

Appropriate Assessment Screening Report

for proposed

Construction of House at 75 Abbeylands, Mullingar, Co. Westmeath

**in accordance with the requirements of
Article 6(3) of the EU Habitats Directive**

by
CAAS Ltd
for
Westmeath County Council



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1. Introduction

1.1. Background

CAAS has been appointed by Westmeath County Council to carry out prepare this Appropriate Assessment Screening Report (AASR) for the proposed construction of house at 75 Abbeylands, Mullingar, Co. Westmeath (the proposed development). It has been prepared to assist the competent authority in assessing whether or not a Natura Impact Statement (NIS) (known as a *Stage Two* Appropriate Assessment) is required for the proposed development. AA is a procedure carried out in accordance with the requirements of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the “Habitats Directive”).

1.2. Report Structure

This report sets out the legislative context for the assessment process with reference to relevant guidelines and highlight the experience and qualifications of the author (See Appendix IV for author qualifications). It then details the proposed development and the works associated with this which are then interrogated to identify any possible effects which may be ecologically relevant for European sites. Following this, the metrics for the assessment of ‘significance’ of these effects are explained and applied to each of the European sites with ecological connectivity to the proposed development area. This assessment is undertaken in view of the conservation objectives and known sensitivities of the qualifying interests and special conservation interests for each European site. Other plans and projects are then considered to identify any likely in-combination effects which may result in the likelihood of potential significant effects to European sites.

1.3. Legislative Context

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the “favourable conservation status” of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable among them. These two designations are collectively known and referred to as European sites. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended).

Article 6(3) of the Habitats Directive States:

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

obtained the opinion of the general public’.

The AA process relates to the protection of species listed in Annex I and Annex II of the Habitats Directive which form the Natura 2000 network (Article 3(1)). Species breeding and resting places of species listed in Annex IV of the Habitats Directive are nationally protected in Ireland as per Articles 15 and 16 of the Habitats Directive. The actual species listed in Annex IV do not form part of the Natura 2000 network as they are not mentioned in Article 3(1) of the Directive which defines the Natura 2000 network.

Article 3(1) of the Habitats Directive States:

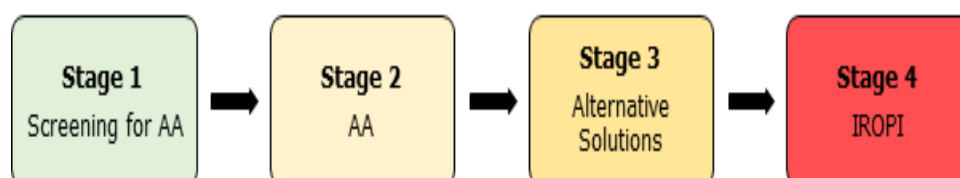
‘A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species’ habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range’.

AA is an assessment of the likely potential significant effects arising from a plan or project, either individually or in combination with other plans or projects, to assess if the plan or project will have potential for significant effect on any European site concerned, and implications in view of the European site’s conservation objectives. These sites consist of SACs and SPAs and provide for the protection and long-term survival of Europe’s most valuable and threatened species and habitats. Where a formal consent process applies, the AA process is concluded by the relevant competent authority making a determination in accordance with article 6(3) of the Habitats Directive.

1.4. Overview of the Habitats Directive and Appropriate Assessment Process

The Habitats Directive itself promotes a hierarchy of avoidance, mitigation and compensatory measures. This approach aims to avoid any effects on European sites by identifying possible effects early in the plan or project making process and avoiding such effects. Second, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If potential significant effects on European sites remain, and no further practicable mitigation is possible, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the plan or project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effects.

There are four main stages in the AA process:



Stage One: Screening

The process that identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans and considers whether these

impacts are likely to be significant.

Stage Two: Appropriate Assessment

The consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse effects mitigation measures are required to avoid or minimise potential effects. The details of these mitigation measures are then assessed in the context of the ecological integrity of the plan/project characteristics to ensure no significant adverse effects on European sites. If this assessment process shows there are no residual significant effects, then the process may end at this stage, stage two, of the AA process which are formalised in Natura Impact Statements (NIS) reports which support the overall AA process. However, if the likelihood of significant impacts remains, then the process must proceed to Stage Three.

Stage Three: Assessment of Alternative Solutions

The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

1.5. Approach

This AA screening report is based on best scientific knowledge and has utilised ecological expertise, and is supported by desktop research on national databases including the National Biodiversity Data Centre¹; the NPWS² (including mapping and available reports for relevant sites, and in particular the qualifying interests/special conservation interests described and their conservation objectives); the EPA³ mapping websites; data collected for the most recent Article 12 and 17 conservation status reporting cycle, 2019; and, *The Status of Protected EU Habitats and Species in Ireland* report (NPWS, 2019).

The ecological desktop study that has been completed for the AA screening of the proposed development, comprised the following elements:

- Identification of European sites within 15 km⁴ of the subject lands;
- Identification of European sites pathways for effects from the site have been identified (if relevant⁵) greater than 15 km from the subject lands;
- Review of the NPWS site synopses and conservation objectives for European sites within 15 km and for which potential pathways from the proposed development area have been

¹ Available at: <https://maps.biodiversityireland.ie/>

² Available at: <https://www.npws.ie/protected-sites> and <https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=8f7060450de3485fa1c1085536d477ba>

³ Available at: <https://gis.epa.ie/EPAMaps/>

⁴ While the actual zone of influence is likely to be much smaller, the default 15km zone extent has been applied on a precautionary basis further detail on this is identified in section 3.2

⁵ This is particularly relevant for all sites with hydrological connectivity or other significant ecological pathways

identified; and

- Examination of available information on protected species.

Source-Pathway Receptor Model

Ecological impact assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model, where, in order for an effect to be established, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any relevance or significance.

- Source(s) – e.g., pollutant run-off from proposed development;
- Pathway(s) – e.g., groundwater connecting to nearby qualifying wetland habitats; and,
- Receptor(s) – qualifying aquatic habitats and species of European sites.

In the context of this report, a receptor is an ecological feature that is known to be utilised by the qualifying interests or special conservation interests of a European site. A source is any identifiable element of the Proposed development that is known to interact with ecological processes. A pathway is any connection or link between the source and the receptor⁶.

This report provides information on whether direct, indirect and cumulative potential significant effects could arise from the proposed development.

Guidance

The AA screening has been prepared taking into account the relevant legislation (ref s1.3) and guidance, including:

- *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, 2009;*
- *Commission Notice: Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", European Commission 2018;*
- *Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission Notice, Journal of the European Union, 2021;*
- *Practice Note PN01: Appropriate Assessment Screening for Development Management, Office of the Planning Regulator, 2021*

⁶ qualifying interest or special conservation interests of the European site in question and the known sensitivities of these key ecological receptors

2. Description of Proposed Development

2.1. Receiving Environment Overview

The proposed development is located at Abbeylands, Mullingar, County Westmeath. The proposed site is 0.03 ha in area, and consists of the construction of a one storey house. The proposed site is currently vacant brownfield land and thus mainly composed of artificial surfaces, disturbed ground, and some scrub. The proposed site is located adjacent to a number of private residential dwellings within a larger suburban residential area. The R394 route runs from the south west to north east, just west of the proposed site. (Figure 2.1).

In the wider context, there are residential development areas to the north and south of the proposed development, and agricultural lands to the west and east of the proposed development. The Regional Hospital Mullingar is located northeast of the proposed development.

The Royal Canal situated to the southeast of the proposed development (Figure 2.1). In consulting satellite imagery and the EPA databases on water courses⁷, there are no surface water courses adjacent to the site; the closest water course lies approximately 840 m to the north of the proposed development site (Figure 2.2). There is also a historic stream which has been culverted and is located approximately 50 m to the west of the proposed development. However, the proposed development will not have any interaction with this stream. Therefore, the proposed site has no direct surface hydrological connection with any surface water course in the surrounding landscape⁷.

2.2. The Proposed Development

The proposed development comprises of the construction of 1 no. 3 bedroom, one storey detached dwelling along with, parking, boundary walls, site services, and associated works of approximately 109.8 m² on a 0.03 ha site at Abbeylands, Mullingar.

The proposed development boundary is shown in Figure 2.3, and the proposed development plan is shown in Figure 2.4.

⁷ Accessed at: <https://gis.epa.ie/EPAMaps/> 13th September 2023



Figure 2.1. Location of the proposed development



Figure 2.2. Location of EPA rivers relative to the proposed development

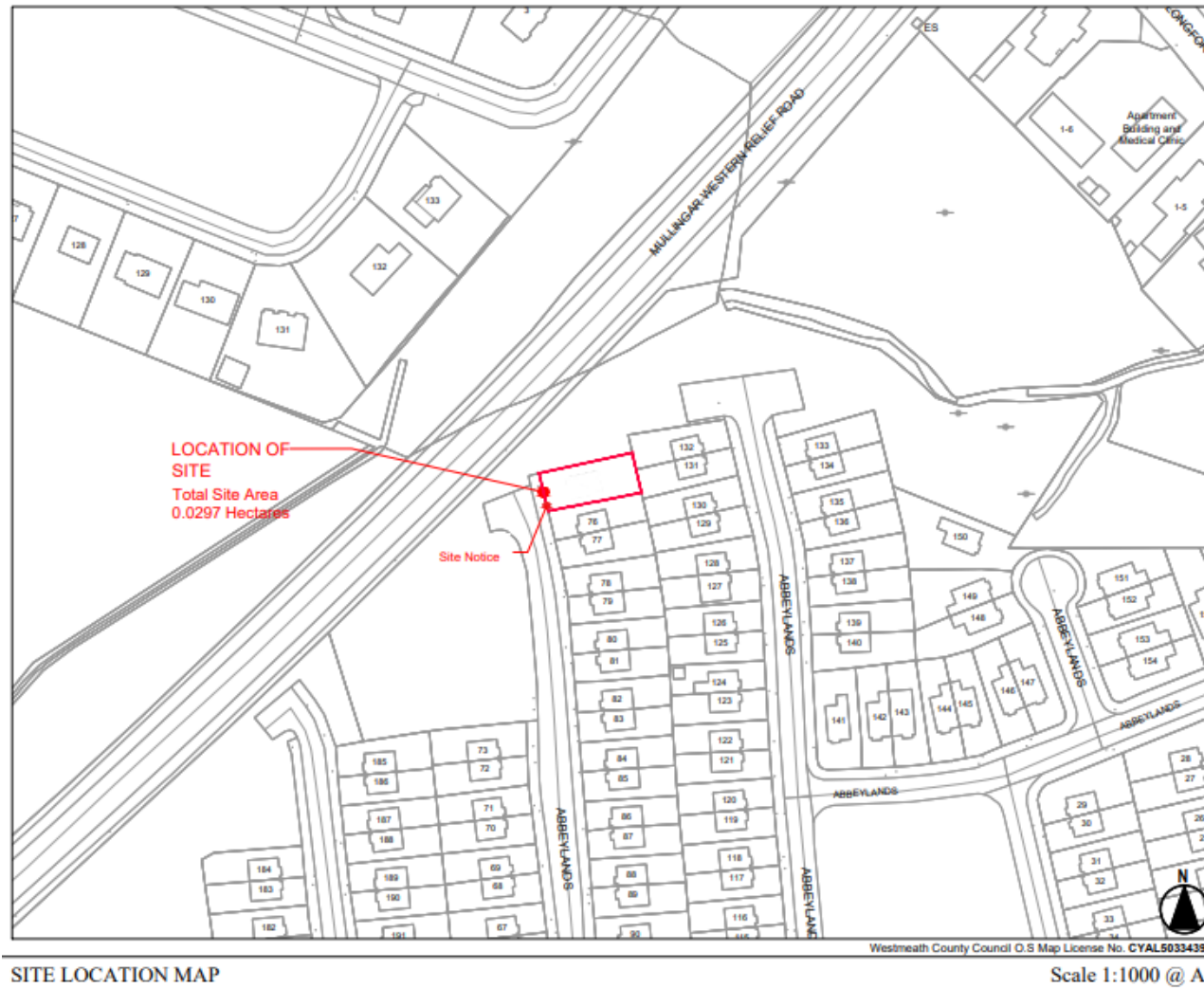


Figure 2.3. Proposed development boundary⁸

⁸ Source: Westmeath County Council (See accompanying drawing set for full scaled versions of all drawings)

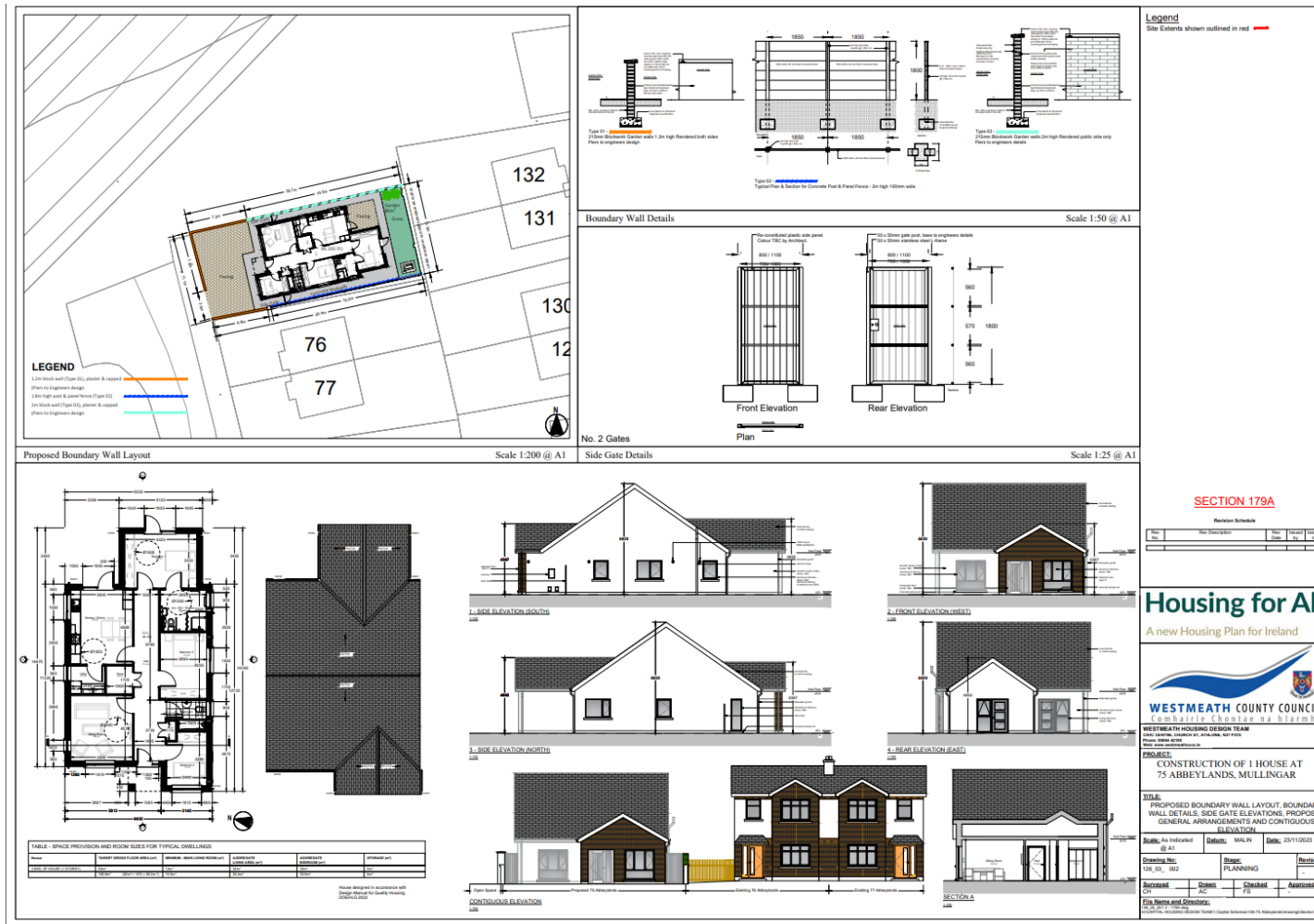


Figure 2.4. Proposed development plan⁹

⁹ Source: Westmeath County Council (See accompanying drawing set for full scaled versions of all drawings)

3. Screening for Appropriate Assessment

3.1. Introduction

This stage of the process identifies any likely significant effects on European sites arising from the project, either alone or in combination with other projects or plans. A series of questions are asked in order to determine:

- Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European site.
- Whether the project will have a potentially significant effect on a European site, either alone or in combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential impacts.

An important element of the AA process is the identification of the "Conservation Objectives", "Qualifying Interests" (QIs) and/or "Special Conservation Interests" (SCIs) of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each Special Area of Conservation (SAC) has been designated and afforded protection under the Habitats Directive. SCIs are bird species listed within Annexes I and II of the Birds Directive for which each Special Protection Area (SPA) has been designated and afforded protection under the Habitats Directive. Under the requirements of the Habitats Directive, the threats and pressures on the ecological / environmental conditions that are required to support QIs and SCIs, with specific regard to the Conservation Objectives of each site, are considered as part of the assessment.

Site-Specific Conservation Objectives (SSCOs) have been designed to define favourable conservation status for a particular habitat or species at that site. According to the European Commission interpretation document 'Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC', paragraph 4.6(3):

"The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."

Favourable conservation status of a habitat is achieved when:

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

The favourable conservation status of a species is achieved when:

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

3.2. Identification of relevant European sites

The Zone of Influence (ZOI) is defined in the relevant guidance^{10,11} as the geographical area, relative to the proposed development, over which the proposed development could have effects on the ecological receiving environment in a way that could result in potential significant effects on the Qualifying Interests or Special Conservation Interests of a given European site.

The Department of Environment, Heritage and Local Government (2009) Guidance on Appropriate Assessment (AA) recommends that a search zone of up to 15 km be considered for AA for Plans, and also acknowledges that this search zone could be much less for the AA of projects. As an initial search zone, this 15 km search zone was applied for this assessment. Beyond 15 km, potential effects arising from the proposed development across terrestrial pathways (i.e., non-hydrological) at this scale are not identified to have any potential to cause significant effects due to the scale of the proposed project and the distances involved. However, further considerations were given to hydrological pathways (i.e., surface and/or groundwater) connecting the proposed development to European sites, as these may extend beyond the 15 km search zone.

Within the initial 15 km search zone, the ZOI was then established based on the nature of the proposed project and connectivity to European sites, their sensitivities, and Qualifying Interests (species and habitats designated for SACs) and Special Conservation Interests (species designated for SPAs). An assessment of the sources of effects (see Section 3.3 below) identifies that there are no significant direct or indirect hydrological pathways, or tributaries / connections to SACs or SPAs.

European sites that are designated for SCI species that are known to utilise (i.e., forage and or roost) isolated / ex-situ resources across the landscape (i.e., outside of the designated SPA boundary) could intersect with the zone of influence for the proposed development. The proposed development site consists of a majority of built environment, with small patches of scrub in a small residential garden. Therefore, the proposed development site is identified here as not holding potential supporting habitat for SCI species of SPAs in terms of ex-situ foraging.

Therefore, considering the nature of the proposed development, the small size of the proposed site and the minor nature of the proposed work, in the context of the current site use and the surrounding residential sub-urban context; any potential effects arising from the proposed development are likely to be within a localised ZOI of 200 m for the proposed development.

European sites that occur within the 15 km initial search zone, or that have been identified to have ecological connectivity pathways (e.g., hydrological) with the proposed development, or have been identified as having designated species which may utilise resources contained within the proposed development area, are listed and analysed in Table 3.1.

In order to determine the potential effects of the proposal, information on the qualifying features, known vulnerabilities and threats pertaining to any potentially affected European sites has been reviewed. Background information on threats to individual sites and vulnerability of habitats and species that was used during this assessment included the following:

¹⁰ Practice Note PN01: *Appropriate Assessment Screening for Development Management*, Office of the Planning Regulator, 2021.

¹¹ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester.

- Ireland’s Article 17 Report to the European Commission “*Status of EU Protected Habitats and Species in Ireland*” (NPWS, 2019);
- Ireland’s Article 12 Report to the European Commission “*Bird species’ status and trends reporting format for the period 2008-2012-*” (NPWS, 2012)
- Site Synopses¹²; and
- NATURA 2000 Standard Data Forms¹².

The analysis in Table 3.1 considers the SSCOs of each of the sites within the 15 km initial search zone, and the 500 m ZOI, and any additionally connected sites. Since the conservation objectives for the European sites focus on maintaining the favourable conservation condition of the QIs/SCIs of each site, the screening process has concentrated on assessing the potential effects of the proposed development against the QIs/SCIs of each site and their Conservation Objectives.

¹² NPWS (2019); NPWS Database of protected site data and associated documents for each European site; available at <https://www.npws.ie/protected-sites>: last accessed 26th October 2022

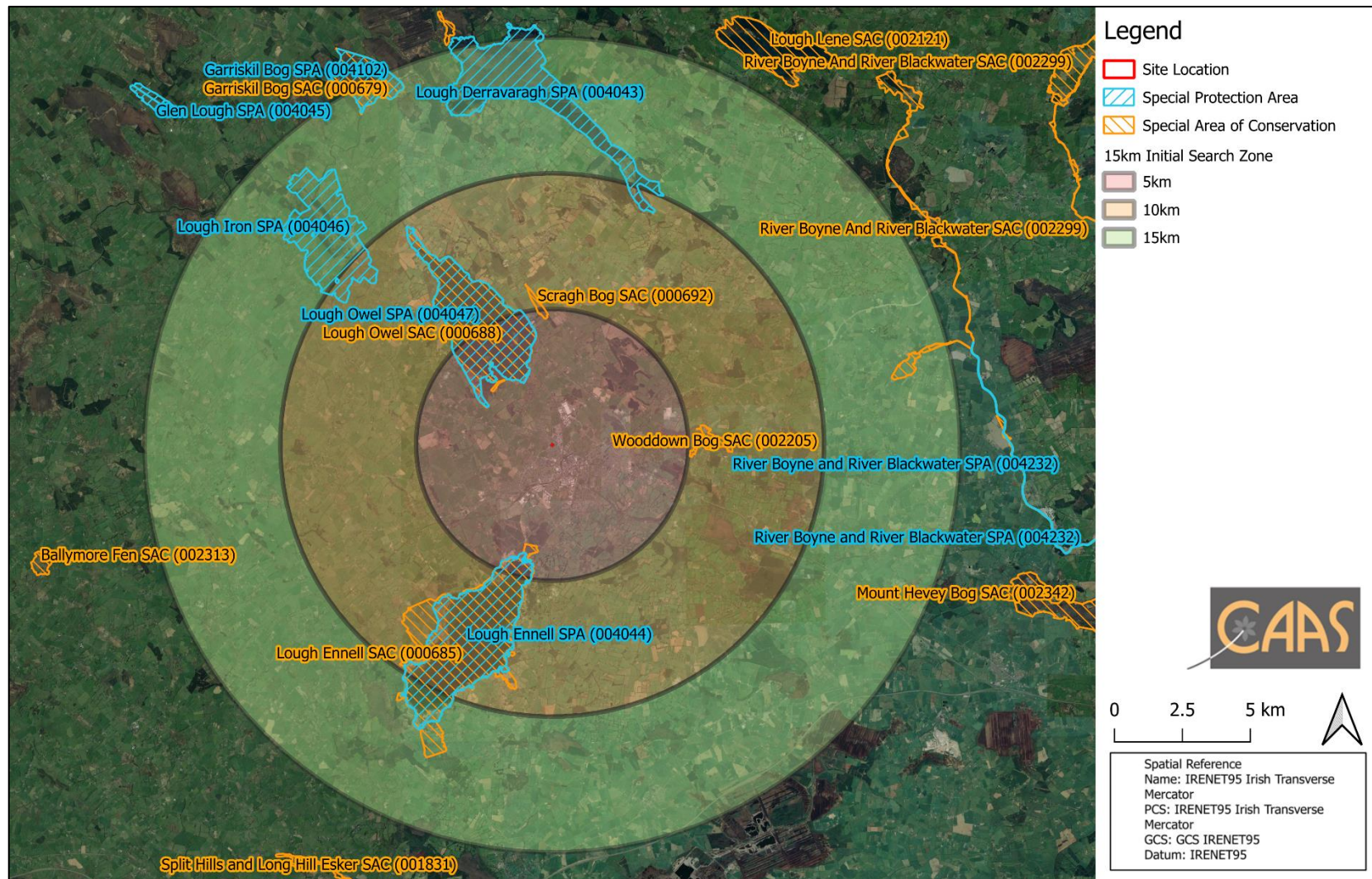


Figure 3.1. European sites within 15km of the proposed development boundary¹³

¹³ Source: NPWS (datasets downloaded 14th September 2023)

3.3. Assessment criteria

3.3.1. Is the development necessary to the management of European sites?

Under the Habitats Directive, projects that are directly connected with or necessary to the management of a European site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the project, even if this might result in positive or beneficial effects for a site(s).

The primary purpose of the proposed development is not the nature conservation management of the site, but to construct a house at 75 Abbeylands, Mullingar, Co. Westmeath and all associated site works. Therefore, in the context of the Habitats Directive, the proposed development would not be considered by the Habitats Directive to be directly connected with or necessary to the management of European designated sites.

3.4. Characterising potential significant effects

This section details the parameters utilised by this AASR when assessing potential effects¹⁴.

- **Direct and Indirect Impacts** - An impact can be caused either as a direct or as an indirect consequence of a Plan/Project.
- **Magnitude** - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.
- **Extent** - The area over that the impact occurs – this should be predicted in a quantified manner.
- **Duration** - The time that the effect is expected to last prior to recovery or replacement of the resource or feature.
 - Temporary: Up to 1 Year;
 - Short Term: The effects would take 1-7 years to be mitigated;
 - Medium Term: The effects would take 7-15 years to be mitigated;
 - Long Term: The effects would take 15-60 years to be mitigated; and
 - Permanent: The effects would take 60OR years to be mitigated.
- **Likelihood** – The probability of the effect occurring taking into account all available information.
 - Certain/Near Certain: >95% chance of occurring as predicted;
 - Probable: 50-95% chance as occurring as predicted;
 - Unlikely: 5-50% chance as occurring as predicted; and
 - Extremely Unlikely: <5% chance as occurring as predicted.

The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for ecological impact assessment (2016) define: an ecologically significant impact as an impact (negative or

¹⁴ Parameters used have been adapted from the following guidance documents on the conduction Appropriate Assessments and Ecological Impact Assessments:

- Department of the Environment, Heritage and Local Government (2009) Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities
- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester; and,

positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area; and the integrity of a site as the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest within a site.

SSCOs have been prepared for a number of European sites. These detailed SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes which define the character habitat. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a species can be described as being achieved when: *'population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.'*

Favourable conservation status of a habitat can be described as being achieved when: *'its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable'*.

First Order Site-specific Conservation Objectives are designated by the NPWS for a number of European sites that SSCOs have yet to be prepared for.

A First Order Site-specific Conservation Objective for a SAC is provided below:

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

A First Order Site-specific Conservation Objective for a SPA is provided below:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA.

3.4.1. Types of potential Effects

EC guidance¹⁵ outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take

¹⁵ 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 Environment DG, 2001

- Resource requirements (drinking water abstraction etc.)
- Emissions (disposal to land, water or air)
- Excavation requirements (removal of soil and vegetation)
- Transportation requirements
- Duration of construction, operation, decommissioning

The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the Conservation Objectives of that site:

- Reduction of habitat area
- Disturbance to key species
- Habitat or species fragmentation
- Reduction in species density
- Changes in key indicators of conservation value (water quality etc.)
- Climate change

The elements detailed above were considered within the context of the European sites identified in this AASR (Table 3.1 and Figure 3.1) below.

Loss/reduction of habitat area

There are no European sites present within the proposed development boundary. No Annex I habitats or supporting habitat for Annex II species were identified within the proposed development boundary¹⁶. The closest European sites to the proposed development site are, Lough Owel SAC (000688) and Lough Owel SPA (004047), at 2.49 km from the proposed development site. There are also no sources for potential significant effects via surface water drainage/hydrological connectivity as a result of the proposed development. Therefore, there are no sources with a likelihood for potential significant effects posed to European sites in this regard.

Habitat or species fragmentation

The proposed development area itself is currently made up of existing artificial surfaces and offers no potential habitat for ex-situ foraging for SCI species. In addition, the receiving environment of the proposed development site has an overall low local value for foraging SCI species due to high disturbance levels in a highly developed urban setting in Mullingar. Therefore, there are no sources with a likelihood for potential significant effects posed to European sites in this regard.

Disturbance to key species

There will be an increase in noise and dust levels during the construction phase, but these will be negligible in terms of potential significant effects due to the small-scale and temporary duration of the construction phase, and the distance to European sites (the closest being 2.49 km in distance). The operational phase of the proposed development will not result in an increase in current noise and disturbance levels of the current site as the operational phase of the proposed development will be in keeping with the surrounding area. The site is over 2 km from the nearest SPA which is a sufficient distance to ensure no disturbance effects through noise in the construction phase. Therefore, there are no sources with a likelihood for potential significant effects posed to European

¹⁶ Consulting current data sets for the proposed development location supplied by the NPWS (<https://www.npws.ie/maps-and-data>) and the NBDC (<https://maps.biodiversityireland.ie/>)

sites in this regard

There are no sources for indirect disturbance to SCI species from surrounding SPAs in terms of ex-situ foraging. The proposed development area is of low value to SCI species and is within a highly developed, hard surface, urban area, with high levels of disturbance. Therefore, there are no sources with a likelihood for potential significant effects posed to European sites in this regard also.

Reduction in species density

There will be no permanent loss of connecting or contributing habitat for European sites as a result of the proposed development. There will be no loss of habitat as a result of the proposed development. The receiving environment of the proposed development site also has an overall low ecological value for foraging SCI species due to the high disturbance levels as a result of the current nature of the existing site, and lack of suitable foraging habitat for ex-situ SCI species.

The nearest water course¹⁷ to the proposed development is approximately 840 m to the northeast of the proposed development, along with a historic stream located 50 m to the west and the royal canal located approximately 660 m to the southeast, none of which has direct surface connectivity to the proposed development site. Therefore, there is no direct surface hydrological connection with the proposed development and these water courses. There will also be no change in hard surfaced area as a result of the proposed development, therefore any changes introduced to surface water run-off will be negligible. In addition, there will be no changes to surface water drainage as a result of the proposed development – i.e., the current surface drainage infrastructure on site will be utilised for the proposed development. The construction phase effects will also be small scale and temporary. Therefore, there will be no reduction in species density as a result of the proposed development. Therefore, there are no sources with a likelihood for potential significant effects posed to European sites in this regard.

Changes of indicators of conservation value

Water quality is an important indicator for Conservation Objectives of many European sites. There is no direct surface hydrological connection between the proposed development and any courses. There is indirect connectivity via surface water drainage, however, there will be no change to surface water run-off within the proposed site as a result of the proposed development. In addition, there will be no changes to surface water drainage as a result of the proposed development – i.e., the current surface drainage infrastructure on site will be utilised for the project as the proposed development will connect to existing WWTP for the local area. The construction phase effects will also be small in scale and temporary in duration. Therefore, there are no sources with pathways for potential significant effects that may affect conservation indicators of European sites, such as water quality

Climate change

The proposed development will result in a slight increase in greenhouse gas emissions during the construction phase, which will be localised and temporary. There will be no expected increase in emissions from the operational phase of the proposed development due to the nature of the proposed development, within urban area. Given the small scale and temporary timeline of the

¹⁷ Accessed at: <https://gis.epa.ie/EPAMaps/> 13th September 2023

proposed development's construction phase, the emissions from the construction phase are determined to be of such a minor scale that they will not affect changes projected to arise from climate change to the degree that it would affect the QIs or SCIs of the European sites considered.

3.5. Identification of potential effects of the proposed development

This part of the screening assessment process identifies whether the changes brought about by the proposed development may introduce sources with pathways for introducing direct, indirect or secondary potential effects (either alone or in combination with other plans or projects) on the European sites considered in this report, in the absence of any controls, conditions, or mitigation measures (as required for an AASR). A number of factors have been taken into account including the sites' conservation objectives and known threats. Certain standardised metrics are utilised in this AASR to describe and assess the potential effects, thus standardising the assessment process across all plans and projects. These metrics are described, alongside the guidelines used in compiling them, in section 3.4 above.

The overall aim of the AASR is to predict the potential effects that can be reasonably foreseen to have a likelihood of causing potential significant effects to European sites as a result of the implementation of the proposed development.

The construction and operational phase elements of the proposed development with potential to introduce sources for effects to ecological processes are identified below. These will be discussed and considered for a likelihood of potential significant effects in view of the Special Conservation Interests, and Qualifying Interests of the European sites, and their sensitivities, and Qualifying Interests. Subsequently the potential effects with sources and pathways identified to have a likelihood for potential significant effects to European sites (if any) will be summarised.

Construction phase potential effects

The construction phase will be localised, small-scale and temporary. Potential effects identified from the construction phase of the proposed development are:

- Disturbance effects through noise; and
- Dust.

The construction phase of the proposed development has potential for effects for disturbance through noise to ex-situ foraging SCI species. However, this potential effect via noise during the construction phase will be temporary (i.e., less than one year) and localised. SCI species are sensitive to disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{18,19}. These distances can vary due to factors such as species and/or time of year^{20,21}. Given that the closest SPA is the Lough Owel SPA, at 2.49 km from the proposed development, it is deemed that this is sufficient distance to ensure that there is no likelihood for potential significant

¹⁸ Rudock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

¹⁹ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

²⁰ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. *Proceedings of the Royal Society B: Biological Sciences*, 284(1858), p.20170846.

²¹ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. *Ibis*, 162(3), pp.845-862.

effects via construction phase noise disturbance during the construction phase of the proposed development.

There will be an increase in dust emissions during the construction phase of the proposed development only. The operational phase will not introduce any sources for effects in this regard. However, given the distances between the proposed development site and the closest European sites of 2.49 km; the small scale of the proposed development; and, the temporary nature of the construction phase it is deemed that there are no sources with pathways for likely significant effects via construction related dust as a result of the proposed development.

Operational phase potential effects

The operational phase effects will be localised, small-scale and permanent. There will be no permanent loss of habitat that either supports, or is ecologically connected to, any European sites in the operational phase.

No surface water drainage system or sewerage infrastructure alterations will occur as a result of the proposed development as these needs will be catered for by existing infrastructure. Thus, surface water drainage and wastewater drainage will not present any sources for potential for significant effects via hydrological connectivity as a result of the proposed development.

3.5.1. Summary of potential significant effects

Therefore, for the purposes of this assessment report the proposed development, and considering the precautionary principle²², the proposed development is identified as no sources with pathways for likely significant effects via the construction or operational phases as a result of the proposed development. The potential effects are considered in the context of European sites identified below, their sensitivities and conservation objectives in section 3.6 and Table 3.1 below.

3.6. Screening of sites

This section of the report concerns the final stage of the screening process. Information has been collected and is presented on the sensitivity of each relevant European site (ref 3.2), and potential effects on each European site resulting from the proposed development have been identified (in s3.5 which assumed the absence of any controls, conditions, or mitigation measures, as required in AA screening). In determining the likelihood for potential for significant effects, a number of factors have been taken into account. First the sensitivity and reported threats to European sites and second, the individual elements of the proposed development and the potential significant effects they may cause on the sites, were considered. These factors are analysed as presented in Table 3.1.

Sites are screened out based on one or a combination of the following criteria:

- where it can be shown that there are no significant pathways such as hydrological links between activities of the proposed development and a site;
- where a site is located at such a distance from proposed development area that effects are not foreseen; and
- where known threats or vulnerabilities of a site cannot be linked to potential impacts that may arise from the proposed development.

²² Case law: ([C127/02 Waddenzee](#)).

Table 3.1 Screening assessment of the potential effects arising from the proposed development

Site Code	Site Name	Distance (km)	Qualifying Feature ²³	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
000688	Lough Owel SAC	2.49	Alkaline fens [7230], White-clawed crayfish (<i>Austropotamobius pallipes</i>) [1092], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], Transition mires and quaking bogs [7140]	Piers or tourist harbours or recreational piers [D03.01.02], Airports, flightpaths [D04], Hunting [F03.01], Outdoor sports and leisure activities, recreational activities [G01], Other sport or leisure complexes [G02.10], Diffuse pollution to surface waters due to agricultural and forestry activities [H01.05], Landfill, land reclamation and drying out, general [J02.01], Surface water abstractions for public water supply [J02.06.02], No threats or pressures [X]	<p>Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, groundwater interactions and direct land use management activities.</p> <p>The site is 2.49 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary.</p> <p>Given the nature and scale of the proposed development and the absence of both direct and indirect hydrological pathways, there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature of the proposed development, there are no sources for effect for groundwater interactions to the SAC.</p> <p>Considering the QIs of this SAC, and given the nature of the proposed development and the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.</p>	No	No
004047	Lough Owel SPA	2.49	Wetland and Waterbirds [A999], Shoveler (<i>Anas clypeata</i>) [A056], Coot (<i>Fulica atra</i>) [A125]	Fertilisation [A08], Sylviculture, forestry [B], Leisure fishing [F02.03], Hunting [F03.01], Human induced changes in hydraulic conditions [J02]	<p>Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects.</p> <p>The site is 2.49 km from the proposed development. There are no sources for effect for direct land use management to the SPA as this site is outside of the proposed development boundary.</p>	No	No

²³ Term used here to encompass both Qualifying Interests of SACs and Special Conservation Interests of SPAs

Site Code	Site Name	Distance (km)	Qualifying Feature ²³	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
					<p>Given the nature and scale of the proposed development and the absence of both direct and indirect hydrological pathways, there is no likelihood for potential significant effects via hydrological interactions.</p> <p>SCI species are sensitive to noise disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{24,25}. These distances can vary due to factors such as species and/or time of year^{26,27}. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed development. However, considering the current nature of the proposed development site, the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in the regard.</p> <p>Considering the SCIs of this SPA, and given the nature of the proposed development and the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.</p>		
000685	Lough Ennell SAC	3.76	Alkaline fens [7230]	Intensive cattle grazing [A04.01.01], Non intensive mixed animal grazing [A04.02.05], Abandonment of pastoral systems lack of grazing [A04.03], Forestry clearance [B02.02], Paths, tracks, cycling tracks [D01.01], Pole fishing	<p>Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, groundwater interactions and direct land use management activities.</p> <p>The site is 3.76 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary.</p> <p>Given the nature and scale of the proposed development and the</p>	No	No

²⁴ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

²⁵ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

²⁶ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

²⁷ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site Code	Site Name	Distance (km)	Qualifying Feature ²³	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
				[F02.03.02], Hunting [F03.01], Diffuse pollution to surface waters due to agricultural and forestry activities [H01.05], Diffuse pollution to surface waters due to household sewage and waste waters [H01.08], Point source or irregular noise pollution [H06.01.01], Light pollution [H06.02], Landfill, land reclamation and drying out, general [J02.01], Modifying structures of inland water courses [J02.05.02], Competition [Fauna] [K03.01]	absence of both direct and indirect hydrological pathways, there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature of the proposed development, there are no sources for effect for groundwater interactions to the SAC. Considering the QIs of this SAC, and given the nature of the proposed development and the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
004044	Lough Ennell SPA	4.08	Pochard (<i>Aythya ferina</i>) [A059], Tufted Duck (<i>Aythya fuligula</i>) [A061], Coot (<i>Fulica atra</i>) [A125], Wetland and Waterbirds [A999]	Fertilisation [A08], Sylviculture, forestry [B], Urbanised areas, human habitation [E01], Leisure fishing [F02.03], Hunting [F03.01], Nautical sports [G01.01], Walking, horse-riding and non-motorised vehicles [G01.02], Trampling, overuse [G05.01]	Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects. The site is 4.08 km from the proposed development. There are no sources for effect for direct land use management to the SPA as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development and the absence of both direct and indirect hydrological pathways, there is no likelihood for potential significant effects via hydrological interactions. SCI species are sensitive to noise disturbance effects; in general distances	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature ²³	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
					<p>beyond 2 km are seen to be sufficient to preclude such effects^{28,29}. These distances can vary due to factors such as species and/or time of year^{30,31}. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed development. However, considering the current nature of the proposed development site, the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in the regard.</p> <p>Considering the SCIs of this SPA, and given the nature of the proposed development and the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.</p>		
000692	Scragh Bog SAC	4.64	Alkaline fens [7230], Slender green feather-moss (<i>Hamatocaulis vernicosus</i>) [6216], Transition mires and quaking bogs [7140]	Fertilisation [A08], Agriculture activities not referred to above [A11], Paths, tracks, cycling tracks [D01.01], Diffuse pollution to surface waters due to household sewage and waste waters [H01.08], Invasive non-native species [I01]	<p>Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, groundwater interactions and direct land use management activities.</p> <p>The site is 4.64 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary.</p> <p>Given the nature and scale of the proposed development and the absence of both direct and indirect hydrological pathways, there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature of the proposed development, there are no sources for effect for groundwater interactions to the SAC.</p>	No	No

²⁸ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

²⁹ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

³⁰ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

³¹ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site Code	Site Name	Distance (km)	Qualifying Feature ²³	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
					Considering the QIs of this SAC, and given the nature of the proposed development and the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
002205	Wooddo wn Bog SAC	5.07	Degraded raised bogs still capable of natural regeneration [7120]	Forestry clearance [B02.02], Hand cutting of peat [C01.03.01], Invasive non-native species [I01], Problematic native species [I02], Burning down [J01.01], Landfill, land reclamation and drying out, general [J02.01], Other human induced changes in hydraulic conditions [J02.15]	<p>Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, groundwater interactions and direct land use management activities.</p> <p>The site is 5.07 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary.</p> <p>Given the nature and scale of the proposed development and the absence of both direct and indirect hydrological pathways, there is no likelihood for potential significant effects via hydrological interactions. In addition, this site is hydrologically isolated from the proposed development area as raised bog habitats are domed and primarily rainwater fed (ombrotrophic) and isolated from groundwater³².</p> <p>Considering the QIs of this SAC, and given the nature of the proposed development and the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.</p>	No	No
004046	Lough Iron SPA	8.81	Wigeon (<i>Anas penelope</i>) [A050], Wetland and Waterbirds [A999], Whooper Swan (<i>Cygnus cygnus</i>) [A038],	Grazing [A04], Fertilisation [A08], Sylviculture, forestry [B]	<p>Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects.</p> <p>The site is 8.81 km from the proposed development. There are no sources for effect for direct land use management to the SPA as this site</p>	No	No

³² Adapted from NPWS (2019). The Status of EU Protected Habitats and Species in Ireland.

Site Code	Site Name	Distance (km)	Qualifying Feature ²³	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
			Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395], Shoveler (<i>Anas clypeata</i>) [A056], Coot (<i>Fulica atra</i>) [A125], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Teal (<i>Anas crecca</i>) [A052]		<p>is outside of the proposed development boundary.</p> <p>Given the nature and scale of the proposed development and the absence of both direct and indirect hydrological pathways, there is no likelihood for potential significant effects via hydrological interactions.</p> <p>SCI species are sensitive to noise disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{33,34}. These distances can vary due to factors such as species and/or time of year^{35,36}. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed development. However, considering the current nature of the proposed development site, the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in the regard.</p> <p>Considering the SCIs of this SPA, and given the nature of the proposed development and the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.</p>		
004043	Lough Derravaragh SPA	9.24	Tufted Duck (<i>Aythya fuligula</i>) [A061], Pochard (<i>Aythya ferina</i>) [A059], Wetland and Waterbirds [A999], Coot (<i>Fulica atra</i>) [A125], Whooper	Animal breeding [A05.01], Fertilisation [A08], Sylviculture, forestry [B], Leisure fishing [F02.03], Hunting [F03.01]	<p>Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects.</p> <p>The site is 9.24 km from the proposed development. There are no sources for effect for direct land use management to the SPA as this site is outside of the proposed development boundary.</p>	No	No

³³ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

³⁴ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

³⁵ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

³⁶ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site Code	Site Name	Distance (km)	Qualifying Feature ²³	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
			Swan (<i>Cygnus cygnus</i>) [A038]		<p>Given the nature and scale of the proposed development and the absence of both direct and indirect hydrological pathways, there is no likelihood for potential significant effects via hydrological interactions.</p> <p>SCI species are sensitive to noise disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{37,38}. These distances can vary due to factors such as species and/or time of year^{39,40}. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed development. However, considering the current nature of the proposed development site, the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in the regard.</p> <p>Considering the SCIs of this SPA, and given the nature of the proposed development and the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.</p>		
000679	Garriskil Bog SAC	14.03	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs	Non intensive cattle grazing [A04.02.01], Mechanical removal of peat [C01.03.02], Invasive non-native species [I01], Problematic native species [I02], Burning down [J01.01], Other human induced changes in hydraulic conditions	<p>Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, groundwater interactions and direct land use management activities.</p> <p>The site is 14.03 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary.</p> <p>Given the nature and scale of the proposed development and the</p>	No	No

³⁷ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

³⁸ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

³⁹ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

⁴⁰ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site Code	Site Name	Distance (km)	Qualifying Feature ²³	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
			[7110]	[J02.15]	<p>absence of both direct and indirect hydrological pathways, there is no likelihood for potential significant effects via hydrological interactions. In addition, this site is hydrologically isolated from the proposed development area as raised bog habitats are domed and primarily rainwater fed (ombrotrophic) and isolated from groundwater⁴¹.</p> <p>Considering the QIs of this SAC, and given the nature of the proposed development and the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.</p>		
004102	Garriskil Bog SPA	14.04	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	Grazing [A04], Restructuring agricultural land holding [A10], Forest planting on open ground [B01], Railway lines, TGV [D01.04], Fire and fire suppression [J01], Modifying structures of inland water courses [J02.05.02]	<p>Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects.</p> <p>The site is 14.04 km from the proposed development. There are no sources for effect for direct land use management to the SPA as this site is outside of the proposed development boundary.</p> <p>There are no direct or indirect surface hydrological pathways between the proposed development and the SPA and therefore no potential for significant effects via hydrological interactions.</p> <p>SCI species are sensitive to noise disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{42,43}. These distances can vary due to factors such as species and/or time of year^{44,45}. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard.</p>	No	No

⁴¹ Adapted from NPWS (2019). The Status of EU Protected Habitats and Species in Ireland.

⁴² Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

⁴³ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

⁴⁴ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

⁴⁵ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site Code	Site Name	Distance (km)	Qualifying Feature ²³	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
					<p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed development. However, considering the current nature of the proposed development site, the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in the regard.</p> <p>Considering the SCIs of this SPA, and given the nature of the proposed development and the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.</p>		

3.7. Other plans and projects

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or projects that might, in combination with the plan or project, have potential for significant effects European sites.

Section 3.2 - receiving environment overview - identifies the overall characteristics of the area with respect to existing condition and general land use. For considerations of in combination with respect to emerging or recent developments a search of the Dept of Housing, Local Government and Heritage planning database was undertaken to identify relevant plans and programmes which relate to the proposed development. All developments from the receiving area were considered; the area considered is defined by the authoring ecologist using criteria which depend on the characteristics of the proposed development and the associated sources (identified above); these criteria include:

- Having direct or indirect connectivity to a European site;
- Being in close proximity to a European site;
- Being of a substantial scale relative to the conditions and/or current works taking place in the surrounding landscape;
- Having disperse emissions or far-reaching sources for effects;
- Having sources for effects to ecological connectivity.

These factors are considered in the context of characteristics of the proposed development and on this basis a search radius of 200 m was selected to be used to search for projects within the receiving environment. The sources for effects from the proposed development are considered in combination with the potential sources for effects from the receiving environment for potential additive or interactive effects to the receiving environment.

Plans of relevance within the receiving environment or in-combination with effects arising from the proposed development:

- Westmeath County Development Plan 2021-2027
- Mullingar Local Area Plan 2014-2020

Considering that the proposed development has a small-scale, temporary construction phase and the operational phase is consistent with the current site use, and the land use zoning of the above plan, it is not foreseen that proposed development will have any significant in-combination effects with the above plans.

Projects considered for possible in-combination effects from the proposed development:

Further to section 3.2 – which details the existing land uses and general characteristics of the area – a focus was placed on current and future development applications. To identify projects for consideration for the in-combination effects section, the Dept of Housing, Local Government and Heritage planning database was used⁴⁶. A review of all planning applications within the identified zone was conducted focusing on all application within the past 5 years⁴⁷.

⁴⁶ Accessed at: <https://data-housinggovie.opendata.arcgis.com/datasets/planning-application-sites-2010-onwards>; 18th December 2023

⁴⁷ Planning applications have a standard lifespan of 5 years as per Section 40 (3)(b) of the Planning & Development Act 2000, as amended; therefore, these are viewed to be the 'live' applications, all other projects are considered as part of the site other than refused and withdrawn applications, as these would not have any in-combination effects

There are a number of other proposed developments in the vicinity of the proposed development including works which are at planning stage or underway on various sites. The database search found that the vast majority of projects within the area are relating to the construction and alteration of residential structures, all of which undergo Appropriate Assessment where required. Table 3.2 provides a list of the proposed developments within 200 m of the proposed development.

Due to the scale and nature of the proposed development, there are no sources with a likelihood for potential significant effects identified as a result of the implementation of the proposed development. On this basis, the assessment guidance given in CIEEM, 2018 indicates that there is no need to consider cumulative effects. However, in taking a precautionary approach, relevant plans and projects have nonetheless been reviewed and assessed in-combination with the proposed development.

The proposed development is localised, with a small scale, temporary construction phase, and an operational phase that is consistent with current site use and environment. The projects listed in Table 3.2 below in the local area are small in scale with Appropriate Assessment and/or EIA screening carried out for each where required. Therefore, given the nature and scale of the proposed development, and the lack of any sources with a likelihood for potential significant effects, there are no likely in-combination potential significant effects with the below projects or above plans, on any European site considered in this report.

Table 3.2 Local planning applications⁴⁸ within the receiving environment of the proposed development⁴⁹

Project Details	Decision	Description	Distance from Proposed Development (m)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Likelihood of potential significant in-combination effects
Project Code: 2360056 Grant Date: 2023-11-21 Project Area (sq m)⁵⁰: 6841.50	Conditional	Development which will consist of the construction of a 3 storey apartment building containing 38 units, comprising of 26 No. 2-bedroom apartments and 12 No. 1-bedroom apartments, the provision of a site entrance off the R394 Road, the works will also include, roads, paths, paving, parking, amenity space, boundary treatments, landscaping, foul sewer drainage, surface water drainage, attenuation tanks with an attenuated outflow to an existing open drain and ancillary structures including bin stores and ESB substation and all associated site development works to complete the development.	54.31	Permission	<p>This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.</p> <p>The consent process for this project was subject to applicable EIA and AA requirements.</p>	No
Project Code: 196070 Grant Date: 2019-06-28 Project Area (sq m)⁵¹: 1124.10	Conditional	For development as previously granted under planning reference 16/6289 for ground floor window in-lieu of external door on northeast elevation, additional first floor window to ensuite on northeast elevation, increase in height of lean-to roof over utility and addition of roof window to roof slope on northeast elevation to accommodate walk in wardrobe to rear	166.83	Retention	<p>This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any</p>	No

⁴⁸⁴⁹ Parameters used: planning application from within the last 5 years, within a radius of 200 m around the proposed scheme boundary⁵⁰ Area is estimated using QGIS software subsequent to retrieving dataset from the Council.⁵¹ Area is estimated using QGIS software subsequent to retrieving dataset from the Council.

Project Details	Decision	Description	Distance from Proposed Development (m)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Likelihood of potential significant in-combination effects
		first floor bedroom.			European sites. The consent process for this project was subject to applicable EIA and AA requirements.	
Project Code: 196091 Grant Date: 2019-07-05 Project Area (sq m)⁵²: 411.30	Conditional	Construction of a two-storey extension to the side of our existing house to include on ground floor a living room, dining room and utility and on first floor two bedrooms and one bathroom with all ancillary site works.	156.23	Permission	<p>This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.</p> <p>The consent process for this project was subject to applicable EIA and AA requirements.</p>	No
Project Code: 186097 Grant Date: 2018-06-13 Project Area (sq m)⁵³: 336.20	Conditional	New single storey pitched and flat roof extension to side and rear of existing semi-detached dwelling house with associated site works.	138.50	Permission	<p>This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.</p> <p>The consent process for this project was subject to applicable EIA and AA requirements.</p>	No

⁵² Area is estimated using QGIS software subsequent to retrieving dataset from the Council.

⁵³ Area is estimated using QGIS software subsequent to retrieving dataset from the Council.

Project Details	Decision	Description	Distance from Proposed Development (m)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Likelihood of potential significant in-combination effects
<p>Project Code: 2360079</p> <p>Grant Date: 2023-06-30</p> <p>Project Area (sq m)⁵⁴: 263.40</p>	<p>Conditional</p>	<p>Development which shall consist of (1) removal of an unauthorized roof structure which was not constructed in accordance with previously granted permission ref. no. 20/6058; (2) construction of a new dormer first floor in place of the unauthorized roof; (3) alterations to elevations and all ancillary site works.</p>	<p>187.28</p>	<p>Permission</p>	<p>This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.</p> <p>The consent process for this project was subject to applicable EIA and AA requirements.</p>	<p>No</p>
<p>Project Code: 206058</p> <p>Grant Date: 2020-07-30</p> <p>Project Area (sq m)⁵⁵: 252.10</p>	<p>Conditional</p>	<p>To construct a side extension to existing dwelling house to include a study and a playroom with all ancillary site works.</p>	<p>187.74</p>	<p>Permission</p>	<p>This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites.</p> <p>The consent process for this project was subject to applicable EIA and AA requirements.</p>	<p>No</p>

⁵⁴ Area is estimated using QGIS software subsequent to retrieving dataset from the Council.

⁵⁵ Area is estimated using QGIS software subsequent to retrieving dataset from the Council.

Table 3.3 EIA Portal Data⁵⁶

EIA Portal Reference Number	Competent Authority	Description	Date of Receipt of Application	Distance from Proposed Development (m)
2022199	Westmeath County Council	Planning permission for Phase 3 of a residential development consisting of the construction of 213 no. residential units and all ancillary development works including access, footpaths, cycle paths, parking, drainage, landscaping, lighting and amenity are	2022-10-16	492
2023144	Westmeath County Council	LRD application for 181 no. residential units and all associated site development works.	2023-08-17	458

⁵⁶ Using a radius of 500m from the proposed development

4. Conclusion

This Appropriate Assessment Screening Report has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the proposed new construction of house at 75 Abbeylands, Mullingar, Co. Westmeath. Through an assessment of the potential sources and potential pathways for significant effects; an evaluation of the project characteristics; taking account of the processes involved and the distance of separation from European sites, it has been evaluated by this report, which intends to inform the competent authority on the Appropriate Assessment process, that there is no likelihood of potential significant effects occurring to the Qualifying Interests, Special Conservation Interests Or The Conservation Objectives of any designated European site as a result of the implementation of the proposed development.

Given the proposed development's small scale, temporary timeline, and its nature in the context of the local environment setting, and the nature and context of the other plans and projects identified in this report; the proposed development is not foreseen to have any likelihood for potential significant in-combination effects arising from any other plans or projects.

It is concluded by this AA Screening Report that the proposed development is not foreseen to have any likelihood of significant effects on any European sites, alone or in combination with other plans or projects – and therefore any potential for significant effects on any European site as a result of the proposed development can be ruled out. This conclusion is made in view of the conservation objectives of the habitats or species for which these sites have been designated. Consequently, this report informs the competent authority undertaking the Appropriate Assessment process that the proposed development does not need to be subject to Stage Two Appropriate Assessment and a Natura Impact Statement is not required.

Appendix I Background information on European sites⁵⁷

Site Code	Site Name	Qualifying Feature	Pressure Codes	Known Sensitivities/Threats and Pressures
000679	Garriskil Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	A04.02.01, I01, J02.15, C01.03.02, J01.01, I02	Non intensive cattle grazing, invasive non-native species, other human induced changes in hydraulic conditions, mechanical removal of peat, burning down, problematic native species
000685	Lough Ennell SAC	Alkaline fens [7230]	H06.02, K03.01, J02.01, B02.02, A04.02.05, A04.01.01, D01.01, J02.05.02, H01.05, F02.03.02, A04.03, H06.01.01, F03.01, H01.08	Light pollution, competition (fauna), landfill, land reclamation and drying out, general, forestry clearance, non-intensive mixed animal grazing, intensive cattle grazing, paths, tracks, cycling tracks, modifying structures of inland water courses, diffuse pollution to surface waters due to agricultural and forestry activities, pole fishing, abandonment of pastoral systems lack of grazing, point source or irregular noise pollution, hunting, diffuse pollution to surface waters due to household sewage and waste waters
000688	Lough Owel SAC	Transition mires and quaking bogs [7140], Alkaline fens [7230], White-clawed crayfish (<i>Austropotamobius pallipes</i>) [1092], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	G02.10, D03.01.02, F03.01, J02.01, D04, H01.05, J02.06.02, G01, X	Other sport or leisure complexes, piers or tourist harbours or recreational piers, hunting, landfill, land reclamation and drying out, general, airports, flightpaths, diffuse pollution to surface waters due to agricultural and forestry activities, surface water abstractions for public water supply, outdoor sports and leisure activities, recreational activities, no threats or pressures
000692	Scragh Bog SAC	Alkaline fens [7230], Slender green feather-moss (<i>Hamatocaulis vernicosus</i>) [6216], Transition mires and quaking bogs [7140]	A11, I01, D01.01, A08, H01.08	Agriculture activities not referred to above, invasive non-native species, paths, tracks, cycling tracks, fertilisation, diffuse pollution to surface waters due to household sewage and waste waters
002205	Wooddown Bog SAC	Degraded raised bogs still capable of natural regeneration [7120]	I01, J01.01, C01.03.01, I02, J02.01, B02.02, J02.15	Invasive non-native species, burning down, hand cutting of peat, problematic native species, landfill, land reclamation and drying out, general, forestry clearance, other human induced changes in hydraulic conditions
004043	Lough Derravaragh SPA	Tufted Duck (<i>Aythya fuligula</i>) [A061], Wetland and Waterbirds [A999], Coot (<i>Fulica atra</i>) [A125], Whooper Swan (<i>Cygnus cygnus</i>) [A038], Pochard (<i>Aythya ferina</i>) [A059]	B, F03.01, A05.01, F02.03, A08	Sylviculture, forestry, hunting, animal breeding, leisure fishing, fertilisation

⁵⁷ That have functional connectivity (ecological pathways) to the proposed development area including their Qualifying Interests, known threats and pressures

Site Code	Site Name	Qualifying Feature	Pressure Codes	Known Sensitivities/Threats and Pressures
004044	Lough Ennell SPA	Coot (<i>Fulica atra</i>) [A125], Wetland and Waterbirds [A999], Pochard (<i>Aythya ferina</i>) [A059], Tufted Duck (<i>Aythya fuligula</i>) [A061]	F02.03, F03.01, G01.02, B, E01, G01.01, G05.01, A08	Leisure fishing, hunting, walking, horse-riding and non-motorised vehicles, silviculture, forestry, urbanised areas, human habitation, nautical sports, trampling, overuse, fertilisation
004046	Lough Iron SPA	Whooper Swan (<i>Cygnus cygnus</i>) [A038], Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395], Wigeon (<i>Anas penelope</i>) [A050], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Teal (<i>Anas crecca</i>) [A052], Shoveler (<i>Anas clypeata</i>) [A056], Wetland and Waterbirds [A999], Coot (<i>Fulica atra</i>) [A125]	A04, B, A08	Grazing, silviculture, forestry, fertilisation
004047	Lough Owel SPA	Wetland and Waterbirds [A999], Shoveler (<i>Anas clypeata</i>) [A056], Coot (<i>Fulica atra</i>) [A125]	F02.03, F03.01, B, J02, A08	Leisure fishing, hunting, silviculture, forestry, human induced changes in hydraulic conditions, fertilisation
004102	Garriskil Bog SPA	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	A04, D01.04, J02.05.02, A10, B01, J01	Grazing, railway lines, tgv, modifying structures of inland water courses, restructuring agricultural land holding, forest planting on open ground, fire and fire suppression

Appendix II Qualifying Interests of SACs that have undergone assessment⁵⁸

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
[1092]	White-clawed Crayfish (<i>Austropotamobius pallipes</i>)	The main pressures facing this species is related to the non-indigenous crayfish species (NICS) and Crayfish Plaque, a waterborne disease specific to freshwater crayfish.	I01, I05	Invasive alien species of union concern, plant and animal diseases, pathogens and pests	Invasive species, disease, surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.
[3140]	Hard oligo-mesotrophic waters with benthic vegetation of muskgrass (<i>Chara spp.</i>)	The hard-water lake habitat is under significant pressure from eutrophication, the primary sources of nutrient and organic pollution being agriculture and municipal and industrial wastewaters.	A25, A26, A31, B23, B27, C05, F12, F13, F33, I02	Agricultural activities generating point source pollution to surface or ground waters, agricultural activities generating diffuse pollution to surface or ground waters, drainage for use as agricultural land, forestry activities generating pollution to surface or ground waters, modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams), peat extraction, discharge of urban waste water (excluding storm overflows and/or urban run-offs) generating pollution to surface or ground water, plants, contaminated or abandoned industrial sites generating pollution to surface or ground water, abstraction of ground and surface waters (including marine) for public water supply and recreational use, other invasive alien species (other than species of union concern)	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
[7110]	Active raised bogs	The main pressures on active raised bog are peat extraction, drainage, afforestation and burning.	A11, B01, C05, K02, N01	Burning for agriculture, conversion to forest from other land uses, or afforestation (excluding drainage), peat extraction, drainage, temperature changes (e.g., rise of temperature & extremes) due to climate change	Surface water interactions. Groundwater isolated system with sensitivities related to the bog basin. Drainage and land use management are the key things.
[7120]	Degraded raised bogs still capable of natural regeneration	The main pressure on degraded bogs come from peat extraction, drainage, afforestation and burning.	A11, B01, C05, K02, N01	Burning for agriculture, conversion to forest from other land uses, or afforestation (excluding drainage), peat extraction, drainage, temperature changes (e.g., rise of temperature & extremes) due to climate change	Surface water interactions. Groundwater isolated system with sensitivities related to the bog basin. Drainage and

⁵⁸ Including known treats and pressures and sensitivities of qualifying interests

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
					land use management are the key things.
[7140]	Transition mires and quaking bogs	The main pressures facing transition mires in Ireland are afforestation, water pollution, drainage and hydrological changes with grazing/agricultural management also being a pressure.	A06, A09, B01, C05, J01, K01, K02, K04, L02	Abandonment of grassland management (e.g., cessation of grazing or of mowing), intensive grazing or overgrazing by livestock, conversion to forest from other land uses, or afforestation (excluding drainage), peat extraction, mixed source pollution to surface and ground waters (limnic and terrestrial), abstraction from groundwater, surface water or mixed water, drainage, modification of hydrological flow, natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Surface water interactions. Groundwater isolated system with sensitivities related to the bog basin. Drainage and land use management are the key things.
[7150]	Depressions on peat substrates of the Rhynchosporion	The main pressures on the habitat are associated with impacts on the supporting bog habitats, especially overgrazing, burning, peat extraction, drainage and conversion to forestry.	A09, A11, B01, C05, K02, N01	Intensive grazing or overgrazing by livestock, burning for agriculture, conversion to forest from other land uses, or afforestation (excluding drainage), peat extraction, drainage, temperature changes (e.g., rise of temperature & extremes) due to climate change	Surface and ground water interactions. Drainage and land use management are the key things.
[7230]	Alkaline fens	The main pressures facing this habitat are land abandonment (and associated succession), overgrazing, drainage and pollution.	A06, A09, A26, J01, K01, K02, K04, L02, N02, N03	Abandonment of grassland management (e.g., cessation of grazing or of mowing), intensive grazing or overgrazing by livestock, agricultural activities generating diffuse pollution to surface or ground waters, mixed source pollution to surface and ground waters (limnic and terrestrial), abstraction from groundwater, surface water or mixed water, drainage, modification of hydrological flow, natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices), temperature changes (e.g., rise of temperature & extremes) due to climate change, increases or changes in precipitation due to climate change	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.

Appendix III Special Conservation Interests of SPAs that have undergone assessment⁵⁹

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A050	Eurasian Wigeon	<i>Anas penelope</i>	C03, F01, F03, G01, H01, H03, H07, I01, J02, J03	Renewable abiotic energy use, marine and freshwater aquaculture, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), marine water pollution, other forms of pollution, invasive non-native species, human induced changes in hydraulic conditions, other ecosystem modifications
A056	Northern Shoveler	<i>Anas clypeata</i>	C03, F03, G01, H01, H03, H07	Renewable abiotic energy use, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), marine water pollution, other forms of pollution
A059	Common Pochard	<i>Aythya ferina</i>	C03, F03, G01, H01, H07, M02	Renewable abiotic energy use, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), other forms of pollution, changes in biotic conditions
A061	Tufted Duck	<i>Aythya fuligula</i>	C03, F03, G01, H01, H07, M02	Renewable abiotic energy use, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), other forms of pollution, changes in biotic conditions
A125	Eurasian Coot	<i>Fulica atra atra</i>	C03, G01, H01	Renewable abiotic energy use, outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish)
A140	European Golden Plover	<i>Pluvialis apricaria</i>	A02, A04, B01, C01, C03, F01, G01, H03, J01, K03, M02	Modification of cultivation practices, grazing, forest planting on open ground, mining and quarrying, renewable abiotic energy use, marine and freshwater aquaculture, outdoor sports and leisure activities, recreational activities, marine water pollution, fire and fire suppression, interspecific faunal relations, changes in biotic conditions
A395	Greater White-Fronted Goose	<i>Anser albifrons flavirostris</i>	A02, A04, A06, A11, B01, C03, D02, D05, F01, F03, G01, H03, H07, K03, M01, M02	Modification of cultivation practices, grazing, annual and perennial non-timber crops, agriculture activities not referred to above, forest planting on open ground, renewable abiotic energy use, utility and service lines, improved access to site, marine and freshwater aquaculture, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, marine water pollution, other forms of pollution, interspecific faunal relations, changes in abiotic conditions, changes in biotic conditions

⁵⁹ Including known treats and pressures of SCIs

Appendix IV Conservation Objectives⁶⁰

NPWS (2015) Conservation Objectives for Garriskil Bog SAC [IE0000679] Version 1.
NPWS (2018) Conservation Objectives for Lough Ennell SAC [IE0000685] Version 1.
NPWS (2018) Conservation Objectives for Lough Owel SAC [IE0000688] Version 1.
NPWS (2018) Conservation Objectives for Scragh Bog SAC [IE0000692] Version 1.
NPWS (2023) Conservation Objectives for Wooddown Bog SAC [IE0002205] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Lough Derravaragh SPA [IE0004043] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Lough Ennell SPA [IE0004044] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Lough Iron SPA [IE0004046] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Lough Owel SPA [IE0004047] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Garriskil Bog SPA [IE0004102] Version 1.

⁶⁰ NPWS/Department of Culture, Heritage and the Gaeltacht

Appendix V Contributor Details

Author - Callum O'Regan is an ecologist who holds a B.Sc. degree in Zoology from University College Cork and obtained a Master's degree in Conservation Behaviour from Galway-Mayo Institute of Technology in 2021. Callum has skills in data management and analysis, report writing and mapping. Callum has also worked on the fieldwork for and preparation of a number of reports including Ecological Impact Assessments (EclAs) and Appropriate Assessment Screenings for private and public projects of various sizes and complexities.

Supervisor - Karen Dylan Shevlin is an ecologist with over 9 years' experience working in multiple capacities in ecology in Irish and international research institutions and organisations, and holds a MSc degree in Biodiversity and Conservation from Trinity College Dublin (2013). Karen has significant skills in leading ecological surveys of bats, birds, insects, habitats and mammals and data analysis, mapping and compiling reports. Karen has worked on producing AA screenings, NISs, and EIARs for a range of public and private projects ranging from smaller facilities upgrades projects to major wind turbine sites. Karen is also a specialist in ecological theory and the impacts/effects that altering natural dynamics may have on the surrounding environment. This combination of skills and knowledge provides the backbone of the assessment process, and ensure that all of the baseline and detailed data gathered in the field is interpreted in a manner that is grounded in best scientific knowledge.

Reviewer - Paul Fingleton has an MSc in Rural and Regional Resources Planning (with specialisation in EIA) from the University of Aberdeen. Paul is a member of the International Association for Impact Assessment as well as the Institute of Environmental Management and Assessment. He has over twenty-five years' experience working in the area of Environmental Assessment. Over this period, he has been involved in a diverse range of projects including contributions to, and co-ordination of, numerous complex EIARs and EIA screening reports. He has also contributed to and supervised the preparation of numerous AAs and AA screenings.

Paul is the lead author of the current EPA Guidelines and accompanying Advice Notes on EIARs. He has been involved in all previous editions of these statutory guidelines. He also provides a range of other EIA related consultancy services to the EPA. Paul is regularly engaged by various planning authorities and other consent authorities to provide specialised EIA advice.