

PROPOSED LARGE-SCALE RESIDENTIAL DEVELOPMENT AT GALWAY PORT

Appropriate Assessment Screening Report

The Land Development Agency

Report no.: 001, Rev. 005

27/08/2025







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Proposed Large-scale residential development at

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1 INTRODUCTION

1.1 Background

DNV was commissioned by the Land Development Agency (LDA) to prepare an Appropriate Assessment Screening Report for a Proposed Large-Scale Residential Development (LRD), at Galway Port, Galway City, hereafter referred to as 'Proposed Development' or 'Site', when referring to the application Site area. This report contains information to enable the Competent Authority to undertake Stage 1 Appropriate Assessment (AA) screening in respect of the Proposed Development.

1.2 Quality Assurance and Competence

All surveying and reporting have been carried out by qualified and experienced ecologists and environmental consultants.

The general walkover survey and desk studies were carried out by Hugh Rowlands (HR), ecologist at DNV. HR has a B.A. (Mod.) in Zoology and a M.Sc. in Biodiversity and Conservation from Trinity College Dublin, and a PgDip in GIS and Remote Sensing from the University of Ulster. HR has a wealth of experience in biodiversity mapping, desktop research, literature review and reporting, as well as practical field experience including habitat mapping, invasive species surveys, and ornithological surveys.

The winter bird surveys completed were carried out by Brian McCloskey (BMcC), ecologist at DNV. BMcC is an experienced Ornithologist with a BSc in Planning and Environmental management from the Technological University of Dublin (TUD) and 12 years of bird survey experience, including three years of professional Ornithology work. BMcC is a longstanding and active member of Bird Watch Ireland and is also the author of several articles in UK birding publication Birdwatch Magazine. BMcC is highly experienced in all survey methodologies and with surveying all species groups of Irish birds and migrants, having provided a range of ornithology survey work for ecological consultancies, e.g., vantage points surveys of gulls, terns, raptors, waders and wildfowl; hinterland surveys of the above as well as riverine species; and breeding waders and country birds.

Ciara Barry-Hannon (CBH) is the author of this Report. CBH Senior Ecologist with DNV has a BSc. (Hons) in Wildlife Biology from Munster Technological University (formerly ITT). CBH has a wealth of experience in desktop research, literature review and reporting, as well as practical field and laboratory experience including experience in surveying habitats, plants, bats, birds, mammals, and invasive species. CBH has prepared several PEA, EcIA, and Stage I/Stage II AA Reports, as-well as ornithology reports for renewable energy projects (wind and solar technology). Additionally, CBH has completed, and supported the preparations of several Biodiversity Chapters for Environmental Impact Assessment Reports (EIAR). CBH is also a Qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

Shane Connolly (SC) reviewed this report. SC is an experienced ecologist with a B.Sc. (Hons) in Botany from the University of Galway and 3 years' experience working in the environmental consultancy sector. SC has project-managed and delivered on ecological services for a wide range of developments including wind farms, commercial units, and large residential schemes. SC has extensive field expertise surveying bats, birds, mammals, plants, habitats, reptiles, amphibians, and invasive species, and holds a bat disturbance licence. SC is proficient in preparing a wide range of ecological reports, including Appropriate Assessment (AA) Screenings, Natura Impact Statements (NIS), Ecological Impact Assessments (EcIA), Bat Reports, Invasive Species Management Plans (ISMP), and constraint reports.

Matthew Peden (MP) approved this Report. MP has 15 years' experience in environmental consultancy with extensive HRA experience in marine and terrestrial projects including large infrastructure projects, offshore cable replacements, renewables and ports. He has also authored and reviewed a number of plan-level HRAs including flood strategy plans and transport plans. He is a full member of CIEEM and holds a BSc (Hons) Land Use and Environmental Management and a PGDip in Ecology and Conservation Management from Queens University Belfast.



Shea O' Driscoll (SOD) completed a final review of this report prior to issuing. SOD is a Principal Ecologist with an honours degree in Zoology from University College Dublin and a Masters in Advanced Wildlife Conservation in Practice from the University of the West of England, Bristol. SOD has experience in habitat survey and assessment in a range of terrestrial, freshwater and coastal environments, surveys for protected species including bats, otter, newts, freshwater pearl mussel, crayfish and badger as well as surveys for invasive flora species. In his role as an ecologist, SOD advises clients and contractors in relation to appropriate mitigation strategies for protected species, such as bats, badger and amphibians and, where required, applies on behalf of the client for necessary derogation licenses. SOD is also experienced in providing ecological services at the construction phase of development to ensure compliance with relevant planning conditions. Throughout his career as an ecologist, SOD has been project manager and lead author on a range of projects including tourism, industrial, residential, and renewable energy developments as well as multiple large scale, national infrastructure projects.

1.3 Description of Proposed Development

1.3.1 Site Location

The Site of the Proposed Development is located at Galway Port in County Galway. The Site is located in Galway city centre, approximately 400m southeast of Eyre Square, and immediately adjacent to Lough Atalia, and falls into the jurisdiction of Galway City Council. The Site is approximately 1.621ha in area and is predominantly surrounded by urban land to the north and west, and water to the east and south (Figure 1).

1.3.2 Proposed Development Description

The Land Development Agency (LDA) intends to apply to Galway City Council for permission for a 'Large-Scale Residential Development' (LRD) at a site of 1.621 Ha in Galway Port at Dock Road and Lough Atalia Road, Galway City, and extending to include parts of both roads for road infrastructure works and water services infrastructure works. The Proposed Development principally consists of:

- The demolition of the existing office / bus depot building (370.2 sq m) and ancillary building (26.0 sq m);
- The partial demolition of the existing ESB sub-station and ancillary building (67.4 sq m);
- The demolition of existing boundary walls at the south-west and north-west; and
- The construction of a mixed-use development.
- The proposed mixed-use development primarily comprises:
- 356 No. residential apartments (172 No. 1-bed, 169 No. 2-bed and 15 No. 3-bed);
- Crèche (255.9 sq m);
- No. café/restaurant units (totalling 428.4 sq m) and 1 No. retail unit (156.0 sq m).

The development has a total floor area of 32,096.0 sq m and is primarily proposed in 4 No. blocks (identified as A–D) that generally range in height from 6 No. to 13 No. storeys: Block A ranges from 6 No. to 9 No. storeys; Block B ranges from 6 No. to 11 No. storeys; Block C is 6 No. storeys; and Block D ranges from 6 No. to 13 No. storeys.

The Proposed Development also includes:

- New internal street and pedestrian network, including a one-way vehicular route at the northwestern side of the site and new junctions with Dock Road at the south-west and with the access road from Lough Atalia at the north-west;
- Upgrades to Lough Atalia Road and the access road from it at the north-west of the site, including
 the provision of a new toucan pedestrian/cycle crossing at Lough Atalia Road; upgrades to the
 footpath and road interface with Dock Road to the south-west;
- 37 No. car parking spaces;
- 1 No. set-down/delivery bay;
- 741 No. cycle parking spaces;
- Hard and soft landscaping, including as public open spaces and communal amenity spaces;



- Private amenity spaces as balconies and terraces facing all directions; boundary treatments;
- Public lighting;
- · Bin stores;
- Double sub-station;
- · Plant rooms; green roofs;
- Rooftop lift overruns and plant;
- Rooftop telecommunications, plant and enclosure at Block C;
- · Recladding of the existing sub-station and pumping station; and
- All associated works above and below ground.

See Figure 2 and Figure 3 for Site Layout and Phase details.

1.3.3 Proposed Landscape Plan

The Proposed Landscape Plan has been prepared by Stephen Diamond Associates, Chartered Landscape Architects (July 2025). An overview of the Master Landscape Design is included below but can be viewed in further detail under separate cover, accompanying this application.

The Proposed Landscape Plan includes the following elements:

- Grass Lawns; free-draining, back-filled, seed sown with low maintenance grass.
- Wildflower Meadows; sown with native plant mix, low maintenance, cut a maximum of 1-2 times per annum)
- Planting Shrubs, Perennials, & Groundcover; flowering, shade tolerant and pollen rich plants.
- Native Trees and Hedgerows; Comprising native tree species to include clear and multi-stemmed trees, and a;
- · Green Wall; with climbing plants.

(See Figure 4 for the Illustrated Landscape Plan).

1.3.4 Drainage and Water Supply

1.3.4.1 Potable Water Supply

The following overview has been extracted from the Civil works Design Report (Tobin, 2025):

"It is proposed to connect a 100mm watermain to an existing 300mm Uisce Eireann watermain, that is located running along the existing Lough Atalia Road, north of the proposed site entrance. The proposed 100mm watermain is the required size to service the development as per Uisce Eireann specifications. All watermain designs will be fully vetted by Uisce Eireann prior to receiving an offer to connect. Details of the watermain arrangement for the proposed development is presented in this report and in drawing no. 11910-2001. A Pre-connection enquiry for the water demand for 400 residential units, was submitted to Uisce Eireann. A Confirmation of Feasibility from Uisce Eireann was received. All watermain designs will be fully vetted by Uisce Eireann prior to receiving an offer to connect."

1.3.4.2 Surface Water Drainage

The following overview has been extracted from the Civil Works Design Report (Tobin, 2025):

"The proposed stormwater drainage system has been designed to cater for all surface water runoff from hard surfaces within the development including roadways, roofs etc. All surface water generated onsite will pass through oil/petrol interceptors designed to separate hydrocarbons from water before discharging to one of 2 no. proposed attenuation units.



To limit surface water runoff from the site, the surface water drainage for the proposed development will be designed in accordance with the principles of Sustainable Urban Drainage Systems (SuDS) as embodied in the recommendations of the Greater Dublin Strategic Drainage Study (GDSDS). The GDSDS addresses the issue of sustainability by requiring designs to comply with a set of drainage criteria which aim to minimise the impact of urbanisation by replicating the runoff characteristics of the brownfield site.

The requirements of SuDS are typically addressed by provision of the following:

- Interception storage
- Treatment storage (not required if interception storage is provided)
- Attenuation storage
- Long term storage (if this is not required growth rates should not be applied to Qbar)

In the case of the subject site, interception and attenuation storage has been proposed by implementing infiltration tanks with calculated holding volume. Growth factors will not be applied to the allowable discharge for the 100-year event. This means that both treatment storage and long-term storage (neither of which would be practical on this site) are not required. All SuDS measures will be designed with due reference to the recommendation set out in the EPA's document entitled 'Guidance on Authorisation of Discharges to Groundwater 2011'.

SuDS measures proposed would be a combination of water butts (not reflected on the SuDS layout), rain gardens, swales, tree pits, permeable paving, and drainage kerbs with infiltration trenches/filter strips. These measures would seek to achieve interception storage. Storage capacity has been calculated and provided in discharge soakaways as though no interception storage were provided. Thereby is mitigated any seasonal performance of interception storage measures.

SuDS objectives relate to:

- 1. Water Quality
- 2. Water Quantity
- 3. Amenity
- 4. Biodiversity"

1.3.4.3 Foul Water Drainage

The following has been extracted from the Civil Works Design Report (Tobin, 2025).

"It is proposed that the wastewater network will consist of gravity discharge to the existing

combined sewer in the direction of the north-west corner of the site. The foul sewer network was designed using Causeway Flow. The proposed foul sewer network is presented graphically on drawing no. 11910-2002. A pre-connection enquiry for the wastewater discharge from 400 residential units was submitted to Uisce Eireann. A Confirmation of Feasibility from Uisce Eireann was received and is attached in Appendix D of this report. All foul sewer designs will be fully vetted by Uisce Eireann prior to receiving an offer to connect.

In accordance with Section 3.6 of the Uisce Eireann Code of Practice for Wastewater Infrastructure UE-CDS-5030-03, dry weather flow (DWF) for domestic wastewater is 450 litres per dwelling. This equates to 2.7 P.E. per unit accounting for a 10% infiltration rate and rounded-up.

Pipework design of the foul sewers was undertaken using Causeway Flow software. The design is presented on drawing no. 11910-2002. All pipework has been designed in accordance with Uisce Eireann Code of Practice for Wastewater Infrastructure UE-CDS-5030-03. It is proposed that all pipes in the network will be thermoplastic structured wall pipes. The maximum pipe diameter is to be 225mm with maximum and minimum gradients of 1/60 and 1/200 respectively. All velocities within the foul network comply with Uisce Eireann Code of Practice for Wastewater Infrastructure requirement for flow velocities greater than self-cleansing velocity (0.75m/sec) and less than 2.5m/s as per Section 3.6 of the Uisce Eireann Code of Practice for Wastewater Infrastructure."



FIGURE 1. SITE LOCATION. (QGIS, 2025).



FIGURE 2. PROPOSED SITE LAYOUT (ALTU ARCHITECTS, 2025).



FIGURE 3. PROPOSED PHASING PLAN (ALTU ARCHITECTS, 2025).



FIGURE 4. PROPOSED LANDSCAPE MASTERPLAN (STEPHEN DIAMOND ASSOCIATES, DECEMBER 2024).



2 LEGISLATIVE AND POLICY CONTEXT

2.1 Legislative Background

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of Special Areas of Conservation (SACs) and the Birds Directive (2009/147/EC) seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs). The Habitats Directive has been transposed into Irish law through the Planning and Development Act, 2000, as amended, and the EC (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011).

It is the responsibility of each Member State to designate SPAs and SACs, both of which will form part of the Natura 2000 Network, a network of protected sites throughout the European Community. These designated sites are referred to as "Natura 2000 sites" or "European sites". SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the Qualifying Interests (QIs) and Special Conservation Interests (SCIs) of the sites; from these the conservation objectives of the site are derived.

An AA is a required assessment to determine the likelihood of significant effects, based on best scientific knowledge, of any plans or projects on European sites. A screening for AA determines whether a plan or project, either 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.

This AA Screening has been undertaken to determine the potential for significant effects on relevant European sites. The purpose of this assessment is to determine, the appropriateness, or otherwise, of the Proposed Development in the context of the conservation objectives of such sites.

2.1.1 Legislative Context

The obligations in relation to AA have been implemented in Ireland under the Planning and Development Act 2000 (as amended), and the Planning and Development Act 2024. While the 2024 Act has been signed into law, the Planning and Development Act 2000 (as amended) will continue to apply until repealed and the new provisions commenced by way of Ministerial Order. The phased commencement of the new Planning and Development Act, 2000, is expected to take place up to early 2026.

The obligations in relation to AA covered within both Acts are summarised below:

- The competent authority must carry out screening for AA for all relevant plans and projects, to determine
 whether the plan or project, in view of best scientific knowledge, is likely to have a significant effect on any
 European site;
- Where potential for likely significant effects cannot be ruled out, either as a result of the plan or project
 alone or in-combination with other plans or projects, or where uncertainty exists, the competent authority
 must determine that an AA is required. In this case, a more detailed examination of the relevant European
 sites shall be carried out, and a Natura Impact Statement must be prepared.

For further details on both the 2000 Act (as amended) and the 2024 Act, please refer to irishstatutebook.ie.

2.1.2 Consideration of Embedded Mitigation in AA

With regard to the consideration of embedded mitigation in the Appropriate Assessment process the following is noted. According to the ruling delivered in open court in Luxembourg on 15th June 2023 regarding the interpretation of Article 6(3) of the Habitats Directive 92/43, the Article must be interpreted as meaning that:

"In order to determine whether it is necessary to carry out an appropriate assessment of the implications of a plan or project for a site, account may be taken of the features of that plan or project which involve the removal of contaminants and which therefore may have the effect of reducing the harmful effects of the plan or project on that site, where those features have been incorporated into that plan or project as standard features, inherent in such a plan or project, irrespective of any effect on the site".



As such, standardised embedded mitigation (such as the use of Sustainable Drainage Systems (SuDS)), that are incorporated into the design of a proposal or project and which may result in a reduction of effects impacting European sites, but where the primary reason of the embedded mitigation is not to protect a European site, are permitted for consideration of Operational Phase impacts during the undertaking of AA.

No mitigation measures, being measures intended to avoid or reduce impacts on any European Sites, have been considered in this AA Screening Report

2.2 Policy Context

2.2.1 Galway City Development Plan 2023-2029

Policies and objectives of the Galway City Development Plan 2023-2029 that are of relevance to this AA Screening Report are outlined in the below chapters:

Policy 5.2 (1) Protect European sites that form part of the Natura 2000 network (including Special Protection Areas and Special Areas of Conservation) in accordance with the requirements in the EU Habitats Directive (92/43/EEC), EU Birds Directive (2009/147/EC) and associated national legislation.

- (2) Ensure that all plans or projects within the Plan area will only be authorised and / or supported after the competent authority has ascertained based on scientific evidence, screening for appropriate assessment and /or a Habitats Directive Assessment that: i. The plan or project will not give rise to an adverse direct, indirect or secondary effect on the integrity of any European site (either individually or in combination with other plans or projects); or ii. The plan or project will have an adverse effect on the integrity of any European site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions, and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or iii. The plan or project will have an adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.
- (4) Protect, conserve and support the development of an ecological network throughout the city which will improve the ecological coherence of the Natura 2000 network in accordance with Article 10 of the Habitats Directive.
- **(9)** Co-operate with the NPWS, landowners and stakeholders in the preparation and implementation of management plans for designated sites and support conservation objectives of lands within Designated Sites for nature conservation Natura 2000 (SAC/SPA) and NHA sites.

2.2.2 Galway City Biodiversity Action Plan 2014-2024 (Present)

Galway City Biodiversity Action Plan 2014-2024 (BAP) is set out to protect and improve biodiversity through specific objectives and actions. While the BAP for 2025-2030 is underway, the 2014-2024 BAP is the most recent action plan which will be referred to until the latest plan is released¹. Key objectives and actions of the 2014-2024 BAP are relative to this report are:

Objectives:

1.	To r	aise	awarenes	s and	appreciation	ı of	biodivers	sity S	Seeks to	raise	awarer	ness a	nd a	ppreciation	of t	he r	many
be	enefit	s of I	biodiversity	/ amo	ng all sectors	s of	society b	y pro	oviding i	nform	ation, e	ducatio	on ar	nd training o	ppc	ortur	nities.

¹ Cover Heading



A change in attitudes is key to protecting the great variety of life contained in the natural world around us and to protect our environment.

- 2. To maintain and enhance biodiversity within the city. Recognises the responsibility of the Local Authority and other state agencies to protect habitats and species of national and international conservation importance, and the potential to enhance biodiversity within the city. Aims to increase public participation in biodiversity initiatives and promotes a partnership approach to conserving biodiversity.
- 3. To increase our knowledge and understanding of biodiversity Recognises the need for a solid knowledge-base in order to protect biodiversity effectively and the importance of making this information available and accessible to the public and decision makers.

Actions:

- 1. Designate Role of Biodiversity Officer by Formal Managers' Order.
- 2. Seek Long-term appointment of Full Time Biodiversity Officer.
- 3. Establish a Biodiversity Forum.
- 4. Conduct a biological audit for Galway City.
- 5. Survey attitudes of the people of the Galway to nature and biodiversity.
- 6. Develop a biodiversity awareness, education and training programme Target audience 1: General public, Target audience 2: City Council staff and officials and Target audience 3: Developers, architects, engineers and landowners.
- 7. Promote creation of new wildlife habitats in developments including housing estates, industrials GMIT, element sites and golf courses.
- 8. Promote community participation in nature conservation.
- 9. Establish a network of Local Biodiversity Areas and associated wildlife corridors.
- 10. Tree survey and preservation.
- 11. Key habitat: Urban woodlands and hedgerows.
- 12. Key habitat: Wetlands and watercourses.
- 13. Key habitat: Exposed limestone habitats.
- 14. Key Habitat: Peatlands.
- 15. Key zone: Coastal zone.
- 16. Key species group: Bats.
- 17. Key species group: Birds.
- 18. Key species group: Small mammals.
- 19. Key Species: Common swift (Apus apus).
- 20. Key Species: Common seal (Phoca vitulina).
- 21. Key Species: Red squirrel (Sciurus vulgaris).
- 22. Develop appropriate strategies for preventing the introduction and spread of invasive alien species.
- 23. Support implementation of national Species and National plans Habitat Action Plans within Galway City, as appropriate, and current National Biodiversity Action Plan.

2.3 Stages of Appropriate Assessment

This AA Screening Report (the 'Screening Report') has been prepared by DNV. It considers whether the Proposed Development is likely to have a significant effect on a European site and whether a Stage 2 AA is required.



The AA process is a three-stage process. Each stage requires different considerations, assessments and tests to ultimately arrive at the relevant conclusion for 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 of an AA, can be summarised as follows:

- Stage 1: Screening. The Screening for AA considers whether a plan or project is directly connected to or necessary for the management of a European site, or 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.
- Stage 2: Natura Impact Statement (NIS). Where Stage 1 determines that significant effects are likely, uncertain or unknown, the preparation of a NIS is required. The NIS must include a scientific examination of evidence and data to classify potential impacts on any European site(s) in view of their conservation objectives in the absence of mitigation. The NIS will identify appropriate mitigation to remove the potential for likely significant adverse effects on any European site(s). If the competent authority determines that the plan or project would have an adverse effect on the integrity of any European site(s) despite mitigation, it can only grant consent after proceeding through stages 3 and 4.
- Stage 3: Derogation from Article 6(3) under certain circumstances. If the outcome of Stage 2 is negative i.e., adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. Stage 3 requires:
 - Examination of alternative solutions, and, where no alternative solution exists;
 - Examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a European site, where no less damaging solution exists.
 - Implementation of compensatory measures to maintain the coherence of the Natura 2000 network.

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. First the project should aim to avoid any negative effects on European sites by identifying possible effects early in the planning stage and designing the project to avoid such effects. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If the project is still likely to result in adverse effects, and no further practicable mitigation is possible, a refusal for planning permission may be recommended. In this case, the project will generally only be considered where no alternative solutions are identified and the project is required for IROPI, or, in the case of priority habitats, considerations of health or safety, or beneficial consequences of primary importance for the environment or to other IROPI. Then compensation measures are required for any remaining adverse effects.



3 AA SCREENING METHODOLOGY

3.1 Guidance

This Screening Report has been undertaken in accordance with the following guidance:

- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 revision);
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.
 Circular NPW 1/10 & PSSP 2/10;
- Communication from the Commission on the precautionary principle (European Commission, 2000);
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (European Commission, 2019);
- 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 Brussels, 28.10.2021 C (European Commission, 2021); and
- Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, Office of the Planning Regulator March 2021.

3.2 Screening Steps

Screening for AA involves the following steps:

- Establish whether the plan or project is directly connected with or necessary for the management of a European site;
- Description of the baseline existing environment at the Site of the Proposed Development;
- Identification of relevant European site(s) potentially affected;
- Identification and description of potential effects on the relevant European site(s);
- Assessment of the likely significance of the effects identified on the relevant European site(s);
- Description and characterisation of other projects or plans that in combination with the Proposed Development have the potential for having significant effects on the European site; and
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

It should be noted that any targeted ecological mitigation measures and/or measures intended or included for the purposes of avoiding adverse effects arising as a result of the Proposed Development on any European site **have not been considered** as part of this Screening Report.

3.3 Desk Study

A desktop study was carried out in January 2025 to collate and review available information, datasets and documentation sources relevant for the completion of this Screening Report. The desktop study relied on the following sources:

- Information on the network of European Sites, boundaries, QIs and conservation objectives, obtained from the National Parks and Wildlife Service (NPWS) at www.npws.ie;
- Text summaries of the relevant European sites taken from the respective Standard Data Forms (available at https://natura2000.eea.europa.eu/) and Site Synopses (available at www.npws.ie);



- Information on waterbodies, catchment areas and hydrological connections obtained from the Environmental Protection Agency (EPA) at www.gis.epa.ie;
- Information on bedrock, groundwater, aquifers and their statuses, obtained from Geological Survey Ireland (GSI) at <u>www.gsi.ie</u>;
- Satellite imagery and mapping obtained from various sources and dates including Google, Digital Globe, Bing and Ordnance Survey Ireland; and
- Information on the existence of permitted developments, or developments awaiting decision, in the vicinity of the Proposed Development from the Galway County Council online planning database and the National Planning Database (DHLGH, 2025).

For a complete list of the documents consulted as part of this assessment, see Section 6 References.

3.4 Field Surveys

Several field surveys have been completed to date (Table 1). For full details on the methods and results of the fields surveys listed, please refer to the Biodiversity Chapter of the Environmental Impact Assessment Report (EIAR) accompanying this application under separate cover. All surveys were carried out at the appropriate time of year by suitably qualified ecologists. No limitations to field surveys were encountered which would prevent robust conclusions being drawn as to the potential impacts of the Proposed Development. Results relevant to this Screening Report have been summarised in Section 4.1.2 below.

TABLE 1. FIELD SURVEYS UNDERTAKEN AT THE PROPOSED DEVELOPMENT SITE.

Survey	Surveyor	Dates
Preliminary Site Walkover including:		
 Habitats (as per Fossit, 2000) & invasive flora; Bird scoping; Bat roost and habitat suitability; Mammals; Herpetofauna; General fauna surveys. 	Ecologist, DNV (HR)	2 nd May 2024
		October
		31st October 2024
		November 12 th November 2024 25 th November 2024
Winter Bird Surveys	Ecologist/Ornithologist, DNV (BMcC)	December
		16 th December 2024
		January
		6 th January 2025
		20 th January 2025



Survey	Surveyor	Dates
		February
		4 th February 2025
		19 th February 2025
		28 th February 2025
		March
		5 th March 2025
		21st March 2025
		31st March 2025
Dedicated Otter Survey	Ecologist, DNV (SC)	
Bat Activity Transect Survey	Ecologists, DNV (SC & BMcC)	4 th June 2025
Breeding Bird Scoping Survey	Ecologist/Ornithologist, DNV (BMcC)	

3.5 Identification of Relevant European sites

The Zone of Influence (ZOI) for a project is the area over which ecological features may be affected by changes as a result of a development and associated activities. This is likely to extend beyond the development site, for example where there are ecological or hydrological links beyond the site boundaries (CIEEM, 2018). Furthermore, ZOI in relation to European sites is described as follows in the 'OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management' (OPR, 2021):

"The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source-Pathway-Receptor framework and not by arbitrary distances (such as 15 km)."

Thus, to identify the European sites that potentially lie within the ZOI of the Proposed Development, a Source-Path-Receptor (S-P-R) method was adopted, as described in OPR PN01 (OPR 2021). This note was published to provide guidance on screening for AA during the planning process, and although it focuses on the approach a planning authority should take in screening for AA, the methodology is also readily applied in the preparation of Screening Reports such as this.

The relevant European sites were identified based on the following:

 Identification of potential sources of effects based on the Proposed Development description and details, including changes to potentially suitable ex-situ habitats at the Site (i.e., habitats utilised by SCI bird species outside of their designated SPAs);



- Use of up-to-date GIS spatial datasets for European designated sites and water catchments downloaded from the NPWS website (<u>www.npws.ie</u>) and the EPA website (<u>www.epa.ie</u>) to identify European sites which could potentially be affected by the Proposed Development; and
- Identification of potential pathways between the Site of the Proposed Development and any European sites within the ZOI of any of the identified sources of impacts.
 - The catchment data were used to establish or discount potential hydrological connectivity between the Proposed Development and any European sites.
 - o Groundwater, soils, and bedrock information used to establish or discount potential hydrogeological connectivity between the Proposed Development and any European sites.
 - Air and land connectivity assessed based on Proposed Development details and proximity to European sites.
 - Consideration of potential indirect pathways, e.g., impacts to flight paths, ex-situ habitats, etc.
- Defining the likely ZOI based on the identified sources of effects and potential pathways between the Proposed Development and any European sites.

3.6 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 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 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.

3.7 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.



4 STAGE 1 SCREENING ASSESSMENT

Management of European sites

The Proposed Development is not directly connected with or necessary to the management of any European site.

4.1 Existing Environment

4.1.1 Desk Study Results

4.1.1.1 Hydrology, Geology and Hydrogeology

The Site is located in the *Galway Bay South-East* Catchment (I.D. 29) and in the *Carrowmoneash [Oranmore]_SC_010* sub-catchment (I.D. 29_6). The Site of the Proposed Development is located approximately 600m to the east of the River Corrib (IE_WE_30C020600). The River Corrib deposits into the Corrib Estuary transitional waterbody (IE_WE_170_0700), which is immediately adjacent to the Site of the Proposed Development.

The Site is situated on the *Clarinbridge* groundwater body (IE_WE_G_0008), and the vulnerability to contamination of said groundwater from human activities is classified as predominantly 'Low', with a small section to the south of the Site being classified as 'Moderate' (GSI, 2025). The Aquifer type in the surrounding area is 'Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones' (GSI, 2025).

The soil underneath the Site of the Proposed Development is classified as 'Deep well drained mineral soil derived from mainly basic parent materials' and 'Made', and the underlying quaternary sediments are a combination of 'Urban' and 'Till derived from limestones' (GSI, 2025). The Waterbody Status for the waterbodies relevant to the Site as recorded by the EPA (2022) in accordance with European Communities Regulations 2003 (SI no. 722/2003) are provided in Table 2.

TABLE 2. WFD RISK AND WATER BODY STATUS

Waterbody Name	Water body; EU code	Location from Site	Distance from Site (km)	WFD water body status (2016-2021)	WFD 3 rd cycle Risk Status	Hydraulic Connection to the Site			
Surface Water	Surface Water Bodies								
River Corrib	IE_WE_30C 020600	West	0.62	Good	Not at risk	Upstream of the Site			
Corrib Estuary	IE_WE_170_ 0700	South	Adjoining	Moderate	Not at risk	Immediately adjacent to the Site			
Groundwater Bodies									
Clarinbridge Groundwater Body	IE_EA_G_00 08	N/A	N/A	Good	Review	Underlying groundwater-body			



4.1.2 Relevant Field Survey Results

4.1.2.1 Habitats & Flora

The Site is predominantly covered by buildings and artificial surfaces (BL3) with negligible ecological value. There is a low-quality instance of dry meadows and grassy verge (GS2) along the northeast, northwest and northern boundary.

4.1.2.2 Fauna

The Site does not provide suitable habitat for terrestrial mammals, including otter (*Lutra lutra*) and badger (*Meles meles*). The proximity of the Site to the *Inner Galway Bay SPA*, however, implies that the Site could be used by SCI bird species. As such, winter bird surveys have been conducted (October 2024 – March 2025 inclusive).

4.1.2.3 Winter Bird Surveys

A total of 29 species of bird have been observed during the winter bird surveys either on, in the vicinity of, or flying over the Site. Of these, 8 are red-listed and 14 are amber listed (Gilbert *et al.*, 2021) as described in Table 3. Some 11 species are also associated with the adjacent *Inner Galway Bay SPA (004031)* and are highlighted in amber in the below table.

TABLE 3. BIRDS RECORDED AT THE PROPOSED DEVELOPMENT SITE DURING WINTERING BIRD SURVEYS. THOSE SPECIES THAT ARE ALSO SCI SPECIES OF INNER GALWAY BAY SPA (004031) ARE HIGHLIGHTED IN AMBER.

Species	Scientific name	BoCCI Status	Dates recorded	Activity
Cormorant	Phalacrocorax carbo	Amber	31st October 2024 12th November 2024 25th November 2024	Flyover at the Site and seen in the adjacent Lough Atalia.
Mallard	Anas platyrhynchos	Green	31 st October 2024 25 th November 2024 20 th January 2025	Flyover at the Site and seen in Lough Atalia.
Herring Gull	Larus argentatus	Red	31st October 2024 12th November 2024 25th November 2024 16th December 2024 6th January 2025 20th January 2025	Regular flyover at the Site and seen in Lough Atalia.
Linnet	Linaria cannabina	Amber	31st October 2024	Seen in the vicinity of the Site
Kingfisher	Alcedo atthis	Amber	31st October 2024 12th November 2024 25th November 2024 16th December 2024 6th January 2025 20th January 2025	Regularly seen in the vicinity of the Site, along adjacent water channel and in Lough Atalia.
Mute Swan	Cygnus olor	Amber	31st October 2024 12th November 2024 25th November 2024	Regularly seen in the vicinity of the Site, along adjacent water channel and in Lough Atalia.



Species	Scientific name	BoCCI Status	Dates recorded	Activity
			16 th December 2024	
Wigeon	Mareca penelope	Red	31 st October 2024 12 th November 2024	Seen in Lough Atalia.
Teal	Anas crecca	Amber	31 st October 2024 12 th November 2024 25 th November 2024 16 th December 2024	Seen in Lough Atalia.
Greenshank	Tringa nebularia	Green	31 st October 2024 12 th November 2024 25 th November 2024 16 th December 2024	Seen in Lough Atalia.
Great Black backed Gull	Larus marinus	Amber	31st October 2024 12th November 2024 25th November 2024 16th December 2024 20th January 2025	Regular flyover at the Site and seen in Lough Atalia.
Curlew	Numenius arquata	Red	31st October 2024	Seen in Lough Atalia.
Grey Heron	Ardea cinerea	Green	12 th November 2024 25 th November 2024 16 th December 2024	Seen in adjacent water channel and in Lough Atalia.
House Sparrow	Passer domesticus	Amber	12 th November 2024 25 th November 2024	Seen on Site, in the vicinity of the Site, and along adjacent water channel.
Starling	Sturnus vulgaris	Amber	31st October 2024 12th November 2024 25th November 2024	Seen on Site, in the vicinity of the Site, and along adjacent water channel.
Little Grebe	Tachybaptus ruficollis	Amber	12 th November 2024 25 th November 2024	Seen in Lough Atalia.
Gadwall	Mareca strepera	Amber	12 th November 2024 25 th November 2024 16 th December 2024 20 th January 2025	Seen in Lough Atalia.
Redshank	Tringa totanus	Red	12 th November 2024 25 th November 2024 16 th December 2024 6 th January 2025 20 th January 2025	Flyover along adjacent water channel and seen in Lough Atalia.
Turnstone	Arenaria interpes	Green	12 th November 2024 25 th November 2024	Seen in Lough Atalia.



Species	Scientific name	BoCCI Status	Dates recorded	Activity
			16 th December 2024	
			6 th January 2025	
			12 th November 2024	
Lapwing	Vanellus vanellus	Red	25 th November 2024	Seen in Lough Atalia.
			16 th December 2024	
Snipe	Gallinago gallinago	Amber	12 th November 2024	Seen in Lough Atalia.
Shipe	Gaiiii iago gaiii iago	Allibei	25 th November 2024	Geen in Lough Atalia.
			12 th November 2024	
Common Gull	1	Amshan	16 th December 2024	Regular flyover at the Site and
Common Guil	Larus canus	Amber	6 th January 2025	seen in Lough Atalia.
			20 th January 2025	
Ringed Plover	Charadrius hiaticula	Green	12 th November 2024	Seen in Lough Atalia.
			31st October 2024	
	Larus ridibundus	Red	12 th November 2024	
B			25 th November 2024	Regular flyover at the Site and
Black-headed Gull			16 th December 2024	seen in Lough Atalia.
				6 th January 2025
			20 th January 2025	
			25 th November 2024	
Little Egret	Egretta garzetta	Green	6 th January 2025	Flyover along adjacent water channel.
			20 th January 2025	
Shelduck	Tadorna tadorna	Amber	25 th November 2024	Coop in Lough Atolia
Sileiduck	Tadoma tadoma	Allibei	16 th December 2024	Seen in Lough Atalia.
Greenfinch	Chloris chloris	Amber	25 th November 2024	Seen on Site, in the vicinity of the Site, and along adjacent water channel.
Peregrine Falcon	Falco peregrinus	Green	6 th January 2025	Seen flying over the Site.
Meadow Pipit	Anthus pratensis	Red	20 th January 2025	Seen using the Site.
Stock Dove	Columba oenas	Red	20 th January 2025	Flew over the Site.
Osytercatcher	Haematopus ostralegus	Red	20 th January 2025	In the waters adjacent to the Site

4.1.2.4 Breeding Bird Survey

To inform an evaluation of the on-site habitats for bird species, a single breeding bird survey was carried out on the 2nd of June 2025 to determine the requirement for a suite of breeding bird surveys during the 2025 bird nesting season (March – August 2025). It was determined that further breeding bird surveys were not required, owing to a distinct lack of suitable breeding habitat within the Site, which is heavily modified. The results of this survey determined that there were no signs of breeding birds using the Site. Some flyovers were observed, this included common species such as Blackbird (*Turdus merula*). Several Common Tern (*Sterna hirundo*) were recorded using the estuary. This species is known to breed in Lough Atalia. Finally, Kingfisher (*Alcedo atthis*) was observed flying along the estuary also. In total, four amber listed species were recorded during the breeding bird surveys, while the rest were green listed species. No red listed species were recorded. The complete list of results for these surveys are provided in the table below (Table 4).





Species	Scientific name	BoCCI Status	Dates recorded	Activity
Blackbird	Turdus merula	Green	4 th June 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Black-headed Gull	Larus ridibundus	Amber	4 th June 2025	Non-breeding. Flyovers only.
Common Tern	Sterna hirundo	Amber	4 th June 2025	The birds nesting on Lough Atalia were flying up and down the river and over the site carrying food from the sea back to the lake.
Grey Heron	Ardea cinerea	Green	4 th June 2025	Non-breeder. Feeding along the river. (outside the RLB)
Herring Gull	Larus argentatus	Amber	4 th June 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Kingfisher	Alcedo atthis	Amber	4 th June 2025	Almost certainly breeding along the river (outside RLB).
Linnet	Linaria cannabina	Amber	4 th June 2025	Possible breeder. Species observed in breeding season in suitable nesting habitat
Mallard	Anas platyrhynchos	Amber	4 th June 2025	Four on the river (outside the RLB)
Pied Wagtail	Motacilla alba yarrelli	Green	4 th June 2025	Probable breeding. Pair observed in suitable nesting habitat in breeding season
Robin	Erithacus rubecula	Green	4 th June 2025	Probable breeding. Pair observed in suitable nesting habitat in breeding season (in vegetation along river i.e. outside the RLB)
Rock Pipit	Anthus petrosus	Green	4 th June 2025	Probable breeding. Pair observed in suitable nesting habitat in breeding season (along river i.e. outside the RLB)
Swallow	Hirundo rustica	Amber	4 th June 2025	Non-breeder. Foraging over the Site.
Wren	Troglodytes troglodytes	Green	4 th June 2025	Probable breeding. Pair observed in suitable nesting habitat in breeding season



Species	Scientific name	BoCCI Status	Dates recorded	Activity
				(in vegetation just outside the RLB)



4.2 Identification of Relevant European Sites

4.2.1 Potential Sources of Impacts

The Proposed Development is not directly connected with or necessary to the management of European sites. However, the following elements of the Proposed Development were identified and assessed for their potential to cause likely significant effects on European sites.

Construction Phase (Estimated duration: 27 months)

- Uncontrolled releases of dust, sediments and/or other pollutants to air due to earthworks;
- Surface water run-off containing silt, sediments and/or other pollutants into nearby waterbodies or surface water network;
- · Surface water run-off containing silt, sediments and/or other pollutants into the local groundwater;
- Waste generation during the Construction Phase comprising soils and construction wastes;
- Increased noise, dust and/or vibrations as a result of construction activity;
- Increased dust and air emissions from construction traffic;
- · Increased lighting in the vicinity as a result of construction activity; and
- Increased human presence and activity as a result of construction activity.
- Spread of invasive plant species from the Site.

Operational Phase (Estimated duration: Indefinite)

- Surface water drainage from the Site of the Proposed Development;
- · Foul water generated from the Proposed Development;
- Increased lighting at the Site and in the vicinity emitted from the Proposed Development,
- Increased human presence and activity at the Site and in the vicinity as a result of the Proposed Development; and
- Increased collision risk at the Site as a result of the building heights ranging up to 13 storeys.
- Operational Phase impacts to SCI bird species of the Inner Galway Bay SPA (004031) and Lough Corrib SPA (004042), (e.g., disturbance/displacement).



4.2.2 Potential Pathways to European Sites

For the above listed potential sources of effects to have the potential to cause likely significant effects on any European site, a pathway between the source of potential effects (i.e., the Site of the Proposed Development) and the receptor is required. Potential impact pathways are discussed in the following sections in the context of the identified impact sources as identified in section 4.2.1.

4.2.2.1 Direct Pathways

Hydrological Pathways

The Site of the Proposed Development is located immediately adjacent to the Corrib Estuary, which drains into the Atlantic Ocean. As such, there exists a hydrological pathway between the Proposed Development (during both the construction and operational phases) and European sites downstream of the Estuary, including *Galway Bay Complex SAC (000268)* and *Inner Galway Bay SPA (004031)*, both of which are immediately adjacent to the Site.

The hydrological pathway via the marine environment to all other European sites within the Atlantic Ocean is considered to be insignificant due to the considerable marine buffer (>15km to next nearest site; *Black Head-Poulsallagh Complex SAC (000020)* between the Proposed Development and any other sites (including via foul water discharge at Mutton Island Wastewater Treatment Plant (WwTP).

Hydrogeological Pathways

During groundworks and other construction activities, the ground will be exposed and any potential accidental discharges to ground could potentially migrate vertically downward to the underlying bedrock aquifer and laterally within the aquifer to the downgradient/overlapping *Galway Bay Complex SAC* and *Inner Galway Bay SPA*. As such, a hydrogeological pathway can be considered to exist between the Proposed Development and these two European sites. Likewise, surface water discharges to ground during the operational phase could also have the potential to cause similar effect.

Given the considerable marine buffer (>16km) between the Proposed Development and any other European sites downstream of *Galway Bay Complex SAC* and *Inner Galway Bay SPA* it is not considered that any other hydrogeological pathways exist between the Proposed Development and other European sites.

Air and Land Pathways

Elements of both the Construction & Operation Phase of the Proposed Development could introduce dust, noise and vibrational impacts transferable via air and land pathways, as well as increased lighting and human activity at the Site and in the vicinity of the Site. The Site is located on the coast of the Irish Sea and is immediately adjacent to both *Galway Bay Complex SAC* and *Inner Galway Bay SPA*. Therefore, a land and air pathway exists between the Proposed Development and these European sites.

An additional aerial pathway exists between the Proposed Development site and SCI bird species associated with the Inner Galway Bay SPA and Lough Corrib SPA (located approximately 4 km to the northwest). These species may commute or forage over the site, potentially increasing the risk of bird collisions during the Operational Phase due to the presence of multi-storey buildings.

No other European sites are linked to the Site via air and land pathways due to the relatively small scale of the Proposed Development and the distance between the Site and the next nearest European site (*Connemara Bog Complex SAC 002034*; located more than 13km west).



4.2.2.2 Indirect Pathways

The foul water from the Proposed Development will connect to existing sewers on Lough Atalia Road, ultimately discharging into the Corrib Estuary at the Mutton Island Wastewater Treatment Plant (WwTP). The discharge point overlaps the *Galway Bay Complex SAC* and *Inner Galway Bay SPA* boundaries, and as such an indirect hydrological pathway exists between these two European sites and the Proposed Development via foul water discharge.

Furthermore, the Site is in proximity of the *Lough Corrib SAC* (<600m) and Lough Corrib SPA (4km). While the Site is downstream of these European sites, they are both designated for mobile QI species (e.g. otter) and mobile SCI species which may forage in/commute through the waters downstream of the Proposed Development (Corrib Estuary). As such, a further indirect hydrological pathway exists between these sites and the Site of the Proposed Development. Furthermore, there is the potential for loss of ex-situ foraging/commuting habitat for SCI bird species of Lough Corrib SPA owing to disturbance impacts during the construction phase of the Proposed Development.



4.2.3 Relevant European Sites

A European site will only be at risk from likely significant effects where a S-P-R link exists between the Proposed Development Site and the European site. All of the European sites considered under the S-P-R method are listed in Table 5, however only two European sites were identified to have a S-P-R link of note to the Proposed Development Site, namely the *Inner Galway Bay SPA* and *Galway Bay Complex SAC* (highlighted in amber).

TABLE 5. EUROPEAN SITES CONSIDERED WITH THE SOURCE-PATHWAY-RECEPTOR (S-P-R) METHOD TO ESTABLISH NOTABLE LINKS BETWEEN THE SOURCES OF EFFECTS ARISING FROM THE PROPOSED DEVELOPMENT, AND ANY RELEVANT EUROPEAN SITES. THOSE SITES WITH NOTABLE S-P-R LINKS ARE HIGHLIGHTED IN GREEN (IF ANY). QUALIFYING INTERESTS (QIS) TAKEN FROM THE RELEVANT CONSERVATION OBJECTIVES DOCUMENTS (AS REFERENCED) AND/OR THE STANDARD DATA FORMS (EEA, 2023)².

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Potential Pathways
Special Areas of Conservation		
Galway Bay Complex SAC (000268) Linear Distance to Proposed Development: Adjoining with slight overlap between this site and the Proposed Development (See Figure 5 and Figure 6 below)	As per NPWS (2013a) Habitats Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230] Salicornia and other annuals colonizing mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Turloughs [3180] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] Alkaline fens [7230] Limestone pavements [8240]	Direct hydrological, hydrogeological, and air / land pathways.

Where applicable, the full species list included in this table is as per the latest updated information as indicated, so either the Conservation Objectives (CO) document for the site, or the latest Standard Data Form (SDF) (EEA, 2023). For SDF updates, CO are not yet available for the newly added species but are assumed, for the purposes of assessment, to follow the same format as for other feature species.



Site Name & Site Code	Qualifying Interests (*= priority habitats)	Potential Pathways
Lough Corrib SAC (000297) Linear Distance to Proposed Development: approx. 580m NW.	Species Otter (Lutra lutra) [1355] Harbour seal (Phoca vitulina) [1365] As per NPWS (2017) Habitats Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoeto-Nanojuncetea [3130] Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]	
	 Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] 	
	Alkaline fens [7230]	
	 Limestone pavements [8240] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the 	
	British Isles [91A0]	
	Bog woodland [91D0]	
	Species	



Site Name & Site Code	Qualifying Interests (*= priority habitats)	Potential Pathways
	 Freshwater pearl mussel (Margaritifera margaritifera) [1029] White-clawed crayfish (Austropotamobius pallipes) [1092] Sea lamprey (Petromyzon marinus) [1095] Brook lamprey (Lampetra planeri) [1096] Salmon (Salmo salar) [1106] Lesser horseshoe bat (Rhinolophus hipposideros) [1303] Otter (Lutra lutra) [1355] Slender Naiad (Najas flexilis) [1833] Slender green feather moss (Hamatocaulis vernicosus) [6216] 	
Black Head-Poulsallagh Complex SAC (000020) Linear Distance to Proposed Development: approx. 16km SW	As per NPWS (2014) Habitats Reefs [1170] Perennial vegetation of stony banks [1220] Fixed coastal dunes with herbaceous vegetation ("grey dunes") [2130] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) ("important orchid sites) [6210] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Petrifying springs with tufa formation (Cratoneurion) [7220] Limestone pavements [8240] Submerged or partially submerged sea caves [8330]	No pathways due to marine buffer distance (>15km) from the Site.



Site Name & Site Code	Qualifying Interests (*= priority habitats)	Potential Pathways	
Special Protection Areas (SPAs)			
Inner Galway Bay SPA (004031) Linear Distance to Proposed Development: Adjoining the Proposed Development (See Figure 5 below)	Qls as per NPWS (2013b) Common Teal (Anas crecca) [A052] Eurasian Wigeon (Anas penelope) [A050] Grey Heron (Ardea cinerea) [A028] Ruddy Turnstone (Arenaria interpres) [A169] Brent Goose (Branta bernicla hrota) [A046] Dunlin (Calidris alpina) [A149] Common Ringed Plover (Charadrius hiaticula) [A137] Black-headed Gull (Chroicocephalus ridibundus) [A179] Black-throated Diver (Gavia arctica) [A002] Great Northern Diver (Gavia immer) [A003] Mew Gull (Larus canus) [A182] Bar-tailed Godwit (Limosa lapponica) [A157] Red-breasted Merganser (Mergus serrator) [A069] Eurasian Curlew (Numenius arquata) [A160] Great Cormorant (Phalacrocorax carbo) [A017] Eurasian Golden Plover (Pluvialis apricaria) [A140] Common Tern (Sterna hirundo) [A193] Sandwich Tern (Sterna sandvicensis) [A191] Common Redshank (Tringa totanus) [A162] Northern Lapwing (Vanellus vanellus) [A142]	Direct hydrological, hydrogeological, and air / land pathways.	
Lough Corrib SPA (004042) Linear Distance to Proposed Development: Approx 4km northwest.	 Qls as per NPWS (2013b) Gadwall (Anas strepera) [A051] Shoveler (Anas clypeata) [A056] Pochard (Aythya farina) [A059] Tufted Duck (Aythya fuligula) [A061] Common (Scoter Melanitta nigra) [A065] Hen Harrier (Circus cyaneus) [A082] Coot (Fulica atra) [A125] 	Indirect hydrological pathway between the Site and mobile SCI species that may commute/forage in the vicinity of the Development.	



Site Name & Site Code	Qualifying Interests (*= priority habitats)	Potential Pathways
	 Golden Plover (<i>Pluvialis apricaria</i>) [A140] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] Wetlands [A999] 	

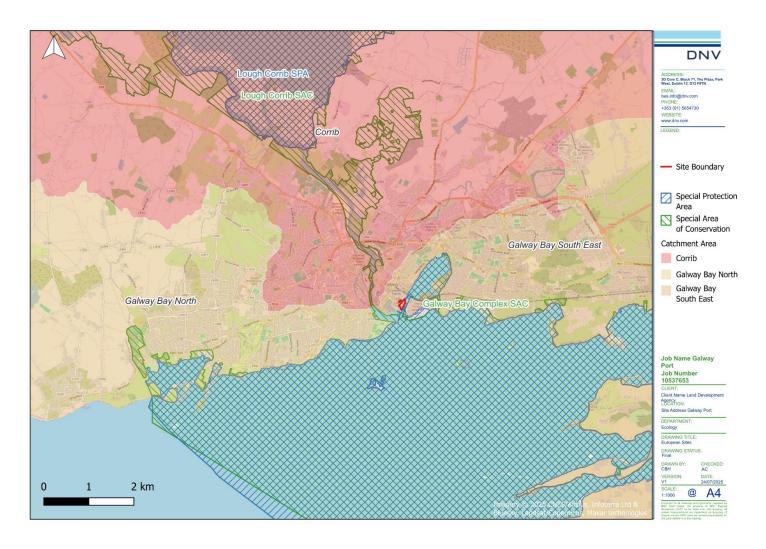


FIGURE 5. LOCATION OF EUROPEAN SITES RELATIVE TO THE PROPOSED DEVELOPMENT.



4.2.3.1 Galway Bay Complex SAC (000268)

The following descriptions of the *Galway Bay Complex SAC* have been extracted from the NPWS Site Synopsis data (NPWS, 2015):

"Situated on the west coast of Ireland, this site comprises the inner, shallow part of a large bay which is partially sheltered by the Aran Islands. The Burren karstic limestone fringes the southern sides and extends into the sublittoral. West of Galway city the bedrock geology is granite. There are numerous shallow and intertidal inlets on the eastern and southern sides, notably Muckinish, Aughinish and Kinvarra Bays. A number of small islands composed of glacial deposits are located along the eastern side. These include Eddy Island, Deer Island and Tawin Island. A diverse range of marine, coastal and terrestrial habitats, including several listed on Annex I of the E.U. Habitats Directive, occur within the site, making the area of high scientific importance.

This large coastal site is of immense conservation importance, with many habitats listed on Annex I of the E.U. Habitats Directive, four of which have priority status (lagoon, Cladium fen, turlough and orchid-rich calcareous grassland). The examples of shallow bays, reefs, lagoons and saltmarshes found within this site are amongst the best in the country. The site supports an important Common Seal colony and a breeding Otter population (Annex II species), and six regular Annex I E.U. Birds Directive species. The site also has four Red Data Book plant species, plus a host of rare or scarce marine and lagoonal animal and plant species."

4.2.3.2 Inner Galway Bay SPA (004031)

The following descriptions of the *Inner Galway Bay SPA* have been extracted from the NPWS Site Synopsis data (NPWS, 2019):

"Inner Galway Bay SPA is a very large, marine-dominated site situated on the west coast of Ireland. The inner bay is protected from exposure to Atlantic swells by the Aran Islands and Black Head. Subsidiary bays and inlets (e.g. Poulnaclough, Aughinish and Kinvarra Bays) add texture to the patterns of water movement and sediment deposition, which lends variety to the marine habitats and communities. The terraced Carboniferous (Viséan) limestone platform of the Burren sweeps down to the shore and into the sublittoral. The long shoreline is noted for its diversity, and comprises complex mixtures of bedrock shore, shingle beach, sandy beach and fringing salt marshes. Intertidal sand and mud flats occur around much of the shoreline, with the largest areas being found on the sheltered eastern coast between Oranmore Bay and Kinvarra Bay. A number of small islands and rocky islets in the Bay are included within the site.

Inner Galway Bay SPA is of high ornithological importance with two wintering species having populations of international importance and a further sixteen wintering species having populations of national importance. The breeding colonies of Sandwich Tern, Common Tern and Cormorant are also of national importance. Also of note is that six of the regularly occurring species are listed on Annex I of the E.U. Birds Directive, i.e. Black-throated Diver, Great Northern Diver, Golden Plover, Bartailed Godwit, Sandwich Tern and Common Tern. Inner Galway Bay is a Ramsar Convention site and part of the Inner Galway Bay SPA is a Wildfowl Sanctuary."

4.2.3.3 Lough Corrib SAC (000297)

The following descriptions of the *Lough Corrib SAC* have been extracted from the NPWS Site Synopsis data (NPWS, 2022):

"Lough Corrib is situated to the north of Galway city and is the second largest lake in Ireland, with an area of approximately 18,240 ha (the entire site is 20,556 ha). The lake can be divided into two parts: a relatively shallow basin, underlain by Carboniferous limestone, in the south, and a larger, deeper basin, underlain by more acidic granite, schists, shales and sandstones to the north. The surrounding lands to the south and east are mostly pastoral farmland, while bog and heath predominate to the west and north. A number of rivers are included within the cSAC as they are important for Atlantic Salmon. These rivers include the Clare, Grange, Abbert, Sinking, Dalgan and Black to the east, as well as the Cong, Bealanabrack, Failmore, Cornamona, Drimneen and Owenriff to the west. In addition to the rivers and lake basin,



adjoining areas of conservation interest, including raised bog, woodland, grassland and limestone pavement, have been incorporated into the site.

The main threats to the quality of this site are from water polluting activities resulting from intensification of agricultural activities on the eastern side of the lake, uncontrolled discharge of sewage which is causing localised eutrophication of the lake, and housing and boating development, which is causing the loss of native lakeshore vegetation. The raised bog habitats are susceptible to further degradation and drying out due to drainage and peat cutting and, on occasions, burning. Peat cutting threatens Addergoole Bog and already a substantial area of it has been cut away. Fishing and shooting occur in and around the lake. Introduction of exotic crayfish species or the crayfish fungal plague (Aphanomyces astaci) could have a serious impact on the native crayfish population. The bat roost is susceptible to disturbance or development. Despite these ongoing issues, however, Lough Corrib is one the best examples of a large lacustrine catchment system in Ireland, with a range of habitats and species still well represented. These include 15 habitats which are listed on Annex I of the E.U. Habitats Directive, six of which are priority habitats, and nine species which are listed on Annex II. The lake is also internationally important for birds and is designated as a Special Protection Area.part of the Inner Galway Bay SPA is a Wildfowl Sanctuary."

4.2.3.4 Lough Corrib SPA (004042)

The following descriptions of the *Lough Corrib SPA* have been extracted from the NPWS Site Synopsis data (NPWS, 2014b):

"Lough Corrib is the largest lake in the country and is located, for the most part, in County Galway, with a small section in the north extending into County Mayo. The main outflowing river is the Corrib, which reaches the sea at Galway City. The shallow, lime-rich waters of the southern basin of the lake support one of the most extensive beds of Stoneworts (Charophytes) in Ireland. These Chara beds are a very important source of food for waterfowl. In contrast, the northern basin contains more oligotrophic and acidic waters. Large areas of reedswamp vegetation, dominated by varying mixtures of Common Reed (Phragmites australis) and Common Club-rush (Scirpus lacustris) occur around the margins of the lake. The lake has numerous islands, which range from relatively bare rocky islets to larger islands with grassland or woodland. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for several species. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetlands & Waterbirds."

4.2.3.5 Qualifying Interests and Conservation Objectives

The QIs/SCIs and their respective conservation objectives for each of the relevant European site(s) with identified pathways are detailed in Table 6 below and Figure 6.

TABLE 6. QUALIFYING INTERESTS (QIS) / SPECIAL CONSERVATION INTERESTS (SCIS) AND THEIR CONSERVATION OBJECTIVES FOR THE RELEVANT EUROPEAN SITES. THE CONSERVATION STATUS OF EACH QI / SCI WAS SOURCED FROM THE RELEVANT STANDARD DATA FORM(S) (SOURCE: EEA (2023)), AND THE LATEST NATIONAL STATUS IS TAKEN FROM THE LATEST ARTICLE 17 REPORT (NPWS, 2019A & 2019B) AND BOCCI³ RESPECTIVELY.

QI / SCI (* = priority habitat)	Conservation Status	Conservation Objective
Galway Bay Complex SAC (000268)		
Mudflats and sandflats not covered by seawater at low tide [1140]	Good	To <u>maintain</u> the favourable conservation condition of these habitats in Galway Bay Complex SAC.

³ Birds of Conservation Concern in Ireland (BOCCI) 2020-2026 (Gilbert, Stanbury & Lewis, 2021). The colours represent the species designation on the various BOCCI lists.



QI / SCI (* = priority habitat)	Conservation Status	Conservation Objective
Coastal lagoons [1150]	Good	To <u>restore</u> the favourable conservation condition of these habitats in Galway Bay Complex SAC.
Large shallow inlets and bays [1160]	Excellent	
Reefs [1170]	Good	
Perennial vegetation of stony banks [1220]	Good	To <u>maintain</u> the favourable conservation condition of these habitats in Galway Bay Complex SAC.
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	Good	SAC.
Salicornia and other annuals colonising mud and sand [1310]	Good	
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	Good	To <u>restore</u> the favourable conservation condition of these
Mediterranean salt meadows (Juncetalia maritimi) [1410]	Good	habitats in Galway Bay Complex SAC.
Turloughs [3180]	Good	To <u>maintain</u> the favourable conservation condition of these habitats in Galway Bay Complex SAC.
Juniperus communis formations on heaths or calcareous grasslands [5130]	Average or reduced	To <u>restore</u> the favourable conservation condition of these habitats in Galway Bay Complex SAC.
Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]	Good	
Calcareous fens with <i>Cladium</i> mariscus and species of the Caricion davallianae [7210]	Average or reduced	To <u>maintain</u> the favourable conservation condition of these habitats in Galway Bay Complex SAC.
Alkaline fens [7230]	Average or reduced	one.
Limestone pavements [8240]	Good	



QI / SCI (* = priority habitat)	Conservation Status	Conservation Objective
Lutra lutra (Otter) [1355]	Excellent	To <u>restore</u> the favourable conservation condition of this species in Galway Bay Complex SAC.
Phoca vitulina (Harbour Seal) [1365]	Excellent	To <u>maintain</u> the favourable conservation condition of this species in Galway Bay Complex SAC.
Inner Galway Bay SPA (00403	1)	
Black-throated Diver (Gavia arctica) [A002]	Excellent	
Great Northern Diver (Gavia immer) [A003]	Excellent	
Cormorant (<i>Phalacrocorax</i> carbo) [A017]	Excellent	
Grey Heron (<i>Ardea cinerea</i>) [A028]	N/A	
Light-bellied Brent Goose (Branta bernicla hrota) [A046]	Excellent	
Wigeon (Anas penelope) [A050]	Good	To <u>maintain</u> the favourable conservation condition of this
Teal (Anas crecca) [A052]	Good	species in Inner Galway Bay SPA.
Red-breasted Merganser (Mergus serrator) [A069]	Excellent	
Ringed Plover (Charadrius hiaticula) [A137]	Excellent	
Golden Plover (<i>Pluvialis</i> apricaria) [A140]	Good	
Lapwing (Vanellus vanellus) [A142]	Excellent	
Dunlin (<i>Calidris alpina</i>) [A149]	Excellent	



QI / SCI (* = priority habitat)	Conservation Status	Conservation Objective
Bar-tailed Godwit (<i>Limosa</i> lapponica) [A157]	Excellent	
Curlew (<i>Numenius arquata</i>) [A160]	Excellent	
Redshank (<i>Tringa totanus</i>) [A162]	Excellent	
Turnstone (<i>Arenaria interpres</i>) [A169]	Excellent	
Black-headed Gull (Chroicocephalus ridibundus) [A179]	Excellent	
Common Gull (<i>Larus canus</i>) [A182]	Excellent	
Sandwich Tern (Sterna sandvicensis) [A191]	Excellent	
Common Tern (Sterna hirundo) [A193]	Good	
Wetland and Waterbirds [A999]	N/A	To <u>maintain</u> the favourable conservation condition of this habitat in Inner Galway Bay SPA.
Lough Corrib SAC (000297)		
Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110]	Average or reduced	
Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoeto-Nanojuncetea</i> [3130]	Average or reduced	To <u>restore</u> the favourable conservation condition of this habitat in Lough Corrib SAC
Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140]	Excellent	
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	Good	To <u>maintain</u> the favourable conservation condition of this habitat in Lough Corrib SAC



QI / SCI (* = priority habitat)	Conservation Status	Conservation Objective
Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]	Good	
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	Good	
Active raised bogs [7110]	Good	
Degraded raised bogs still capable of natural regeneration [7120]	Average or reduced	To <u>restore</u> the favourable conservation condition of this habitat in Lough Corrib SAC
Depressions on peat substrates of the <i>Rhynchosporion</i> [7150]	Average or reduced	
Calcareous fens with <i>Cladium</i> mariscus and species of the Caricion davallianae [7210]	Good	
Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]	Good	
Alkaline fens [7230]	Good	To <u>maintain</u> the favourable conservation condition of this habitat
Limestone pavements [8240]	Good	in Lough Corrib SAC
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]	Good	
Bog woodland [91D0]	Excellent	
Freshwater pearl mussel (Margaritifera margaritifera) [1029]	Excellent	To <u>restore</u> the favourable conservation condition of this species in Lough Corrib SAC
White-clawed crayfish (Austropotamobius pallipes) [1092]	Excellent	To <u>maintain</u> the favourable conservation condition of this species in Lough Corrib SAC
Sea lamprey (Petromyzon marinus) [1095]	Good	To <u>restore</u> the favourable conservation condition of this species in Lough Corrib SAC



QI / SCI (* = priority habitat)	Conservation Status	Conservation Objective	
Brook lamprey (<i>Lampetra</i> planeri) [1096]	Excellent	To <u>maintain</u> the favourable conservation condition of this	
Salmon (<i>Salmo salar</i>) [1106]	Excellent	species in Lough Corrib SAC	
Lesser horseshoe bat (Rhinolophus hipposideros) [1303]	Good	To <u>restore</u> the favourable conservation condition of this species in Lough Corrib SAC	
Otter (<i>Lutra lutra</i>) [1355]	Excellent		
Slender Naiad (<i>Najas flexilis</i>) [1833]	Excellent	To <u>maintain</u> the favourable conservation condition of this species in Lough Corrib SAC	
Slender green feather moss (Hamatocaulis vernicosus)	Excellent		
Lough Corrib SPA (004042)			
Pochard (Aythya ferina) [A059]	Excellent		
Tufted Duck (Aythya fuligula) [A061]	Excellent		
Common Scoter (Melanitta nigra) [A065]	Excellent		
Hen Harrier (Circus cyaneus) [A082]	Good		
Coot (Fulica atra) [A125]	Excellent	To <u>maintain</u> the favourable conservation condition of this species in Lough Corrib SPA.	
Golden Plover (<i>Pluvialis</i> apricaria) [A140]	Average or reduced conservation		
Black-headed Gull (Chroicocephalus ridibundus) [A179]	Excellent		
Common Gull (<i>Larus canus</i>) [A182]	Good		
Common Tern (Sterna hirundo) [A193]	Good		



QI / SCI (* = priority habitat)	Conservation Status	Conservation Objective
Arctic Tern (Sterna paradisaea) [A194]	Good	
Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	Average or reduced conservation	
Shoveler (Spatula clypeata) [A857]	Unassigned	
Gadwall (<i>Mareca strepera</i>) [A889]	Excellent	
Wetland and Waterbirds [A999]	Unassigned	

DNV



FIGURE 6. ANNEX 1 HABITATS IN THE VICINITY OF THE PROPOSED DEVELOPMENT (QGIS, 2025).



4.3 Assessment of Likely Significant Effects

The following sections discuss the potential for likely significant effects on the relevant European site, taking into consideration the QIs, SCIs and SSCOs (where available), this AA Screening takes these elements into consideration when assessing the potential of significant impacts on European sites as a result of the Development. Furthermore, due consideration shall be given to species not formally identified but which may be present within the relevant European site(s) and adversely effected by the Proposed Development, provided that those potential impacts are likely to affect the conservation objectives of the designated site. The potential for significant effects that may arise from the Proposed Development was considered through the use of key indicators as detailed in section 3.6.

A summary of this assessment for potential impact on European sites arising from the Proposed Development is provided in Table 8 below.

4.3.1 Habitat Loss and Alteration

The Proposed Development overlaps with one European site (*Galway Bay Complex SAC*) and occurs directly adjacent to Inner Galway Bay SPA.

It should be noted, however, that while there is some overlap on the mapped boundary for Annex I - 1130 estuaries habitat (Figure 6), this is considered a digitisation error as there is no actual overlap in the real world as the Site comprises built land. Therefore, the Site does not support any habitats of European conservation importance, more specifically Qualifying Interest (QI) habitats associated with the Galway Bay Complex SAC (or Lough Corrib SAC which lies 5km north) and is not functionally connected to these designated European sites.

While there is no overlap between the Site and any European designated sites, accounting for the proximity of these sites to the Proposed Development, there is the potential for direct habitat loss or alteration of habitat suitable for the SCI bird species associated with the SPA that may utilise the Site of the Proposed Development as a result of (list potential impacts i.e. run off etc). Therefore, the potential for direct loss or alteration of habitat suitable for SCI bird species within the *Inner Galway Bay SPA* as a result of the Proposed Development cannot be ruled out.

QI species listed in the *Galway Bay Complex SAC*, including otter and harbour seal, are not considered to undergo <u>direct</u> loss of habitat due to the lack of suitable foraging/breeding habitat within the Site boundary, however there is the potential for indirect effects on their habitats to occur. This rationale extends to nearby *Lough Corrib SAC*, which is designated for QI species such as otter, lampreys and salmon. Indirect habitat loss or alteration upon these QI species, as a result of water quality deterioration due to the Proposed Development, is discussed in Section 4.3.3, concluding that impacts <u>cannot be ruled out</u>.

4.3.2 Habitat / Species Fragmentation

Given that direct habitat loss or alteration cannot be ruled out, the same must be concluded regarding habitat and species fragmentation associated with *Galway Bay Complex SAC* and *Inner Galway Bay SPA*. Furthermore, indirect habitat/species fragmentation of QI species designated in *Galway Bay Complex SAC* and *Lough Corrib SAC*, as well as SCI species designated in *Inner Galway Bay SPA* may also occur as a result of changes in water quality and resource (Section 4.3.3). Similarly, SCI species designated in Lough Corrib SPA may also be impacted indirectly through water quality effects on *ex-situ* foraging/commuting habitat.

4.3.3 Changes in Water Quality and Resource

A direct hydrological pathway has been identified via surface water, foul water and groundwater to *Galway Bay Complex SAC* and *Inner Galway Bay SPA*. A further indirect pathway has been identified to *Lough Corrib SAC*.



During the Construction Phase there is the potential for surface and ground water run-off which may contain pollutants such as concrete and dust. Given the proximity of the Site to these two European sites, there is significant potential for said pollutants to directly enter the European sites, altering water quality and resource. Untreated surface water flow during the Operational Phase of the Proposed Project also has potential to impact the adjacent European sites.

Additionally, foul water during the Operational Phase will discharge into the two European sites via the WwTP on Mutton Island. Mutton Island Wastewater Treatment Plant ⁴ (WwTP), which is located approximately 1.6 kilometres (km) to the south of the Site in Galway Bay serving the entire catchment area of Galway city and its environs. This design, build and operate (DBO) project saw Irish Water engage Murphy to refurbish the existing plant and deliver an expansion in capacity from a population equivalent 91,600 to 170,000 followed by a 20-year operation and maintenance period. Mutton Island Wastewater Treatment Plant uses anaerobic digestion to renewable energy from organic waste and this project also entailed the installation of new combined heat and power (CHP) units to harness the biogas produced to power the operation of the plant⁵. The original plant was constructed and commissioned by Murphy in 2003 and had been operated and maintained by Murphy since it entered service. As a result, Mutton Island WwTP has capacity (total of 170,000 population equivalent (pe)) available to accommodate the Proposed Development's foul drainage. In addition, the Annual Environmental Report (2024⁶) for this WwTP shows that the plant is currently in compliance with it's emission limit values (ELVs). As such foul water impacts can be ruled out and are not discussed further within this Report.

However, accounting for all of the above, significant water quality impacts on both aforementioned European sites as a result of the Construction and/or Operational Phase of the Proposed Development cannot be ruled out.

⁴ Also known as Galway City WwTP

⁵ <u>Mutton Island Waste Water Treatment Works | Murphy Group</u>

^{6 &}lt;u>D0050-01 2024 AER Rev1.pdf</u>



4.3.4 Disturbance and / or Displacement of Species

'Disturbance' in an ecosystem is defined as any event "that disrupts the structure of an ecosystem, community, or population, and changes resource availability or the physical environment" (White and Pickett, 1985). Examples of disturbance to QI/SCI species that could occur as a result of project activities include: (i) displacement due to noise generation during the construction phase, (ii) increased collision risk presented by the Proposed Development during the operational phase, or (iii) the deterioration in water quality as a result of sediment/pollutant discharge into a water body during the construction and operation phases. The location of the Proposed Development upstream, within or in close proximity to a European site may result in brief disturbance and/or displacement of QI/SCI species at European sites.

4.3.4.1 Potential Impacts to QI and SCI Species due to Construction Activities

Given the size of the Proposed Development Site, dust generation and deposition during construction has the potential to degrade habitats within 25m of the Proposed Development Site (NRA, 2011). There are two European sites within this distance: *Galway Bay Complex SAC* and *Inner Galway Bay SPA*.

There are multiple SCI bird species designated under the SPA which may be impacted by dust as a result of the Proposed Development. QI species within the SAC are not directly susceptible to adverse impacts due to dust generation. However, they are susceptible to indirect disturbance or displacement as a result of work being upstream of their habitat (as discussed in Section 4.3.4.3).

Typically, the majority of Construction Phase disturbance (noise and visual) impacts on waterbirds and QI species would not be expected to extend beyond a distance of c.300m from the construction site (Cutts et al., 2009). Both aforementioned European sites are within this distance, and as such impacts, in the absence of mitigation, are envisaged.

There is also the potential for *ex-situ* disturbance/displacement of SCI species of both *Inner Galway Bay SPA and Lough Corrib SPA* owing to construction activities on site.

In conclusion, impacts on QI and SCI species due to disturbance/displacement as a result of the Proposed Development <u>cannot be ruled out</u> during both the Construction Phase and the Operational Phase.

4.3.4.2 Potential impacts arising due to increased collision risk during the operational phase

The Proposed Development is somewhat consistent with the existing skyline of Galway City. However, given the proximity of the Site to the *Inner Galway Bay SPA* and *Lough Corrib SPA* and the building height of the Proposed Development ranging up to thirteen storeys, the potential for increased collision risk for SCI bird species within the *Inner Galway Bay SPA and Lough Corrib SPA* cannot be ruled out.

4.3.4.3 Potential impacts arising due to works upstream or adjacent to European sites

As discussed in Section 4.3.3 the potential for impacts as a result of the Proposed Development on water quality cannot be ruled out, therefore by proxy it <u>cannot be ruled out</u> that displacement/disturbance of QI/SCI species in the downstream *Inner Galway Bay SPA* and *Galway Bay Complex* SAC and the nearby *Lough Corrib SAC/SPA* may occur as a result of the Proposed Development.



4.3.5 Changes in Population Density

For the reasons outlined in Section 4.3.3, above, it <u>cannot be ruled out</u> that the Proposed Development <u>will not</u> cause any reduction in the baseline populations of QI species associated with *Galway Bay Complex SAC* and SCI species associated with *Inner Galway Bay SPA & Lough Corrib SPA*.

4.3.6 Potential for In-combination Effects

4.3.6.1 Existing Planning Permissions

A search of planning applications located within a 500m radius of the Site of the Proposed Development was conducted using GIS. Any planning applications listed as granted or decision pending from within the last five years were assessed for their potential to act in-combination with the Proposed Development and cause likely significant effects on the relevant European sites. Long-term developments granted outside of this time period were also considered where applicable.

It is noted that the majority of the developments within the vicinity of the Site of the Proposed Development are applications granted for commercial developments. The larger developments in the vicinity of the Proposed Development are outlined in Table 7:

TABLE 7. GRANTED AND PENDING DEVELOPMENT APPLICATIONS WITHIN 500 M OF THE PROPOSED DEVELOPMENT. LOCATION AND DISTANCE GIVEN IS RELATIVE TO THE PROPOSED DEVELOPMENT.

Planning Reference	Planning Authority	Status	Location
2047	Galway City Council	Granted	Ceannt Station

Development Description

The proposed development is for a mixed-use urban regeneration project with an overall gross floor area of approximately 114161sq. m.

Potential for In-combination effects

NIS produced which concluded that there would be no significant effects on any European sites following mitigation measures. Therefore, the potential for cumulative impact on any European sites is considered unlikely.

314597 ACP	Galway City Council/	Granted	University Road to Dublin Road
	An Coimisiún		
	Pleanála		

Development Description

BusConnects Galway Project consisting of alteration of existing road layouts, including junction layouts, footpaths, signalling, pedestrian crossings, drainage and other associated works.

Potential for In-combination effects

NIS produced which concluded that there would be no significant effects on any European sites following mitigation measures. Therefore, the potential for cumulative impact on any European sites is considered unlikely.

17121	Galway City Council	Granted	Queen Street
Dovolonment Description			

Development Description

The proposed development consists of a predominantly student accommodation scheme (c. 10,747 sqm) provided in 2 no. blocks sitting over a common ground floor level.

Potential for In-combination effects



Planning Reference	Planning Authority	Status	Location
Reference			

AA Screening concluded no potential for impacts on European sites. Therefore, the potential for cumulative impact on any European sites is considered unlikely.

1783	Galway City Council	Granted	Dock Road/Queen Street

Development Description

Permission for a 10-year permission for development at this site (c. 0.93ha). The proposed development consists of a mixed-use office development.

Potential for In-combination effects

AA Screening concluded no potential for impacts on European sites. Therefore, the potential for cumulative impact on any European sites is considered unlikely.

2460108 ACP	Galway City Council /	In Appeal	Lough Atalia Road		
	An Coimisiún				
	Pleanála				

Development Description

Permission for development which consists of the demolition of (a) the vacant industrial structure (115 sq m) (b) the external canopy structure (170 sq m) and (c) the boundary walls along the southern, western and northwestern boundaries of the site; and the construction of a 15 No. storey Hotel.

Potential for In-combination effects

NIS produced which concluded that there would be no significant effects on any European sites following mitigation measures. Therefore, the potential for cumulative impact on any European sites is considered unlikely.

PA61.PA0033 ACP	Galway City Co	ouncil / In Progress	S Galway Harbou	Galway Harbour		
	An Coi	misiún				
	Pleanála					

Development Description

Development of an extension of Galway Harbour at Renmore and Townparks Townlands.

Potential for In-combination effects

NIS produced which concluded that there would be no significant effects on any European sites following mitigation measures. Therefore, the potential for cumulative impact on any European sites is considered unlikely.

4.3.6.2 Relevant Policies and Plans

The local policies and plans detailed in section 2.2 above were reviewed and considered for possible incombination effects with the Proposed Development. Each of these plans has undergone AA, and where potential for likely significant effects has been identified (e.g., in the case of the Galway City Council Development Plan), an NIS has been prepared which identifies appropriate mitigation. As such, it is considered that the plans and policies listed will not result in in-combination effects with the Proposed Development. The Galway City Council Development Plan 2023-2029 has directly addressed the protection of European sites and biodiversity through specific objectives. The above listed plans are not being relied upon to rule out potential significant effects on European sites.

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TABLE 8. SUMMARY OF ASSESSMENT OF POTENTIAL IMPACTS ON EUROPEAN SITES AS A RESULT OF THE PROPOSED DEVELOPMENT.

Site	Habitat Loss / Alteration	Habitat or Species Fragmentation	Disturbance and/or Displacement of Species	Changes in Population Density	Changes in Water Quality and/or Resource	In- combination effects	Stage 2 AA Required
SAC							
Galway Bay Complex SAC (000268)	No	Yes	Yes	Yes	Yes	No	YES
Lough Corrib SAC (000297)	Yes	Yes	Yes	Yes	Yes	No	YES
DBlack Head-Poulsallagh Complex SAC (000020)	No	No	No	No	No	No	NO
SPA							
Inner Galway Bay SPA (004031)	Yes	Yes	Yes	Yes	Yes	No	YES
Lough Corrib SPA (004042)	No	No	Yes	Yes	Yes	No	YES



5 APPROPRIATE ASSESSMENT SCREENING CONCLUSION

The Proposed Development at Galway Port, Galway has been assessed taking into account:

- The nature, size and location of the proposed works and possible impacts arising from the construction works.
- The QIs and conservation objectives of the European sites
- The potential for in-combination effects arising from other plans and projects.

In conclusion, upon the examination, analysis and evaluation of the relevant information and applying the precautionary principle, it is concluded by the authors of this report that the possibility **cannot be excluded** that the Proposed Development will have a significant effect on any of the European sites listed below:

- Inner Galway Bay SPA (004031)
- Galway Bay Complex SAC (000268)
- Lough Corrib SAC (000297)
- Lough Corrib SPA (004042)

On the basis of the screening exercise carried out above, it can be concluded, on the basis of the best scientific knowledge available and objective information, that the possibility of any significant effects on the above listed European sites, whether arising from the project itself or in combination with other plans and projects, cannot be excluded in light of the above listed European sites' conservation objectives. Thus, there is a requirement to proceed to Stage 2 of the Appropriate Assessment process; and an NIS has been prepared as part of the Planning Application.



6 REFERENCES

DEHLG. (2010). Department of the Environment, Heritage and Local Government. Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. DEHLG, Dublin. (Rev. Feb 2010).

EPA. (2025). Environmental Protection Agency Online Mapping [ONLINE] Available at: http://www.epa.ie/ [Accessed January 2025].

European Commission. (2000). Communication from the Commission on the precautionary principle. Commission of the European Communities, Brussels.

European Commission. (2001). 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. European Communities, Luxembourg.

European Commission. (2019). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?gid=1555085968125&uri=CELEX:52019XC0125(07)

European Commission. (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 Brussels, 28.9.2021

Fossitt, J. (2000). A Guide to Habitats in Ireland. The Heritage Council, Kilkenny.

Franklin, A. N. (2002). What is Habitat Fragmentation? Studies in Avian Biology, 20-29.

GSI. (2025). Geological Survey of Ireland website [ONLINE] Available at: http://www.gsi.ie/ accessed [Accessed January 2025].

NPWS. (2010). Circular NPW 1/10 & PSSP 2/10. Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.

NPWS (2013a) Conservation Objectives: Galway Bay Complex SAC 000268. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013b) Conservation Objectives: Inner Galway Bay SPA 004031. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014a) Conservation Objectives: Black Head-Poulsallagh Complex SAC 000020. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014b) Site Synopsis: Lough Corrib SPA 004042. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2015) Site Synopsis: Galway Bay Complex SAC 000268. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2017) Conservation Objectives: Lough Corrib SAC 000297. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2019) Site Synopsis: Inner Galway Bay SPA 004031. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2022) Site Synopsis: Lough Corrib SAC 000297. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2023) Conservation Objective: Lough Corrib SPA 004042. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

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

Stephen Diamond Associates (2025). Master Landscape Plan for the Proposed Large-Scale Residential Development at Galway Port. Drawing number: 24-612-SDA-PD-DR-GF-001.

Tobin (2025). Civil Design Report, Galway Port, Galway.





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