

Rockbrae Residential Development Ecological Impact Assessment



Prepared By:


**Moore Group -
Environmental Services**

**On behalf of:
Wicklow County Council**

**Job Number 24030
25 June 2025**



Project Proponent	Wicklow County Council
Project	Rockbrae Residential Development
Title	Rockbrae Residential Development Ecological Impact Assessment

Project Number	24213	Document Reference	24213 Rockbrae RD EclA Rev1	
Revision	Description		Author	Date
Rev1	Revised Site Layout		G. O'Donohoe 	25 June 2025
Moore Archaeological and Environmental Services Limited				

Contents

1. INTRODUCTION	3
2. ASSESSMENT METHODOLOGY	5
2.1. POLICY & LEGISLATION	5
2.1.1. EU HABITATS DIRECTIVE	5
2.1.2. EU BIRDS DIRECTIVE	5
2.1.3. WILDLIFE ACTS 1976 - 2024	6
2.2. SURVEY METHODOLOGY	6
2.2.1. DESK STUDY	6
2.2.2. FIELD STUDY	7
2.2.3. SITE EVALUATION AND IMPACT ASSESSMENT	8
3. PROJECT DESCRIPTION	9
4. EXISTING ENVIRONMENT	13
4.1. DESIGNATED CONSERVATION AREAS	13
4.2. HABITAT DESCRIPTIONS	18
4.1. FAUNA	18
4.1.1. MAMMALS	18
5. ASSESSMENT OF IMPACTS	19
5.1. SITE EVALUATION	19
5.2. IMPACT ASSESSMENT	20
5.2.1. DIRECT IMPACTS	20
5.2.2. INDIRECT IMPACTS	20
5.2.3. CUMULATIVE IMPACTS	21
6. CONCLUSIONS	24
7. REFERENCES	25

Appendix 1 TII Evaluation of Habitats

Appendix 2 Site Photos

1. INTRODUCTION

Moore Group was commissioned by Wicklow County Council to undertake a Habitat Survey and EclA of the site of a proposed residential development at Rockbrae, Bray, Co. Wicklow, referred to as the 'Proposed Development'. The proposed development will consist of the demolition of Rockbrae House and gate lodge, and the provision of 53 no. residential apartments and houses arranged in 3 blocks.

This report provides information on ecological features if present within the potential Zone of Influence of the Proposed Development, of particular significance, primarily designated habitats and species, including habitats/species listed in Annex I, II and IV of the EU Habitats Directive, rare flora listed in the Flora Protection Order along with other semi-natural habitats of conservational value.

This report was compiled by Ger O'Donohoe M.Sc. of Moore Group providing information on habitats in the study area. Ger is the principal ecologist with Moore Group and has over 30 years' experience in ecological impact assessment. He graduated from ATU Galway in 1993 with a B.Sc. in Applied Freshwater & Marine Biology and subsequently worked in environmental consultancy while completing an M.Sc. in Environmental Sciences, graduating from Trinity College, Dublin in 1999. (He also has over 15 years' experience of carrying out bat surveys and has completed the Bat Conservation Ireland, Bat Detector Workshop which is the standard training for the carrying out of bat surveys in Ireland and follows the Bat Conservation Ireland 'Bat Survey Guidelines' - Aughney *et al.*, 2008'. In addition, Ger is an active member of the Galway Bat Group and Bat Conservation Ireland, which monitors bat populations in Ireland, and facilitates the education of bat communities to the public.

The following important ecological receptors were considered in planning and designing the project, and in assessing its likely ecological effects:

- Sites with nature conservation designations, including proposed NHAs, the reasons for their designation, and their conservation objectives, where available;
- Annex IV (Habitats Directive) species of fauna and flora, and their breeding sites and resting places, which are strictly protected under the European Communities (Birds and Natural Habitats) Regulations, 2011;
- Other species of fauna and flora which are protected under the Wildlife Acts, 1976-2012;
- '*Protected species and natural habitats*', as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including:
 - Birds Directive – Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur);
 - Habitats Directive – Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur);
- Other habitats of ecological value in a national to local context, including rocky habitats in the general area;

- Stepping stones and ecological corridors encapsulated by Article 10 of the Habitats Directive.

The report has been compiled in compliance with the European Communities Legal requirements and follows EPA Guidelines on Information to be contained in an EIAR (EPA, 2022) and on Transport Infrastructure Ireland TII policy and guidance outlined in Section 2.

The European Habitats Directive 92/43/EEC (Article 6) indicates the need for plans and projects to be subject to Habitats Directive Assessment (also known as Appropriate Assessment) if the plan or project not directly connected with or necessary to the management of a Natura 2000 site (which includes SACs and SPAs) but which has the potential to have implications on a site's conservation objectives. These implications can be significant effects either individually or in combination with other plans or projects.

As such, a report for the purposes of Appropriate Assessment Screening was undertaken by Moore Group for the proposed development in support of the application. This stand-alone report is presented separately as part of the design package for the Project.

The site location is presented in Figure 1 below.

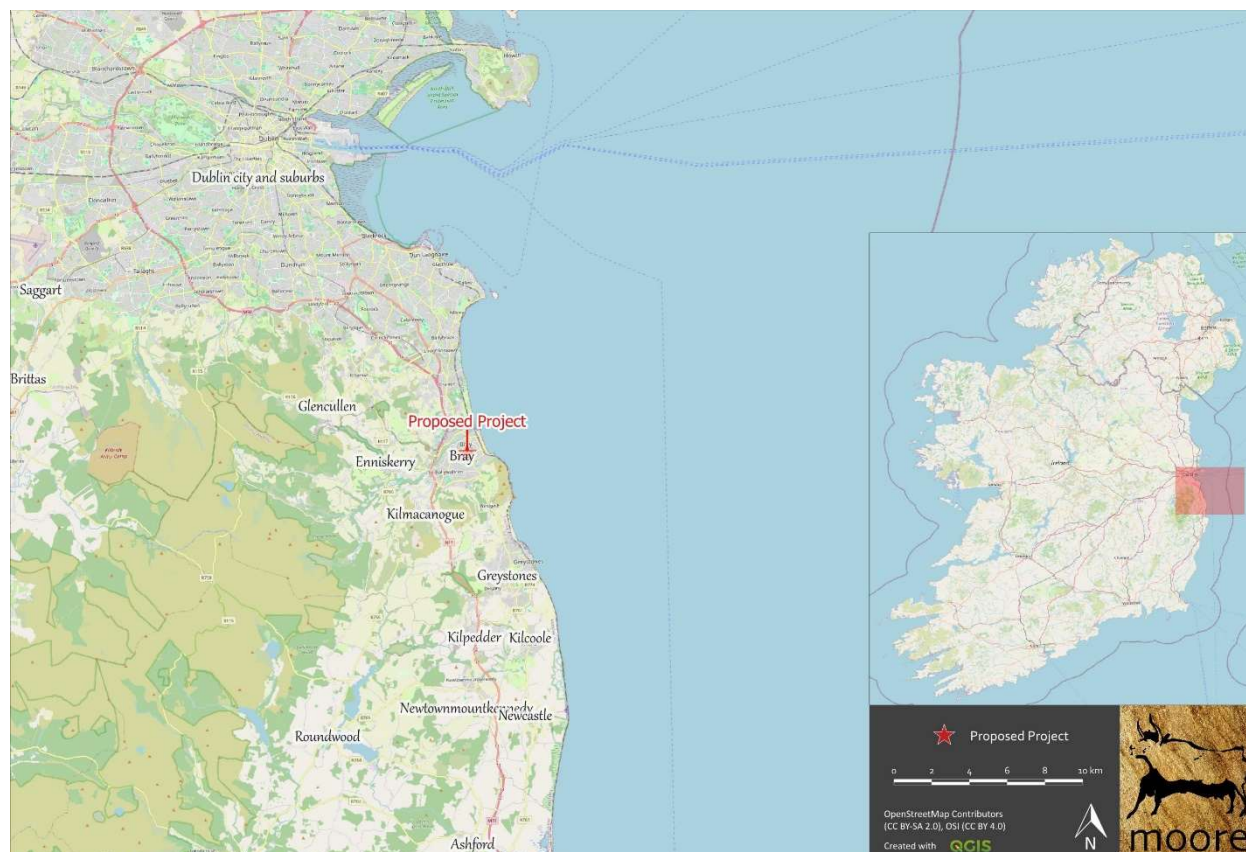


Figure 1. Showing the site location at Rockbrae, Bray, Co. Wicklow.

2. ASSESSMENT METHODOLOGY

2.1. POLICY & LEGISLATION

2.1.1. EU Habitats Directive

The “*Habitats Directive*” (Council Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Flora and Fauna) is the main legislative instrument for the protection and conservation of biodiversity within the European Union. The Habitats Directive provides for the designation, conservation and protection of sites comprising Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), collectively forming the Natura 2000 network of ‘European sites’. Article 3 of the Habitats Directive obliges Member States to designate as SACs sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II of the Habitats Directive. Article 10 of the Habitats Directive requires that Member States endeavour to improve the ecological coherence of the Natura 2000 network to manage and conserve features of the landscape which are of major importance for wild fauna and flora, for example ecological corridors or stepping-stones which are important for the migration, dispersal and genetic exchange of species.

Article 6(2) obliges Member States to take the necessary measures to avoid the deterioration of an SAC, or disturbance of a species for which the site is designated. Article 6(3) sets out the requirement for an “Appropriate Assessment”, to ensure that a proposed plan or project will not have an adverse effect on the integrity of a SAC. Article 7 applies the requirements of Article 6(2) and 6(3) of the Habitats Directive to SPAs designated under the Birds Directive.

In addition and separate to the Appropriate Assessment requirements, Article 12 of the Habitats Directive obliges Member States to establish a regime of strict protection for certain species listed in Annex IV of the Directive, wherever they occur within their natural range. The protection for species under Article 12 of the Habitats Directive is not confined to the boundary of SACs. Species listed in Annex IV include the otter and certain species of bat.

2.1.2. EU Birds Directive

The “*Birds Directive*” (European Council (2009) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds) confers legal protection to all naturally occurring wild birds within the EU territory. Member States are obliged to adopt the necessary measures to maintain the population of bird species, and that includes, in accordance with Article 3, an obligation to create, maintain and manage habitats for birds, and specifically for the species of Bird listed in Annex I of the Directive, Article 4 requires Member States to create SPAs which, by virtue of Article 7 of the Habitats Directive, form part of the Natura 2000 network of European sites and are subject to the Appropriate Assessment requirements under Article 6(3) of the Habitats Directive.

Additionally, Article 5 of the Birds Directive requires that Member States establish a general system of protection for all naturally occurring wild birds within the EU territory, similar to the system of strict protection required for Annex IV species under the Habitats Directive.

2.1.3. Wildlife Acts 1976 - 2024¹

The primary domestic legislation providing for the protection of wildlife in general, and wild birds in particular, and the control of some activities adversely impacting upon wildlife is the Wildlife Act of 1976, as amended. The aims of the Wildlife Act, according to the National Parks and Wildlife Service (NPWS) are “... to provide for the protection and conservation of wild fauna and flora, to conserve a representative sample of important ecosystems, to provide for the development and protection of game resources and to regulate their exploitation, and to provide the services necessary to accomplish such aims.” All wild bird species are protected under the Act. The European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) made significant amendments to the Wildlife Acts to ensure consistency with the Habitats and Birds Directives.

2.2. SURVEY METHODOLOGY

2.2.1. Desk Study

The assessment was carried out in three stages, firstly through desktop assessment to determine existing records in relation to habitats and species present in the potential Zone of Influence of the Proposed Development. This included research on the NPWS metadata website, the National Biodiversity Data Centre (NBDC) database and a literature review of published information on flora and fauna occurring in the development area.

Sources of information that were used to collate data on biodiversity in the potential Zone of Influence are listed below:

- The following mapping and Geographical Information Systems (GIS) data sources, as required:
 - National Parks & Wildlife (NPWS) protected site boundary data;
 - Ordnance Survey of Ireland (OSI) mapping and aerial photography;
 - OSI/ Environmental Protection Agency (EPA) rivers and streams, and catchments;
 - Open Street Maps;
 - Digital Elevation Model over Europe (EU-DEM);
 - Google Earth and Bing aerial photography 1995-2025;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie including:
 - Natura 2000 - Standard Data Form;

¹ Wildlife Act 1976, as amended. Administrative consolidation of the Wildlife Act 1976, Law Reform Commission (2024)

- Conservation Objectives;
- Site Synopses;
- National Biodiversity Data Centre records;
 - Online database of rare, threatened and protected species;
 - Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2019); and
- Relevant Development Plans in neighbouring areas:
 - Wicklow County Development Plan 2022-2028

2.2.2. Field Study

The second phase of the assessment involved a site visit to establish the existing environment in the footprint of the proposed development area. Areas which were highlighted during desktop assessment were investigated in closer detail according to the Heritage Council Best Practice Guidance for Habitat Survey and Mapping (Smith *et al.*, 2011). Habitats in the proposed development area were classified according to the Heritage Council publication “*A Guide to Habitats in Ireland*” (Fossitt, 2000). This publication sets out a standard scheme for identifying, describing and classifying wildlife habitats in Ireland. This form of classification uses codes to classify different habitats based on the plant species present. Species recorded in this report are given in both their Latin and English names. Latin names for plant species follow the nomenclature of “*An Irish Flora*” (Parnell & Curtis, 2012).

Habitats were surveyed on the 30 October 2024 by conducting a study area walkover covering the main ecological areas identified in the desktop assessment. The survey date is outside the optimal botanical survey period. However, it is adequate given the scattered trees and artificial habitats present on site, particularly for bat roost inspections. A photographic record was made of features of interest.

Signs of mammals such as badgers and otters were searched for while surveying the study area noting any sights, signs or any activity in the vicinity especially along adjacent boundaries.

Birds were surveyed using standard transect methodology and signs were recorded where encountered during the field walkover surveys.

A detailed inspection of the buildings on site was undertaken during daylight hours on the 30 October 2024. The aim was to compile information on actual and potential access points and bat roosting locations. This was done by searching for evidence of bats including live and dead specimens, droppings, feeding remains, urine splashes, fur oil staining and noises.

The exterior of the buildings were inspected first from ground level, with the aid of binoculars. The search included the ground, accessible windowsills, walls, eaves, roof slates, gutters, downspouts and the roof ridge. A systematic search of all accessible interiors was also undertaken. Searches were

carried out with the aid of binoculars and a high powered torch; Gowen & Bradshaw AT131 LED 330 Lumens and focused on walls, floors, roof beams, lintels, shelves, etc.

Mature trees ear marked for removal were surveyed from Ground Level for Potential Bat Roost Features (PRFs). Tree categorization according to Bat Conservation Trust 2 ed. (Hundt *et al.*, 2012).

The survey was undertaken following adapted guidelines from the following sources;

- *Hundt L. (2012) Bat Surveys: Good Practice Guidelines, 2nd edition, Bat Conservation Trust, London*
- *Kelleher, C. & Marnell, F. (2006) Bat Mitigation Guidelines for Ireland. Irish Wildlife Manuals, No. 25. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.*

2.2.3. Site Evaluation and Impact Assessment

The final part of the assessment involves an evaluation of the study area and determination of the potential impacts on the habitats of the study area. This part of the assessment forms the basis for Impact Assessment and is based on the following guidelines and publications:

- Guidelines for Ecological Impact Assessment in the UK And Ireland Terrestrial, Freshwater, Coastal and Marine September 2018 Version 1.1 - Updated September 2019 (CIEEM, 2019);
- EPA Guidelines on Information to be contained in an EIAR (EPA, 2022);
- Best Practice Guidance for Habitat Survey and Mapping (Heritage Council, 2011);
- Ecological Surveying Techniques for Protected Flora & Fauna (NRA, 2008);
- Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009);
- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DEHLG, December 2009, Rev 2010);
- Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC (EC, 2007).

While prepared for linear projects the TII Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009) are still relevant and outlines the methodology for evaluating ecological impacts of the project in the present report. According to the TII Guidelines, the Ecological Study should address:

- Designated conservation areas and sites proposed for designation within the zone(s) of influence of any of the Project options,
- All the main inland surface waters (e.g. rivers, streams, canals, lakes and tanks) that are intersected by any of the route corridor options, including their fisheries value and any relevant designations,
- Aquifers and dependent systems and turloughs and their subterranean water systems,

- Any known or potentially important sites for rare or protected flora or fauna that occur along or within the zone(s) of influence of any of the route options,
- Any other sites of ecological value, that are not designated, along or in close proximity to any of the route corridor options,
- Any other relevant conservation designations or programmes (e.g. catchment management schemes, habitat restoration or creation projects, community conservation projects, etc.),
- Any other features of particular ecological or conservation significance along any of the route options.

The TII Guidelines set out a method of evaluating the importance of sites identified and in turn the evaluation of the significance of impacts. The Evaluation Scheme is presented in Appendix 1 for reference.

Impact Assessment is then based on CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland, 2019.

3. PROJECT DESCRIPTION

The Proposed Development consists of the construction and operation of a residential development at the former Rockbrae House site at, Bray, Co. Wicklow.

The development will consist of the demolition of Rockbrae House and gate lodge, and the provision of 53no. residential units in a combination of houses and apartments arranged in 3 blocks as summarised below, with new vehicular and pedestrian entrance to Vevay Rd, 29no. carparking spaces, external bike and bin stores, external play area, and ancillary site development and landscaping works.

Block A (4 storeys):

1 bed 2 person apartment – 10 no.

1 bed 2 person UD apartment – 6 no.

2 bed 4 person apartment – 8 no.

Block B (5 storeys):

1 bed 2 person apartment – 5 no.

2 bed 3 person UD apartment – 5 no.

2 bed 4 person apartment – 10 no.

Block C (3 storeys):

3 bed 5 person townhouse – 9 no.

The site is connected to municipal sewer and wastewater will be treated appropriately.

Figure 2 shows a detailed view of the existing site on high resolution aerial photography. Figure 3 shows the positions and layout of the proposed development.



Figure 2. Showing the Proposed Development boundary on recent aerial photography.

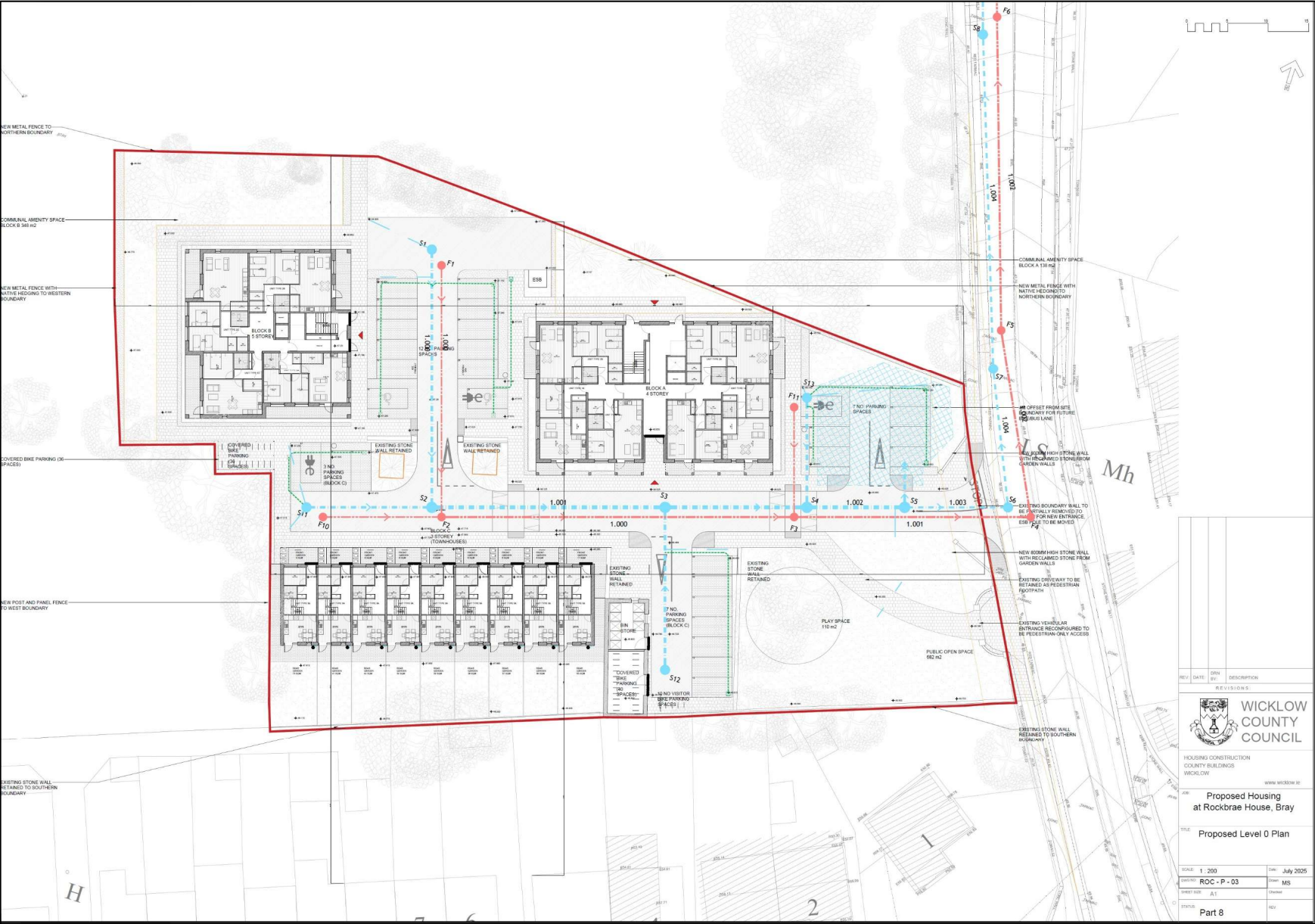


Figure 3. Plan showing layout of proposed development.

4. EXISTING ENVIRONMENT

4.1. DESIGNATED CONSERVATION AREAS

A Zone of Influence (Zoi) of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. In accordance with the OPR Practice Note (2021), PN01, the Zoi should be established on a case-by-case basis using the Source- Pathway-Receptor framework.

The European Commission's "Assessment of plans and projects in relation to Natura 2000 sites guidance on Article 6(3) and (4) of the Methodological Habitats Directive 92/43/EEC" published 28 September 2021 states at section 3.1.3, that:

"Identifying the Natura 2000 sites that may be affected should be done by taking into consideration all aspects of the plan or project that could have potential effects on any Natura 2000 sites located within the zone of influence of the plan or project. This should take into account all of the designating features (species, habitat types) that are significantly present on the sites and their conservation objectives. In particular, it should identify:

- *any Natura 2000 sites geographically overlapping with any of the actions or aspects of the plan or project in any of its phases, or adjacent to them;*
- *any Natura 2000 sites within the likely zone of influence of the plan or project Natura 2000 sites located in the surroundings of the plan or project (or at some distance) that could still be indirectly affected by aspects of the project, including as regards the use of natural resources (e.g. water) and various types of waste, discharge or emissions of substances or energy;*
- *Natura 2000 sites in the surroundings of the plan or project (or at some distance) which host fauna that can move to the project area and then suffer mortality or other impacts (e.g. loss of feeding areas, reduction of home range);*
- *Natura 2000 sites whose connectivity or ecological continuity can be affected by the plan or project".*

The range of Natura 2000 sites to be assessed, i.e. the zone in which impacts from the plan or project may arise, will depend on the nature of the plan or project and the distance at which effects may occur. For Natura 2000 sites located downstream along rivers or wetlands fed by aquifers, it may be that a plan or project can affect water flows, fish migration and so forth, even at a great distance. Emissions of pollutants may also have effects over a long distance. Some projects or plans that do not directly affect Natura 2000 sites may still have a significant impact on them if they cause a barrier effect or prevent ecological linkages. This may happen, for example, when plans affect features of the landscape

that connect Natura 2000 sites or that may obstruct the movements of species or disrupt the continuity of a fluvial or woodland ecosystem. To determine the possible effects of the plan or project on Natura 2000 sites, it is necessary to identify not only the relevant sites but also the habitats and species that are significantly present within them, as well as the site objectives.

The Zone of Influence may be determined by considering the Proposed Development's potential connectivity with European sites, in terms of:

- Nature, scale, timing and duration of all aspects of the proposed works and possible impacts, including the nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of potential pathways (dilution and dispersion; intervening 'buffer' lands, roads etc.); and
- Location of ecological features and their sensitivity to the possible impacts.

The potential for source pathway receptor connectivity is firstly identified through GIS interrogation and detailed information is then provided on sites with connectivity. European sites that are located within a potential Zone of Influence of the Proposed Development are listed in Table 1 and presented in Figures 4 and 5, below. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website (www.npws.ie) on 25 June 2025. This data was interrogated using GIS analysis to provide mapping, distances, locations and pathways to all sites of conservation concern including pNHAs, NHA and European sites.

Table 1 European Sites located within the potential Zone of Influence² of the Proposed Development.

Site Code	Site name	Distance (km) ³
000713	Ballyman Glen SAC	2.14
000714	Bray Head SAC	1.10
000719	Glen of the Downs SAC	5.96
000725	Knocksink Wood SAC	4.01
003000	Rockabill to Dalkey Island SAC	5.72
002122	Wicklow Mountains SAC	7.40
004040	Wicklow Mountains SPA	7.88
004186	The Murrough SPA	7.89

The Proposed Development is located on the site of the former Rockbrae Huse which was until recently used as Defence Forces facility at Bray, Co. Wicklow. There are several European sites in the wider areas and the nearest to the Proposed Development is Bray Head SAC located over 1km to the southeast; however there is no connectivity to this site and it is screened out at this stage.

² All European sites potentially connected irrespective of the nature or scale of the Proposed Development.

³ Distances indicated are the closest geographical distance between the Proposed Development and the European site boundary, as made available by the NPWS.

The development is connected to municipal sewer and wastewater will be treated appropriately at Shanganagh-Bray WWTP. All sites listed with the exception of Bray Head SAC are considered to be outside the zone of influence of the Proposed Development. Two off shore marine sites; Rockabill to Dalkey Island SAC and The Murrough SPA are also considered to be outside the zone of influence of the Proposed Development.

A review of aerial photography, Ordnance Survey Ireland (OSI) mapping and OSI Geographical Information System (GIS) data for rivers and streams indicates that there are no notable surface water features onsite and no direct hydrological pathways to offsite surface water bodies. This was confirmed during fieldwork on habitat assessment on 30 October 2024.

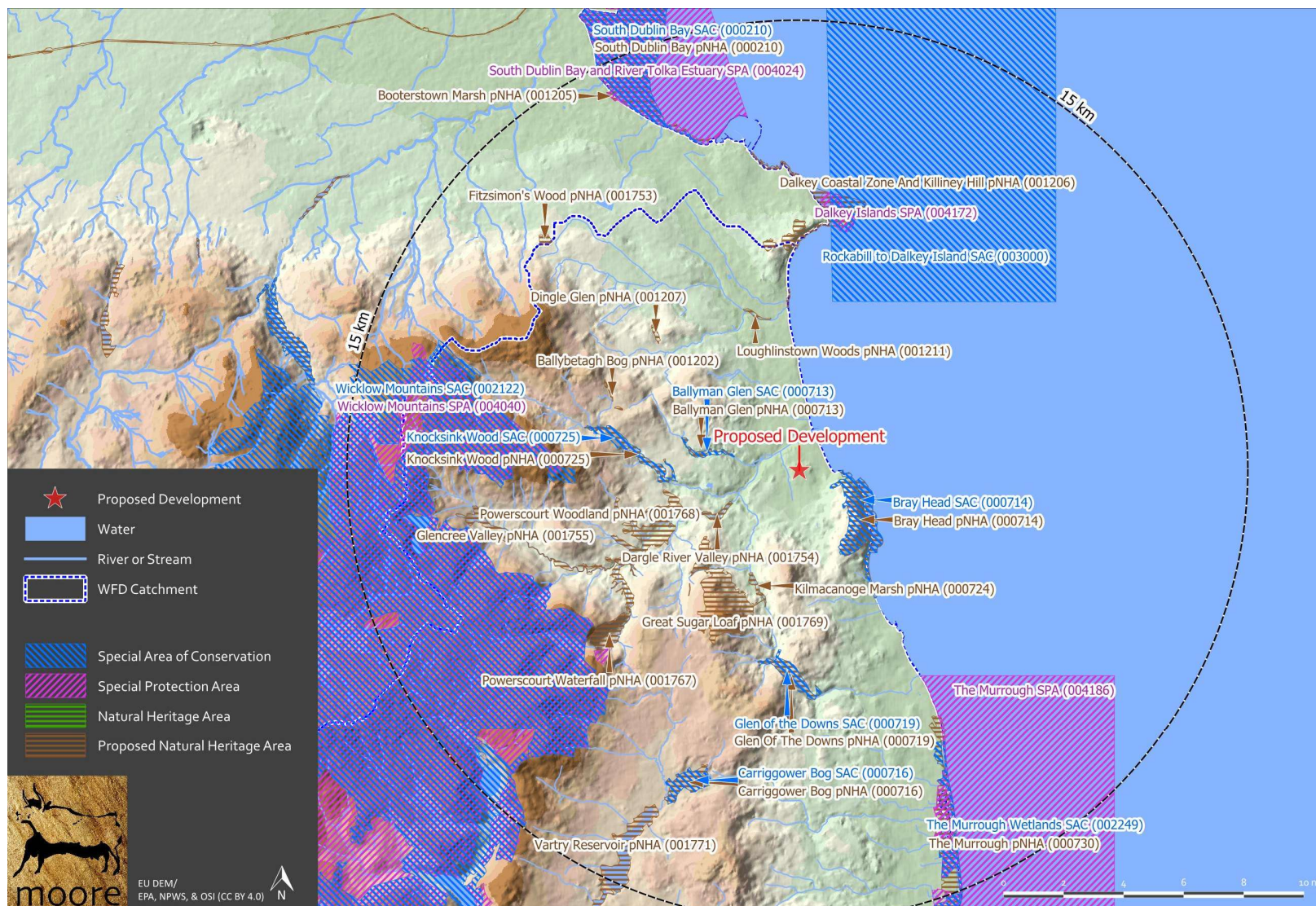


Figure 4. Showing European sites and NHAs/pNHAs within the wider Potential Zone of Influence of the Proposed Development.



Figure 5. Detailed view of European sites in the nearer Potential Zone of Influence of the Proposed Development.

4.2. HABITAT DESCRIPTIONS

There are no records of rare plants in a site specific polygon from the NDDC database. The proposed development comprises the site of the former Rockbrae House at Bray, Co. Wicklow. The site is essentially a small demesne with former main house, gatehouse and out buildings with a walled garden and scattered trees and parkland areas that have become overgrown with rank grass and bramble scrub. A habitat map is not necessary as the site is visible in the aerial photography in Figure 2.

Unfortunately the interior of the main house was destroyed by fire on 9 April 2023 resulting in roof collapse.

The Gate lodge is in a state of disrepair and the roof is partially collapsed while the outhouse and former Defence Forces Bar is intact with a well-sealed roof and interior.

The main habitat on site is Scattered trees and parkland (WD5). There are fine specimens of Sequoia, Yew, Cypress and Arbutus trees along with several Beech which will be retained and conserved as part of the landscaping plan.

The previously maintained grassed areas have become overgrown with False Oat-Grass (*Arrhenatherum elatius*), Perennial Rye Grass (*Lolium perenne*), Nettle (*Urtica dioica*) and Dock (*Rumex obtusifolius*) and Bramble (*Rubus fruticosus*) is frequent. Cherry laurel () an moderate level invasive species was frequent along with scattered Buddleia bushes.

There were no Third Schedule invasive species recorded at the proposed development site.

4.1. FAUNA

4.1.1. Mammals

Otters

There are no otter habitats in the study area and no potential for otters on the site.

Badgers

There are no badger setts in the study area and no potential for badgers on the site. The field boundaries were surveyed and no setts were recorded.

Bats

Unfortunately the fire damage to Rockbrae House has removed the potential for bat roosting from that building.

The Gate Lodge roof is in a state of collapse and is open to the elements reducing bat roosting potential. No bats were recorded during the survey.

The Outhouse/ former bar roof is well sealed with low potential for bat access. The attic space did not have any roosting bats and the dense growth of cobwebs suggest that the space has not been used for bat roosting and is unlikely to be used in the future.

5. ASSESSMENT OF IMPACTS

5.1. SITE EVALUATION

Due cognisance of features of the landscape which are of major importance for wild flora and fauna, such as those with a “*stepping stone*” and ecological corridors function, as referenced in Article 10 of the Habitats Directive were considered in this assessment.

The ecological value of the site was assessed following the guidelines set out in the Institute of Ecology and Environmental Management’s Guidelines for Ecological Impact Assessment (2019) and according to the Natura Scheme for evaluating ecological sites (after Nairn & Fossitt, 2004). Judgements on the evaluation were made using geographic frames of reference, *e.g.* European, National, Regional or Local.

Following a detailed literature review, desktop assessment and field survey the footprint of the proposed development site can be categorised into the following habitat types:

- Scattered trees and parkland (WD5)
- Scrub (WS1)

There were no rare or protected species recorded on the site and there were no records of Third Schedule invasive species on site.

The habitats under the footprint of the proposed development are of moderate to low local ecological value with specimen trees to be retained of high local value.

There are no annexed habitats or species on site and no pathways to offsite conservation sites. There is no connectivity with any European sites. All foul and surface water runoff, once the facility is operational, will be contained on site and discharged to urban drainage systems.

There is no real likelihood of any significant effects on European Sites in the wider catchment area. The facility is located at a distance of removal such that there will be no disturbance to qualifying interest species in any European sites.

5.2. IMPACT ASSESSMENT

5.2.1. Direct Impacts

Habitats

The new development areas are of moderate to low local biodiversity value and there will be a minor local insignificant loss of low value scrub and a treeline of *Leylandii* to the western boundary.

Fauna

Otters

There will be no direct or indirect impact on otters.

Badgers

There will be no direct or indirect impact on badgers.

Bats

The potential for bat roosting in ruin of Rockbrae House has been significantly reduced due to the fire of 2023. There were no records of roosting bats or signs of roosting bats in either the Gate Lodge or the Outhouse. There will be no direct impact on roosting bats.

The *Leylandii* trees were checked for roost potential along with other smaller semi-mature specimens marked for removal and no Potential Bat Roost Features were recorded.

The availability of the site to commuting bats in the wider area will not be significantly affected given the availability of mature trees and commuting corridors in the wider area.

Birds

There are no predicted significant effects on birds. Potential effects on nesting birds can be avoided by standard timing avoiding tree surgery in the nesting season.

5.2.2. Indirect Impacts

The development is connected to municipal sewer and wastewater will be treated appropriately at Shanganagh-Brat WWTP. All sites listed with the exception of Bray Head SAC are considered to be outside the zone of influence of the Proposed Development. Two offshore marine sites; Rockabill to Dalkey Island SAC and The Murrough SPA are also considered to be outside the zone of influence of the Proposed Development.

5.2.3. Cumulative Impacts

Cumulative impacts or in combination effects are changes in the environment that result from numerous human-induced, small-scale alterations. Cumulative impacts can be thought of as occurring through two main pathways: first, through persistent additions or losses of the same materials or resource, and second, through the compounding effects as a result of the coming together of two or more effects.

A review of the planning section of the Wicklow County Council website indicates that, within the last three years, the following development have been granted planning permission within 500m of the Proposed Development, presented in Table 2 below.

There are no predicted in-combination effects given the Proposed Development will have no significant effects on Biodiversity.

Table 2 Planning applications granted permission in the vicinity of the Proposed Development.

Planning Ref.	Description of development	Comments
211095	(i) change of use of Unit No. 4 from retail to a café unit (c.65sqm); (ii) the amalgamation of Unit No. 4 (c.65sqm) with the existing café Unit No. 5/6 (c.150sqm) to provide a single café unit of c.215sqm gross floor area; and (iii) the removal of internal partition walls, amendments to the front elevation, signage and all associated site services and ancillary site development works.	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
211139	two storey rear extension including alterations to the existing dwelling, redesign of the front garden to provide additional carpark spaces and associated site works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
211216	(i) retention permission for "Click and Collect" signage in the existing Tesco car park; and (ii) permission for the construction of a sheltered canopy (c. 50 sq.m) in the existing car park for the purpose of providing 2 no. dedicated "Click and Collect" spaces for the existing Tesco store and all associated site development works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
211352	(1) for the removal of the existing roadside pedestrian entrance and a section of the roadside boundary wall, (2) a new vehicular entrance, (3) off-street parking for 2 no. vehicles and (4) all associated site works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
21606	a proposed residential development (14 no. residential units) comprising of 1 no. 1 bedroom unit, 2 no. 2 bedroom units, 5 no. 3 bedroom units & 6 no. 4 bedroom units to be provided in a mix of unit types as follows: 4 no. semi-detached houses (2.5 storey), 5 no. terraced houses (2 to 2.5 storey), 4 no. duplex / apartment units (3 storey block), 1 no. own door unit (2 storey), together with all associated landscaping & site development works including estate road, vehicular entrance, car parking, bins & bicycle storage, services infrastructure & demolition of existing dwelling	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
22124	two storey extension to side with single storey extension to rear to include extension and conversion of existing roof profile with Velux roof lights to rear and associated site works	No potential for in-combination effects given the Proposed

Planning Ref.	Description of development	Comments
		Development will have no significant effects on Biodiversity.
221255	construction of a single storey stand-alone building consisting of two classrooms, one general activities room, one multi-sensory room, one office, associated ancillary spaces together with all associated works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
221305	provision of a new vehicular entrance gate to the Lauderdale Estate and for the lowering of the existing boundary wall to a height of 1.8m	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
22217	construction of a 6 no. storey building (over basement for services) with a gross floor area of approx. 1016 sqm comprising of 36 no. residential apartment units. Pedestrian and vehicular access via the existing Wyvern road. Proposes 160sqm of retail/office floorspace at ground floor level, balconies/terraces associated with individual apartment units, a roof garden of approx. 400 sqm and set back screened plant area of 85 sqm, 19 no. paid car parking spaces for use by the general public, associated secure bicycle and bin storage, hard and soft landscaping, ESB substation and all other associated site works and services above and below ground on an overall site area of approx. 1389 sqm	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
22233	(1) The conversion of the existing attic including the provision of a new dormer window (2) A new single storey rear extension. (3) The provision of new window to the side elevation. (4) The provision of new rooflights.	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
22370	(1) new single storey extension to existing detached garage for use as Art/Hobby Room to rear of existing main house for ancillary use of the home. (2) Conversion of existing detached garage to new Home Office and Gym to rear of existing main house for ancillary use of the home. (3) all above with associated site works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
22667	change of use from nursing home to private dwelling, demolition of single storey extensions and 2 storey return to rear, the construction of a single storey extension to rear, new windows to existing rear and side façade, alterations to existing façade, reinstatement of window canopies and plaster quoins to front and all associated site works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
22671	the demolition of a single storey conservatory to the rear and the construction of a part single and part two storey extension to the rear and to the side, and all ancillary works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
2274	proposed first floor extension to rear of dwelling and re-establishment of two windows to the upper gable wall of existing dwelling and associated works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
22782	proposed opening in existing rear boundary wall to facilitate the installation of a pedestrian timber access gate, existing wall height to be increased with the addition of a timber fence over and all associated site works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
23208	the provision of (1) a single-storey extension with rooflights, to the side and rear of the existing property, (2) associated site works and (3) alteration of driveway entrance	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.

Planning Ref.	Description of development	Comments
23240	construction of new wall & timber gates set back from the existing boundary to create a private amenity space for existing dwelling; revisions to existing front door location and existing fenestration; new patio doors to front elevation; external insulation to be fitted to external walls replacing the existing red brick with smooth render finish; all together with associated works including boundary treatments and landscaping	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
23242	1) purposed new shopfront to include new stone cladding in selected colour new framed entrance and exit doors 2 no box bay windows & lowered cills of existing ground floor windows 2) interior fit-out and all ancillary site works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
23325	change of use of the existing 169sqm ground floor retail unit to a doctor's surgery for associated signage treatment to the existing front façade and all associated site works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
23333	attic conversion including raising the ridge level of the roof, new dormer roof to rear and roof lights to front slope along with new single story extension to the rear of the existing dwelling	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
23405	for an existing single storey rear extension along with all associated and ancillary site and development works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
23530	a new first floor front and side extension over existing ground floor together with infilling existing porch area at ground floor and all associated ancillary site works and connection to services	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
2360266	"the following works all within the curtilage of Protected Structures : the opening up of a former temporary site access in the west boundary wall on Vevay Road and re-instatement upon completion of the development. Sequential demolition of 20th century classroom buildings being Mary Ward, St Josephs including removal of the link to the Convent (Protected Structure), St Anne's prefabricated structure and the Sports Hall. Construction in 2 phases of three storey split level school building of 11,302 sqm gross internal area, consisting of general classrooms, specialist classrooms, multi-purpose hall, general purpose area including kitchen, library, 4 class base Special Educational Needs (SEN) Unit, technology classroom and associated external teaching space and store, ancillary welfare and administrative accommodation.	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
2360465	single storey rear extension and frosted window in side gable at first floor of existing dwelling	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
23802	first floor extension to side over existing ground floor portion	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
23824	the removal of an existing porch and shed, and the building of a new single storey house extension to the southside, front and rear of the existing house, consisting of one bedroom/office, snug room, toilet and utility area	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
24149	Construction of new first floor extension over existing ground floor extension to the rear of dwelling	No potential for in-combination effects given the Proposed

Planning Ref.	Description of development	Comments
		Development will have no significant effects on Biodiversity.
2429	(A) retention of development consisting of : (i) ground floor kitchen extension to the rear (6m ²) along with a ground floor kitchen window on the rear west elevation, (ii) first floor bedroom extension to rear (10m ²); (iii) conversion of garage to bedroom (13m ²) including replacement of the garage doors with a window to the front elevation . (B) Permission for development consisting of (i) adjustment to first floor windows on the rear south elevation , (ii) adjustment to kitchen window on the rear west elevation	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
2460221	a new single-storey extension to the front of the existing house and the provision of a new front entrance porch and ramp to the west side elevation. The site is within the curtilage of a protected structure which will be unaffected by the development	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
2460264	the installation of an aircraft noise monitoring terminal on a standalone, tilttable mast structure (6m in height) along with associated works including electrical connection on land within the car park	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.
SH202104	demolition of:-Non-original shed and outbuildings to the rear of Bray Head House; The 1950s 2/3 storey redbrick secondary school extension to Bray Head House; Other shed and outbuildings to the rear of the site; Refurbishment of Bray Head House (Protected Structure) with internal reconfiguration and change of use from School to Apartments; The Construction of 3 no. residential apartment buildings (Block A, B and C) with common basement under podium amenity space; Provision of 179 residential apartment units. The units will be provided across 4 no. buildings arranged around a central landscaped podium; The under-podium basement level will accommodate 142 no. car parking spaces, bicycle parking, bin stores and plant; A Creche will be located at ground floor level of Block A; 12 no. surface level car parking spaces will be provided allocated for Bray Head House units and drop off area for creche along with surface level bicycle parking; Widening of existing vehicular access from Putland Road to Newcourt Road; Site Landscaping, boundary treatments, infrastructure works, ESB substation and all associated site works	No potential for in-combination effects given the Proposed Development will have no significant effects on Biodiversity.

6. CONCLUSIONS

There are no significant impacts predicted from the proposed development on habitats, flora, fauna or biodiversity.

Should best practice guidelines for the prevention of invasive species spread be adhered to, no potential for the spread or introduction of high impact invasive species are foreseen as a result of this Scheme.

7. REFERENCES

Aughney, T., Kelleher, C. & Mullen, D. (2008) Bat Survey Guidelines: Traditional Farm Buildings Scheme. The Heritage Council, Áras na hOidhreachta, Church Lane, Kilkenny.

CIEEM (2019) Guidelines for Ecological Impact Assessment in the UK And Ireland Terrestrial, Freshwater, Coastal and Marine September 2018 Version 1.1 - Updated September 2019.

Department of the Environment, Heritage and Local Government (2010) Guidance on Appropriate Assessment of Plans and Projects in Ireland (as amended February 2010).

EPA (2022) EPA Guidelines on Information to be contained in an EIAR; EPA, May 2022.

European Commission (2000) Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.

European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission, Brussels.

European Commission (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC: Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interests, compensatory measures, overall coherence and opinion of the Commission. European Commission, Brussels.

European Commission (2018) Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC.

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

Nairn, R. and J. Fossitt (2004) The Ecological Impacts of Roads, and an Approach to their Assessment for National Road Schemes. In: J. Davenport and J.L Davenport (eds) The Effects of Human Transport on Ecosystems: Cars and Planes, Boats and Trains, 98-114. Dublin. Royal Irish Academy.

NPWS (2019) The Status of EU Protected Habitats and Species in Ireland. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

NPWS (2024) National Parks and Wildlife Service Metadata available online at <https://www.npws.ie/maps-and-data>

NRA (2008) Ecological Surveying Techniques for Protected Flora & Fauna. Available at: <http://www.nra.ie/Environment/>

NRA (2009) Guidelines for Assessment of Ecological Impacts of National Road Schemes. Dublin: National Roads Authority. Available at: <http://www.nra.ie/Environment/>

Parnell, J. and T. Curtis (2012) Webb's An Irish Flora. Cork University Press.

Smith, G.F., O'Donoghue, P., O'Hara, K. and E. Delaney (2011) Best Practice Guidance for Habitat Survey and Mapping. The Heritage Council.

Appendix 1 TII Evaluation of Habitats

Ecological valuation: Examples

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 fulfills 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.⁴
- ☐ 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)⁵ 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).⁶

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)⁷ of the following:
 - ☐ Species protected under the Wildlife Acts; and/or
 - ☐ Species listed on the relevant Red Data list.
- ☐ Site containing 'viable areas'⁸ of the habitat types listed in Annex I of the Habitats Directive.

County Importance:

- ☐ Area of Special Amenity.⁹
- ☐ 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)¹⁰ 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 fulfil 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,¹¹ 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)¹² 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 are of some importance in maintaining habitat links.

Appendix 2 Site Photos



Photo 1. Showing the recently burned out Rockbrae House, to be demolished.



Photo 2. Showing scattered trees and parkland typical of the overall site.



Photo 3. The attic space of the Gate Lodge with no roosting bats and low potential.

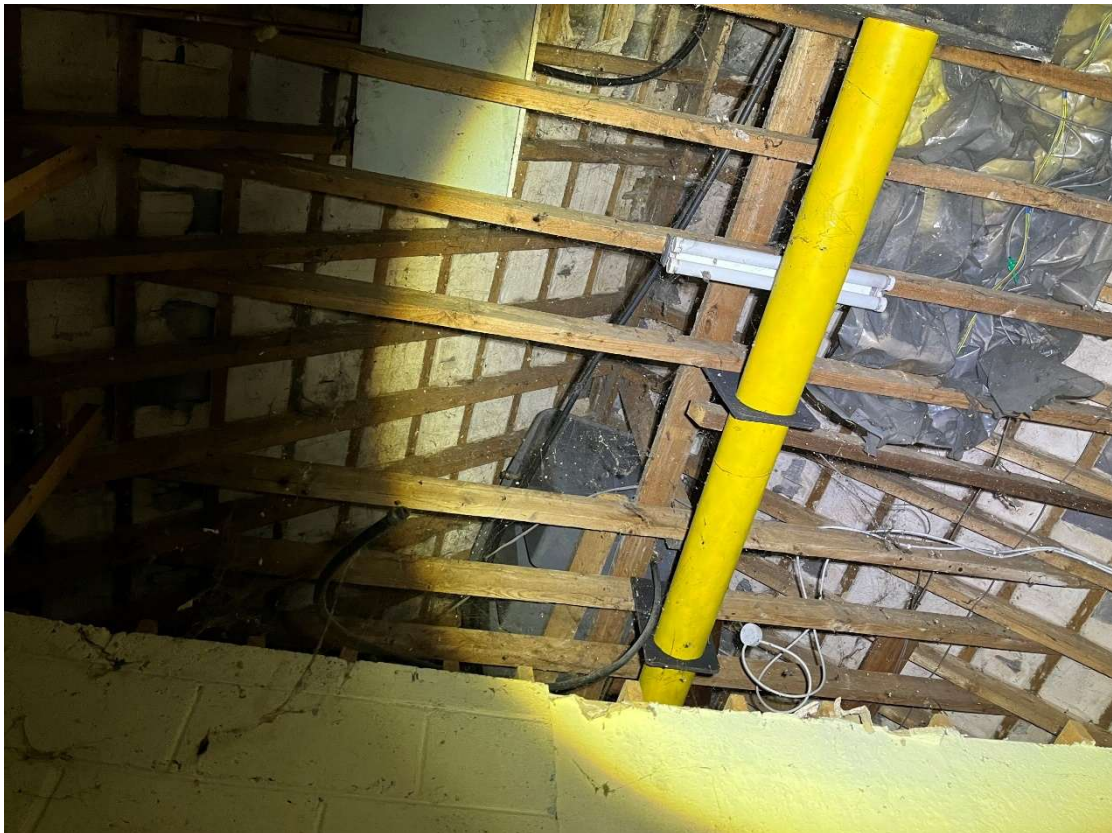


Photo 4. The attic space of the former outhouse/bar with no roosting bats, dense cobwebs suggesting no potential.