

# **Appropriate Assessment Screening Report**

**for proposed**

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## **Housing at Bundaire, Kinnegad, Co. Westmeath**

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

**by**  
**CAAS Ltd**  
**for**  
**Westmeath County Council**



**October 2023**

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## Document Control

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## 1. Introduction

### 1.1. Background

CAAS has been appointed by Westmeath County Council to prepare this Appropriate Assessment Screening Report (AASR) for the proposed housing at Bundaire, Kinnegad, 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:

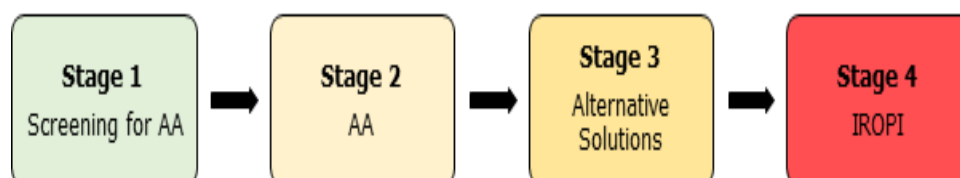
*‘A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species’ 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 Centre<sup>1</sup>; the NPWS<sup>2</sup> (including mapping and available reports for relevant sites, and in particular the qualifying interests/special conservation interests described and their conservation objectives); the EPA<sup>3</sup> 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 km<sup>4</sup> of the subject lands;
- Identification of European sites pathways for effects from the site have been identified (if relevant<sup>5</sup>) 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 identified; and

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

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

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

<sup>4</sup> 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

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

- 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 receptor<sup>6</sup>.

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*

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<sup>6</sup> 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 Bundaire, Kinnegad, County Westmeath. The proposed site is 0.8 ha in area, and consists of the construction of 12 residential homes to the north-east of Kinnegad town (Figure 2.1). The proposed site is currently an overgrown greenfield site, which contains an existing burial ground, which has been incorporated into the proposed site's operational phase design (Figure 2.3).

In the wider context, proposed site is adjacent to a number of residential dwellings, which extend towards the south-east, and agricultural areas to the west, north and south (Figure 2.1). In consulting satellite imagery and the EPA databases on water courses<sup>7</sup>, there are no surface water courses adjacent to the site; the closest water course lies approximately 550 m to the south east of the proposed development site (Figure 2.2). The proposed site has no direct surface hydrological connection with any surface water course in the surrounding landscape<sup>7</sup>.

### 2.2. The Proposed Development

The proposed development comprises of the construction of 12 residential homes at Bun Daire, Boreen Bradach, Kinnegad – Phase 4 of approximately 2728 m<sup>2</sup> on a 0.8 ha site.

The proposed development boundary is shown in Figure 2.1, and the proposed development plan is shown in Figure 2.3.

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

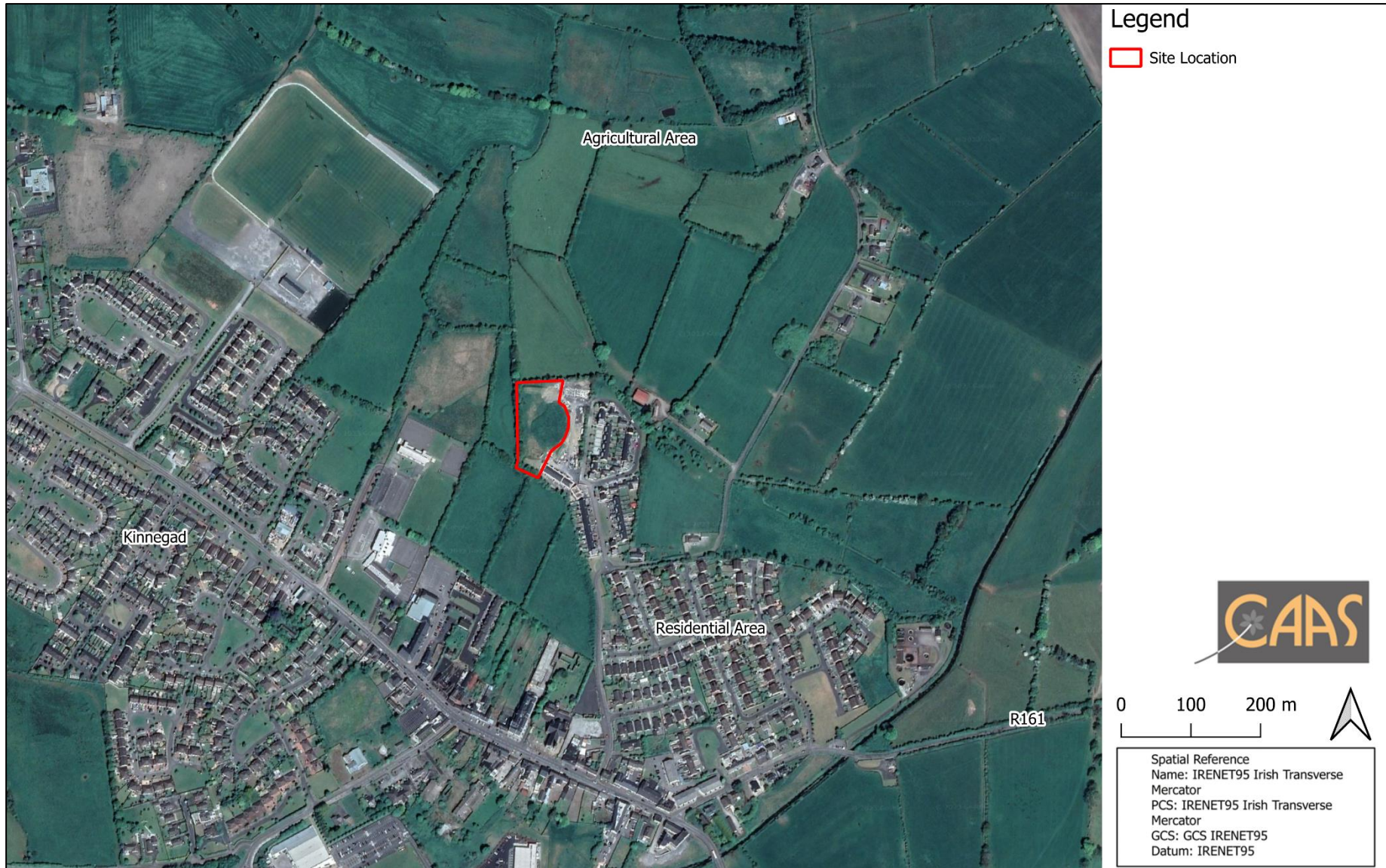


Figure 2.1. Location of the proposed development

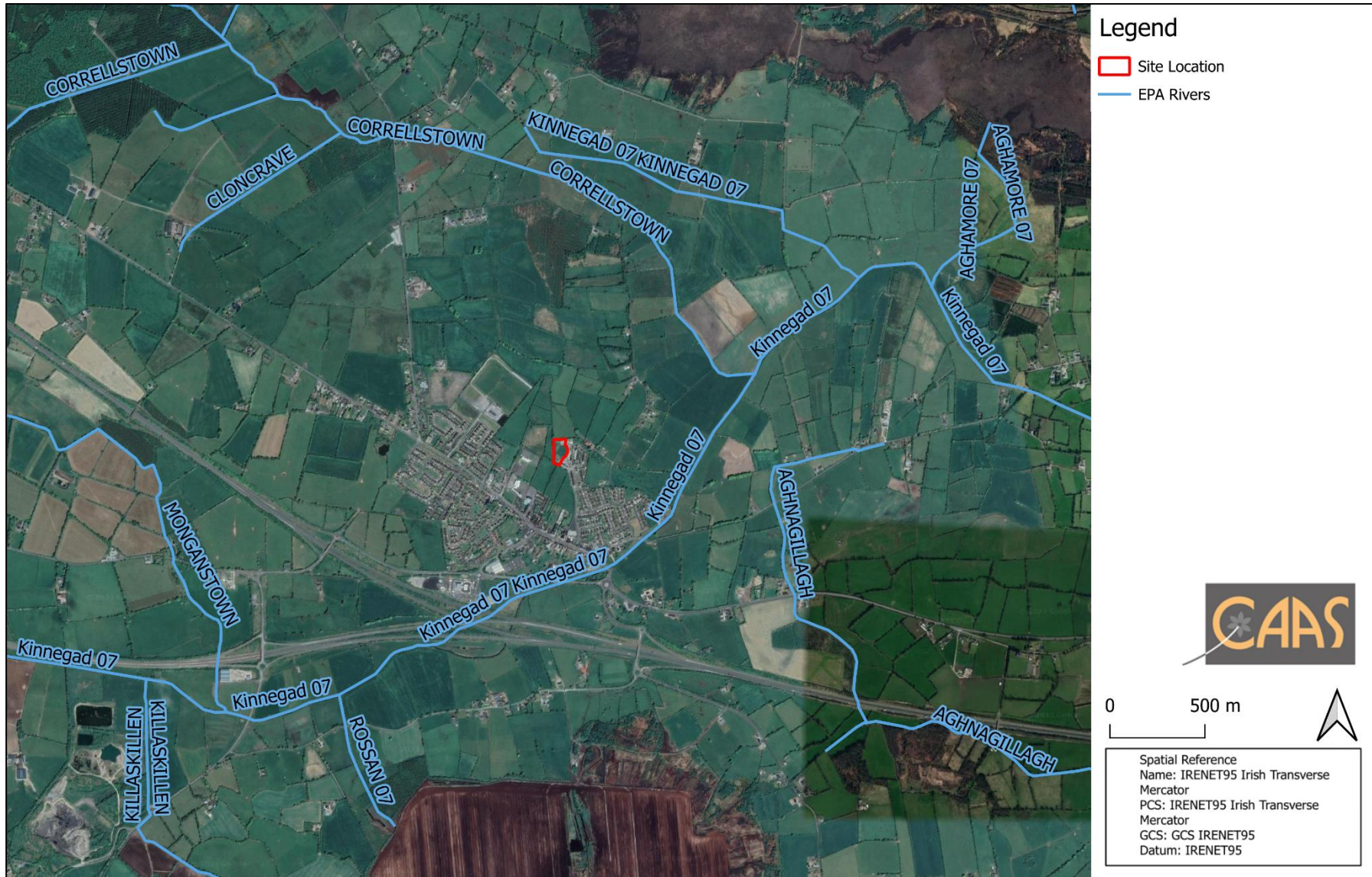


Figure 2.2. Location of EPA rivers relative to the proposed development



Figure 2.3. Proposed development plan<sup>8</sup>

<sup>8</sup> 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<sup>9,10</sup> 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 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 development 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 development 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 is currently a brown field site, with small areas of artificial surfaces, and is located 4.46 km from the closest SPA designated for SCI species. Therefore, the proposed development site does not hold 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

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<sup>9</sup> Practice Note PN01: *Appropriate Assessment Screening for Development Management*, Office of the Planning Regulator, 2021.

<sup>10</sup> 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.

species that was used during this assessment included the following:

- 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 Synopses<sup>11</sup>; and
- NATURA 2000 Standard Data Forms<sup>11</sup>.

The analysis in Table 3.1 considers the SSCOs of each of the sites within the 15 km initial search zone, and the 200 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.

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<sup>11</sup> 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

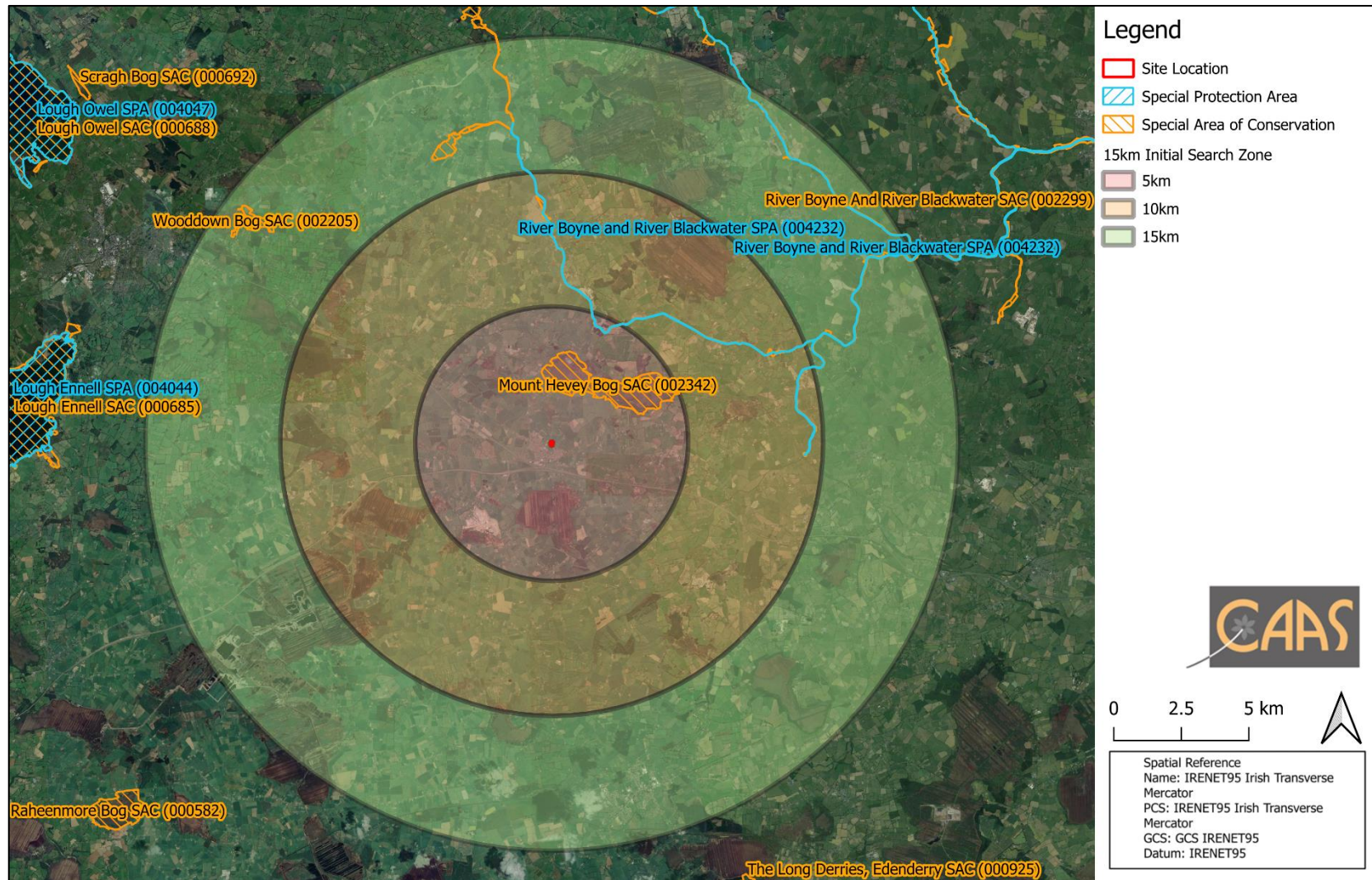


Figure 3.1. European sites within 15km of the proposed development boundary<sup>12</sup>

<sup>12</sup> Source: NPWS (datasets downloaded 15<sup>th</sup> 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 residential housing at Bundaire, Kinnegad, 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 effects<sup>13</sup>.

- **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

<sup>13</sup> 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 SSCO 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 SSCO 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 guidance<sup>14</sup> outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take

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<sup>14</sup> 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 boundary<sup>15</sup>. The closest European site to the proposed development site is, Mount Hevey Bog SAC (002342), at 1.84 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 due to lack of hydrological connectivity (S2.1 and Figure 2.2). 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 site itself is composed of an existing greenfield site, which is heavily overgrown, and undermanaged / not grazed – and thus offers little to no potential habitat for ex-situ foraging for SCI species. Overall, the proposed development site has no ecological value for foraging SCI species due to high disturbance levels, the unsuitability of the receiving environment of the proposed site for ex-situ foraging, and the proposed site's location in a suburban setting. 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 a minor, short-term 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 1.84 km in distance). 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. The operational phase of the proposed development will not result in any significant increase in noise levels due to the small

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<sup>15</sup> 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/>)

scale, temporary nature of the proposed development, and the disturbed, suburban nature of the surrounding receiving environment of the proposed development site.

There are no sources for indirect disturbance to SCI species from surrounding SPAs in terms of ex-situ foraging. The proposed development area has no ecological value to SCI species and is within a suburban area on the outskirts of Kinnegad, 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 also be no direct loss of SAC or SPA habitat as a result of the proposed development. The receiving environment of the proposed development site also has an overall no 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 course<sup>16</sup> is approximately 550 m to the southeast of the proposed development, which has no direct surface connectivity to the proposed development site. Therefore, there is no direct surface hydrological connection between the proposed development and this water course. There will be a change in hard surfaced area as a result of the proposed development, which can cause a slight increase of surface water run-off, however, due to the scale and nature of the proposed development and the majority of the proposed site remaining unchanged due to the existing burial site, any changes introduced to potential surface water run-off area will be negligible. Drainage system alterations are to occur as a result of the proposed development; however, these will connect the proposed development to existing drainage systems in Bundaire for the operational phase. The construction phase effects will also be small scale and temporary. 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 surface water courses. There is indirect connectivity to the surrounding landscape via surface water drainage; however, there will be no significant change to surface water run-off as a result of the proposed development, due to the small-scale nature of the proposed development, and the connection to existing surface water drainage infrastructure in Bundaire during the operational phase. 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 a slight increase in emissions from the operational phase of the proposed development due to the nature of the proposed development, within suburban area. However, given the small scale and temporary timeline of the proposed development's construction and operational phase, the emissions from the

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<sup>16</sup> Accessed at: <https://gis.epa.ie/EPAMaps/> 13<sup>th</sup> September 2023

construction and operational 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 likely significant 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 likely significant 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<sup>17,18</sup>. These distances can vary due to factors such as species and/or time of year<sup>19,20</sup>. Given that the closest SPA is the River Boyne and Blackwater SPA, at 4.46 km from the proposed development, it is deemed that this is sufficient distance to ensure that there is no likelihood for

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<sup>17</sup> 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.

<sup>18</sup> 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.

<sup>19</sup> 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.

<sup>20</sup> 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.

potential significant 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 1.84 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 neither supports, nor is ecologically connected to, any European sites in the operational phase.

Surface water drainage system and sewerage infrastructure alterations will occur as a result of the proposed development. These alterations will allow for the proposed development to connect to existing drainage infrastructure in Bundaire. The existing drainage infrastructure has capacity for the operational phase of the proposed development and will not result in a significant change to surface water and wastewater drainage. 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 likely significant effects**

Therefore, in summary, for the purposes of this assessment report of the proposed development, and considering the precautionary principle<sup>21</sup>, the proposed development is identified as having no sources with pathways for likely significant effects from the construction or operational phases of the proposed development.

The identified potential effects above are also considered and discussed in section 3.6 and Table 3.1 below, in the context of each of the European sites identified by this assessment report, in view of each of their sensitivities and Conservation Objectives.

### **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.

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<sup>21</sup> Case law: ([C127/02 Waddenzee](#)).

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.

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

Site Code	Site Name	Distance (km)	Qualifying Feature <sup>22</sup>	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
002342	Mount Hevey Bog SAC	1.84	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	Forestry clearance [B02.02], Mechanical removal of peat [C01.03.02], Paths, tracks, cycling tracks [D01.01], Railway lines, Disposal of household or recreational facility waste [E03.01], Invasive non-native species [I01], Introduced genetic material, GMO [I03], Landfill, land reclamation and drying out, general [J02.01], Canalisation & water deviation [J02.03], Modification of hydrographic functioning, general [J02.05], Parasitism [Flora] [K04.02]	<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 direct land management activities, hydrological interactions and groundwater interactions.</p> <p>The site is 1.84km 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 groundwater<sup>23</sup>.</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
004232	River Boyne and River Blackwater SPA	4.46	Kingfisher ( <i>Alcedo atthis</i> ) [A229]	Roads, motorways [D01.02], Urbanised areas, human habitation [E01], Dispersed habitation [E01.03], Human induced changes in hydraulic conditions [J02], 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 SPA is sensitive to hydrological interactions, disturbance effects and direct land use management activities.</p> <p>The site is 4.46km from the proposed development. There are no sources for effect for direct land use management to the SAC</p>	No	No

<sup>22</sup> Term used here to encompass both Qualifying Interests of SACs and Special Conservation Interests of SPAs.

<sup>23</sup> Adapted from NPWS (2019). The Status of EU Protected Habitats and Species in Ireland.



Site Code	Site Name	Distance (km)	Qualifying Feature <sup>22</sup>	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
					<p>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.</p> <p>SCI species are sensitive to noise disturbance effects; in general distances beyond 2km are seen to be sufficient to preclude such effects<sup>24,25</sup>. These distances can vary due to factors such as species and/or time of year<sup>26,27</sup>. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this 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>		
002299	River Boyne and River Blackwater SAC	4.47	Atlantic salmon ( <i>Salmo salar</i> ) [1106], Otter ( <i>Lutra lutra</i> ) [1355], Alkaline fens [7230], River lamprey ( <i>Lampetra fluviatilis</i> ) [1099], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus</i>	Cultivation [A01], Mowing or cutting of grassland [A03], Stock feeding [A05.02], Use of biocides, hormones and chemicals [A07], Fertilisation [A08], Removal of hedges and copses or scrub [A10.01], Artificial planting on open ground (non-native trees) [B01.02], Sand and gravel extraction [C01.01], Roads, motorways [D01.02], Bridge, viaduct [D01.05], Other patterns	<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 direct land use management activities, hydrological interactions and groundwater interactions.</p> <p>The site is 4.47km 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, there are no sources for</p>	No	No

<sup>24</sup> 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.

<sup>25</sup> 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.

<sup>26</sup> 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.

<sup>27</sup> 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 <sup>22</sup>	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
			excelsior ( <i>Alno-Padion, Alnion incanae, Salicion albae</i> ) [91E0]	of habitation [E01.04], Industrial or commercial areas [E02], Disposal of industrial waste [E03.02], Other discharges [E03.04], Storage of materials [E05], Outdoor sports and leisure activities, recreational activities [G01], Other sport or leisure complexes [G02.10], Other human intrusions and disturbances [G05], Tree surgery, felling for public safety, removal of roadside trees [G05.06], Pollution to surface waters [Limnic & terrestrial, marine & brackish] [H01], Invasive non-native species [I01], Human induced changes in hydraulic conditions [J02], Modifying structures of inland water courses [J02.05.02], Management of aquatic and bank vegetation for drainage purposes [J02.10], Siltation rate changes, dumping, depositing of dredged deposits [J02.11], Other human induced changes in hydraulic conditions [J02.15]	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.		
002205	Wooddown Bog SAC	12.85	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,	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.  The site is 12.85km from the proposed development. There are	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature <sup>22</sup>	Known Threats and Pressures	Analysis of Potential Effects	Likelihood of Potential Significant Effects	Likelihood of Potential In-Combination Effects
				general [J02.01], Other human induced changes in hydraulic conditions [J02.15]	<p>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 groundwater<sup>28</sup>.</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>		

<sup>28</sup> Adapted from NPWS (2019). The Status of EU Protected Habitats and Species in Ireland.



### 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

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 likely 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 used<sup>29</sup>. A review of all planning applications within the identified zone was conducted focusing on all application within the past 5 years<sup>30</sup>.

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<sup>29</sup> Accessed at: <https://data-housinggovie.opendata.arcgis.com/datasets/planning-application-sites-2010-onwards>; 14<sup>th</sup> September 2023

<sup>30</sup> 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 small 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 these 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 project listed in Table 3.2 below in the local area is small in scale with Appropriate Assessment and/or EIA screening carried out if 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 likely significant effects with the below projects or above plans, on any European site considered in this report.

**Table 3.2 Local planning applications<sup>31</sup> within the receiving environment of the proposed development<sup>32</sup>**

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
<b>Project Code:</b> 2379  <b>Grant Date:</b> 2023-09-07  <b>Project Area (sq m):</b> 4229.90	Conditional	RETENTION permission for existing constructed footings of extension, completion of same to existing dwelling, completion of refurbishment works to existing dwelling and retention of existing garage	137.99	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. The consent process for this project was subject to applicable EIA and AA requirements.</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>	No

<sup>31</sup> The majority of surrounding developments are minor projects with no risk of in-combination effects. Therefore, a summary list is provided here of the four largest proposed schemes within the below stated parameters

<sup>32</sup> Parameters used: planning application from within the last 5 years, within a radius of 200m around the proposed scheme boundary

## 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 housing at Bundaire, Kinnegad, 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 its 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 sites<sup>33</sup>

Site Code	Site Name	Qualifying Feature	Pressure Codes	Known Threats and Pressures
002205	Wooddown Bog SAC	Degraded raised bogs still capable of natural regeneration [7120]	B02.02, I01, C01.03.01, I02, J01.01, J02.15, J02.01	Forestry clearance, invasive non-native species, hand cutting of peat, problematic native species, burning down, other human induced changes in hydraulic conditions, landfill, land reclamation and drying out, general
002299	River Boyne and River Blackwater SAC	Otter ( <i>Lutra lutra</i> ) [1355], Alkaline fens [7230], River lamprey ( <i>Lampetra fluviatilis</i> ) [1099], Atlantic salmon ( <i>Salmo salar</i> ) [1106], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ) [91E0]	A01, A03, A05.02, A07, A08, A10.01, B01.02, E01.04, E02, C01.01, E03.02, E03.04, E05, G01, D01.02, G05, G05.06, D01.05, J02.11, I01, J02.05.02, J02.10, H01, J02.15, J02, G02.10	Cultivation, mowing or cutting of grassland, stock feeding, use of biocides, hormones and chemicals, fertilisation, removal of hedges and copses or scrub, artificial planting on open ground (non-native trees), other patterns of habitation, industrial or commercial areas, sand and gravel extraction, disposal of industrial waste, other discharges, storage of materials, outdoor sports and leisure activities, recreational activities, roads, motorways, other human intrusions and disturbances, tree surgery, felling for public safety, removal of roadside trees, bridge, viaduct, siltation rate changes, dumping, depositing of dredged deposits, invasive non-native species, modifying structures of inland water courses, management of aquatic and bank vegetation for drainage purposes, pollution to surface waters (limnic & terrestrial, marine & brackish), other human induced changes in hydraulic conditions, human induced changes in hydraulic conditions, other sport or leisure complexes
002342	Mount Hevey Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	C01.03.02, D01.04, D01.01, E03.01, I01, I03, B02.02, J02.03, J02.05, J02.01, K04.02	Mechanical removal of peat, railway lines, tgv, paths, tracks, cycling tracks, disposal of household or recreational facility waste, invasive non-native species, introduced genetic material, gmo, forestry clearance, canalisation & water deviation, modification of hydrographic functioning, general, landfill, land reclamation and drying out, general, parasitism (flora)
004232	River Boyne and River Blackwater SPA	Kingfisher ( <i>Alcedo atthis</i> ) [A229]	D01.02, J02, E01, E01.03, X	Roads, motorways, human induced changes in hydraulic conditions, urbanised areas, human habitation, dispersed habitation, no threats or pressures

<sup>33</sup> That have functional connectivity (ecological pathways) to the proposed development area including their Qualifying Interests, known threats and pressures

Appendix II Qualifying Interests of SACs that have undergone assessment<sup>34</sup>

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
[1099]	River Lamprey ( <i>Lampetra fluviatilis</i> )	The main pressures on River Lampreys are associated with hydropower infrastructure and changes in rainfall due to climate change. The use of synthetic and natural fertilisers, drainage and also infrastructure related to shipping are also considered to be pressures on the species.	A19, A20, A31, D02, E03, N01, N02, N03	Application of natural fertilisers on agricultural land, application of synthetic (mineral) fertilisers on agricultural land, drainage for use as agricultural land, hydropower (dams, weirs, run-off-the-river), including infrastructure, shipping lanes, ferry lanes and anchorage infrastructure (e.g., canalisation, dredging), temperature changes (e.g., rise of temperature & extremes) due to climate change, increases or changes in precipitation due to climate change	Surface water dependent. Highly sensitive to hydrological change. Availability of suitable spawning ground is a considerable issue for the species.
[1106]	Salmon ( <i>Salmo salar</i> )	Known pressures include exploitation at sea in commercial fisheries, interceptor fisheries in coastal waters, aquaculture and predation. In addition, the negative influence of climate change on prey structure as well as alterations in habitat and water quality are also pressures on the species.	A25, A26, B23, D02, F12, F28, G11, G19, G20, I02, J01, K05, L06, N01	Agricultural activities generating point source pollution to surface or ground waters, agricultural activities generating diffuse pollution to surface or ground waters, forestry activities generating pollution to surface or ground waters, hydropower (dams, weirs, run-off-the-river), including infrastructure, discharge of urban waste water (excluding storm overflows and/or urban run-offs) generating pollution to surface or ground water, modification of flooding regimes, flood protection for residential or recreational development, illegal harvesting, collecting and taking, other impacts from marine aquaculture, including infrastructure, abstraction of water, flow diversion, dams and other modifications of hydrological conditions for freshwater aquaculture, other invasive alien species (other than species of union concern), mixed source pollution to surface and ground waters (limnic and terrestrial), physical alteration of water bodies, interspecific relations (competition, predation, parasitism, pathogens), temperature changes (e.g., rise of temperature & extremes) due to climate change	Disease, parasites and barriers to movement.
[1355]	Otter ( <i>Lutra lutra</i> )	There are no pressures facing this species	Xxp, Xxt	No pressures, no threats	Surface and marine water dependent. Moderately sensitive to hydrological change. Sensitivity to pollution.

<sup>34</sup> 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
[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 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.
[91E0]	Alluvial forests with Alder and Ash ( <i>Alnus</i> )	Many of the pressures facing this habitat include invasive species, particularly sycamore ( <i>Acer</i> )	B09, I02, I04, I05	Clear-cutting, removal of all trees, other invasive alien species (other than species of union concern), problematic native species,	Surface and groundwater dependent. Highly sensitive to hydrological changes.

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
	<i>glutinosa</i> , <i>Fraxinus excelsior</i> , <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>	<i>pseudoplatanus</i> ), beech ( <i>Fagus sylvatica</i> ), Indian balsam ( <i>Impatiens glandulifera</i> ) and currant species ( <i>Ribes nigrum</i> and <i>R. rubrum</i> ) as well as some native species such as brambles ( <i>Rubus fruticosus</i> agg.) and common nettle, along with over felling.		plant and animal diseases, pathogens and pests	Changes in management.

### Appendix III Special Conservation Interests of SPAs that have undergone assessment<sup>35</sup>

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A229	Common Kingfisher	<i>Alcedo atthis</i>	A11, D01, G01, H01, I01, J02	Agriculture activities not referred to above, roads, paths and railroads, outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), invasive non-native species, human induced changes in hydraulic conditions

### Appendix IV Conservation Objectives<sup>36</sup>

NPWS (2023) Conservation Objectives for Wooddown Bog SAC [IE0002205] Version 1.

NPWS (2021) Conservation Objectives for River Boyne and River Blackwater SAC [IE0002299] Version 1.

NPWS (2016) Conservation Objectives for Mount Hevey Bog SAC [IE0002342] Version 1.

NPWS (2022) First Order Site-specific Conservation Objectives for River Boyne and River Blackwater SPA [IE0004232] Version 1.

<sup>35</sup> Including known treats and pressures of SCIs

<sup>36</sup> 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.