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2026

Ecological Impact Assessment (EcIA) Report



***Páirc na hAbhainn,
Athenry,
Co. Galway***



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Ecological Impact Assessment (EcIA) Report - Páirc na hAbhainn, Athenry, Co. Galway

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1.0 INTRODUCTION

1.1 Purpose of Report

An Ecological Impact Assessment (EclA) was undertaken by Ash Ecology & Environmental Ltd (AEE) on behalf of Galway County Council (GCC) for the proposed residential development of 16 no. two-storey houses (comprising 8 no. 3-bedroom semi-detached houses and 8 no. 2-bedroom terraced houses) at Páirc na hAbhainn, Athenry, Co. Galway. This report provides information on the ecological features present within the site and its surrounding area, assesses the potential impacts of the proposed development on these features, and proposes mitigation measures to avoid or reduce impacts where necessary.

The EclA has been prepared in accordance with the Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2024) and the EPA Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EPA, 2022). This report should be read in conjunction with the Screening for Appropriate Assessment (AA) Report (AEE, May 2026) and Natura Impact Statement (NIS) Report (AEE, May 2026) submitted as part of this application.

The assessment considers both the construction and operational phases of the development, identifying potential direct, indirect and cumulative impacts on ecological receptors. Where significant impacts are identified, appropriate mitigation measures are proposed to ensure the development proceeds in an ecologically sustainable manner.

1.2 Competent Expertise

This report has been prepared by Ash Ecology & Environmental Ltd (AEE) whose managing director and leading ecologist is Aisling Walsh who is a full member of the Chartered Institute of Ecological & Environmental Management (CIEEM) while the company, AEE, is a Registered Practice by the CIEEM (see Appendix A).

Aisling's qualifications include M.Sc. (Dist) in Biodiversity and Conservation (TCD) and B.Sc. (Hons) Zoology (NUIG), a diploma in Applied Aquatic Science (GMIT) and a Certificate in Applied Biology (GMIT). Since 2007, Aisling has over 18 years of experience providing environmental consultancy and environmental assessment services. Aisling has written numerous Ecological Impact Assessments (EclA), Screening for Appropriate Assessment Stage I and Stage II Natura Impact Statements, Badger Surveys, Bat Surveys, Bird and Habitat Surveys. She has also provided input and reviewed Ecological and Environmental Screening assessments for several EIS and EIAR and conducted numerous Flood Risk Assessments for planning applications.

Aisling is a licenced bat ecologist and a member of Bat Conservation Ireland. In addition she has completed several bat courses to continue her training and CPD. Over the past 18 years Aisling has completed several hundred bat surveys providing her with more than adequate experience in the profession. Aisling is a member of Bat Conservation Ireland and an associate member of the Institute of Lighting Professionals (ILP).

1.3 Project Description

The proposed development site is located at Páirc na hAbhainn, Athenry, Co. Galway (10km² grid square M52). The site measures approximately 0.651 hectares and is situated in a suburban setting on the edge of Athenry town.

The site is located on a greenfield site to the south of the existing Páirc na hAbhainn housing estate, Athenry, Co. Galway and accessed via the existing road network in the estate located at Baunmore, a regional road connected to the R347 Dublin Road. The red line boundary of the site measures approximately 0.651 hectares and is triangular in shape. The site is bound by the rear boundary blockwork walls and timber fencing of Páirc na hAbhainn estate to the north, and a natural stone wall to the east and south. The western boundary line has no designated fence or wall. The site topography is steep, sloping approximately 5.5 metres from its lowest to highest point. The most significant gradient is located at the north-east corner of the site.

The proposed development comprises (see Figure 3a):

- Construction of 16 no. houses located on a greenfield site accessed from the existing Páirc na hAbhainn housing estate (see Figures 3a and 3b). The proposed dwellings are two-storey in height and comprises of:
 - 8 no. 3-bedroom semi-detached houses
 - 8 no. 2-bedroom terraced houses
- Construction of hard and soft landscape works including new roadways and paths, provision of 32 no. new car parking spaces including two universal access parking spaces, provision of 8no. cycle parking, public open space, public lighting, signage, boundary treatments and all associated infrastructure and site developments work necessary to facilitate the proposed development.

Construction is expected to commence in Q1 2026, subject to planning permission, with an anticipated construction period of 18-24 months. The development will be constructed in a single phase.

The proposed development will connect to the existing foul water and surface water drainage systems in the area (see Figure 3b). For foul water drainage, the development will connect to the Athenry Wastewater Treatment Plant (WWTP D0193). Irish Water has confirmed feasibility of the water connection without infrastructure upgrade by Uisce Éireann (Pre-Connection Enquiry reference CDS25006844).

For surface water drainage, the development incorporates Sustainable Urban Drainage Systems (SUDS) features including a Graf Eco Bloc attenuation tank with hydrobrake optimum outflow control device, road gullies, silt trap and Class 1 petrol interceptor. Surface water will be attenuated on-site before controlled discharge to the existing surface water network. A detailed Surface Water and Wastewater Drainage Plan is provided in Figure 3b. All drainage infrastructure will be designed and constructed in accordance with Irish Water's Code of Practice for Water Infrastructure (IW-CDS-5020-03) and Wastewater Infrastructure (IW-CDS-5030-03). The steep

topography of the site has been addressed in the drainage design through the incorporation of appropriate attenuation and flow control measures.

The site is located approximately 6.8km from the nearest European site (Rahasane Turlough SAC/SPA), with no direct hydrological connectivity identified during the AA Screening process.

1.4 Aims

The aims of this Ecological Impact Assessment are to:

- Establish the baseline ecological conditions of the site through desktop study and field surveys conducted on 29th August 2025, identifying and mapping habitats according to Fossitt (2000) classification, with particular attention to the improved agricultural grassland (GA1) and grassy meadows (GS2) present on site, and the traditional stone walls (BL1) that provide ecological connectivity;
- Assess the importance and sensitivity of ecological features within the Zone of Influence using recognised evaluation criteria from NRA (2009) guidelines, considering the site's low ecological value dominated by modified grassland habitats;
- Identify and characterise potential impacts on ecological receptors during both construction and operational phases, with specific focus on the loss of approximately 0.55ha of improved agricultural grassland (GA1) and limited areas of dry meadow habitat (GS2), whilst recognising opportunities for enhancement through higher quality habitat creation;
- Support the findings of the Screening for Appropriate Assessment (AA) Report (AEE, May 2026) and Natura Impact Statement (NIS) (AEE, May 2026), which together conclude that the proposed development will not adversely affect the integrity of the Galway Bay Complex SAC (000268) or Inner Galway Bay SPA (004031)
- Propose appropriate mitigation measures following the mitigation hierarchy (avoid, reduce, remedy) including appointment of an Ecological Clerk of Works, seasonal timing constraints for vegetation clearance (avoiding bird nesting season March-August), pre-construction surveys for protected species, and implementation of a bat-sensitive lighting strategy maintaining dark corridors along boundary features;
- Design biodiversity enhancements that go beyond mitigation to provide net gains supporting the All-Ireland Pollinator Plan, installation of bat boxes and bird boxes, and planting of native hedgerows and trees to strengthen ecological networks;
- Assess residual impacts following implementation of mitigation measures, acknowledging that some impacts such as habitat loss cannot be fully mitigated but can be reduced to acceptable levels through quality improvements and connectivity maintenance;
- Consider cumulative impacts in combination with other developments in Athenry, particularly ongoing residential schemes within the wider Páirc na hAbhainn area;
- Ensure compliance with relevant wildlife legislation including the Wildlife Acts 1976-2023 (protecting nesting birds and bat roosts), EU Habitats Directive

(protecting Annex IV species including all bat species), EU Birds Directive, and Flora Protection Order 2022;

- Provide clear implementation requirements including detailed method statements for sensitive works, responsibilities for ecological supervision, monitoring protocols extending to Year 5 post-construction, and adaptive management responses based on monitoring results;
- Address climate considerations through incorporation of SuDS for climate adaptation, native planting for carbon sequestration and urban cooling, and sustainable location within existing settlement to minimise transport emissions;
- Support planning policy objectives in the Galway County Development Plan 2022-2028 and Athenry Local Area Plan 2024-2030 regarding biodiversity protection, green infrastructure provision, and sustainable urban expansion.

2.0 ASSESSMENT METHODOLOGY

This EclA assesses the ecological features present within the site and its surrounding area (the Zone of Influence; Zol) in relation to the proposed works. This allows for identification of the potential impacts of the proposed works upon the ecological features of the site at an early stage, whilst identifying the potential ecological constraints upon the proposed works. The assessment is based on a desk-based assessment, which determines the baseline conditions at the site of the proposed works, and site surveys, which provided information on habitats and species present on the site and its surroundings.

This EclA will outline the findings of the desk-based assessment and the surveys and identifies any potential impacts of the proposed works on ecological features within the Zol of the site, and proposes environmental controls and protection measures to avoid or reduce impacts where necessary.

2.1 Desk Based Studies

A number of methodologies were employed in completing this report including detailed desk-based studies, consultation and a general site visit. Further details are provided below.

A desktop study was used to identify features of ecological value occurring within the site and those occurring in close proximity to it. A desktop review also allows the key ecological issues to be identified early in the appraisal process and facilitates the planning of appropriate surveys. Sources of information utilised for this report include the following:

- EPA, Guidelines on the Information to be contained in Environmental Impact Assessment Reports, May 2022 (Current)
- OPR Practice Note PN01: Appropriate Assessment Screening for Development Management (Office of the Planning Regulator, 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 (European Commission, 2021)

- CIEEM (2024) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.3. (Update from 2018)
- CIEEM (2022) Guidelines for Preliminary Ecological Appraisal. Version 2.
- CIEEM (2022) Guidelines on Ecological Report Writing. Version 2.
- CIEEM (2023) Biodiversity Net Gain: Good Practice Principles for Development in Ireland
- Flora (Protection) Order 2022 (S.I. No. 235/2022)
- Red Data Books & NPWS Red Lists
- The Water Framework Directive (2000/60/EC)
- NRA (2008) Management of Noxious Weeds and Non-Native Plant Species on National Road Schemes
- NRA (2009, Rev 2) Guidelines for the Assessment of the Ecological Impacts of National Road Schemes
- NRA (2005) Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes
- NRA (2006) Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes
- NRA (2006) Guidelines for the Treatment of Bats during the Construction of National Road Schemes
- IFI (2016) Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters, Inland Fisheries Ireland
- IFI (2021) A Guide to the Protection of Watercourses through the use of Buffer Zones, Sustainable Drainage Systems, Instream Rehabilitation, Climate / Flood Risk and Recreational Planning
- Bat Conservation Trust (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th Edition
- BS 42020:2013 Biodiversity - Code of practice for planning and development

The following sites have been consulted in the preparation and development of this report;

- National Parks and Wildlife Service (NPWS) online data (www.npws.ie)
- Status of EU Protected Habitats and Species in Ireland - Article 17 Report 2019 (NPWS)
- Status of Birds in Ireland - Article 12 Report 2019 (NPWS)
- Ireland's 4th National Biodiversity Action Plan 2023-2030
- Ordnance Survey Ireland Maps and Aerial Photography (www.geohive.ie)
- Environmental Protection Agency data and mapping (www.epa.ie):
- Water quality data
- EPA Maps (<https://gis.epa.ie/EPAMaps/>)
- River Basin Management Plan 2022-2027
- National Biodiversity Data Centre (www.biodiversityireland.ie)
- All-Ireland Pollinator Plan 2021-2025
- BirdWatch Ireland (www.birdwatchireland.ie)
- Birds of Conservation Concern in Ireland 2020-2026
- Heritage Maps (www.heritagemaps.ie)
- Bat Conservation Ireland Database (www.batconservationireland.org) OSi Digital Aerial Photography and Historical Mapping (via GeoHive)

References were also made to the following key legislation and documents:

European

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (The Habitats Directive)
- Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds (codified version of Directive 79/409/EEC as amended) (The Birds Directive)
- Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy (The Water Framework Directive)
- EU Biodiversity Strategy for 2030 (COM(2020) 380)
- Regulation (EU) 1143/2014 on the prevention and management of the introduction and spread of invasive alien species
- EU Nature Restoration Law (2023) (pending final approval)

Republic of Ireland

- Wildlife Acts 1976 to 2023 (as amended)
- European Union (Birds and Natural Habitats) Regulations 2011-2021 (S.I. 477/2011, as amended)
- Flora (Protection) Order 2022 (S.I. No. 235/2022)
- Planning and Development Acts 2000-2023
- Climate Action and Low Carbon Development (Amendment) Act 2021
- Ireland's 4th National Biodiversity Action Plan 2023-2030
- River Basin Management Plan for Ireland 2022-2027
- National Marine Planning Framework 2021
- Article 17 Report 2019: Status of EU Protected Habitats and Species in Ireland (NPWS)

2.2 Assessment of the Effects – Ecological Evaluation Criteria

The impact significance is a combined function of the value of the affected feature (its ecological importance), the type of impact and the magnitude of the impact. It is necessary to identify the value of ecological features within the study area in order to evaluate the significance and magnitude of possible impacts.

The method of evaluating ecological significance used in this study is broadly based on guidelines issued by CIEEM (2024)¹ and TII (formerly NRA) (2009)². The results of the habitat survey and fauna survey were evaluated to determine the significance of identified ecological features located in the study area on an importance scale ranging from international → national → county → local. The local scale is approximately equivalent to one 10 km square. Because most sites will fall within the local scale, this is sub-divided into high local importance and low local importance. The criteria shown in Table 1 have been used in assessing ecological value within the study area. In addition to the criteria listed in Table 1, the evaluation of habitats and species also considers:

¹ CIEEM (2024) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.3

- Potential ecological value
- Secondary supporting values where habitats may perform a secondary ecological function
- Social values of an ecological feature such as educational, recreational and economic value
- Biodiversity net gain potential
- Nature recovery potential
- Climate resilience considerations

The assessment of effects has been undertaken in accordance with best practice, legislation and guidance notes. The approach is set out below in Table 1.

Table 1 Criteria used in assessing the ecological importance of sites

ECOLOGICAL VALUATION SCHEME
International Importance: • 'European Site' including Special Area of Conservation (SAC), Site of Community Importance (SCI), Special Protection Area (SPA) or proposed Special Area of Conservation. • Proposed Special Protection Area (pSPA). • Site that fulfils the criteria for designation as a 'European Site' (see Annex III of the Habitats Directive, as amended). • Features essential to maintaining the coherence of the Natura 2000 Network. • Site containing 'best examples' of the habitat types listed in Annex I of the Habitats Directive. • Resident or regularly occurring populations (assessed to be important at the national level) of the following: ➤ Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; and/or ➤ Species of animal and plants listed in Annex II and/or IV of the Habitats Directive. • Ramsar Site (Convention on Wetlands of International Importance Especially Waterfowl Habitat 1971). • World Heritage Site (Convention for the Protection of World Cultural & Natural Heritage, 1972). • Biosphere Reserve (UNESCO Man & the Biosphere Programme). • Site hosting significant species populations under the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals, 1979). • Site hosting significant populations under the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats, 1979). • Biogenetic Reserve under the Council of Europe. • European Diploma Site under the Council of Europe. • Salmonid water designated pursuant to the European Communities (Quality of Salmonid Waters) Regulations, 1988, (S.I. No. 293 of 1988). National Importance: • Site designated or proposed as a Natural Heritage Area (NHA). • Statutory Nature Reserve. • Refuge for Fauna and Flora protected under the Wildlife Acts. • National Park. • Undesignated site fulfilling the criteria for designation as a Natural Heritage Area (NHA); Statutory Nature Reserve; Refuge for Fauna and Flora protected under the Wildlife Act; and/or a National Park. • Resident or regularly occurring populations (assessed to be important at the national level) of the following:

ECOLOGICAL VALUATION SCHEME

- Species protected under the Wildlife Acts; and/or
- Species listed on the relevant Red Data list.
- Site containing 'viable areas' of the habitat types listed in Annex I of the Habitats Directive.

County Importance:

- Area of Special Amenity.
- Area subject to a Tree Preservation Order.
- Area of High Amenity, or equivalent, designated under the County Development Plan.
- Resident or regularly occurring populations (assessed to be important at the County level) of the following:
 - Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive;
 - Species of animal and plants listed in Annex II and/or IV of the Habitats Directive;
 - Species protected under the Wildlife Acts; and/or
 - Species listed on the relevant Red Data list.
- Site containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfill the criteria for valuation as of International or National importance.
- County important populations of species, or viable areas of semi-natural habitats or natural heritage features identified in the National or Local BAP, if this has been prepared.
- Sites containing semi-natural habitat types with high biodiversity in a county context and a high degree of naturalness, or populations of species that are uncommon within the county.
- Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.

Local Importance (higher value):

- Locally important populations of priority species or habitats or natural heritage features identified in the Local BAP, if this has been prepared;
- Resident or regularly occurring populations (assessed to be important at the Local level) of the following:
 - Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive;
 - Species of animal and plants listed in Annex II and/or IV of the Habitats Directive;
 - Species protected under the Wildlife Acts; and/or Species listed on the relevant Red Data list.
 - Sites containing semi-natural habitat types with high biodiversity in a local context and a high degree of naturalness, or populations of species that are uncommon in the locality;
 - Sites or features containing common or lower value habitats, including naturalised species that are nevertheless essential in maintaining links and ecological corridors between features of higher ecological value.

Local Importance (lower value):

- Sites containing small areas of semi-natural habitat that are of some local importance for wildlife;
- Sites or features containing non-native species that have some importance in maintaining habitat links.

SAC = Special Area of Conservation; SPA = Special Protection Area; NHA = Natural Heritage Area
BAP = Biodiversity Action Plan (these have been published for many local authority areas)

In line with the EPA Guidelines on information to be contained in Environmental Impact Assessment Reports (May 2022), the following terms in Table 2 are defined when quantifying duration:

Table 2 Definition of Durations (EPA, 2022)

Description of Duration Corresponding Time Frame	
Momentary Effects	Effects lasting from seconds to minutes
Brief Effects	Effects lasting less than a day
Temporary Effects	Effects lasting less than a year
Short-term Effects	Effects lasting one to seven years.
Medium-term Effects	Effects lasting seven to fifteen years.
Long-term Effects	Effects lasting fifteen to sixty years
Permanent Effects	Effects lasting over sixty years
Reversible Effects	Effects that can be undone, for example through remediation or restoration
Frequency of Effects	Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)

The criterion for confidence levels of the predicted likely impacts are given below in Table 3 and assessment for impact type in Table 4. The impact significance criteria follow EPA guidance (EPA, 2022).

Table 3 Impact Significance Criteria (EPA, 2022)

Significance of Effects	Definition
Imperceptible	An effect capable of measurement but without significant consequences.
Not significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Slight Effects	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate Effects	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant Effects	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment
Very Significant	An effect which, by its character, magnitude, duration or intensity, significantly alters most of a sensitive aspect of the environment.
Profound Effects	An effect which obliterates sensitive characteristics.

Table 4 Description of Effects (EPA, 2022)

Effect Type	Definition
Positive Effects	A change which improves the quality of the environment (for example, by increasing species diversity, or improving the reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).
Neutral Effects	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.

Effect Type	Definition
Negative/A dverse Effects	A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem, or damaging health or property or by causing nuisance).

2.3 Duration of Impact

Unless otherwise noted in the individual sections of this report the following duration of impacts apply:

- Temporary Impact - Impact lasting for one year or less.
- Short term Impact - Impact lasting one to seven years.
- Medium Term Impact - Impact lasting seven to fifteen years.
- Long Term Impact - Impact lasting fifteen to sixty years.
- Permanent Impact - Impact lasting over sixty years.

2.4 Methodology

2.4.1 Habitats and Flora

The site was assessed for the purposes of this report on August 29th 2025. Habitats were categorised according to the Heritage Council's 'A Guide to Habitats in Ireland' (Fossitt, 2000)² to level 3. The habitat mapping exercise had regard to the 'Best Practice Guidance for Habitat Survey and Mapping' (Smith et al., 2011)³ both published by the Heritage Council. Plant nomenclature follows Parnell and Curtis (2012).⁴ Plates of the site are shown as Appendix B. The site is located within 10km² grid M52. A list of protected species from is attached as Appendix C. Searches were made for any habitats or animal species which are legally protected under Irish or European legislation (Wildlife Acts 1976 to 2023; EU Habitats Directive; EU Birds Directive), or listed on the Flora Protection Order (2022) or Red Data books.^{5, 6}

Particular attention was paid to:

- The condition of the existing improved agricultural grassland
- Boundary vegetation structure and species composition, particularly stone walls
- Any features with potential ecological value
- Assessment for protected flora or invasive species

² Fossitt, J. (2000). *A Guide to Habitats in Ireland*. The Heritage Council, Kilkenny.

³ Smith, G.F., O'Donoghue, P., O'Hora, K. and Delaney, E. (2011) Best practice guidance for habitat survey and mapping. The Heritage Council, Kilkenny.

⁴ Parnell, J and Curtis, J. (2012). *Webb's, An Irish Flora*. Cork University Press.

⁵ Wyse Jackson, M., FitzPatrick, Ú., Cole, E., Jebb, M., McFerran, D., Sheehy Skeffington, M. & Wright, M. (2016) Ireland Red List No. 10: Vascular Plants. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland.

⁶ Colhoun, K and Cummins, S (2013) Birds of Conservation Concern in Ireland 2014–2019, Irish Birds 9: 523-544.

⁶ Wyse Jackson, M., FitzPatrick, Ú., Cole, E., Jebb, M., McFerran, D., Sheehy Skeffington, M. & Wright, M. (2016) Ireland Red List No. 10: Vascular Plants. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland.

Colhoun, K and Cummins, S (2013) Birds of Conservation Concern in Ireland 2014–2019, Irish Birds 9: 523-544.

2.4.2 Invasive Species

During the assessment, particular attention was given to the possible presence of highly invasive species⁷ which are regulated for control under the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477). The survey was completed outside the optimal time to identify all invasive species, however the remnants of many, for example Japanese knotweed would be apparent if present due to the long lasting red stems.

2.4.3 Mammals (Exc. Bats)

A general terrestrial mammal survey was carried out during the field survey on 29th August 2025. The presence of mammals was indicated principally by their signs, such as dwellings, feeding signs, or droppings using signs described by Brown et al. (1995).

Given the improved agricultural grassland setting and site characteristics, particular attention was paid to evidence of badger activity including setts, paths, latrines, and foraging signs. The site boundaries, particularly the natural stone walls, were examined for mammal activity.

2.4.4 Birds

Bird observations were made during the 29th August 2025 site visit. Birds were recorded by sight and call, with the aid of binoculars where necessary. As the survey was conducted outside the main breeding season, comprehensive breeding bird surveys were not required.

The timing of any vegetation removal will need to consider the bird nesting season (1st March to 31st August) in accordance with Section 40 of the Wildlife Acts. The mature treeline along the southwest boundary and scrub areas provide potential nesting habitat for common bird species.

2.4.5 Bats

A preliminary ground-level roost assessment was conducted during the site visit. The site boundaries were examined from ground level following criteria outlined in Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th edition (Collins, 2023). Features assessed included:

- Stone walls for crevices and gaps
- Any mature trees present for potential roost features
- Hedgerow connectivity to wider landscape

The natural stone walls along the eastern and southern boundaries were identified as having low potential for bat roosts, though they may provide commuting routes. The

⁷Risk of High Impact Invasive Species for Ireland List
http://www.biodiversityireland.ie/wordpress/wp-content/uploads/Invasives_taggedlist_HighImpact_2013RA-1.pdf

nearest Lesser Horseshoe Bat records are 5.6-5.8km southwest of the site, outside the typical 2.5km foraging radius for this species.

No bat activity survey was conducted. Given the low ecological value of the improved grassland habitat and absence of significant roost features, the site is considered to have low value for foraging bats.

2.4.6 Amphibians and Reptiles

The site was assessed for suitability for amphibians and reptiles. Given the improved agricultural grassland habitat and absence of water features, standing water, or suitable refugia, the site provides negligible opportunities for these species groups.

2.5 Designated Sites

There are four designations which may be applied to areas requiring specific ecological protection in Ireland:

2.5.1 Natural Heritage Areas (NHAs)

These were established from the former Areas of Scientific Interest (ASIs) and represent the best remaining examples of Ireland's natural and semi-natural habitats. Sites are selected for their special scientific significance for one or more species, communities, habitats, landforms, geological or geomorphological features, or for their diversity of natural attributes.

NHAs may carry additional designations including SAC, SPA, Statutory Nature Reserve or National Park, depending on their conservation importance. NHAs are protected under the Wildlife Acts 1976-2023.

2.5.2 Special Areas of Conservation (SACs)

These sites are designated under the EU Habitats Directive (92/43/EEC) for their European conservation importance, based on the habitats and species they support. The Directive contains several Annexes:

- Annex I lists habitat types of Community Interest whose conservation requires SAC designation. Some are identified as 'priority habitats' requiring particular protection
- Annex II lists animal and plant species of Community Interest whose conservation requires SAC designation

All SACs are also proposed Natural Heritage Areas. Activities within SACs are regulated through Notifiable Actions specific to each Qualifying Interest. Consent must be sought from the National Parks and Wildlife Service (NPWS) for these activities. SACs are protected under the EU Habitats Directive (92/43/EEC) as transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011-2021 (S.I. 477/2011 as amended).

2.5.3 Special Protection Areas (SPAs)

These sites are designated under the EU Birds Directive (2009/147/EC) for their importance to bird conservation at a European level. The Directive requires Member States to protect all wild birds and preserve sufficient habitat diversity for all naturally occurring species to maintain their populations.

SPAs are designated based on:

- Presence of species listed in Annex I of the Directive (species requiring special conservation measures)
- Significant populations of regularly occurring migratory species, particularly wintering waterfowl

All SPAs are also proposed Natural Heritage Areas. SPAs are protected under the EU Birds Directive (2009/147/EC) and the European Communities (Birds and Natural Habitats) Regulations 2011-2021 (S.I. 477/2011 as amended).

3.0 RESULTS

3.1 Designated Sites in the Vicinity of the Proposed Development

Appropriate Assessment is a requirement of Article 6(3) and 6(4) of Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, also known as the Habitats Directive.

Appropriate Assessment is an assessment of the potential effects of a proposed plan, on its own or in combination with other plans or projects, on one or more Natura 2000 sites (Special Protection Areas [SPA] for birds, Special Areas of Conservation [SAC] for habitats and species).

A Screening for Appropriate Assessment (AA) Report and Natura Impact Statement (NIS) have been prepared for this development (AEE, May 2026). The AA Screening Report screened in the Galway Bay Complex SAC (000268) and Inner Galway Bay SPA (004031) on the basis of the indirect surface water pathway via the Clarinbridge River (~270m west of the site). The NIS concludes that the proposed development will not adversely affect the integrity of either site.

The nearest protected areas to the site are listed below in Table 5. European sites within 15km of the site are shown in Figures 4 and 5. There are no pNHAs within 5km. The proposed works do not occur within a SAC, SPA, NHA or pNHA.

Table 5 European Sites within 15km of the Site and pNHAs within 5km of the site

Site Code	Name	Distance
SACs		
000322	Rahasane Turlough SAC	6.8km SW
000297	Lough Corrib SAC	10.7km N
001285	Kiltiernan Turlough SAC	11km SE
002244	Ardrahan Grassland SAC	11.3km SE

Site Code	Name	Distance
000242	Castletaylor Complex SAC	12.2km SE
000606	Lough Fingall Complex SAC	12.7km SE
000268	Galway Bay Complex SAC	13.4km SW
001251	Cregduff Loughs SAC	14.1km NW
SPAs		
004089	Rahasane Turlough SPA	6.8km SW
004142	Cregganna Marsh SPA	10.5km SW
004042	Lough Corrib SPA	13.3km NW
pNHAs		
None	No pNHAs within 5km	-

The AA Screening Report (AEE, May 2026) assessed all European sites within 15km. Rahasane Turlough SAC/SPA (6.8km) and all other groundwater-dependent European sites are in a separate groundwater catchment from the development site with no hydrological connectivity. The Galway Bay Complex SAC (000268, 10.3km SW) and Inner Galway Bay SPA (004031, ~10.3–11km SW) were screened in on the basis of the indirect surface water pathway via the Clarinbridge River (~270m west).

- The site consists of improved agricultural grassland (GA1) and grassy meadows (GS2) with no Annex I habitats present
- There is no direct overlap with European sites
- No suitable habitat exists for SCI bird species from nearby SPAs (Whooper Swan, Greenland White-fronted Goose, Golden Plover, Wigeon, Shoveler, Coot, Black-tailed Godwit, Black-headed Gull)
- No suitable habitat for Lesser Horseshoe Bat (nearest records 5.6-5.8km southwest, outside typical 2.5km foraging radius)
- Connection to Athenry WWTP for foul water treatment
- Implementation of SUDS and CEMP measures will prevent any water quality impacts

The NIS (AEE, May 2026) concludes, following Stage 2 Appropriate Assessment, that the proposed development will not adversely affect the integrity of the Galway Bay Complex SAC or the Inner Galway Bay SPA, alone or in combination with other plans or projects. The drainage design incorporating SUDS attenuation, silt trap, and Class 1 petrol interceptor (Figure 3b), combined with full foul water connection to Athenry WWTP (Irish Water ref. CDS25006844), ensures no credible impact pathway to any qualifying interest of either European site.

Surface water from the site will be managed through appropriate sustainable drainage systems (SuDS) to be finalised at detailed design stage, with particular consideration for the steep topography of the site. A detailed drainage plan is to be submitted with the application documents showing standard SuDS measures ensuring appropriate attenuation and treatment of surface water. The CEMP will detail environmental protection measures including sediment control and pollution prevention during construction.

The nature of the proposed development (16 residential units on improved agricultural grassland), combined with the implementation of appropriate environmental controls, the significant distance to European sites (minimum 6.8km), and the absence of ecological pathways, means there is no potential for significant effects on any European or nationally designated sites. The retention of existing stone wall boundaries ensures continued ecological connectivity in the wider landscape, albeit of limited value given the modified nature of the site.

3.2 Habitats and Flora – Desk Review

3.2.1 Flora Protection Order & Threatened Plant Species

Of the 312 Vascular plant species recorded in M52 (www.nbdc.ie), there are 3 threatened vascular plant species listed on from the Red Data Book (RDB) with 1 of these also listed on the Flora Protection Order (FPO) 2022.

- Dense-flowered Orchid (*Neotinea maculata*) – RBD – Near Threatened
- Greater Knapweed (*Centaurea scabiosa*) – RBD – Near Threatened
- Spring Gentian (*Gentiana verna*) – RBD – Near Threatened

There are also 80 bryophyte species listed in M52, with 8 listed as Annex V on the Habitats Directive:

- Austin's Bog-moss (*Sphagnum austinii*)
- Blunt-leaved Bog-moss (*Sphagnum palustre*)
- Cow-horn Bog-moss (*Sphagnum auriculatum*)
- Feathery Bog-moss (*Sphagnum cuspidatum*)
- Large White-moss (*Leucobryum glaucum sensu Smith (2004)*)
- Papillose Bog-moss (*Sphagnum papillosum*)
- Red Bog-moss (*Sphagnum rubellum*)
- Soft Bog-moss (*Sphagnum tenellum*)

3.2.2 Invasive Species

The number of non-native species recorded in Irish watercourses and on land has increased significantly in the 20th and 21st centuries. The presence of a truly invasive species is evidenced by a demonstrable adverse impact on native communities or habitats. Invasive species represent one of the greatest threats to biodiversity, second only to that caused by direct habitat destruction. They do this by competitively excluding or out-competing our less robust native species, by preying on native species or by altering the natural aquatic, riparian or terrestrial habitat in which they reside.

In addition to their biological effects, invasive species can adversely impact the recreational and amenity use of infested watercourses by restricting angling, boating, swimming and other water-based leisure pursuits. They can impact on industry by clogging engines, turbines and water intake pipes. These adverse effects have resulted in significant costs to the economy.

A total of 4 No. Invasive species recorded from 10km² grid square M52 listed on Regulation S.I. 477 are shown in Table 6.

Table 6 Invasive species recorded from 10km² grid square M52 listed on Regulation S.I. 477

Species group	Species name	Designation
Flowering plant	Himalayan Balsam (<i>Impatiens glandulifera</i>)	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 Invasive Species: Regulation S.I. 477/2011 (Ireland) Invasive Species: Detailed Risk Assessment Invasive Species: High Risk Invasive Species (2013 Report) Invasive Species: Regulation S.I. 374/2024 (Ireland) Invasive Species: Detailed Risk Assessment >> High Risk
Flowering plant	Japanese Knotweed (<i>Fallopia japonica</i>)	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 Invasive Species: Regulation S.I. 477/2011 (Ireland) Invasive Species: High Risk Invasive Species (2013 Report) Invasive Species: Regulation S.I. 374/2024 (Ireland) Invasive Species: The Wildlife (Northern Ireland) Order 1985
Flowering plant	Rhododendron ponticum	Invasive Species: Regulation S.I. 477/2011 (Ireland) Invasive Species: Detailed Risk Assessment Invasive Species: High Risk Invasive Species (2013 Report) Invasive Species: Regulation S.I. 374/2024 (Ireland) Invasive Species: Detailed Risk Assessment >> High Risk
Terrestrial mammal	Fallow Deer (<i>Dama dama</i>)	Invasive Species: Regulation S.I. 477/2011 (Ireland) Invasive Species: High Risk Invasive Species (2013 Report) Invasive Species: Regulation S.I. 374/2024 (Ireland) Protected Species: Wildlife Acts

3.2.3 Bird Species

A total of 90 bird species are listed for 10km square (M52) of which 50 no. are listed as protected (see Appendix C). None of the protected bird species listed in Appendix C were encountered during the August 29th 2025 site visit. There is potential for common garden bird species using the hedging along the stone walls on boundaries.

3.2.4 Protected Mammals – Excluding Bats

Records from the National Biodiversity Data Centre reveal the presence of 8 no. protected mammals (ex. Bat species) from within the 10km square (M52), namely:

- Badger (*Meles meles*)
- Hedgehog (*Erinaceus europaeus*)
- Otter (*Lutra lutra*)
- Pine Marten (*Martes martes*)
- Red Squirrel (*Sciurus vulgaris*)
- Fallow Deer (*Dama dama*)
- Irish Hare (*Lepus timidus* subsp. *hibernicus*)

- Irish Stoat (*Mustela erminea* subsp. *hibernica*)

Protected mammal species listed above (also listed in Appendix C), were not visually encountered during the visit 29th August 2025.

3.2.5 Bats

3.2.5.1 Previous Records

A desktop review was carried out to identify the previous records of 7 Bat species within the applicant site and its environs. Previous bat records and shown below in Table 7.

Table 7 Historical Bat Records in 10km² Grid Ref M52 (NBDC website www.nbdc.ie accessed 14/09/2025)

Species Name - Common	Species Name - Latin
Brown Long-eared Bat	<i>Plecotus auritus</i>
Daubenton's Bat	<i>Myotis daubentonii</i>
Leisler's Bat	<i>Nyctalus leisleri</i>
Natterer's Bat	<i>Myotis nattereri</i>
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>
Soprano Pipistrelle	Soprano Pipistrelle (<i>Pipistrellus pygmaeus</i>)
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>

The distribution of Lesser Horseshoe Bat records in the wider area is shown in Figure 6, with the closest observations approximately 5.6-5.8km southwest of the site, outside the typical 2.5km foraging and commuting radius for this species. Lesser Horseshoe Bat is a qualifying interest of Lough Corrib SAC (6.8km from site) and whilst recorded in the 10km grid square M52, the distance from known records and absence of suitable roosting structures suggests the site is unlikely to support this species.

3.2.5.2 Landscape Suitability for Bats

The National Biodiversity Data Centre (NBDC) maps landscape suitability bats based on Lundy *et al.* (2011). The maps are a visualisation of the results of the analyses based on a 'habitat suitability' index. The index ranges from 0 to 100 with 0 being least favourable and 100 most favourable for bats. The overall assessment of bat habitats for the current study area is given as 30.89, a 'Moderate' score with the maximum average for all bats being between 36.44 and 58.55. Table 8 gives the suitability of the study area for the bat species found in the study area (based on NBDC) along with their Irish Red List Status (from Marnell *et al.*, 2019).⁸

⁸ Marnell, F., Looney, D. & Lawton, C. (2019) Ireland Red List No. 12: Terrestrial Mammals. National Parks and Wildlife Service, Department of the Culture, Heritage and the Gaeltacht, Dublin, Ireland.

Table 8 Suitability of the study area for the bat species found in the Athenry area (based on the NBDC data) with Irish Red list status indicated

Common name	Scientific name	Suitability index	Irish red list status
All bats	-	30.89	Least Concern
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	41	Least Concern
Brown long-eared bat	<i>Plecotus auritus</i>	40	Least Concern
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	44	Least Concern
Lesser-horseshoe bat	<i>Rhinolophus hipposideros</i>	6	Least Concern
Leisler's bat	<i>Nyctalus leisleri</i>	43	Least Concern
Whiskered bat	<i>Myotis mystacinus</i>	28	Least Concern
Daubenton's bat	<i>Myotis daubentonii</i>	30	Least Concern
Nathusius' pipistrelle	<i>Pipistrellus nathusii</i>	3	Least Concern
Natterer's bat	<i>Myotis nattereri</i>	43	Least Concern

3.3 Aquatic Environment

The Water Framework Directive (WFD) is a key initiative aimed at improving water quality throughout the EU. It applies to rivers, lakes, groundwater, coastal & transitional waters. The Directive requires an integrated approach to managing water quality on a river basin basis; with the aim of maintaining and improving water quality. The Directive requires that management plans be prepared on a river basin basis and specifies a structured approach to developing those plans. It requires that a programme of measures for improving water quality be brought into effect. Specifically, the WFD aims to protect/enhance all waters (surface, ground and coastal waters), achieve "good status" for all waters, manage water bodies based on river basins (or catchments), involve the public and streamline legislation.

The hydrology of the area is shown on Figure 7. The site is located within:

- Hydrometric Area 29 – 'Galway Bay South East'
- WFD Catchment 'Corrib'
- WFD Subcatchment 'Clarinbridge_SC_010'
- WFD River Sub-Basin 'CLARINBRIDGE_030'
- The 2016-2021 Water Framework Directive Results are as follows:
 - 2019-2024 WFD River Status of 'CLARINBRIDGE_030' is 'Moderate'
 - 2019-2024 WFD River Risk Status of 'CLARINBRIDGE_030' is 'At Risk'
 - 2019-2024 WFD Groundwater Body Status of 'Clarinbridge' is 'Good'
 - 2019-2024 WFD Groundwater Body Risk Status of 'Clarinbridge' is 'Not at Risk'

The Clarinbridge River is located approximately 800m from the site. Surface water from the site would drain via the proposed SUDS system to the local surface water network and potentially reach the Clarinbridge River, which flows southwest to Galway Bay.

Flood Risk

According to CFRAM mapping (available on the OPW Mapping Website) the site is outside the flood risk zone for the current scenario. The site is located in an area of High/Extreme Vulnerability. This confirms that whilst flood risk is not a constraint for the proposed works, appropriate surface water management measures will be required.

3.4 Field Survey Results

3.4.1 Flora

The habitats on the existing site are listed below in Table 9 and assessed for their biodiversity importance. The NRA guidelines on the Assessment of Ecological Impacts on National Road schemes (NRA, 2009) provides a rationale for the evaluation of ecological receptors within a site. There were no habitats present within the site boundary that would qualify as Annex I Habitats.

The site was visited on 29th August 2025. Habitats were identified and classified according to Fossitt (2000) and Smith et al. (2011). A habitat map is shown as Figure 8. Plates are attached as Appendix B.

The main habitats onsite were:

- Improved Agricultural Grassland (GA1) - The site is dominated by improved agricultural grassland covering approximately 0.55ha, characterised by species-poor sward with grass cover of at least 95%. This habitat is dominated by perennial ryegrass (*Lolium perenne*), with Yorkshire fog (*Holcus lanatus*) and white clover (*Trifolium repens*) present throughout. The grassland shows evidence of recent agricultural management with low botanical diversity typical of intensively managed pasture. The steep topography of the site influences drainage patterns across this habitat.
- Dry Meadows and Grassy Verges (GS2) - A narrow strip of less intensively managed grassland is present along the northern boundary adjacent to the existing estate. Species composition includes Yorkshire fog (*Holcus lanatus*), cock's-foot (*Dactylis glomerata*), and occasional broad-leaved herbs such as ribwort plantain (*Plantago lanceolata*) and creeping buttercup (*Ranunculus repens*). This habitat provides marginally higher botanical diversity than the dominant improved grassland.
- Stone Walls and Other Stonework (BL1) - Traditional natural stone walls form the eastern and southern boundaries of the site. These dry stone walls are in reasonable condition and provide potential refugia for invertebrates and small fauna. The walls support limited bryophyte growth and occasional ferns, contributing to local habitat diversity. No evidence of protected species using these features was recorded.
- Hedgerows (WL1) - Intermittent hedgerow sections are associated with the stone wall boundaries, particularly along the eastern boundary. Species include blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*), and bramble (*Rubus fruticosus* agg.). The hedgerows are fragmented with significant gaps, limiting their value as wildlife corridors. These features provide some nesting opportunities for common bird species.

The habitats present are typical of agricultural land on the edge of suburban development. The improved grassland provides minimal ecological value due to intensive management and species-poor composition. The stone walls represent the most notable ecological feature, though their value is limited by the absence of associated mature vegetation. No rare or protected plant species were recorded

during the survey, and no High Risk Invasive species were identified, confirming the findings of the AA Screening Report.

Table 9 Ecological Importance of habitats on site

Habitat Types	Description	Ecological Importance Rating
Improved Agricultural Grassland (GA1)	Species-poor improved grassland covering ~0.55ha, dominated by perennial ryegrass with white clover. Evidence of intensive agricultural management. Very low botanical diversity. Steep topography influences drainage patterns.	Local Importance (Lower Value)
Dry Meadows and Grassy Verges (GS2)	Narrow strip along northern boundary with marginally higher botanical diversity including Yorkshire fog, cock's-foot, plantain and buttercup. Less intensively managed than main grassland area.	Local Importance (Lower Value)
Stone Walls (BL1)	Natural stone walls forming eastern and southern boundaries. Traditional dry stone construction providing refugia for invertebrates and supporting limited bryophytes. No evidence of use by protected species.	Local Importance (Lower Value)
Hedgerows (WL1)	Intermittent hedgerow sections with blackthorn, hawthorn and bramble. Significant gaps limiting connectivity value. Provides some nesting opportunities for common birds.	Local Importance (Lower Value)

The site's ecological value is limited by the dominance of improved agricultural grassland and absence of mature trees or water features. The stone walls and associated hedgerows provide the only semi-natural features of note, though these are of limited extent and connectivity. The steep topography of the site presents both constraints and opportunities for habitat enhancement through the development process.

Invasive Species

Non-native species in Ireland have been assessed and attributed an impact rating of either 'High', 'Medium' or 'Low' impact based on a number of factors that determine a species' potential to become established in this country and have significant impacts.

No 'High Impact' invasive species listed in the Third Schedule of European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011, as amended) was recorded at the site during the August 29th 2025 survey. The rank grassland vegetation and established boundary features show no evidence of invasive plant colonisation. Implementation of biosecurity measures during construction will prevent the introduction of invasive species to the site.

3.4.2 Fauna

Birds

Bird observations were made during the 29th August 2025 site visit. As the survey was conducted outside the main nesting season (which extends to 31st August), no

obvious nesting activity was observed, which was not expected at this time of year. Due to the improved agricultural grassland/edge-of-settlement setting, a comprehensive bird assemblage was not expected. A total of 7 bird species were recorded using the site, all of which were Green-listed species and not of conservation concern:

- Blackbird (*Turdus merula*)
- Robin (*Erithacus rubecula*)
- Hooded Crow (*Corvus cornix*)
- Blue Tit (*Cyanistes caeruleus*)
- Wren (*Troglodytes troglodytes*)
- Song Thrush (*Turdus philomelos*)
- Chaffinch (*Fringilla coelebs*)

These common garden and countryside bird species were noted primarily along the stone walls and intermittent hedgerows that form the site boundaries. The stone walls and associated hedgerows, despite being fragmented, provide nesting opportunities for these species during the breeding season, whilst the improved agricultural grassland offers limited foraging habitat for ground-feeding species such as hooded crow and song thrush.

No Red or Amber-listed species were recorded during the survey. The site does not provide suitable habitat for any Special Conservation Interest (SCI) bird species from nearby SPAs such as Rahasane Turlough SPA (6.8km) or Cregganna Marsh SPA (10.5km), which support wetland species such as Whooper Swan, Greenland White-fronted Goose, and various waterfowl that require aquatic or wetland habitats absent from this site.

The presence of suitable nesting habitat in the boundary hedgerows and stone wall crevices means that timing considerations will be required for any vegetation management. Any hedgerow maintenance or works affecting stone walls should be scheduled outside the bird nesting season (1st March to 31st August) to comply with Section 40 of the Wildlife Acts 1976-2023. It is highly unlikely any hedging will be affected by the proposed development as these features are to be retained where possible.

Bats

While no bat activity survey was conducted specifically for this site, the site was assessed for its potential to support bats during the 29th August 2025 site visit. The site boundaries were examined from ground level for potential roost features using criteria outlined in Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th edition (Collins, 2023).

The natural stone walls along the eastern and southern boundaries were assessed for their potential to support bat roosts. These traditional dry stone walls contain numerous crevices and gaps that could potentially be used by crevice-dwelling bat species, though no evidence of bat use (droppings, staining, etc.) was observed during the survey.

No mature trees with bat roost potential were identified within the site boundary. The site is dominated by improved agricultural grassland with no trees present. The intermittent hedgerows along the boundaries are relatively young and lack features suitable for roosting bats.

Desktop records indicate Lesser Horseshoe Bat has been recorded in the wider area, with the closest observations approximately 5.6-5.8km southwest of the site (Figure 6), outside the typical 2.5km foraging and commuting radius for this species. This distance, combined with the absence of suitable foraging habitat (the species prefers woodland edge, riparian corridors and species-rich hedgerows), makes it highly unlikely that Lesser Horseshoe Bats use the site.

Based on the habitats present and the landscape context, the most likely bat species to use the site occasionally would be:

- Common Pipistrelle (*Pipistrellus pipistrellus*) - Ireland's most common and adaptable bat species
- Soprano Pipistrelle (*Pipistrellus pygmaeus*) - often found in edge-of-settlement habitats
- Leisler's Bat (*Nyctalus leisleri*) - a high-flying species that may pass over the site

These species are typical of modified agricultural and edge-of-settlement habitats in County Galway. However, the improved agricultural grassland provides poor foraging habitat for bats due to low invertebrate diversity associated with intensive management. The stone walls and intermittent hedgerows may provide some commuting routes, though their fragmented nature limits their value as ecological corridors.

The landlocked nature of the site, accessed only through the existing Páirc na hAbhainn estate, means that existing street lighting within the estate may already influence bat activity patterns in the area. Light-sensitive species would likely avoid well-lit areas, potentially limiting the use of the site by bats.

Given the low ecological value of the improved grassland, absence of mature trees, and limited connectivity features, the site is considered to have low importance for bats. The retention of the stone walls and associated hedgerows will maintain what limited value the site has for commuting bats, though this is not considered a significant ecological feature requiring specific mitigation beyond standard best practice measures.

Badgers and other Protected Mammals

Limited evidence of mammal activity was recorded during the site survey on 29th August 2025, with some tracks visible along the field edges and boundaries. Based on the track patterns observed and site characteristics, activity is likely from fox (*Vulpes vulpes*) and rabbit (*Oryctolagus cuniculus*). The improved agricultural grassland and edge habitat provide limited foraging opportunities for mammal species.

The improved agricultural grassland provides poor foraging conditions for most mammal species due to the intensive management and low invertebrate diversity. The stone walls and intermittent hedgerows along the boundaries may serve as

movement corridors for small mammals, though their fragmented nature limits their effectiveness. Rabbit is likely present given the grassland habitat at the rural-urban interface, with some evidence of grazing noted along the field margins.

No evidence of badger (*Meles meles*) was recorded, including setts, latrines, paths, or foraging signs. The improved grassland offers minimal foraging opportunities for badgers, and the proximity to the existing residential estate, combined with the landlocked nature of the site, makes badger presence highly unlikely.

Similarly, otter (*Lutra lutra*) presence can be ruled out given the site's distance from any watercourses (nearest being approximately 6.8km to Rahasane Turlough) with no connecting drainage features or riparian corridors that would facilitate otter movement to the site.

Pine marten (*Martes martes*), Irish hare (*Lepus timidus subsp. hibernicus*), and Irish stoat (*Mustela erminea subsp. hibernica*) are recorded in the wider 10km grid square (M52) but were not observed during the survey. The absence of suitable habitat features such as mature woodland (for pine marten) or extensive rough grassland (for Irish hare) makes their presence on site unlikely.

Red squirrel (*Sciurus vulgaris*) records exist in the wider area, but the complete absence of trees within the site boundary and the isolated nature of the intermittent boundary hedgerows means the site provides no suitable habitat for this species.

The limited mammal activity observed demonstrates that the site has minimal value as part of the local ecological network for mammal species. The improved grassland provides little foraging value, and the fragmented boundary features offer only marginal connectivity for movement between other habitats in the area. The steep topography of the site may further limit its use by some mammal species.

Amphibians and Reptiles

No suitable habitat for amphibians or reptiles was identified within the site boundary. The improved agricultural grassland habitat lacks the structural diversity, shelter, and moisture levels required by these species groups. No standing water/drains was observed on site during the survey.

Common frog (*Rana temporaria*) and smooth newt (*Lissotriton vulgaris*) require standing water for breeding and terrestrial habitats with adequate cover for foraging and hibernation. The absence of ponds, ditches, or areas of standing water within or adjacent to the site precludes breeding opportunities. The improved grassland provides minimal cover, and the steep topography of the site results in rapid drainage, preventing the formation of temporary pools that might support amphibians. The lack of permanent or temporary water features makes the site unsuitable for amphibian breeding or foraging.

Similarly, common lizard (*Zootoca vivipara*), Ireland's only native reptile, requires structurally diverse habitats with basking spots and cover. Whilst the stone walls along the eastern and southern boundaries could theoretically provide some basking and refugia opportunities, the absence of associated rough grassland margins, the

intensive management of the adjacent grassland, and the isolated nature of these features significantly limits their value for reptiles. The steep slope and northern aspect of much of the site further reduces its suitability for basking reptiles. No evidence of reptile presence was recorded during the survey. The improved agricultural nature of the site and surrounding landscape provides no suitable terrestrial habitat corridors that would support amphibian or reptile movement to or from the site.

4.0 IMPACT ASSESSMENT

4.1 Introduction

The information gathered as part of the desk study and field survey for this proposed application has been used to complete an Ecological Impact Assessment (EclA). This EclA has been undertaken following the guidelines set out by CIEEM (2024) Version 1.3 and the EPA (2022).

The identification of potential impacts and the assessment of their significance typically requires the identification of the type and magnitude of the impacts. For example, will the impacts be short term or long term, direct, indirect or cumulative and will they occur during construction or operation. This section will establish whether ecological impacts of the proposed development are likely to occur and whether or not they are significant. These potential impacts will be examined with respect to the ecological receptors identified in the previous section.

The emphasis in EclA is on "significant" effects, rather than all ecological effects. For the purpose of EclA, a "significant effect" is an effect that either supports or undermines biodiversity conservation objectives for important ecological features or for biodiversity in general. Conservation objectives may be specific (e.g., for a designated site) or broad (e.g., national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity). Effects can be considered significant at a wide range of scales from international to local.

A significant effect is an effect that is sufficiently important to require assessment and reporting so that the decision maker is adequately informed of the environmental consequences of permitting the project. In broad terms, significant effects encompass impacts on structures and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution).

4.2 Designated Areas

The potential impacts on designated conservation sites must be assessed as part of any development proposal, considering both direct and indirect effects through various pathways. This ensures compliance with relevant legislation protecting European sites (SACs and SPAs) and nationally designated areas (NHAs and pNHAs). A review of designated sites using the NPWS database and site-specific mapping (SACs shown in Figure 4 and SPAs shown in Figure 5) identifies the following conservation areas within the study radius:

European Sites (within 15km):

- Rahasane Turlough SAC (000322) - 6.8km SW
- Lough Corrib SAC (000297) - 10.7km N
- Kiltiernan Turlough SAC (001285) - 11km SE
- Ardrahan Grassland SAC (002244) - 11.3km SE
- Castletaylor Complex SAC (000242) - 12.2km SE
- Lough Fingall Complex SAC (000606) - 12.7km SE
- Galway Bay Complex SAC (000268) - 13.4km SW
- Cregduff Loughs SAC (001251) - 14.1km NW
- Rahasane Turlough SPA (004089) - 6.8km SW
- Cregganna Marsh SPA (004142) - 10.5km SW
- Lough Corrib SPA (004042) - 13.3km NW

Proposed Natural Heritage Areas (within 5km):

- None identified within 5km radius

The Screening for Appropriate Assessment (AA) Report and Natura Impact Statement (AEE, May 2026) provide the detailed assessment of potential impacts on European sites, assessed against the conservation objectives of all European sites within 15km.

Given the nature of the proposed residential development and considering:

- No hydrological connectivity exists between the site and any European sites
- The landlocked site has no direct watercourse connections
- Foul water will connect to Athenry WWTP with Irish Water confirmed feasibility (CDS25006844)
- Surface water will be managed through appropriate SUDS measures with particular consideration for the steep topography
- The site consists of improved agricultural grassland with no Annex I habitats present
- No suitable habitat exists for Qualifying Interest species or SCI birds from nearby European sites
- Standard construction environmental controls will be implemented via the CEMP

The Appropriate Assessment Screening concluded that no significant effects on European sites are likely to occur, either alone or in combination with other plans or projects. This assessment was based on:

- The significant distance to all European sites (minimum 6.8km)
- The absence of ecological pathways between the site and European sites
- The residential nature of the development with standard urban drainage connections
- The absence of suitable habitat for mobile QI/SCI species that might use the site ex-situ

Lesser Horseshoe Bat, a qualifying interest of several SACs in the region, has been recorded approximately 5.6-5.8km from the site (Figure 6), outside its typical 2.5km

foraging radius. The site lacks suitable roosting structures (no trees or buildings present) and foraging habitat (improved grassland of low ecological value) for this species and is unlikely to support any SAC populations.

The implementation of appropriate drainage design, taking account of the steep site topography, and construction-phase environmental controls eliminates any potential for impacts on downstream receptors. The Natura Impact Statement (AEE, May 2026) concludes that the proposed development will not adversely affect the integrity of the Galway Bay Complex SAC (000268) or Inner Galway Bay SPA (004031).

4.3 Construction Phase

4.3.1 Habitat Loss & Modification

The proposed development will involve the loss of approximately 0.651 hectares comprising primarily improved agricultural grassland (GA1) and limited areas of dry meadows and grassy verges (GS2) for 16 residential units and associated infrastructure. This represents a complete and permanent loss of the existing grassland habitats. The improved agricultural grassland has low ecological value due to intensive management and species-poor composition, whilst the small area of dry meadow along the northern boundary has marginally higher botanical diversity.

The natural stone walls (BL1) along the eastern and southern boundaries are proposed for retention where possible. These traditional features provide limited ecological value as refugia for invertebrates and potential commuting routes for bats, though no evidence of protected species use was recorded. The intermittent hedgerows (WL1) associated with these boundaries may be partially affected by development, particularly where access and services are required.

Limited evidence of mammal tracks along field edges indicates the site has minimal use by common species such as fox and rabbit. This habitat will be permanently lost, though given the low quality of the improved grassland, the impact on foraging opportunities is negligible.

The habitat loss is considered to have a minor negative impact at the local level, given:

- Complete loss of 0.651ha of predominantly improved agricultural grassland of low ecological value
- No trees present on site to be affected
- Removal of poor-quality foraging habitat with minimal use by mammals and birds
- Permanent conversion from agricultural land to residential development
- Retention of stone wall boundaries where possible maintaining some ecological connectivity

The steep topography of the site presents both challenges and opportunities - whilst construction will require significant ground works, this also provides opportunity to create more diverse habitats through appropriate landscaping and SUDS features

that could enhance the ecological value compared to the existing improved grassland.

4.3.2 Invasive Species

No invasive species listed on S.I. 477 were recorded within the site boundary during the August 29th 2025 survey. However, the construction phase presents risks for potentially introducing invasive species through:

- Movement of construction machinery between sites
- Importation of materials (particularly topsoil for gardens and landscaping)
- Creation of disturbed ground where invasive species could establish
- Potential spread from adjacent lands during boundary works

Table 6 identifies invasive species recorded in the wider M52 grid square, including Japanese Knotweed. While not present on site, Japanese Knotweed occurs in the locality and could potentially be introduced without appropriate controls.

This impact is considered potentially moderate at the local scale without appropriate biosecurity controls, particularly given the scale of earthworks required for residential development.

4.3.3 Disturbance

Construction activities will introduce significant sources of disturbance including:

- Noise and vibration from heavy machinery and construction vehicles
- Increased human presence and activity throughout the site
- Construction lighting for security and winter working
- Dust generation during site clearance and earthworks

The construction phase is expected to last 18-24 months for 16 houses, with works typically restricted to standard hours but potentially extending during critical phases. Birds nesting in boundary vegetation may experience disturbance, particularly if site clearance occurs during the breeding season (March 1st to August 31st). The survey on 29th August was essentially outside the nesting season, but breeding birds would be expected to use the stone walls and hedgerows during the appropriate season.

Given the low ecological value of the site and absence of trees with bat roost potential, impacts on bats are expected to be minimal. The stone walls may provide occasional commuting routes for common bat species, but no evidence of significant bat activity was recorded. The nearest Lesser Horseshoe Bat records (5.6-5.8km away) are well outside the typical foraging range.

The landlocked nature of the site, accessed only through the existing estate, means construction traffic must pass through established residential areas, potentially causing disturbance to existing residents and any wildlife using garden habitats.

The impact of disturbance is considered to be minor in magnitude for birds and negligible for bats, given:

- The relatively small scale of development (16 units on 0.651ha)
- The low ecological value of the improved grassland
- Absence of significant wildlife features (no mature trees or water bodies)
- Limited evidence of mammal activity

4.3.4 Water Quality

Construction activities present risks to water quality through:

- Sediment runoff from exposed soils during site clearance and foundation excavation
- The steep topography increasing erosion and sediment mobilisation risk
- Concrete/cement washout from house construction
- Accidental spills of fuels or hydraulic fluids from machinery
- Potential contamination from welfare facilities

The site has no direct hydrological connection to any watercourse. The nearest groundwater-dependent European site (Rahasane Turlough SAC/SPA at 6.8km) lies in a separate groundwater catchment with no hydrological connectivity to the development site. The Galway Bay Complex SAC (000268, 10.3km SW) and Inner Galway Bay SPA (004031) are assessed in the NIS (AEE, May 2026), which concludes no adverse effect on site integrity. Surface water will be managed through the SUDS system (Figure 3b), ultimately connecting to the municipal network.

The steep topography of the site presents particular challenges for sediment control during construction, with increased potential for erosion and runoff during rainfall events. Without appropriate controls, sediment-laden runoff could enter the existing surface water drainage system.

The foul drainage will connect to Athenry WWTP. Irish Water has confirmed feasibility of the water connection without infrastructure upgrade by Uisce Éireann (Pre-Connection Enquiry reference CDS25006844).

The impact on water quality is considered potentially minor to moderate without controls, given:

- No direct connection to natural watercourses
- The steep site topography increasing erosion risk
- Connection to existing municipal drainage systems
- The relatively small scale of development (0.651ha)
- Standard construction controls will be implemented through the CEMP

4.4 Operational Phase

4.4.1 Lighting Impacts

The operational phase will introduce permanent lighting for 16 houses, including street lighting, security lighting, and domestic lighting from windows. However, given the site's landlocked location accessed only through the existing Páirc na hAbhainn

estate, the baseline lighting environment is already influenced by existing residential development.

Street lighting along new internal roads will follow standard designs, with potential for some light spill onto retained boundary features. The existing estate lighting already creates a partially lit environment in the vicinity.

For bats, the site's low ecological value and absence of roost features (no trees present) means lighting impacts will be minimal. The stone walls may provide occasional commuting routes for common bat species, but these are already subject to lighting influence from the adjacent estate. The nearest Lesser Horseshoe Bat records (5.6-5.8km away) are well outside the species' typical range, and this light-sensitive species is unlikely to use the site.

The impact of operational lighting is considered minor at the local level, given:

- No trees with roost potential present on site
- Already modified lighting environment from existing estate
- Low ecological value of improved grassland
- Limited bat activity expected based on habitat quality

4.4.2 Habitat Fragmentation

The development will convert agricultural land into residential use, though the site's ecological connectivity is already limited by:

- Its landlocked position surrounded by existing development
- The dominance of improved grassland of low ecological value
- Limited boundary features (fragmented hedgerows and walls)
- Minimal evidence of mammal movement through the site

The conversion will:

- Remove 0.651ha of improved agricultural grassland
- Retain stone wall boundaries where possible
- Have negligible impact on ecological networks given the site's isolation

The impact of fragmentation is considered negligible to minor at the local level, as the site currently provides minimal ecological connectivity due to its enclosed nature and low habitat value.

4.4.3 Surface Water Management

The operational development will generate surface water runoff from roofs, roads, and driveways across 0.651ha. The steep topography of the site requires particular attention in drainage design.

For surface water drainage, comprehensive SUDS features have been incorporated including:

- A Graf Eco Bloc attenuation tank to store and control surface water discharge rates
- A hydrobrake optimum outflow control device located within manhole SW 6.0 (CL 37.300, IL 35.490) with 400mm sump
- Heavy-duty road gullies (D400 loading) suitable for vehicular traffic
- A silt trap and Class 1 petrol interceptor (225mm Ø pipework, IL in 35.370, IL out 35.235) to treat surface water prior to discharge
- 225mm Ø and 150mm Ø uPVC surface water pipework connecting to existing surface water network

A detailed Surface Water and Wastewater Drainage Plan is provided in Figure 3b. All drainage infrastructure will be designed and constructed in accordance with Irish Water's Code of Practice for Water Infrastructure (IW-CDS-5020-03, latest revision) and Code of Practice for Wastewater Infrastructure (IW-CDS-5030-03, latest revision), including the relevant Standard Details documents.

The development will result in:

- Controlled runoff rates through attenuation and hydrobrake flow control
- Appropriate treatment through silt trap and petrol interceptor
- Connection to existing surface water network
- Hydrocarbon pollution prevention through petrol interceptor

For foul water drainage, Irish Water has confirmed feasibility of the water connection without infrastructure upgrade by Uisce Éireann (Pre-Connection Enquiry reference CDS25006844). The absence of direct hydrological connections to natural watercourses reduces potential impacts.

4.5 Do-Nothing Scenario

In the absence of the proposed development, the site would likely continue as improved agricultural grassland, subject to periodic grazing or cutting. Based on current management and site characteristics:

The improved grassland would maintain its current species-poor composition without active agricultural management. Some natural succession might occur along field margins, with bramble and gorse potentially establishing from adjacent areas. However, the steep topography and ongoing agricultural use in the surrounding area would likely maintain the grassland character for the foreseeable future.

From a biodiversity perspective, the do-nothing scenario would maintain the status quo of low ecological value. The site would continue to provide minimal value for wildlife, limited to occasional use by common farmland species. The stone walls would continue to provide some refugia for invertebrates, and the fragmented hedgerows might develop further if unmanaged.

The do-nothing scenario would avoid the impacts associated with development but would:

- Not deliver needed housing as identified in the Athenry Local Area Plan 2024-2030
- Not provide the biodiversity enhancements proposed as part of development
- Maintain a site of low ecological value with limited potential for enhancement without intervention
- Continue the current minimal contribution to local green infrastructure

5.0 MITIGATION MEASURES

The approach to mitigation for this project follows the standard hierarchy of avoid, reduce, and where necessary, compensate. Based on the ecological characteristics identified during the 29th August 2025 survey and considering the nature of the proposed residential development, this section outlines the mitigation measures that will be implemented to protect ecological features and minimise impacts during both construction and operational phases.

5.1 Flora

The site's ecological features are limited, comprising improved agricultural grassland of low value and stone walls with intermittent hedgerows. Given the complete habitat transformation from agricultural land to residential, appropriate mitigation focuses on boundary protection and enhancement opportunities.

5.1.1 Protection of Retained Features

The natural stone walls along the eastern and southern boundaries will be retained and protected during construction. Protective fencing will be installed at least 2m from the base of stone walls, consisting of Heras fencing or similar robust barriers with clear signage prohibiting access. No machinery movement, material storage, or level changes will be permitted within this protection zone.

The intermittent hedgerows associated with the stone walls will be retained where possible. Any necessary gaps for access or services will be minimised and clearly marked in the Construction Environmental Management Plan (CEMP). The site compound and materials storage areas will be positioned well away from retained boundary features.

Given the steep topography, particular care will be required to prevent erosion or undermining of stone walls during earthworks. Temporary stabilisation measures may be required where level changes occur near boundaries. An ecological clerk of works will supervise any works required near retained features to ensure compliance with protection measures.

5.1.2 Biosecurity Measures

To prevent the introduction of invasive species during construction, strict biosecurity protocols will be implemented throughout the project. All machinery will be inspected and cleaned before arrival on site, with particular attention to tracks, wheels, and undercarriages where seeds and plant fragments can lodge. A designated wash-

down area with appropriate drainage containment will be established at the site entrance.

Materials, particularly topsoil for gardens and landscaping, will be sourced only from approved suppliers who can provide invasive species declarations. Given the scale of earthworks required due to the steep topography and the confirmed presence of Japanese Knotweed in the M52 grid square, weekly monitoring for invasive species will be conducted throughout construction. An immediate action plan will be implemented if any invasive species are detected.

5.2 Fauna

The fauna present is limited to common bird species and minimal mammal activity. The mitigation strategy focuses on legal compliance and enhancement of the site's limited ecological value.

5.2.1 Birds

The 29th August 2025 survey recorded seven common bird species, with stone walls and hedgerows providing potential nesting habitat. Compliance with the Wildlife Acts 1976 to 2023 requires careful timing of any vegetation clearance. All vegetation removal must be scheduled outside the bird nesting season, which runs from 1st March to 31st August. The survey on 29th August was essentially at the end of the nesting season, confirming no active nests at that time.

If any vegetation clearance is unavoidable during the nesting season, a pre-clearance survey by a qualified ecologist will be required. Any active nests identified must be protected with appropriate buffer zones (typically 5-10m) until young have fledged. Given the limited extent of vegetation to be removed and the retention of boundary features, impacts on nesting birds can be effectively avoided through appropriate timing.

5.2.2 Bats

No trees with bat roost potential are present on site, and the improved grassland provides poor foraging habitat. The stone walls may provide occasional commuting routes for common bat species, though no evidence of significant use was recorded. The nearest Lesser Horseshoe Bat records (5.6-5.8km) are well outside typical foraging range.

Construction Phase Measures

Night-time working will be avoided where possible during the bat active season (April-October). Where security lighting is essential, it will be directed away from retained boundary features and equipped with motion sensors to minimise duration of illumination. The retention of stone walls will maintain any existing commuting routes through the area.

Operational Lighting Design

While the site has low importance for bats, appropriate lighting design represents good practice:

- Warm white LED lighting ($\leq 3000\text{K}$)
- Full cut-off lanterns directing light downward
- Column heights not exceeding 6m
- Motion sensors for security lighting
- Lights positioned to avoid illumination of stone walls and hedgerows

These measures ensure compliance with ILP Guidance Note 08/23 'Bats and Artificial Lighting' whilst recognising the site's low bat value and existing lighting influence from the adjacent estate.

A Lighting Report has been prepared for this development. The lighting design should comply with the ecological lighting recommendations outlined in this section to ensure minimal impacts on wildlife, particularly along retained boundary features.

5.2.3 Other Wildlife

Limited evidence of mammal activity was recorded. During construction, open excavations will be covered overnight or provided with mammal ramps (rough sawn timber at <45 degrees). All pipes greater than 150mm diameter will be capped when stored, and excavations checked each morning before work commences.

The operational development could incorporate hedgehog gaps (13cm x 13cm) in garden boundaries where appropriate. Native species will be prioritised in landscaping to provide improved foraging compared to the existing improved grassland.

5.2.4 Habitat Enhancement

While the development results in the loss of 0.651ha of improved agricultural grassland (of low ecological value), meaningful biodiversity enhancements can provide net gain:

- Installation of 4-6 bird nest boxes on buildings/boundaries targeting recorded species
- Installation of 2-3 bat boxes on buildings to provide new roosting opportunities
- New native hedgerow planting to strengthen boundary features
- Incorporation of native wildflower areas in public open spaces
- At least 20% of dwellings to incorporate integral swift bricks
- SUDS features designed to maximise biodiversity value through appropriate planting

These enhancements will significantly improve the site's ecological value compared to the existing improved grassland, whilst providing resources for local wildlife and supporting the All-Ireland Pollinator Plan objectives.

5.3 Water Quality Protection

Protecting water quality during construction is essential, even though the site has no direct hydrological connection to any watercourse. The nearest groundwater-dependent European site (Rahasane Turlough SAC/SPA) is 6.8km away and in a separate groundwater catchment. The Galway Bay Complex SAC and Inner Galway Bay SPA are assessed in the NIS (AEE, May 2026), which concludes no adverse effect on site integrity. Surface water will be managed through the SUDS system (Figure 3b), ultimately connecting to the municipal network.

5.3.1 Construction Phase Controls

The Construction Environmental Management Plan (CEMP) will detail comprehensive water quality protection measures appropriate for this residential development. The primary risks during construction relate to the earthworks required for 16 houses on steep terrain, foundation excavations, and infrastructure installation across 0.651ha. Given the construction period of 18-24 months and the steep topography, strict erosion controls are essential throughout all phases.

Sediment control represents the primary challenge given the steep slopes and potential for erosion. Installation of silt fencing along all down-gradient boundaries will occur before any earthworks commence, with particular attention to the interface with the existing estate to the north. All existing drains and gullies within the estate will be protected using filter socks or temporary bunding to prevent sediment ingress. The steep topography requires additional measures including:

- Temporary cut-off drains upslope of work areas
- Check dams in any temporary drainage channels
- Stepped silt traps given the gradient
- Immediate stabilisation of cut slopes using geotextiles or hydroseeding

Exposed soils will be stabilised progressively, with particular urgency on steep slopes. Temporary stockpiles will be located on the flattest available areas, covered with geotextiles, and surrounded by silt fencing. No stockpiles will be placed on slopes exceeding 1:3 gradient.

Concrete and cement management requires attention given the volume needed for foundations and infrastructure. Designated concrete washout areas with impermeable bases will be established on level ground away from the estate drainage system. All concrete pours will be planned to minimise waste, with surplus removed from site. Quick-setting cement will be stored in waterproof containers on level ground.

5.3.2 Pollution Prevention

Standard construction site protocols will be implemented for this development. All potentially polluting materials will be stored in a designated compound area on level ground, featuring double-bunded storage for fuels and oils with 110% capacity. Given the steep site, the compound location must ensure any spills cannot reach the

drainage system. Daily inspection checklists will identify potential leaks, with particular attention after heavy rainfall which may mobilise pollutants on steep slopes. Spill kits will be positioned at the compound, site entrance, and any refuelling areas, with all personnel trained in their use. Emergency response procedures will account for the rapid runoff potential on steep slopes. These controls align with Inland Fisheries Ireland (2016) guidelines and CIRIA C532 and C648 guidance.

5.3.3 Surface Water Management During Construction

The steep topography requires enhanced temporary drainage measures during construction:

- Temporary settlement ponds sized for rapid runoff from steep slopes
- Series of stepped silt traps to manage gradient
- Regular monitoring after rainfall events
- Diversion berms to direct clean water around work areas
- Pumped dewatering through appropriate filtration

The contractor will prepare a detailed surface water management plan accounting for the challenging topography, showing phased controls for each construction stage.

5.3.4 Operational Phase Management

Once operational, the development will generate typical suburban runoff from roofs, roads, and driveways. The SUDS system design must account for the steep topography, likely requiring:

- Terraced rain gardens to manage levels
- Reinforced swales to prevent erosion
- Multiple small attenuation features rather than single large basin
- Enhanced inlet protection to trap sediments

These features will provide treatment through filtration whilst managing the hydraulic challenges of the steep site. Connection to Athenry WWTP (currently 'Amber' capacity, confirmation required from Uisce Éireann) ensures appropriate treatment of foul water, eliminating any risk to water quality.

The absence of natural watercourses and reliance on existing municipal drainage reduces ecological sensitivity, though proper management remains essential to prevent impacts on the wider drainage network.

5.4 Impact Summary

The potential impacts of the proposed development have been assessed in detail through Sections 4.0 and 5.0. The assessment demonstrates that with appropriate mitigation measures, the residential development can proceed while managing ecological impacts to acceptable levels. Table 10 below provides a comprehensive overview of the ecological impact assessment.

The implementation of mitigation measures, combined with adherence to the Construction Environmental Management Plan, will address the main ecological concerns. The site's low ecological value means most impacts are minor, with the steep topography presenting the main challenge for construction management.

Table 10 Summary of Ecological Impact Assessment

Ecological Feature	Importance	Impact Description	Significance (Pre-mitigation)	Mitigation Measures	Residual Impact
GA1 Improved Agricultural Grassland	Local (Lower Value)	Permanent loss of 0.55ha species-poor grassland	Minor Negative	Native planting in gardens, wildflower areas in POS, enhanced habitat creation	Negligible to Positive
GS2 Dry Meadows & Grassy Verges	Local (Lower Value)	Loss of small area along northern boundary	Minor Negative	Native wildflower planting, creation of species-rich areas	Negligible
BL1 Stone Walls	Local (Lower Value)	Potential damage during construction	Minor Negative	Protection during works, retention and repair where needed	Negligible
WL1 Hedgerows	Local (Lower Value)	Fragmented habitat partially affected	Minor Negative	Native hedgerow planting, enhancement of retained sections	Negligible
Bats (Low potential)	Local (Lower Value)	Minimal impact - no roosts present, poor foraging habitat	Minor Negative	Sensitive lighting design, bat boxes on buildings	Negligible
Birds (7 species recorded)	Local (Lower Value)	Limited nesting habitat affected, construction disturbance	Minor Negative	Timing restrictions (avoid Mar-Aug), nest boxes, native planting	Negligible
Mammals (Fox, Rabbit)	Local (Lower Value)	Loss of poor-quality foraging habitat	Negligible	Hedgehog gaps where appropriate, native planting	Negligible
Habitat Fragmentation	Local	Minimal impact - site already isolated and landlocked	Minor Negative	Wildlife-friendly boundaries where feasible, enhancement planting	Negligible
Water Quality	Local	Construction runoff on steep slopes, operational drainage	Minor to Moderate Negative	Enhanced CEMP for slopes, SUDS implementation, connection to WWTP	Negligible
Invasive Species Risk	Local	Potential introduction	Potentially Moderate Negative	Biosecurity protocols, weekly	Negligible

Ecological Feature	Importance	Impact Description	Significance (Pre-mitigation)	Mitigation Measures	Residual Impact
		during construction		monitoring, rapid response plan	
Steep Topography Impacts	Local	Erosion risk, challenging drainage management	Moderate Negative	Stepped silt traps, terraced SUDS, immediate stabilisation	Minor Negative

The assessment confirms that the proposed development will result in the transformation of low-value agricultural land into suburban housing. The most significant challenges relate to managing the steep topography during construction rather than ecological impacts. The site's improved grassland has minimal ecological value, and no features of significant importance will be lost.

With full implementation of the specified mitigation measures, including appropriate erosion control on steep slopes and habitat enhancements, residual impacts are reduced to negligible levels. Indeed, the biodiversity enhancements proposed (native planting, nest/bat boxes, wildflower areas) may result in a net improvement in ecological value compared to the existing species-poor improved grassland.

The development represents a typical suburban expansion on agricultural land of low ecological value. The mitigation strategy ensures ecological functionality is maintained through boundary retention, sensitive design, and targeted enhancement measures that will improve upon the site's current limited biodiversity value.

6.0 CUMULATIVE IMPACTS

The assessment of cumulative effects considers the interaction of the proposed development with other projects and environmental pressures in the Athenry area. The Galway County Development Plan 2022-2028 identifies Athenry as a Self-Sustaining Growth Town with capacity for continued expansion, whilst recognising the importance of protecting ecological resources and maintaining green infrastructure networks at the urban-rural interface.

Athenry has experienced steady residential growth, with multiple housing developments completed or planned in recent years. This 16-unit development adds to this pattern, contributing to the gradual conversion of agricultural land to residential use. The site's location within the existing Páirc na hAbhainn estate means it forms part of the incremental expansion of this established residential area rather than creating new urban sprawl. When considered alongside other developments in Athenry, the cumulative habitat loss primarily affects low-value agricultural land rather than significant ecological features.

The development will connect to Athenry WWTP. Irish Water has confirmed feasibility of the water connection without infrastructure upgrade by Uisce Éireann (Pre-Connection Enquiry reference CDS25006844). Multiple developments connecting to this infrastructure create cumulative pressure on treatment capacity, however

the confirmation of feasibility indicates adequate capacity exists for this development. The cumulative loading from multiple developments requires strategic infrastructure planning to prevent future capacity issues.

While the site has no direct hydrological connection to watercourses, surface water will ultimately discharge through the municipal system following on-site attenuation and treatment. The cumulative increase in hard surfaces from multiple developments reduces natural infiltration and increases runoff rates in the wider drainage network. The steep topography of this site has been addressed through comprehensive SUDS features including a Graf Eco Bloc attenuation tank with hydrobrake flow control device, ensuring controlled discharge rates comparable to or better than greenfield conditions. Each development may meet individual standards, and the incorporation of effective SUDS features helps to manage cumulative pressure on drainage infrastructure.

The NIS (AEE, May 2026) assesses cumulative and in-combination effects with other plans and projects and concludes that no adverse in-combination effects on the Galway Bay Complex SAC (000268) or Inner Galway Bay SPA (004031) will occur.

The landlocked site, surrounded by existing development, has minimal current value for ecological connectivity. Its conversion to residential use will have negligible cumulative impact on wildlife movement patterns, as the site is already isolated from the wider countryside by the existing estate. The improved agricultural grassland provides minimal ecological value, and its loss contributes marginally to cumulative habitat reduction in the area.

The development will contribute to cumulative positive effects through biodiversity enhancement measures. Implementation of bird and bat boxes, native planting, and wildlife-friendly features across multiple developments creates a network of provisions that may exceed the ecological value of the agricultural land being replaced. The proposed enhancements (wildflower areas, native hedgerows, nest boxes) will improve biodiversity value compared to the existing species-poor grassland.

The incorporation of SUDS features, if replicated across developments, contributes to improved surface water management at the catchment level, potentially offsetting some cumulative drainage impacts through attenuation and treatment.

When assessed in combination with other plans and projects, the proposed development contributes minor cumulative impacts on local ecology. The conversion of 0.651ha of improved agricultural grassland represents a negligible contribution to habitat loss at the landscape scale. The site's isolation within an existing estate and low ecological value limit its cumulative significance.

The primary cumulative concerns relate to:

- Infrastructure capacity at Athenry WWTP (addressed through Irish Water confirmation CDS25006844)
- Surface water management given the steep topography (addressed through comprehensive SUDS with attenuation and flow control)
- Incremental loss of greenfield land

However, these impacts are offset by:

- The low ecological value of land being developed
- Proposed biodiversity enhancements exceeding existing value
- The site's location within an established residential area
- Implementation of SUDS and appropriate drainage design

The development aligns with planned growth for Athenry whilst contributing minimal adverse cumulative ecological impacts. The enhancement measures proposed may result in a net improvement in local biodiversity value compared to the existing agricultural baseline.

7.0 CONCLUSION

This Ecological Impact Assessment, based on the field survey of 29th August 2025 and comprehensive desktop review, has evaluated the ecological features and potential impacts of the proposed residential development of 16 houses (comprising 8 no. 3-bedroom semi-detached houses and 8 no. 2-bedroom terraced houses) at Páirc na hAbhainn, Athenry, Co. Galway.

The site comprises 0.651 hectares of predominantly improved agricultural grassland (GA1) with limited areas of dry meadows and grassy verges (GS2) along the northern boundary. Natural stone walls form the eastern and southern boundaries with intermittent hedgerows. The ecological survey confirmed the site supports minimal biodiversity typical of intensively managed agricultural land. The site lacks significant ecological features, with no trees present and limited wildlife value in the species-poor grassland.

Desktop review confirms Lesser Horseshoe Bat has been recorded 5.6-5.8km from the site, outside its typical foraging range. Seven common bird species were recorded using the boundary features, with limited evidence of mammal activity along field edges. No invasive species or protected flora were recorded, though Japanese Knotweed is known from the wider M52 grid square.

The development will result in complete transformation from agricultural land to residential use, with permanent loss of improved grassland habitat. Key ecological considerations include the limited loss of low-value habitat, the steep topography requiring careful drainage management, and minor contribution to cumulative development in the Athenry area. The construction period of 18-24 months presents manageable disturbance given the site's low ecological value.

Appropriate mitigation measures have been specified to address identified impacts. Protection of stone walls and associated hedgerows maintains existing boundary features. Pre-construction checks for nesting birds ensure legal compliance. Sensitive lighting design, whilst the site has low bat value, represents good practice. Construction-phase controls including enhanced erosion management for steep slopes, biosecurity protocols, and water quality protection measures address temporary impacts.

Biodiversity enhancements including bird and bat boxes, native hedgerow planting, and wildflower areas will improve ecological value compared to the existing

improved grassland. These measures will create new ecological opportunities exceeding the current site value, potentially resulting in a net biodiversity gain.

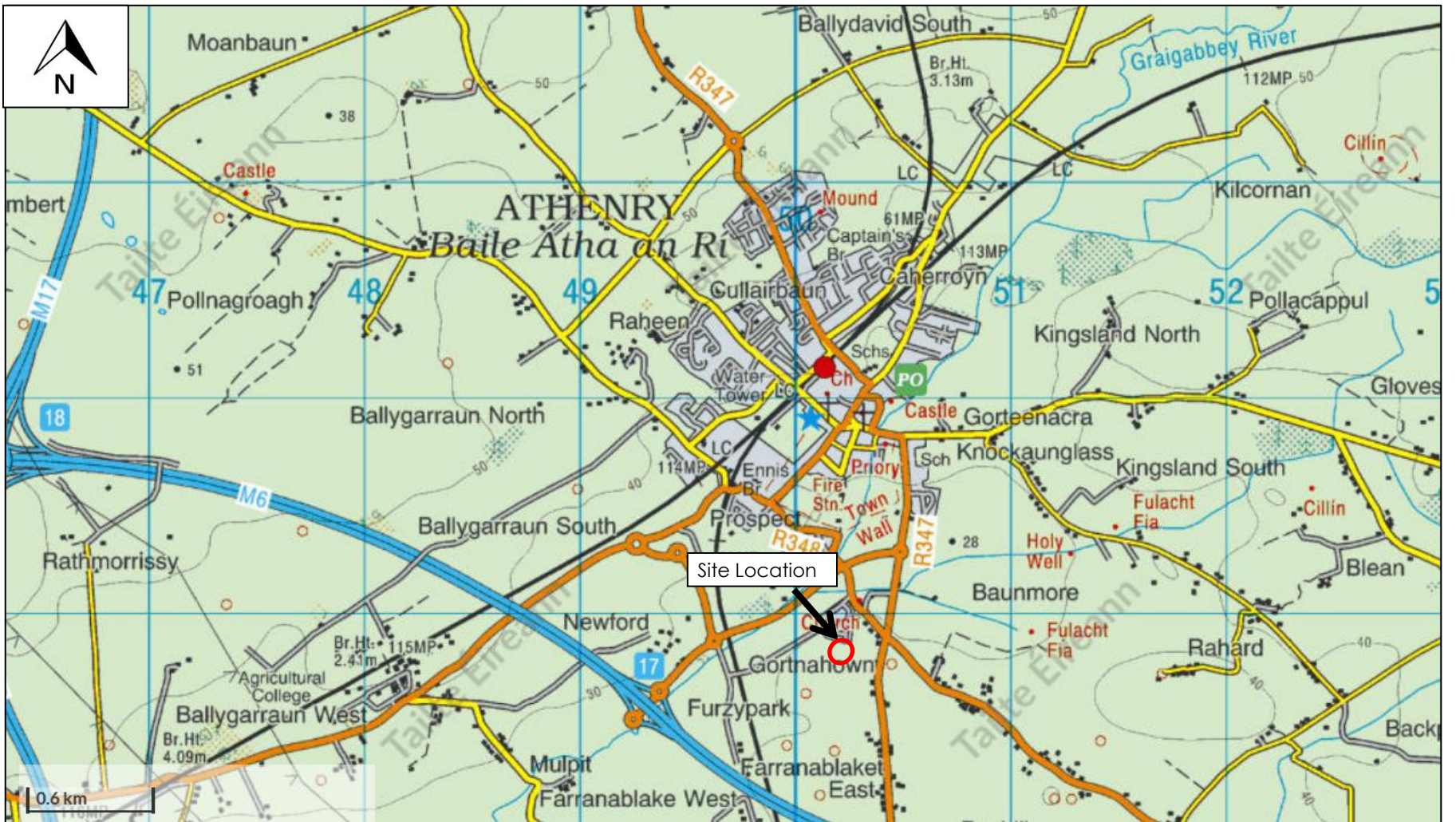
The implementation of specified mitigation measures will effectively manage the limited ecological impacts identified. The retention of boundary features, comprehensive construction controls accounting for steep topography, and biodiversity enhancements demonstrate appropriate ecological consideration in development design.

The Screening for Appropriate Assessment (AA) Report and Natura Impact Statement Report (AEE, May 2026) confirm that the proposed development will not adversely affect the integrity of the Galway Bay Complex SAC (000268) or Inner Galway Bay SPA (004031), alone or in combination with other plans or projects. The development poses no risk to Natura 2000 sites.

This assessment demonstrates that the proposed development, with implementation of specified mitigation and enhancement measures, can proceed without adverse ecological impacts. The site's low ecological value as improved agricultural grassland means the development results in minimal habitat loss. The proposed enhancements will likely improve biodiversity value compared to the baseline condition.

The proposed development is consistent with the designation of Athenry as a Self-Sustaining Growth Town in the Galway County Development Plan 2022–2028 and will deliver 16 no. residential units on a brownfield-edge infill site of low ecological value. Subject to implementation of the mitigation measures set out in this report and the Construction Environmental Management Plan, residual ecological impacts are assessed as negligible.

FIGURES



Map sourced from National Biodiversity Data Centre Website – www.nbdc.ie



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Client Galway County Council		Drawing Site Location Map			
Job EcIA Report					
Drawing Number Figure 1	Status Final	Sht. Size A4	Scale As Shown	Date May 26	Drawn AW



- Site Location
- Rivers



Client Galway County Council			Drawing Aerial Photo & Drainage Network			
Job EcIA Report						
Drawing Number	Status	Sht. Size	Scale	Date	Drawn	
Figure 2	Final	A4	As Shown	May 26	AW	



Site Boundary

Client Galway County Council		Drawing Proposed Site Layout	
Job EcIA Report			
Drawing Number Figure 3a	Status Final	Sht. Size A4	Scale As Shown
		Date May 26	Drawn AW

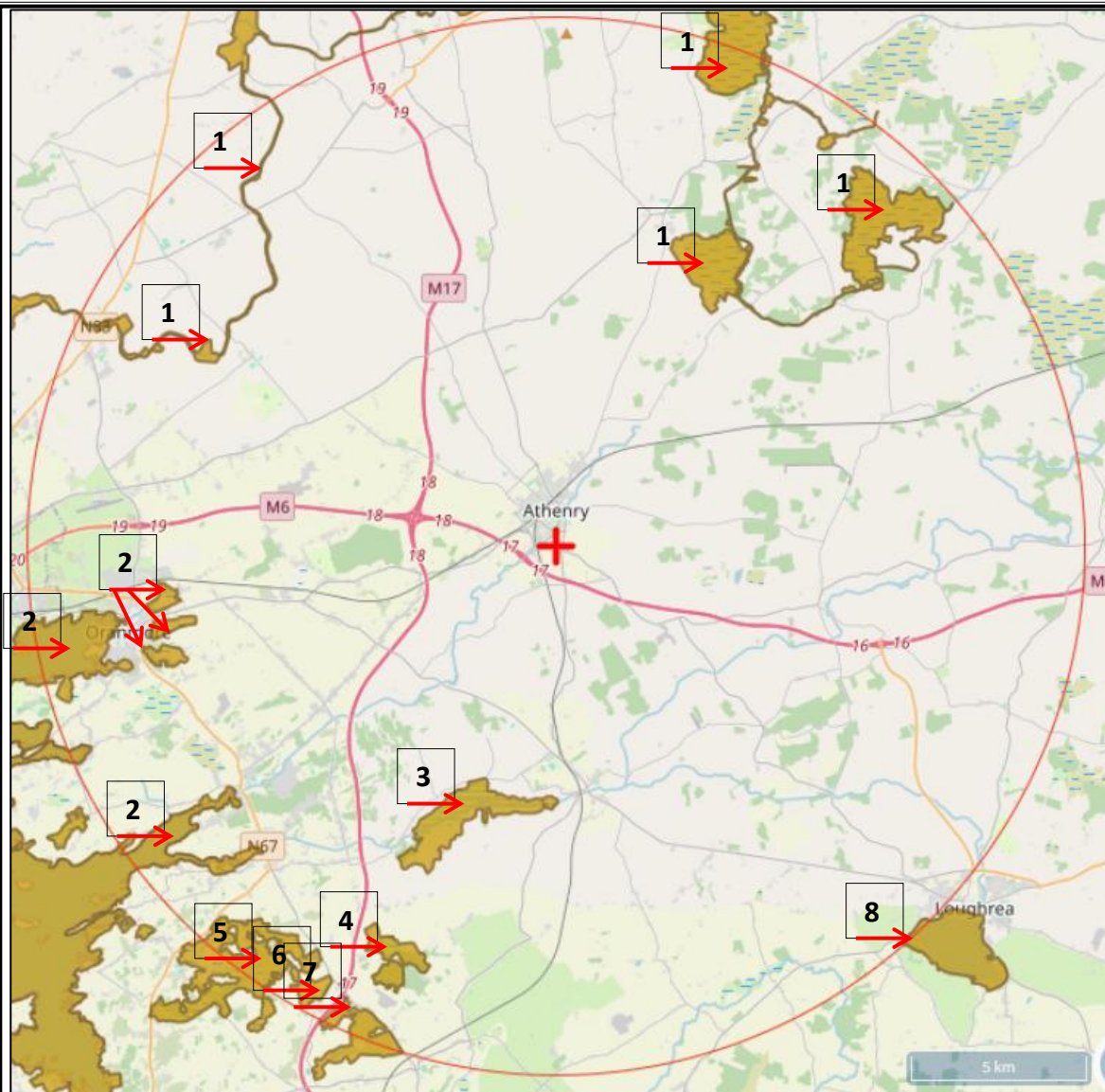


SITE LAYOUT- SERVICES: WASTEWATER & SURFACE WATER
SCALE = 1:250

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Site Boundary

Client Galway County Council		Drawing Proposed Waste Water and Surface Water Drainage Layout			
Job AA Screening Report		Drawing Number Figure 3b	Status Final	Sht. Size A4	Scale As Shown
		Date May 26	Drawn AW		



No.	Site Code	Name	Distance
1	000297	Lough Corrib SAC	7.9km NE, N, NW
2	000268	Galway Bay Complex SAC	10.3km SW
3	000322	Rahasane Turlough SAC	6.8km S, SW
4	000242	Castletaylor Complex SAC	11.8km SW
5	000606	Lough Fingall Complex SAC	13.2km SW
6	001285	Kiltiernan Turlough SAC	13.7km SW
7	002244	Ardrahan Grassland SAC	14.2km SW
8	000304	Lough Rea SAC	14.7km SE



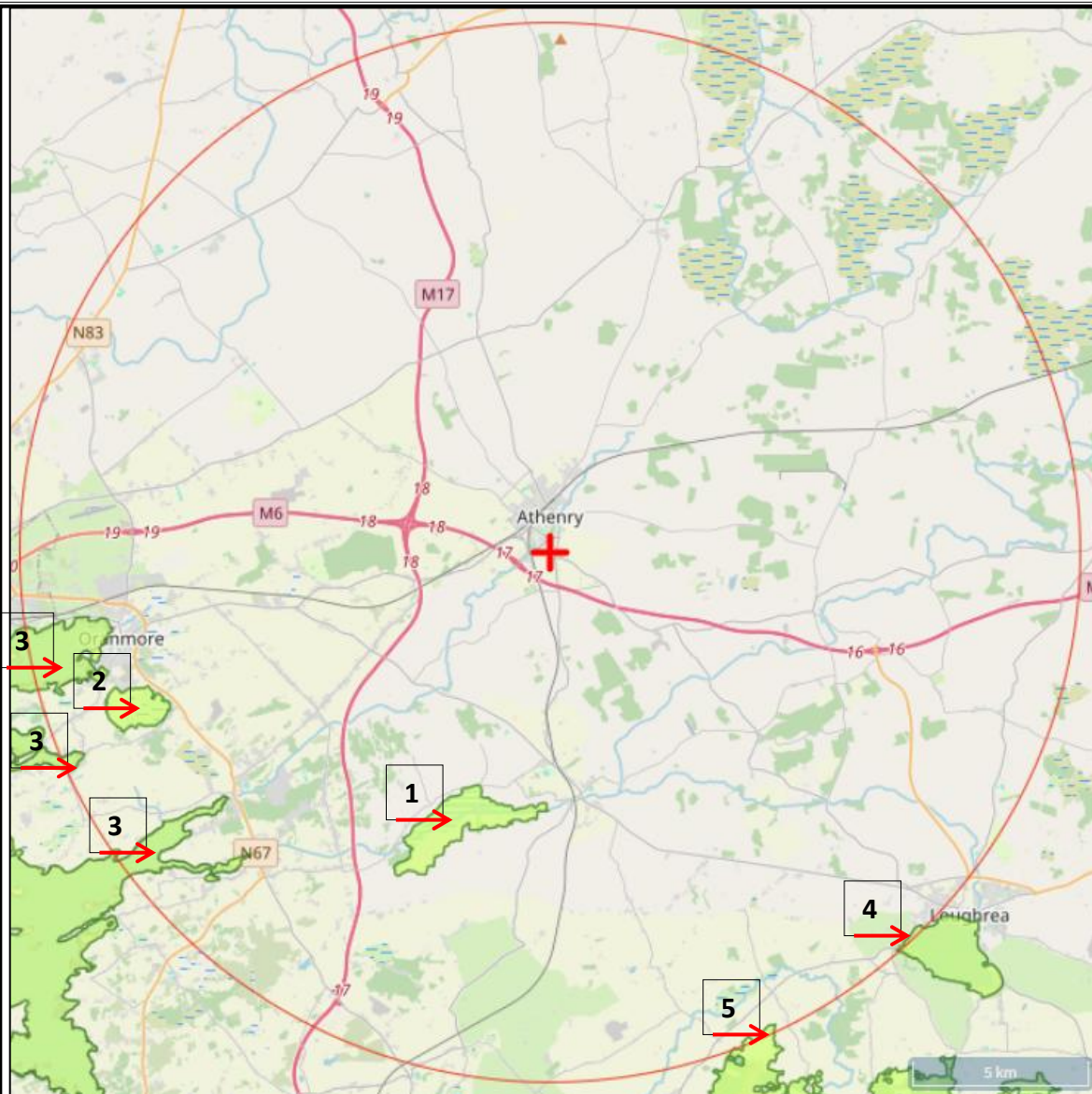
Special Area of Conservation



Site Location



Client Galway County Council		Drawing				
Job EcIA Report		Special Areas of Conservation (SACs) within 15km of Site				
	Drawing Number Figure 4	Status Final	Sht. Size A4	Scale As Shown	Date May 26	Drawn AW



No.	Site Code	Name	Distance (km)
1	004089	Rahasane Turlough SPA	6.8km S, SW
2	004142	Cregganna Marsh SPA	11.5km SW
3	004042	Lough Corrib SPA	11.4km SW
4	004134	Lough Rea SPA	14.7km SE
5	004168	Slieve Mountains SPA	14.7km SE, S

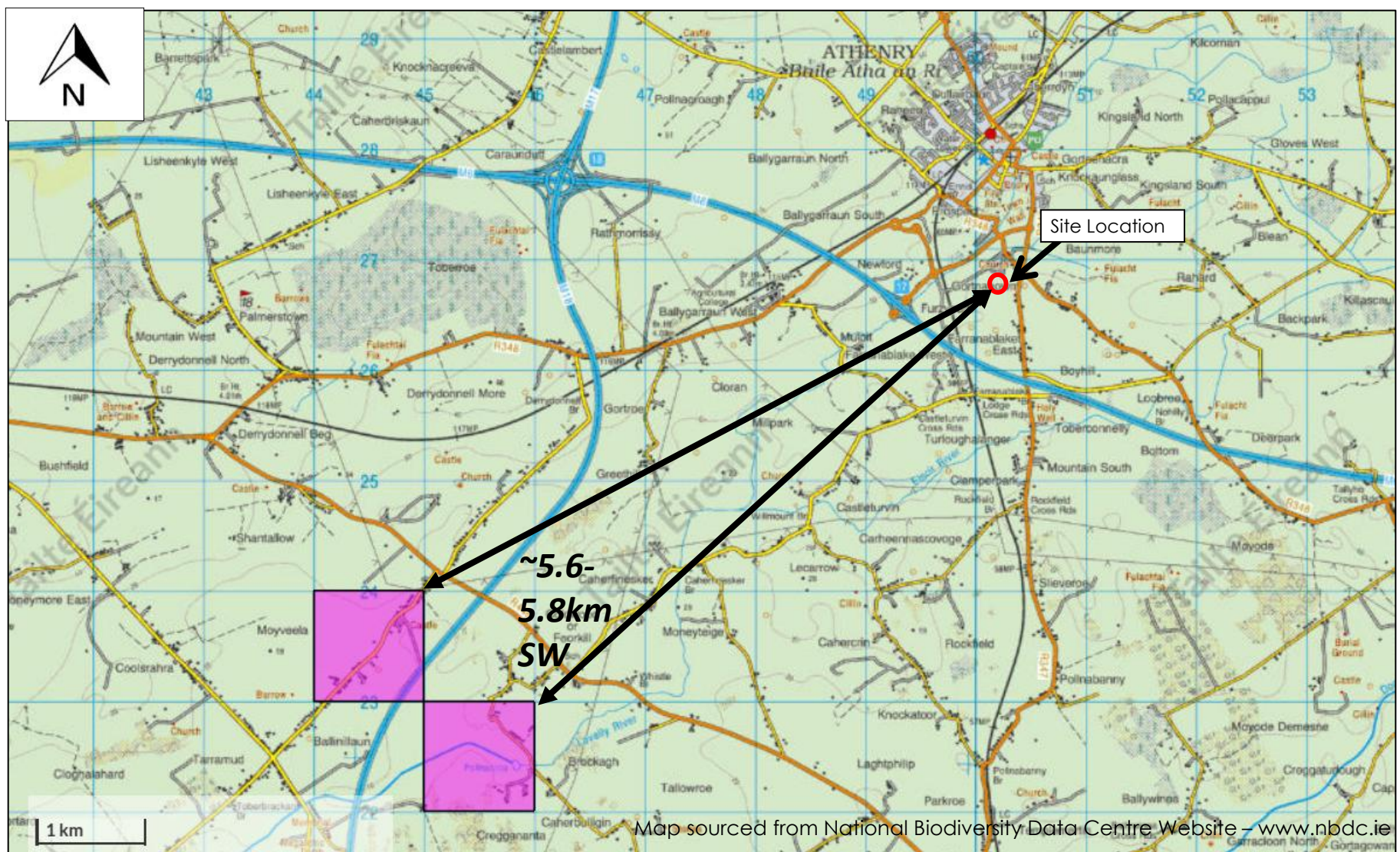


Site Location



N

Client Galway County Council		Drawing				
Job EcIA Report		Special Protection Areas (SPAs) within 15km of Site				
	Drawing Number Figure 5	Status Final	Sht. Size A4	Scale As Shown	Date May 26	Drawn AW



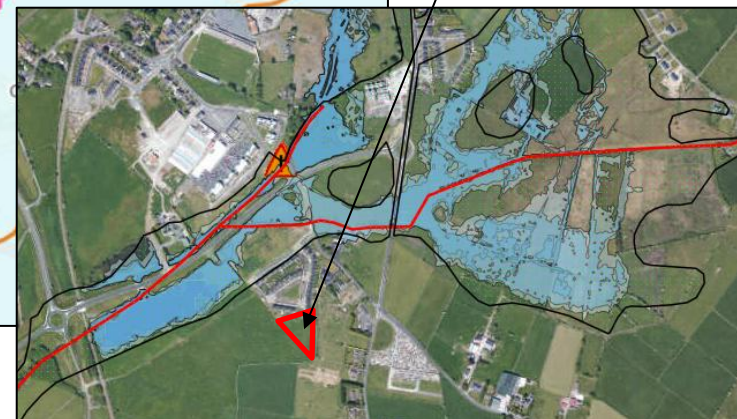
Lesser horseshoe bat records approx. 5.6-5.8km SW of site. Outside the ~2.5km foraging and commuting radius. Unlikely to use site.

Client Galway County Council		Drawing Closest Lesser Horseshoe Bat Records			
Job EcIA Report					
Drawing Number Figure 6	Status Final	Sht. Size A4	Scale As Shown	Date May 26	Drawn AW



Site in area of High Vulnerability

Site not in any flood zone



Approx. Site location – Hydrometric Area 29 – Galway Bay South East

Site within the WFD Sub-Catchment 'Clarinbridge_SC_010' and River Sub-Basin 'CLARINBRIDGE_030'

Water Framework Directive River Waterbody Status 2019-2024

'CLARINBRIDGE_030' is 'Moderate'

River Waterbodies Risk 2019-2024 of 'CLARINBRIDGE_030' is 'At Risk'

WFD Groundwater Body Status 2019-2024 of 'Clarinbridge' is 'Good' and 'Not at Risk'

Client Galway County Council		Drawing 2019-2024 WFD Catchment Drainage Information			
Job EcIA Report					
Drawing Number Figure 7	Status Final	Sht. Size A4	Scale As Shown	Date May 26	Drawn AW



- Approx. Site Boundary
- Grassy Meadows (GS2)
- Intermittent Hedging with Old Stone Walls (WL1/BL1)
- Improved Agricultural Grassland (GA1)
- Fencing
- Block Walls - Buildings and Artificial Surfaces (BL3)



Client Galway County Council		Drawing Habitat Map			
Job EcIA Report					
Drawing Number Figure 8	Status Final	Sht. Size A4	Scale As Shown	Date May 26	Drawn AW

APPENDICES

APPENDIX A



Registered Practices Certificate
April 2026—March 2027

Ash Ecology and Environmental Ltd

has been admitted as a Registered Practice
of the

Chartered Institute of Ecology
and Environmental Management

on the 1st day of April 2026

Penny Lewns CEcol CEnv MCIEEM
President

1st April 2026

This certificate remains the property of CIEEM. Membership is subject to annual renewal and may be authenticated by contacting CIEEM at the registered address. Company no. RC000861.

Registered Charity Number (England and Wales): 1189915.

Registered address: Grosvenor Court, Ampfield Hill, Ampfield, Romsey, SO51 9BD United Kingdom.

APPENDIX B



Plate 1: Habitat made up mainly of Improved Agricultural Grassland (GA1) which dominates the site area. View across the Improved Agricultural Grassland (GA1) showing typical ryegrass-dominated sward.



Plate 2: Northern boundary showing transition from Improved Agricultural Grassland (GA1) to Grassy Meadows (GS2) with fence divider. Block walls (BL3) to the rear of existing housing separate the site along the north boundary.



Plate 3: Old stone walls (BL1) forming the eastern site boundary showing typical dry-stone construction.



Plate 4: Intermittent hawthorn and bramble hedging with stone wall features (WL1/BL1) to the south providing limited wildlife corridor connectivity.



Plate 5: Overview of site showing dominance of Improved Agricultural Grassland (GA1) showing evidence of agricultural management and low botanical diversity.

APPENDIX C

Species group	Species name	Date of last record	Designation
Amphibian	Common Frog (<i>Rana temporaria</i>)	22/01/2023	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts
Amphibian	Smooth Newt (<i>Lissotriton vulgaris</i>)	03/09/2019	Protected Species: Wildlife Acts
Bird	Barn Owl (<i>Tyto alba</i>)	24/06/2020	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	09/09/2012	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	Common Gull (<i>Larus canus</i>)	29/02/1984	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Coot (<i>Fulica atra</i>)	29/02/1984	Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species
Bird	Cormorant (<i>Phalacrocorax carbo</i>)	19/03/2020	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Corncrake (<i>Crex crex</i>)	31/07/1972	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	Curlew (<i>Numenius arquata</i>)	14/05/2021	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	Goldcrest (<i>Regulus regulus</i>)	26/04/2021	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Golden Plover (<i>Pluvialis apricaria</i>)	07/01/2024	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	Great Spotted Woodpecker (<i>Dendrocopos major</i>)	22/04/1969	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Greenfinch (<i>Chloris chloris</i>)	26/01/2023	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Grey Partridge (<i>Perdix perdix</i>)	31/07/1972	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	Grey Wagtail (<i>Motacilla cinerea</i>)	05/06/2022	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List

Species group	Species name	Date of last record	Designation
Bird	Hen Harrier (<i>Circus cyaneus</i>)	31/12/2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Herring Gull (<i>Larus argentatus</i>)	17/06/2024	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	House Martin (<i>Delichon urbicum</i>)	26/04/2021	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	House Sparrow (<i>Passer domesticus</i>)	17/06/2024	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Kestrel (<i>Falco tinnunculus</i>)	10/07/2020	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Kingfisher (<i>Alcedo atthis</i>)	03/04/2021	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Lapwing (<i>Vanellus vanellus</i>)	25/01/2018	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	Linnet (<i>Linaria cannabina</i>)	25/01/2018	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Little Egret (<i>Egretta garzetta</i>)	27/08/2019	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species
Bird	Little Grebe (<i>Tachybaptus ruficollis</i>)	31/12/2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Mallard (<i>Anas platyrhynchos</i>)	26/11/2017	Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Bird	Meadow Pipit (<i>Anthus pratensis</i>)	25/02/2018	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	Merlin (<i>Falco columbarius</i>)	31/12/2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Mistle Thrush (<i>Turdus viscivorus</i>)	26/04/2021	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Mute Swan (<i>Cygnus olor</i>)	31/12/2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Oystercatcher (<i>Haematopus ostralegus</i>)	29/02/1984	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Peregrine (<i>Falco peregrinus</i>)	27/01/2021	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species
Bird	Pheasant (<i>Phasianus colchicus</i>)	20/03/2020	Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species

Species group	Species name	Date of last record	Designation
Bird	Robin (<i>Erithacus rubecula</i>)	30/01/2023	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Rock Dove (<i>Columba livia</i>)	26/01/2023	Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species
Bird	Sand Martin (<i>Riparia riparia</i>)	31/12/2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Skylark (<i>Alauda arvensis</i>)	18/06/2017	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Snipe (<i>Gallinago gallinago</i>)	17/01/2024	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Sparrowhawk (<i>Accipiter nisus</i>)	19/03/2020	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Spotted Flycatcher (<i>Muscicapa striata</i>)	21/06/2022	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Starling (<i>Sturnus vulgaris</i>)	17/06/2024	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Stock Dove (<i>Columba oenas</i>)	31/07/1972	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Stonechat (<i>Saxicola rubicola</i>)	31/12/2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Swallow (<i>Hirundo rustica</i>)	17/06/2024	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Swift (<i>Apus apus</i>)	22/07/2023	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Teal (<i>Anas crecca</i>)	09/11/2018	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Wheatear (<i>Oenanthe oenanthe</i>)	26/09/2017	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Whooper Swan (<i>Cygnus cygnus</i>)	31/12/2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Bird	Wigeon (<i>Mareca penelope</i>)	31/12/2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	Woodcock (<i>Scolopax rusticola</i>)	05/02/2024	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex

Species group	Species name	Date of last record	Designation
			III, Section III Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Bird	Woodpigeon (<i>Columba palumbus</i>)	12/04/2023	Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Bird	Yellowhammer (<i>Emberiza citrinella</i>)	29/02/1984	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Crustacean	White-clawed Crayfish (<i>Austropotamobius pallipes</i>)	31/12/2021	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex II Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts
Insect - butterfly	Marsh Fritillary (<i>Euphydryas aurinia</i>)	21/09/2021	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex II Threatened Species: Vulnerable
Moss	Austin's Bog-moss (<i>Sphagnum austinii</i>)	22/06/2011	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V
Moss	Blunt-leaved Bog-moss (<i>Sphagnum palustre</i>)	22/06/2011	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V
Moss	Cow-horn Bog-moss (<i>Sphagnum auriculatum</i>)	22/06/2011	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V
Moss	Feathery Bog-moss (<i>Sphagnum cuspidatum</i>)	22/06/2011	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V
Moss	Large White-moss (<i>Leucobryum glaucum</i> sensu Smith (2004))	22/06/2011	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V
Moss	Papillose Bog-moss (<i>Sphagnum papillosum</i>)	22/06/2011	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V
Moss	Red Bog-moss (<i>Sphagnum rubellum</i>)	22/06/2011	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V
Moss	Soft Bog-moss (<i>Sphagnum tenellum</i>)	22/06/2011	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V
Reptile	Common Lizard (<i>Zootoca vivipara</i>)	11/08/2020	Protected Species: Wildlife Acts
Terrestrial mammal	Badger (<i>Meles meles</i>)	30/10/2022	Protected Species: Wildlife Acts
Terrestrial mammal	Brown Long-eared Bat (<i>Plecotus auritus</i>)	05/07/2022	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Terrestrial mammal	Daubenton's Bat (<i>Myotis daubentonii</i>)	09/08/2011	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Terrestrial mammal	Fallow Deer (<i>Dama dama</i>)	31/12/2008	Invasive Species: Regulation S.I. 477/2011 (Ireland) Invasive Species: High Risk Invasive Species (2013 Report) Invasive Species: Regulation S.I. 374/2024 (Ireland) Protected Species: Wildlife Acts
Terrestrial mammal	Hedgehog (<i>Erinaceus europaeus</i>)	10/12/2023	Protected Species: Wildlife Acts

Species group	Species name	Date of last record	Designation
Terrestrial mammal	Leisler's Bat (<i>Nyctalus leisleri</i>)	08/08/2022	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Terrestrial mammal	Natterer's Bat (<i>Myotis nattereri</i>)	26/05/2008	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Terrestrial mammal	Otter (<i>Lutra lutra</i>)	24/06/2015	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex II Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Terrestrial mammal	Pine Marten (<i>Martes martes</i>)	15/02/2021	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts
Terrestrial mammal	Pipistrelle (<i>Pipistrellus pipistrellus sensu lato</i>)	26/05/2008	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Terrestrial mammal	Pygmy Shrew (<i>Sorex minutus</i>)	14/08/2014	Protected Species: Wildlife Acts
Terrestrial mammal	Red Squirrel (<i>Sciurus vulgaris</i>)	20/07/2021	Protected Species: Wildlife Acts
Terrestrial mammal	Soprano Pipistrelle (<i>Pipistrellus pygmaeus</i>)	08/08/2022	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Terrestrial mammal	Whiskered Bat (<i>Myotis mystacinus</i>)	13/08/2019	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts