management activities such as mowing or grazing. This lack of management has resulted in the proliferation of a dense grassy sward, corresponding to dry meadows and grassy verge grassland (GS2), comprising cock's-foot (*Dactylis glomerata*) and false oat grass (*Arrhenatherum elatius*).

The northern boundary of the site supports a long-established, unmanaged hedgerow (WL1) habitat comprising maturing hawthorn (*Crataegus monogyna*) shrubs with occasional semi-mature ash (*Fraxinus excelsior*) trees and with spreading blackthorn (*Prunus spinosa*) and dense bramble (*Rubus fruticosus* agg.) scrub (WS1) extended along the southern face of the hedgerow.

4.1.2 Evaluation of Habitats

Habitat evaluation within the proposed housing scheme and the surrounding area are presented in **Table 4-1** below.

Table 4-1 - Evaluation of habitats within the proposed housing scheme

Habitat	Evaluation	Evaluation Rationale
Improved Agricultural Grassland (GA1)	Local Importance – Lower Value	A routinely maintained grassland habitat with poor floristic diversity. The margins of the grassland habitat may provide suitable foraging habitat for small mammal species and passerine birds.

¹¹ Alphanumeric codes follow 'A Guide to Habitats in Ireland' (Fossitt, 2000)



Habitat	Evaluation	Evaluation Rationale
Hedgerows (WL1)	Local Importance – Lower Value	A habitat located along the northern margins of the proposed development site. This habitat provides suitable habitat for roosting and nesting birds and may provide suitable foraging habitat for foraging.
Scrub (WS1)	Local Importance – Lower Value	A linear habitat located along the northern margins of the proposed development site. This habitat provides suitable habitat for roosting and nesting birds and may provide suitable foraging habitat for mammals.

4.1.3 Birds

Bird species that were seen or heard along the site bounds, within the wider study area or overflying the site during the site walkover survey were as follows:

- Wren
- Blackbird
- Song Thrush
- Chaffinch
- Woodpigeon
- Goldfinch
- Goldcrest
- Great Tit
- Chiffchaff
- Blue Tit
- Rook
- Jackdaw
- Robin
- House Sparrow
- House Martin
- Swallow
- Blackcap

4.1.4 Mammals

Non-volant mammal field surveys at the study area comprised of a thorough walkover of the proposed development site, targeting the site boundaries and any areas of scrub or woody cover.

No underground mammal dwellings including badger setts or fox dens were encountered during the survey. Signs of foraging fox (hairs snagged on barbed wire fence) were noted along the northern boundary of the site. There are no watercourses within the proposed development site or its immediate environs and therefore no suitable foraging, commuting or breeding habitat for otter. The site may be used as a foraging route or commuting route for mammals, such as fox or local domesticated animals as evidenced through the identification of localised mammal trails along the northern and eastern boundaries.



4.1.5 Bats

All bats and their roosting sites are legally protected under the EU Habitats Directive as transposed by the Habitats Regulations. With the exception of Lesser Horseshoe bat (*Rhinolophus hipposideros*), which is an Annex II species, the remainder are classified as Annex IV species. They are also protected under the Wildlife Act (as amended). Across Europe, bats are further protected under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1982), which, in relation to bats, exists to conserve all species and their habitats. The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, enacted 1983) was instigated to protect migrant species across all European boundaries. The Irish government has ratified both of these conventions.

The desk and field-based assessments undertaken of the habitats at the proposed development site revealed limited potential for bat roosting features. Pastoral lands do not provide optimal habitats for foraging bats and no suitability for roosting bats (Lundy *et al.*, 2011). A review of the bat 'habitat suitability' index for the site presented on www.maps.biodiversityireland.ie was undertaken. The bat 'habitat suitability' index is the research outcome of a study by (Lundy *et al.* 2011) examining the relative importance of landscape and habitat associations across Ireland for bats. The 'habitat suitability' index ranges from 0 to 100 with 0 being least favourable and 100 most favourable for various bat species. The habitat / landscape within the site and surrounding area has a 'Moderate to High' bat suitability index (49.11). This high rating for the study area is likely to be due to the proximity of Portumna Forest Park and Lough Derg to the south of the proposed housing development site. Both the woodland and open water habitats of the forest park and Lough Derg provide suitable foraging and roosting habitat for bats. The open pastoral habitats within the footprint of the proposed housing development footprint are considered to be unsuitable for foraging and roosting bats, given the lack of linear woodland features and buildings with suitable crevices or apertures to support roosting bats. The hedgerow located along the northern boundary of the site provides suitable foraging habitat for bats.

Lesser horseshoe bat is unlikely to occur on site, although the site is located within its current known range and distribution in Ireland (NPWS, 2019c). However, the proposed development site does not support suitable roosting habitats for this species; i.e. continuous tree and woodland cover to support commuting and foraging.

4.1.6 Amphibians and Reptiles

Amphibians and reptiles were not identified during the site walkover survey. The NBDC hold records for common frog (*Rana temporaria*) from tetrad (2x2km square) M80M (which supports the proposed project site). There are no watercourses or waterbodies or areas of standing water within the proposed development site that are suitable to support key breeding stages of amphibians such as common frog.

4.1.7 Invasive Species

Invasive plant species listed on the Third Schedule of the Birds and Natural Habitats Regulations 2011 (as amended) were not identified within the proposed development site footprint. However, the north-eastern corner of the field supporting the proposed development site, supports a stand of Japanese knotweed (*Reynoutria japonica*). This is a well-established stand of Japanese knotweed measuring 4m (N-S axis) & 4m (E-W axis) and ca. 3m high. This stand is located outside of the proposed

development footprint and boundary and has been avoided, with appropriate buffer zones and setbacks, by the proposed site design and development layout.

In addition to the European Communities (Birds and Natural Habitats) Regulations 2011 - Annex 2 (Part 1) list, the NBDC supports a list of 'non-native' invasive alien species classifying the impact and risk posed by non-native species in Ireland as 'high risk' and 'medium risk' together with an additional 'watch list'. None of these species were identified within the proposed development site or its immediate environs.

4.1.8 Surface Watercourses

A review of EPA river routes data (<https://gis.epa.ie/EPAMaps/>) and the findings of the site walkover survey, confirms that the proposed development site does not support permanent or ephemeral watercourses. The nearest waterbody to the proposed development site is Lough Derg located >700m south of the proposed development site, while the nearest watercourse is the Shannon (Lower)_040 located >600m west. There is no connectivity between the proposed development site and this watercourses.

Photos of the Study Area

Photographs of the proposed development site and environs are presented below.

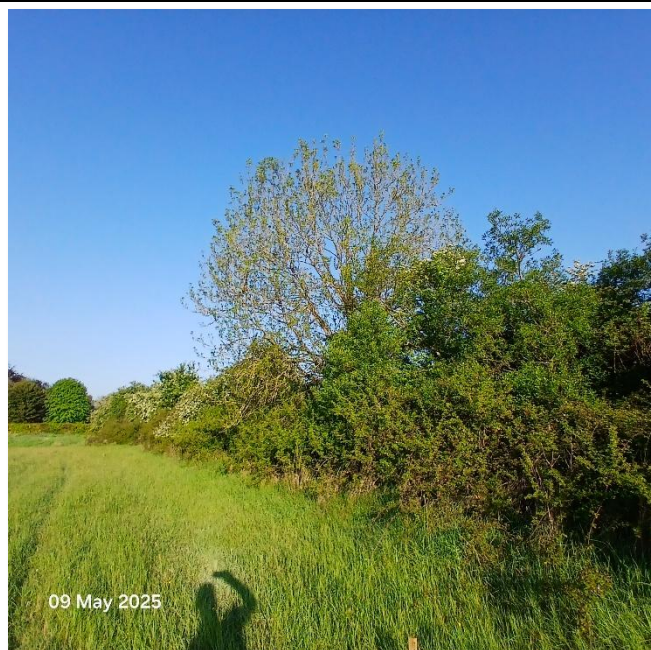


Image 4.1: Hedgerow located along the northern boundary of the proposed development site.

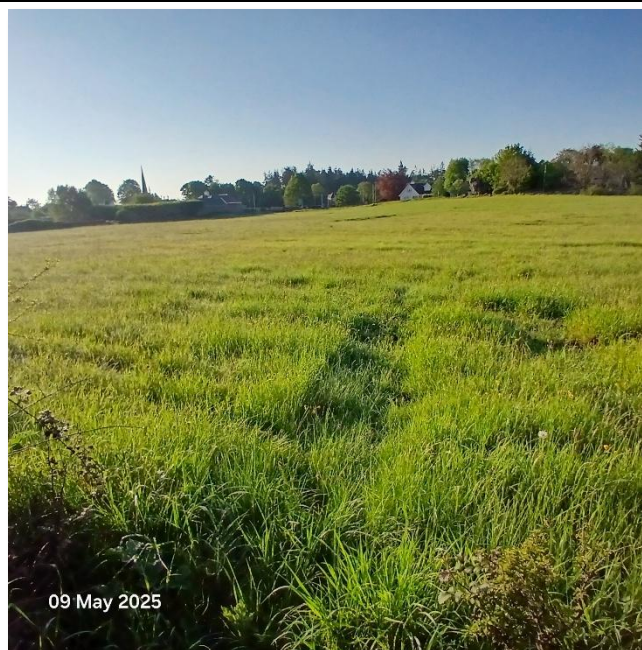


Image 4.2: View of the proposed development site looking south / south-east.

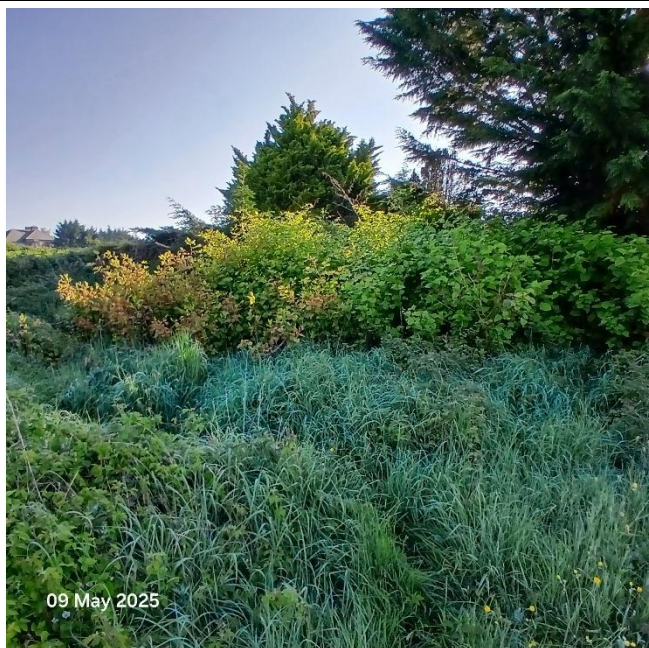


Image 4.3: Stand of Japanese knotweed located to the north-east of the proposed development site boundary

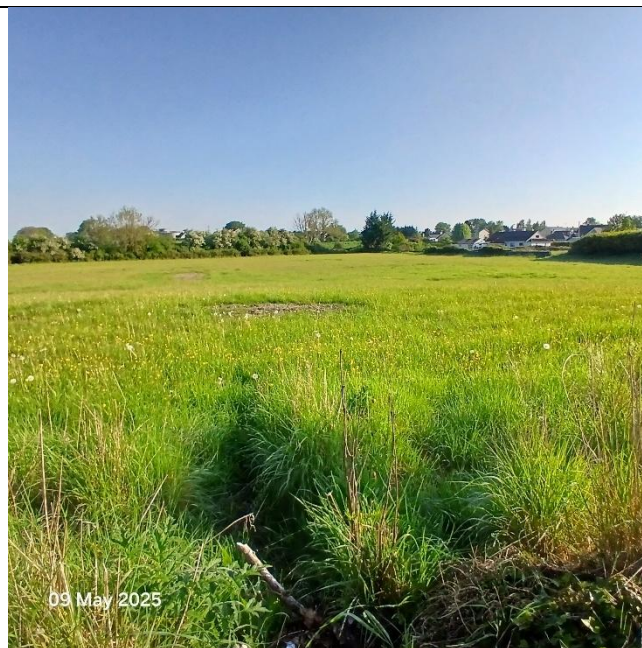


Image 4.4: View of the proposed development site from the southern roadside boundary



Figure 4-1: Habitats within the proposed development Site.

4.2 Flooding

The Flood Info database (www.floodinfo.ie) was also consulted to identify Predictive Flood Risk Areas (PFRA) mapped as part of the Catchment Flood Risk Assessment and Management (CFRAM) programme for the study area. OPW developed the Flood Hazard Mapping website floodmaps.ie in 2004-2006 which provided information about the location of known flood events in Ireland and showed supporting information in the form of reports, photos, and press articles about those floods. In late 2017 this data was migrated across to the newly developed website FloodInfo.ie. This website was consulted to find any instances of flooding in the proximity of the proposed works. The mapping shows zero instances of single past flood events nor recurring flood events within the proposed development boundary. Historic mapping from OSI indicate the site is greenfield with no indication of historical flooding within the site boundary.

4.3 Geology, Hydrology and Hydrogeology

The Geological Survey of Ireland (GSI) online database¹² was consulted for available edaphic, geological and hydrological information of the site and its environs. The underlying bedrock of the study site is part of the Lucan Formation which comprise dark limestone and shale. The groundwater vulnerability within the footprint of the study site is classified Groundwater Vulnerability as 'High'. Bedrock aquifer maps published on the GSI website provide a detailed classification of bedrock aquifer types and indicate the bedrock aquifer beneath the site is classified as a LI Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zone. There are no karst features within the proposed development site or its immediate environs.

The study site is located within the 'Tynagh' GroundWater Body (GWB) (IE_SH_G_0236). This GroundWater Body was classified as Good Status under the Water Framework Directive (2016-2021) and considered to be 'Not at Risk' of meeting its objectives under the Water Framework Directive.

¹² GSI Online database: <https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx>

5 SCREENING FOR APPROPRIATE ASSESSMENT

Table 5-1 presents Screening Assessment Criteria considering the proposed development.

Table 5-1: Screening Assessment Criteria

Screening Assessment Criteria Screening Questions	Impacts
Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the European Sites.	The proposed housing development is not directly connected with or necessary to the management of European sites. The proposed housing development is not located within the bounds of a European Site. The proposed works do not support direct connectivity to European sites within the project ZOI. Therefore, there will be no direct impacts to European Sites as a result of the proposed works. There are no ground or surfacewater features or other environmental vectors linking the proposed development site with the surrounding environment. Lough Derg is located >700m south of the proposed development site. There is no surface expression of watercourses or drainage channels within the proposed development site or conduits linking the proposed development site to this waterbody. The proposed development site is located within the Tynagh groundwaterbody (IE_SH_G_0236) which overlaps the site boundary of Lough Derg North-east shore SAC, Lough Derg SPA, Middle Shannon Callows SPA and the River Shannon Callows SAC. Nonetheless, there will be no discharge to or abstraction from groundwater as a result of the proposed development, during the project's construction of operational phases. Furthermore, the proposed development site provides poor suitability to support feeding, foraging or commuting habitat for mobile species associated with European Sites within the project Zone of Influence. To that end, ex-situ disturbance effects to mobile species of qualifying interest are not likely. The construction phase of the proposed housing development could introduce dust and noise impacts transferable via air and land pathways, as well as increased lighting and anthropogenic activity at the housing development within the site and in proximity to the site particularly during the project's construction phases. As per the guidelines on the assessment of dust from demolition

Screening Assessment Criteria Screening Questions	Impacts
	and construction (Holman et al. 2014)¹³, screening criteria required dust impact assessment is generally as below: An 'ecological receptor' within: - 50 m of the boundary of the site; or - 50 m of the route(s) used by construction vehicles on the public highway, up to 500 m from the site entrance(s). The most proximal European Sites include Lough Derg SPA and Lough Derg North-east Shore SAC, which are located 715m south via the nearest straight line distance. This separation distance is considered to be adequate to screen out a dust deposition from the proposed housing development on the features of Qualifying Interest for these European Sites. Generally, noise levels of 120dB at source have been shown to have the capacity to impact on waterbirds within a range of 300m (Cutts et al., 2013). The proposed works are not located within the footprint of a European Site. The nearest European Site is Lough Derg North-east Shore SAC and Lough Derg SPA, both of which are located 715m south. This separation distance is considered to be sufficient to remove in-situ noise disturbance as a potential vector / pathway to European Sites and their features of Qualifying Interest. There will be no impacts or consequent effects arising from the project operational phase. A new foul water connection to the public drainage network is required for this development. Correspondence with Uisce Eireann has confirmed that foul water connection proposals are feasible and do not require infrastructure upgrades. Surface water will be managed via soakaways, with a partial outfall to the Galway County Council surface water network. All potential emissions during the project's operational phase will be attenuated on site or will be directed to existing surface and wastewater infrastructure. Lighting proposed for the project will be hooded, targeted and downward facing. Therefore, the risk of lighting overspill to the receiving and surrounding environment during the project operational phase is significantly reduced. All other European Sites within the potential zone of influence do not support connectivity to the proposed

¹³ Holman *et al.* (2014). IAQM Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London. www.iaqm.co.uk/text/guidance/construction-dust-2014.pdf.

Screening Assessment Criteria Screening Questions	Impacts
	development site via surfacewater, groundwater or other environmental vectors.
Likely direct, indirect or secondary impacts of the project on the European Sites:	
• Size and Scale	The size and scale of the proposed works are small when compared with the surrounding environment and the size of European Sites within the project Zone of Influence.
• Land Take	The proposed development will not result in land-take to European Sites. The most proximal European Sites are Lough Derg North-east Shore SAC and Lough Derg SPA, located >700m south. The proposed development site does not support habitats or species for European Sites within the potential project Zone of Influence.
• Distance from European Sites or Key Features of the Site	The proposed development site will not result in land-take to European Sites. The most proximal European Sites are Lough Derg North-east Shore SAC and Lough Derg SPA of the proposed development site, located >700m south. The proposed development site does not support connectivity with the surrounding environment via surfacewater, groundwater or other environmental vectors.
• Resource Requirements	The proposed development will require use of standard construction methods, including wet cement, pre cast concrete, aggregates and water. Limited volumes of cement and aggregate materials may also be required. Given the absence of viable ecological and environmental vectors on site, it is not considered that the proposed works would result in the release of construction related materials from the proposed site to the receiving and surrounding environment and by extension European Sites.
• Emissions	There are potential dust (to air) and washwater (potential overland flow to the receiving environment) emissions as a result of the proposed works. However there are no vectors linking the proposed development site to the receiving environment and by extension European Sites. Wastewater generated on site will be connected to the public wastewater mains.
• Excavation Requirements	Localised excavations will be required for the proposed development. Potential impacts associated with excavations include run-off of silt laden water to the receiving environment and to nearby European sites. Excavation requirements could result in the production of mounded aggregate, soils and subsoils. However there are no vectors, such as watercourses, drainage channels or preferential flow patterns linking the proposed development site to the receiving environment and by extension European Sites and therefore no risk of impact to European Sites as a result of excavation requirements.



Screening Assessment Criteria Screening Questions	Impacts
• Transport Requirements	Transport requirements as part of the proposed development will utilise the existing roads serving the proposed development site; i.e. R352 along the southern boundary of the site.
• Duration of construction, operation and decommissioning	Duration of construction will be short term, ca. 18 months. The project's operational phase will be long term, i.e. 50+ years. There will be no impacts and consequent likely significant effects as a result of the proposed project duration.
• Cumulative impact with other plans and projects in the area	As part of the AA, in addition to the proposed development, other relevant projects and plans in the area must also be considered at this stage. These plans and projects are considered further in this respect in Table 5-2 below.

Table 5-2: In-combination Effects associated with the proposed development.

Programmes, Plans and Projects	Key Policies/Issues/Objectives Directly Related to the Conservation of the Natura 2000 Network	Potential for In-combination Effects
Galway County Development Plan 2022-2028	NHB 1 Natural Heritage and Biodiversity of Designated Sites, Habitats and Species Protect and where possible enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts) and extend to any additions or alterations to sites that may occur during the lifetime of this plan. Protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI 94 of 1999). Support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites, that form part of the Natura 2000 network, the protection of Natural Heritage Areas, proposed Natural Heritage Areas, Ramsar Sites, Nature Reserves, Wild Fowl Sanctuaries (and other designated sites including any future designations) and the promotion of the development of a green/ ecological network. NHB 2 European Sites and Appropriate Assessment To implement Article 6 of the Habitats Directive and to ensure that Appropriate Assessment is carried out in relation to works, plans and projects likely to impact on European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European Communities (Birds and Natural Habitats) Regulations 2011. All such projects and plans will also be required to comply	A number of strategies, policies and objectives are set out in the Galway County Development Plan 2022-2028 with the aim of protection of the counties natural heritage and biodiversity. A number of policies and objectives provide for the protection of the integrity of sites designated under European and National legislation and ecological works. The Natural Heritage objective (NHB-1) highlights the council's policy to support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites. The adherence and implementation of this plan within the Development Plan area will ensure that European Sites are protected, and that Appropriate Assessment is undertaken for all plans, projects or programmes that have the potential for significant effects to European Sites.

Programmes, Plans and Projects	Key Policies/Issues/Objectives Directly Related to the Conservation of the Natura 2000 Network	Potential for In-combination Effects
	with statutory Environmental Impact Assessment requirements where relevant. NHB 3 Protection of European Sites No plans, programmes, or projects etc. giving rise to significant cumulative, direct, indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource 198 requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans, programmes, etc. or projects).	
River Basin Management Plan for Ireland 2022 – 2027	The Third Cycle Draft River Basin Management Plan 2022-2027 Consultation Report has been published. This report presents a summary of the issues raised in the submissions reviewed from the public consultation on the draft River Basin Management Plan (RBMP) for the period of 2022-2027 is currently being prepared by Department of Housing, Local Government and Heritage (DHLGH) in line with the EU Water Framework Directive (WFD) (2000/60/EC). Key issues raised as part of the consultation process within the ten most prominent themes are as follows. - Water Quality / Pollution - Agricultural Practices - Public Engagement and Awareness - Local Authority - Level of ambition	The implementation of the RBMP seeks compliance with the environmental objectives set under the plan, which will be documented for each water body. This includes compliance with the European Communities (Surface Waters) Regulations S.I. No. 272 of 2009 (as amended). The implementation of the RBMP and achievement or maintenance of environmental objectives which will be set for the receiving water bodies will have a positive impact on water dependent habitats and species within European Sites.

Programmes, Plans and Projects	Key Policies/Issues/Objectives Directly Related to the Conservation of the Natura 2000 Network	Potential for In-combination Effects
	- Sewage Pollution - Department / Agency - Co-ordination - Funding - Forestry - Peat - Shellfish waters / aquaculture - Other Following review of the submissions, the DHLGH will commence a review and where necessary update the draft RBMP with a view to finalisation and publication in Q3/Q4 of 2022. The SEA and AA processes will continue in parallel until finalisation and will be completed prior to adoption of the 3rd cycle plan.	
Inland Fisheries Ireland Corporate Plan 2021 -2025	IFI's Corporate Plan details the Inland Fisheries Ireland's, Vision, Mission and Values across seven strategic objectives for the period 2021 to 2025. Under each of the seven objectives a series of actions required to achieve the objectives are described, with the intended outcomes outlined. The strategic objectives outline where Inland Fisheries Ireland will focus their efforts between 2021 and 2025. Inland Fisheries Ireland will secure stakeholder feedback on the implementation of the Strategy mid-2023.	The implementation and compliance with key environmental issues and objectives of this corporate plan will result in positive in-combination effects to European sites. The implementation of this corporate plan will have a positive impact for biodiversity of inland fisheries and ecosystems. It will not contribute to in-combination or cumulative negative impacts with the proposed development.
EPA Licenced Facilities	There is one EPA Licenced Facilities (IPPC Licenced Facility within the potential zone of influence of the proposed housing development site. - P0816 Portumna Pastry Limited	EPA licenced facilities are subject to conditions and parameters associated with licencing requirements (including wastewater discharge licencing for Portumna WwTP), restricting the release of polluted or contaminated materials to

Programmes, Plans and Projects	Key Policies/Issues/Objectives Directly Related to the Conservation of the Natura 2000 Network	Potential for In-combination Effects
	Uisce Eireann also operate a wastewater treatment facility for Portumna town; Portumna WwTP. This facility discharges treated wastewater to Lough Derg to the south.	the receiving or surrounding environment. Therefore, these facilities will not contribute towards significant negative effects to European Sites.
Draft 4th National Biodiversity Action Plan 2023-2027	Objective 2 - Meet Urgent Conservation and Restoration Needs Outcome 2A: The protection of existing designated areas and species is strengthened and conservation and restoration within the existing protected area network are enhanced. Outcome 2B: Biodiversity and ecosystem services in the wider countryside are conserved. Outcome 2C: All freshwater bodies are of at least 'Good Ecological Status' as defined under the EU Water Framework Directive. Outcome 2D: Genetic diversity of wild and domesticated species is safeguarded. Outcome 2E: A National Restoration Plan is in place to meet EU Biodiversity Strategy 2030 nature restoration targets. Outcome 2F: Biodiversity and ecosystem services in the marine environment are conserved and restored. Outcome 2G: Invasive alien species (IAS) are controlled and managed on an all-island basis to reduce the harmful impact they have on biodiversity and measures are undertaken to tackle the introduction and spread of new IAS to the environment.	Following the implementation of mitigation as set out in Section 7, there will be no adverse impacts on designated sites or biodiversity as a result of the Proposed Development. The Proposed Development will not impact on connectivity within the wider area and will maintain watercourses within and adjacent to the development site in good condition. An Invasive Species Management Plan (ISMP) has been prepared with respect to invasive plants recorded during the ecological surveys. Following implementation of the measures specified in the ISMP, no potential for significant residual impacts have been identified as a result of the proposed development.



Programmes, Plans and Projects	Key Policies/Issues/Objectives Directly Related to the Conservation of the Natura 2000 Network	Potential for In-combination Effects
Local Planning Applications	A search of Galway County Council's online planning enquiry database ¹⁴ was undertaken to identify other projects and plans consented within the past five years that are proximal or within the proposed development area. Numerous applications for dwellings, dwelling extensions and associated structures and commercial buildings, warehouses and facilities with granted planning permission were noted within the environs of the proposed development site, Portumna town and environs. These small-scale projects are not likely to cause effects to European sites when considered in combination with the current proposal under examination, either during the construction or operational phase. There is therefore no potential for significant in-combination effects of these developments with proposed development.	Adherence to the policies and objectives of the Galway County Development Plan 2022-2028 ensure that local planning applications and subsequent grant of planning comply with the core strategy of proper planning and sustainability and with the requirements of relevant EU Directives and environmental considerations, there is no potential for adverse in-combination effects on European Sites.

¹⁴ <https://galwaycoco.maps.arcgis.com/apps/webappviewer/index.html?id=3570e45b0e354cf0b740ecbc7505adb2>

5.1.1 Conclusion of Cumulative Impact Assessment

Provided adherence to the overarching policies and objectives of the plans and programmes and best practice and mitigation measures are implemented for individual projects, there is no potential for the mentioned plans and projects to have a cumulative impact to European sites, in combination with the proposed development.

In particular, the adherence and implementation of the policies and objectives within the Galway County Development Plan 2022-2028 will ensure that European Sites are protected, and that Appropriate Assessment is undertaken for all plans, projects or programmes that have the potential for significant effects to European Sites.

Screening Assessment Criteria is further assessed in **Table 5-3** below.

Table 5-3: Screening Assessment Criteria

Screening Assessment Criteria Screening Questions	
Describe any likely changes to the site arising as a result of the following	
Reduction of Habitat	The proposed development site footprint primarily supports improved grassland with fringing hedgerow and boundary features. The proposed dwelling site does not support habitats or species of European Sites within the project Zone of Influence. The proposed development site does not support connectivity to European Sites via hydrological, hydrogeological or other environmental vectors and will not contribute indirect impacts and consequent effects to European Sites.
Disturbance to Key Species	The proposed development site footprint primarily supports improved grassland with fringing hedgerow and boundary features. The proposed dwelling site does not support habitats or species of European Sites within the potential project Zone of Influence. The proposed development site does not support suitable foraging habitat for features of Qualifying Interest for which Lough Derg SPA and Lough Derg north-East Shore SAC, Middle Shannon Callows SPA or River Shannon Callows SAC have been designated. Therefore, there will be no ex-situ disturbance to key species as a result of the proposed development.
Habitat or Species Fragmentation	The proposed development site does not support habitats of Qualifying Interest or suitable habitat for species of Qualifying Interest for European Sites within the project Zone of Interest and will not contribute to habitat or species fragmentation.



Screening Assessment Criteria Screening Questions	
Reduction in Species Diversity	The proposed development site supports improved grassland with fringing hedgerow and boundary features. The proposed development site does not support habitats or species of European Sites within the potential project Zone of Influence. In addition, the habitats within the proposed development site are not suitable to support species of Qualifying Interest associated with European Site within the project Zone of Influence; i.e. Lough Derg SPA and Lough Derg North-east Shore SAC. The proposed development site will not result in the reduction in species diversity to European Sites within the project Zone of Influence.
Changes in Key Indicators of Conservation Value	
Climate Change	The proposed development site will not result in significant negative effects contributing to climate change that could in turn affect the conservation objectives of those European Sites within the project Zol.
Describe any likely impacts on the European Sites as a whole in terms of Interference with key relationships that define the structure and function of the site;	The proposed development site does not support connectivity with European Sites. Therefore the proposed works will not impact the integrity or structure and function of European Sites within the project Zone of Influence.
Provide Indicators of Significance as a result of the identification of effects set out above in terms of;	
Loss	The footprint of the proposed works does not directly overlap with any European sites. Therefore, there will be no potential effects to European Sites resulting from direct loss. The proposed development site does not support connectivity with European Sites and will therefore not contribute towards indirect habitat or species loss.
Fragmentation	The footprint of the proposed works does not directly overlap with any European sites. Therefore, there will be no potential for fragmentation to habitats and species of conservation interest associated with European Sites as a result of the proposed development.
Disruption	Due to the separation distance and lack of connectivity between the proposed development site and European Sites, the proposed works will not result in direct or indirect disturbance or disruption impacts to features of qualifying interest for this European Site. In addition, the proposed development site does not support suitable habitats to support features of Qualifying Interest associated with these European Sites. Therefore, ex-situ disturbance or disruption is unlikely.
Disturbance	
Changes to Key Elements of the Site	



Screening Assessment Criteria Screening Questions	
	connectivity between the proposed development site and European Sites. Therefore, the proposed development will not contribute changes to key elements of European Sites.
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 are not known	The proposed development site does not support connectivity with European Sites. There are no vectors linking the proposed development site with the surrounding environment and by extension European Sites. The proposed development site supports improved grassland with fringing hedgerow and boundary features. These habitats do not correspond with habitats of Qualifying Interest for European Sites and do not provide suitable habitat for mobile species for European Sites within the potential project zone of influence. Therefore, the proposed development will not contribute direct, indirect or ex-situ impacts and consequent effects to European Sites.



5.2 Screening for AA Conclusion

The proposed project has been assessed taking into account:

- The nature, size and location of the proposed project and the associated works and possible impacts arising from same;
- The Qualifying Interests (QIs) and Special Conservation Interests (SCIs), Conservation Objectives and conservation status of any European Sites within the project zone of influence;
- The potential for likely significant effects arising from the project on any European Sites; and
- The potential for cumulative impacts.

The Appropriate Assessment Screening process considered the potential for likely significant effects which may arise during the construction and operational phases of the proposed housing development at St Joseph's Road, Portumna, Co. Galway.

The closest European Sites to the proposed housing development are Lough Derg SPA and Lough Derg North-east Shore SAC and, located 715m south. However, there is no connectivity identified in relation to the sensitivities of the features of Qualifying Interest for this European Sites, in view of the Conservation Objectives.

This Screening for Appropriate Assessment comprised an evaluation of the pathways for effects on the qualifying interests of designated European Sites, with reference to the location, size, scale, and duration (construction and operation) associated with the proposal. Pathways for impacts on any European Site were evaluated with regard to the lack of environmental vectors and the distance of separation between European Sites in the wider study area, leading to a determination that there are no likely significant effects on the Qualifying Interests or Special Conservation Interests of any designated European Site, with regard to their conservation objectives.

A new foul water connection to the public drainage network is required for this development. Correspondence with Uisce Eireann has confirmed that foul water connection proposals are feasible and do not require any infrastructure upgrades. Surface water will be managed via soakaways, with a partial outfall to the Galway County Council surface water network.

In particular, no potential for likely significant effects are identified with respect to European Sites, either alone or in combination with other plans or projects. There are no impact pathways arising from the proposed project which could interact with the features of Qualifying Interest of the SAC with the potential to give rise to significant effects. Therefore, taking account of the nature of the proposed works, the potential for significant effects via hydrological impact pathways or other environmental vectors are excluded.

It is concluded that there are no likely potential impacts, whether direct, indirect or cumulative/in-combination, which could give rise to significant effects on the qualifying interests or special conservation interests of any designated European Site, in view of their conservation objectives. Consequently, this proposal does not require Appropriate Assessment process and can be screened out.



APPENDIX A – PROPOSED LAYOUT





Conditions of use of this drawing
note: if this A1 size drawing is reproduced at a smaller size which makes these conditions difficult to read, please contact the Architects office for a legible copy of these conditions.

- This drawing the design and contents contained herein are copyright. All rights are reserved. No part hereof may be copied or reproduced in any form whatsoever without the prior written consent of the copyright owner Simon J Kelly Architects.
- This drawing is to be relied upon only for the specific project and for the specific purpose for which it has been prepared. This drawing is not to be relied upon for construction purposes, and no implied or expressed warranty is given as to the suitability for construction purposes, unless the purpose of this drawing is stated to be "construction" or "contract". If the purpose is stated to be "contract" this drawing is not to be used for construction if it is also marked "preliminary".
- The Employer is granted a copyright license to use this drawing and its contents for the purpose for which the drawing has been prepared. If this drawing has been produced for construction purposes the license will only be valid for a single constructed reproduction and shall expire once a single reproduction has occurred. Any such license only passes to the Employer on payment of Architects fees in full and in any event the license cannot be assigned without prior written consent of Simon J Kelly Architects.
- Where the Architects conditions of engagement provide that the Employer obtains copyright (whether by transfer of ownership or expressed or implied license) for use on projects other than the project which the copyright material was specifically prepared for, the Architect does not accept any liability whatsoever howsoever arising for use of this drawing and/or its contents in whole or in part in relation to any project and/or purpose other than that for which it was specifically prepared. A copyright entitlement to use this drawing and/or its contents (in whole or in part) is not a warranty that use of this drawing and/or its contents (in whole or in part) is appropriate in circumstances other than the purpose and project for which it has been prepared.
- Do not scale off this drawing. Figured metric dimensions only should be taken off this drawing. Imperial dimensions, if any, contained on this drawing are given for illustrative purposes only.
- All contractors, whether main or sub contractors, must visit the site and are responsible for taking and checking any and all dimensions levels and the like that relate to the works.
- Where the drawing contains discrepancies in relation to other relevant documents, such discrepancies shall be brought to the attention of the Architects who shall issue a written instruction as to which information is to be followed, and until such written Architects instruction has been issued any work carried out on foot of the discrepancies shall be unauthorized.
- References to National Standards, whether to Irish (BSI) or otherwise, or codes of practice (CP) shall be deemed to refer to the relevant standard or code current at the date of issue of the drawing notwithstanding any reference to the contrary or to any earlier standard.
- Any reference to the "Architect" or "Architects" on this or any other relevant document shall mean the nominated project Architect and/or a Director of Simon J Kelly Architects who has been nominated as the partner-in-charge but only while such Architect remains in the employment of Simon J Kelly Architects.
- Any questions as to the meaning or application of these conditions shall be submitted in writing to the Architect for his/her ruling and such a ruling shall be conclusive as to the meaning or application of these conditions.
- Simon J Kelly Architects, their Agents, Architects, employees and or directors shall not be liable for any loss damage or injury consequential or otherwise howsoever arising for failure to comply with any or all of these conditions.
- Should anyone copy this drawing in whole or in part with or without consent and use the copy in relation to a purpose and or project for which the drawing has not been prepared for, such use is at the sole and exclusive risk of the copier and Simon J Kelly Architects do not accept any liability whatsoever howsoever arising in relation to such use.
- Should anyone copy this drawing in whole or in part with or without consent they should also copy these conditions of use in full and reproduce them with the copy. These conditions of use are to be read in conjunction with the drawing and its contents, these conditions of use form part of this drawing and/or its content and are inseparable from the drawing and its contents.
- The use of or reliance upon this drawing and/or its contents shall be deemed to be acceptance of these conditions of use unless otherwise agreed in writing, such written agreement to be sought from and issued by the Architects prior to the use or reliance upon this drawing and/or its contents.
- All drawings are to be read in conjunction with the the safety compliance report, all other contract documents, all statutory consents and or requirements and all statutory obligations.

project for which it has been prepared.
Do not scale off this drawing. Figured metric dimensions only should be taken off this drawing. Imperial dimensions, if any, contained on this drawing are given for illustrative purposes only.
All contractors, whether main or sub contractors, must visit the site and are responsible for taking and checking any and all dimensions levels and the like that relate to the works.
Where the drawing contains discrepancies in relation to other relevant documents, such discrepancies shall be brought to the attention of the Architects who shall issue a written instruction as to which information is to be followed, and until such written Architects instruction has been issued any work carried out on foot of the discrepancies shall be unauthorized.
References to National Standards, whether to Irish (BSI) or otherwise, or codes of practice (CP) shall be deemed to refer to the relevant standard or code current at the date of issue of the drawing notwithstanding any reference to the contrary or to any earlier standard.
Any reference to the "Architect" or "Architects" on this or any other relevant document shall mean the nominated project Architect and/or a Director of Simon J Kelly Architects who has been nominated as the partner-in-charge but only while such Architect remains in the employment of Simon J Kelly Architects.
Any questions as to the meaning or application of these conditions shall be submitted in writing to the Architect for his/her ruling and such a ruling shall be conclusive as to the meaning or application of these conditions.
Simon J Kelly Architects, their Agents, Architects, employees and or directors shall not be liable for any loss damage or injury consequential or otherwise howsoever arising for failure to comply with any or all of these conditions.
Should anyone copy this drawing in whole or in part with or without consent and use the copy in relation to a purpose and or project for which the drawing has not been prepared for, such use is at the sole and exclusive risk of the copier and Simon J Kelly Architects do not accept any liability whatsoever howsoever arising in relation to such use.

liability whatsoever howsoever arising in relation to such use.
Should anyone copy this drawing in whole or in part with or without consent they should also copy these conditions of use in full and reproduce them with the copy. These conditions of use are to be read in conjunction with the drawing and its contents, these conditions of use form part of this drawing and/or its content and are inseparable from the drawing and its contents.
The use of or reliance upon this drawing and/or its contents shall be deemed to be acceptance of these conditions of use unless otherwise agreed in writing, such written agreement to be sought from and issued by the Architects prior to the use or reliance upon this drawing and/or its contents.
All drawings are to be read in conjunction with the the safety compliance report, all other contract documents, all statutory consents and or requirements and all statutory obligations.

For planning purposes only

PROJECT: GCC Social Housing D + B Portumna			
CLIENT: Galway County Council			
DRAWING: Proposed Site Plan			
DRAWING PURPOSE: Stage 1	DRAWN BY: G.P.	APPROVED:	DATE: 02/05/2025
DRAWING SIZE: A1	SCALE: 1:500	DRAWING REFERENCE: 2390-SHP-SJK-DR-205	REV. NO. P04

L E G E N D	
	Home zones surface beige/buff colored tarmacadam/asphalt
	Concrete Paths/Surface
	Road tarmac
	Parking tarmac - beige/buff colored
	Public Open Space
	Private Open Space
	Primary Entrances
	Proposed Trees
	Existing Trees
	Proposed Floor Level

SCHEDULE OF ACCOMODATION		see proposed
B01-05	Terraced house 2B3P1S	6
B06	End of terrace house 3B5P1S	1
H01 - 02	End of Terrace house 3B5P2S	6
H03	Terraced house 2B4P2S	4
H04	Terraced house 3B5P2S	19
H07	End of terrace house 4B7P2S	1
H06	End of Terrace house 4B7P2S UDGF	1
Total		38

SITE AREA:
Gross site area: 15,275.00 m², 1.53 Hectare
24.8 dpHe

PUBLIC OPEN SPACE ANALYSIS	
Gross site area:	15,275.00 m²
Requirement 15%:	2,291.00 m²
Provided:	
Public OS 1	1330.00 m² / 8.70%
Public OS 2	264.00 m² / 1.70%
Public OS 3	97.00 m² / 0.60%
Public OS 4	482.00 m² / 3.15%
Public OS 5	223.00 m² / 1.45%
TOTAL	2,396.00 m² / 15.70%

CAR-PARKING ANALYSIS	
Dwellings / Apartments (1-3 bedrooms)	1.5 space per dwelling*
Dwellings / Apartments (4+ bedrooms)	2 spaces per unit*
Required 60 Spaces*	
Provided 64 Spaces	

DENSITIES:

Required:
10 - 12 Units per Hectare*

According to the brief the number of units required are 41

Provided: 38 Units in 1.53 hectares
24.8 dpHe

*According to Chapter 15 - Development Management of Galway CDP
Small Growth Towns - Edge of Centre/Greenfield

P04 02/05/25
rev. date description

Simon J Kelly Architects
21 Middle Street,
Galway
+353 91 56 2949
Cox's Yard, Mayo
+353 98 24 414
mail@sjk.ie
www.sjk.ie