

Appropriate Assessment Screening Report

Footpath and Cyclepath Works Ardmore Road, Mullingar

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| Definition | Term | | |
|---|---|--|--|
| Appropriate Assessment (AA) | An assessment of the potential adverse effects of a plan or project (in combination with other plans or projects) on Special Areas of Conservation and Special Protection Areas | | |
| Department of Environment, Heritage and Local Government | Previous name for Department of Housing, Local Government and Heritage. The Irish government department responsible for housing, local government (including planning) and heritage. | | |
| Effect | Outcome to an ecological feature from an impact, e.g. the effects on an animal population from loss of a hedgerow. | | |
| European Commission (EC) | The executive body of the European Union responsible for proposing legislation, enforcing European law, setting objectives and priorities for action, negotiating trade agreements and managing implementing European Union policies and the budget. | | |
| Habitats Directive (92/43/EEC) | European Directive relevant to the on the conservation of natural habitats and of wild fauna and flora | | |
| Impact | Actions resulting in changes to an ecological feature, e.g. the construction activities of a development removing a hedgerow. | | |
| Natura 2000 / European Site | A network of sites selected to ensure the long-term survival of Europe's most valuable and threatened species and habitats. European site" replaced the term "Natura 2000 site" under the EU (Environmental Impact Assessment and Habitats) Regulations 2011 S.I. No. 473 of 2011 | | |
| Receptor | Environmental component that may be affected, adversely or beneficially, by the project. | | |
| Special Areas of Conservation (SACs) | Areas of protected habitats and species as defined in the Habitats Directive (92/43/EEC). | | |
| Special Protection Areas (SPAs). | Sites classified in accordance with Article 4 of the EC Birds Directive (79/409/EEC) which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex 1 of the Directive), and for regularly occurring migratory Species. | | |
| Special Conservation Interests (SCI) | Special Conservation Interests (SCI) are Qualifying Interests of SPA's that relate only to birds | | |
| Qualifying Interest (QI) | Relates to the habitats and/or species for which an SAC or SPA is selected. This may also include birds. | | |
| Zone of Influence (Zol) | Spatial extent of potential impacts resulting from the project. | | |

1. Introduction

This report comprises information in support of screening for Appropriate Assessment (AA) in line with the requirements of Article 6[3] of the EU Habitats Directive (EC 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora; the Planning and Development (Amendment) Act 2010; and the European Union (Birds and Natural Habitats) Regulations 2011 as amended, for the proposed Footpath and cycle path works on the Ardmore Road, Mullingar Co. Westmeath.

This screening exercise aims to determine whether the proposed works have the potential to significantly impact upon the conservation objectives and overall integrity of any Natura 2000 sites. This assessment is based upon a desk study and fieldwork carried out by suitably qualified ecologists. Also included is a general assessment of the ecological status of the site and the potential impacts of the proposed works on the ecology of the surrounding area, including Designated Sites.

The Competent Authority is obliged to examine the likely significant effects individually or in combination, of the proposed development on European Designated Sites in light of their specific Qualifying Interests (QIs) and Conservation Objectives (COs). If AA screening determines that there is likely to be significant effects on one or more of these sites, or the impacts are uncertain, then full AA must be carried out for the proposed development, including the compilation of a Natura Impact Statement to inform the decision making.

Sections 4 and 5 of the report comprise the AA Screening that specifically focuses on the potential for impacts on Natura 2000 sites deemed to be at risk from the proposed development.

1.1 Statement of Authority

Flynn Furney Environmental Consultants have 20-plus years of experience in ecological surveying and management. We have detailed knowledge of the principles and implementation of both Irish and European environmental legislation. We have worked closely with statutory bodies including the National Parks and Wildlife Service (NPWS) and Waterways Ireland on habitat management and protection projects. Other expertise includes Ecological Impact Assessment, Habitat and Floral Surveys, Bird Surveying, Bat Surveying, Fish and Waterways Surveys.

This survey was completed **by Ian Douglas (MSc, BSc, H Cert.Ag)**. Ian is an Ecologist and Environmental Consultant specialising in appropriate assessment, ecological impact assessment, habitats assessment, soil science, GIS mapping and regenerative agriculture. Ian has worked on projects including large road developments, power infrastructure projects, planning applications, planning and design of nature trails, constructed wetland creation and on-farm habitat development. Ian previously worked in Ecology and Agriculture in England and Australia before taking a position with Flynn, Furney Environmental Consultants in 2018 with whom he is currently Associate Director.

Reporting was completed by Ian Douglas and Billy Flynn. **Billy Flynn (BSc, MSc (Agr.), H.Dip, Dip Ind., MIBiol, MCIEEM, MIEnvSc. CEnv.)** is an Ecologist and Chartered Environmental Scientist. He was educated in London, Madrid and Dublin. He was manager of the National Environmental Education Centre from 1999 until 2006 and assistant lecturer in ecology and biology at the Dublin Institute of Technology. He has over 20 years of experience in environmental science and engineering. He has been a Tidy Towns Adjudicator since 2007. He is the author of the Tidy Towns Guidelines for Wildlife, Habitats and Natural Amenities, Waterways and Biodiversity, and co-author of the Tidy Towns Adjudicator Guidelines and Heritage and Habitats in Your Locality. He is a Director of the Irish Wildlife Trust and a former Director of Voluntary Service International and the Irish Environmental Network.

2. Background to Screening for Appropriate Assessment

2.1. European Designated Sites

Sites designated for the conservation of nature in Ireland include:

- Special Areas of Conservation (SACs);
- Special Protection Areas (SPAs), and;
- Natural Heritage Areas (NHAs)

SPAs and SACs form the Natura 2000 network of sites. It is these sites that are of relevance to the screening process for this Appropriate Assessment Screening. SPAs and SACs are prime wildlife conservation areas in the country, considered to be important on a European as well as Irish level. SPAs and SACs are designated under EU Habitats Directive, transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended.

Natural Heritage Area (NHA) is the basic designation for wildlife in Ireland. These are areas considered important for their habitats or species of plants and animals whose habitat requires protection and are protected by the Wildlife (Amendment) Act of 2000.

All European Designated Sites (henceforth simply referred to as "Designated Sites") that are connected to the proposed development were considered during the desktop study in order to assess the potential for significant effects upon their QIs and COs. This stage of the process is used to determine whether any of the Designated Sites can be regarded as not being relevant to the process of Appropriate Assessment of the project, having no potential to be significantly affected.

2.2. Legislative Context

The methodology for this screening statement is clearly set out in a document prepared for the Environment DG of the European Commission entitled 'Assessment of plans and projects significantly

affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6 paragraphs 3 and 4 of the Habitats Directive 92/43/EEC' (European Commission, 2019). This report and contributory fieldwork were carried out in accordance with guidelines given by the Department of Environment, Heritage and Local Government (2009, amended February 2010). The assessment process is given in Articles 6[3] and 6[4] of the Habitats Directive and is commonly referred to as "Appropriate Assessment" or AA.

Article 6 of the Habitats Directive sets out provisions which govern the conservation and management of Natura 2000 sites. Article 6[3] and 6[4] of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6[3] establishes the requirement for Appropriate Assessment:

"Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implication 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."

Article 6[4] continues:

"If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

It is the responsibility of the proponent of the plan or project to provide the relevant information (ecological surveys, research, analysis etc.) for submission to the 'competent national authority'. If satisfied that the information is complete and objective, the competent authority will use this information to screen the project, i.e. to determine if an AA is required and to carry out the AA, if one is deemed necessary. The competent authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned."

The appropriate assessment process has four stages. Each stage determines whether a further stage in the process is required. If, for example, the conclusions at the end of Stage One are that there will be no

significant impacts on the Natura 2000 site, there is no requirement to proceed further. The four stages are:

- 1. Screening to determine if an appropriate assessment is required;
- 2. Appropriate assessment;
- 3. Consideration of alternative solutions, and;
- 4. Imperative reasons of overriding public interest/derogation.

Stage 1: Screening for AA

This report provides a stage one Screening for Appropriate Assessment. It aims to establish whether the plan or project is directly connected with or necessary to the management of Designated Sites; or in view of the best scientific knowledge, if the plan or project, individually or in combination with other plans or projects, is likely to have a significant effect on a Designated Site. This is done by examining the proposed plan or project and the COs of any Designated Sites that might potentially be affected.

The study is based on a preliminary impact assessment using both publicly available data and data collected during site surveys. This is followed by a determination of whether there is a risk that the effects identified could significantly impact any Natura 2000 sites, and if so an Appropriate Assessment (AA) is required. The need to apply the precautionary principle in making any key decisions in relation to the tests of AA has been confirmed by the European Court of Justice case law. Therefore, where significant effects are likely, possible or uncertain at the screening stage, a stage two AA will be required.

2.3 Guidance Documents

This report has been prepared with regard to the following guidance documents on Appropriate Assessment, where relevant:

- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (Department of Environment, Heritage and Local Government, 2010 revision);
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 & PSSP 2/10;
- 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 Directorate-General, 2001 and updates April 2015 and September 2021). The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Article 6(3) and (4) of the Habitats Directive;
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC (EC Environment Directorate-General, 2018); and
- Communication from the Commission on the precautionary principle. European Commission (2000). •
- OPR (2021) Appropriate Assessment Screening for Development Management. Practice Note PN01. Office of the Planning Regulator. March 2021.

3. Methodology

3.1. Desk Study

A desktop study was carried out as part of this screening process to gain an understanding of the surrounding human and natural environments. This included a review of available data from a range of sources on the site and its immediate environs.

The following sources of data were employed:

- Environmental Protection Agency (EPA) Appropriate Assessment Tool;
- EPA Maps (to identify watercourses, hydrology and Natura 2000 site boundaries);
- NPWS protected species database and online mapping;
- The Geological Survey of Ireland hydrological and lidar data and map viewer;
- The National Biodiversity Data Centre archives;
- Myplan and Westmeath County Councils planning portal, and;
- An Bord Pleanála's online database.

3.2. Field Survey

The field survey was carried out on the 25th of January 2023. Baseline ecological conditions were assessed. Habitats were classified according to A Guide to Habitats in Ireland (Fossitt, 2000). Where applicable, the habitat types and species usage were recorded (Smith et al. 2011; Scannell and Synnott, 1987; Wyse Jackson et al. 2016). Habitats were classified and dominant plant species were noted according to the guidelines given by the JNCC (2010) with reference to best practice guidance for habitat survey and mapping (Smith et al., 2011) and Census Catalogue of the Flora of Ireland (Scannell & Synnott, 1987).

3.3. SPR Model

This assessment was carried out using the source-pathway-receptor (SPR) approach, a standard tool in environmental assessment. The SPR concept in ecological impact assessment relates to the idea that for the risk of an impact to occur, a source is needed (e.g. a development site); an environmental receptor is present (a lake); and finally, there must a pathway between the source and the receptor (a watercourse linking the development site to the lake). Even though there might be a risk of an impact occurring, it does not necessarily mean that it will occur, and in the event that it does occur, it may not have significant effects on the receiving environment. Identification of a risk means that there is a possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature and exposure to the risk and the characteristics of the receivor.

In this instance, the most relevant receptors are any relevant Natura 2000 sites with connectivity of the proposed works. These were considered during the desktop study stage of this screening assessment in order to assess the potential for significant effects upon their QIs and COs.

3.4 The Precautionary Principle

The Precautionary Principle has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as: "When human activities may lead to morally unacceptable harm [to the environment] that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis". Reasoned application of the 'Precautionary Principle' is fundamental to the Screening Stage (and AA). The precautionary principle is referenced in Article 191 of the Treaty on the Functioning of the European Union (TFEU). It relates to an approach to risk management whereby if there is the possibility that a given policy or action might cause harm to the public or the environment and if there is still no scientific consensus on the issue, the policy or action in question should not be pursued.

The precautionary principle prevails where 'reasonable scientific doubt' cannot be ruled out. Known threats to QIs of relevant sites are analysed to avoid overlooking subtle or far-field effect pathways. The duration of potential effects is a key consideration, in particular, because the European Court of Justice has recently ruled—albeit in specific reference to priority habitats—those effects to site integrity must be "lasting".

3.5 Likely Significant Effect

The threshold for a Likely Significant Effect (LSE) is treated in the screening exercise as being above a de minimis level¹. The opinion of the Advocate General in CJEU case C-258/11 outlines:

"the requirement that the effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on a European site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill."

In this assessment, therefore, 'relevant' European sites are those within the potential ZOI of activities associated with the construction and operation of the proposed development, where LSE pathways to European sites were identified through the source-pathway-receptor model.

¹ Sweetman v. An Bord Pleanála (Court of Justice of the EU, case C-285/11). A de minimis effect is a level of risk that is too small to be concerned with when considering ecological requirements of an Annex I habitat or a population of Annex II species present on a European site necessary to ensure their favourable conservation condition. If low level effects on habitats or individuals of species are judged to be in this order of magnitude and that judgment has been made in the absence of reasonable scientific doubt, then those effects are not considered to be likely significant effects.

3.6 Constraints and Limitations

Ecological surveys were carried out in January 2023. This is outside the optimal window for habitat surveys and surveys of flowering plants (Smith et al., 2011). Habitats within the footprint of the proposed development are readily identifiable through plant species and vegetation structures visible throughout the year. Photos of the site and its habitats can be seen in Appendix 3. The survey window was also outside the optimal time for breeding birds and bats. Surveys were carried out in the optimal window for both wintering and migratory birds and for the identification of field signs for mammals.

3.7. Zones of Influence and Potential Impacts and Effects

Table 1 identifies the "zones of influence" for each effect (i.e. the area over which effects may occur).

| Potential Impact and Effect | Description | Zone of Influence for possible impacts or effects |
|--|--|--|
| Land-take resulting in habitat loss or degradation. | The permanent loss or degradation of the habitat present in the footprint of the works site or within the footprint of the broad works area including temporary access routes and storage areas. | Land within the proposed footprint of works footprint and access routes. |
| Changes in water quality and quantity/distribution resulting in habitat loss or degradation. Or impacts to key species upon which water quality is a key indicator of conservation value. | Reduction in the habitat quality, loss of habitats and direct or indirect impacts to species who rely upon good water quality as a result of surface water pollution (e.g. sedimentation or from other polluting materials like hydrocarbons) | Changes in surface water quality, as a result of construction works within local watercourses that form part of or are hydrologically connected to designated sites. Other indirect impacts on prey species may leading to wider- reaching impacts and effects. |
| Noise and vibration resulting in disturbance. | Direct impacts on feature species reducing their ability to forage or breed. | Generally assessed within 500m of proposed works for birds and 150m for otter underground sites. |

Table 1: Potential Impacts, Effects and their Zone of Influence

4. Screening of Designated Sites

4.1. Site Location

The subject site is located on the southeast of Mullingar along Ardmore Road. The proposed cycleway and walkway will provide active travel connectivity between the Ardmore Hills and Ardmore Close. The subject site is surrounded by housing estates, roads, amenity grasslands, industrial estates and areas of agricultural grasslands. The closest designated site to the subject site is Wooddown Bog SAC 2.5km to the northeast and Lough Ennel SAC and SPA 3.6km to the southwest.

4.2 Description of Works

It is proposed to develop a hard-surfaced shared footpath/cycling route, segregated from the vehicular carriageway, which will require the widening of the roadway with the consequent removal of trees and culverting of a drain. The southern side of the site in front of the Holy Family National School and the three no. dwellings to the east have a shared cycle/footpath which will remain in its current form. The southern side of the site in front of the housing estate, Ardmore Hills, will be subject to works to widen the existing footpath to create a shared pedestrian/cycling route. A crossing point will be provided to the eastern end of the site to connect the north side and south side pedestrian/cycle paths. Works are expected to be approximately 6 months.

The works will generally consist of the following:

- Excavation of soils and subsoils
- disposal of surplus soil off site to an authorised waste facility
- culvert drain
- importation, placement and compaction of hardcore (crushed stone)
- installation of 50mm macadam surfacing
- ducting for and provision of public lighting
- tree removal
- plantings (new field boundaries will be marked with fencing and a compensatory hedge and tree line) and;
- noise and general construction disturbance during daytime hours.

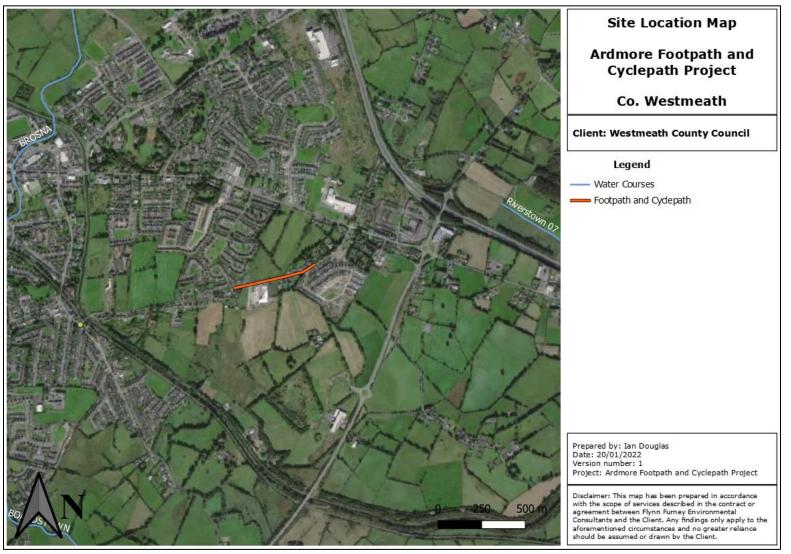


Figure 1: Overview of the general works area.

4.2. Receiving Environment

Habitats found within and surrounding the proposed development site are listed below, with descriptions adapted from "A Guide to Habitats in Ireland" by Julie A. Fossitt, 2000. The majority of the works area is composed of Buildings and other artificial surfaces (BL3). This includes Ardmore road itself and its adjoining footpaths. Directly adjacent to the works area along Ardmore road are further buildings and other artificial surfaces in the form of buildings, walls and driveways. Amenity Grasslands (GA1) and Ornamental/non-native shrub (WS3) were recorded in private gardens, around housing estates and within the grounds of a school adjacent to the proposed site of works. Semi-natural hedgerows were also found within the subject site. These usually contained Blackthorn (Prunus spinosa), Ash (Fraxinus excelsior). Bramble (Rubus fruticosus agg), Ivy (Hedera helix) and Hawthorn (Crataegus monogyna) were found. Dry meadow and grassy verges (GS2) habitat was found along unkept road verges within the subject site. Here course grasses such as Cock's-foot (Dactylis glomerata), Bents (Agrostis spp.), False Oatgrass (Arrhenatherum elatius) and Yorkshire-fog (Holcus lanatus) were abundant. A small field drain is also found within the subject site. Fool's Water-cress (Apium nodiflorum), Bramble (Rubus fruticosus agg.), Creeping Buttercup (Ranunculus repens) were noted within its channel along with small amounts of water. Improved Agricultural Grasslands (GA1) were found adjacent to the subject site. Most were grazed by cattle.

4.2.2. Surface water

A drainage ditch is found on the opposite side of Ardmore Road to the Holy Family National School. It is understood that this drainage ditch has connectivity to the Brosna River via a series of drains and culverts through town over a distance of 1.8km. The Brosna eventually discharges in to Lough Ennell SAC/SPA a further 3.5km downstream. The closest watercourse to the site is the Royal Canal which is located 860m from the scheme's southern extent.

4.2.3. Groundwater

Groundwater vulnerability is a term used to represent the natural ground characteristics that determine the ease with which infiltrating water and potential contaminants may reach groundwater in a vertical or sub-vertical direction. Subsoil permeability indicates how readily water from the surface can permeate through to the groundwater below. Groundwater Vulnerability was assessed using publicly available data sets from the Geological Survey of Ireland GIS web viewer². The site is in a moderate groundwater vulnerability zone. No groundwater dependant habitats or species occur within any local European designated sites.

² https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef

4.2.4. Bird Survey

All species of wild birds that occur naturally in Ireland are fully protected at all times by the Wildlife Act and relevant amending legislation. Similarly, all birds naturally occurring in the wild state are afforded a measure of protection by the EU Birds Directive but derogations may reduce protection for specific reasons. As such, any vegetation clearance must be carried out outside of the bird nesting season (March 1st - August 31st).

A dedicated breeding bird survey was not carried out, all birds seen and heard were typical countryside species. No birds associated with local Special Areas of Conservation were recorded within or surrounding the site of works.

4.2.5. Mammals

Fauna surveys were carried out during this multidisciplinary walkover survey for the detection of field signs such as tracks, markings, feeding signs, and droppings, as well as by direct observation. Mammal surveys followed the guidance as per NRA (2009). No mammal activity, such as holes, trails, burrows or scatt, was found during this survey. The works site would not provide suitable habitat for any foraging or refugia sites.

4.2.6. Invasive Species

The Wildlife Acts, 1976 and 2000, contain several provisions relating to Invasive Non-Native Species (INNS), covering several sections and subsections of the Acts. It is prohibited, without a licence, to plant or otherwise cause to grow in a wild state, in any place in the State, any species of flora, or the flowers, roots, seeds or spores of invasive flora listed on the Third Schedule. Articles 49 and 50 of the aforementioned Acts set out the legal implications associated with alien invasive species and Schedule 3 (the Third Schedule) of the regulations lists non-native species subject to the restrictions of Articles 49 and 50, which make it an offence to plant, disperse, allow dispersal or cause the spread of invasive species.

No third schedule invasive species were found within the study area. A number on none native species were recorded that have invasive characterises including Snowberry (*Symphoricarpos albus*), Cotoneaster (*Cotoneaster spp.*) and Cherry Laurel (*Prunus laurocerasus*). Most were recorded in private gardens.

4.3. Nearby Designated Sites

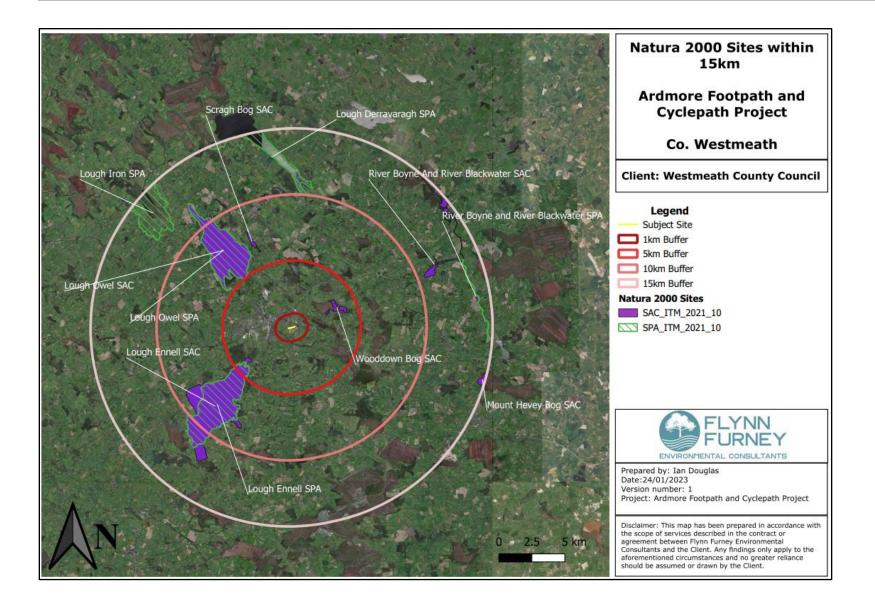
| Site Name and Code | Qualifying Interests (* denotes a priority habitat) | Distance | Likely Zone of Impact Determination |
|----------------------------|--|--|---|
| | Sites within 15km where So | ource -Pathw | vay – Receptor linkages were found |
| Lough Ennell SAC 685 | Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Alkaline fens [7230] | 4.1km directly | Possible hydrological connectivity to this SAC via a series of culverts and drains through the town that eventually discharges into the Brosna River 1.8km further down the drainage network. It is then a further 3.5km until the Brosna reaches the SAC boundary. |
| | | 5.3km via town drains and the Brosna | Given the intervening distance between the development site and the SAC via both the drainage network and the Brosna in conjunction with the size and scale of the works no LSE are predicted. |
| | | River | No risk of likely significant effects were identified, either alone or in combination with other plans or projects. |
| Lough Ennell | Pochard (Aythya ferina) [A059] Tufted Duck (Aythya fuligula) [A061] | 4.1km directly 5.3km | Possible hydrological connectivity to this SPA via a series of culverts and drains through the town that eventually discharges into the Brosna River 1.8km further down the drainage network. It is then a further 3.5km until the Brosna reaches the SPA boundary. |
| SPA 4044 | Coot (Fulica atra) [A125] Wetland and Waterbirds [A999] | via town drains and the Brosna River | Given the intervening distance between the development site and the SPA via both the drainage network and the Brosna in conjunction with the size and scale of the works no LSE are predicted. |

| | | | No risk of likely significant effects were identified, either alone or in combination with other plans or projects. |
|--|---|--------------|---|
| | Other sites within 15km where | no Source -P | Pathway – Receptor linkages were found |
| Lough Owel SAC | Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Transition mires and quaking bogs | 5.1km | The proposed development is located outside the boundary of |
| 688 | [7140] Alkaline fens [7230] | 5.1Km | this SAC and there is no potential for direct effect. |
| | Austropotamobius pallipes (White- clawed Crayfish) [1092] | | The potential for an indirect effect on the terrestrial QIs can be ruled out due to the terrestrial nature of the habitats, the intervening distance between the development site and the SAC |
| | Transition mires and quaking bogs [7140] | | and the absence of a source-pathway-receptor chain for a likely significant effect. |
| Scragh Bog SAC | Alkaline fens [7230] | 6.6km | |
| 692 | Hamatocaulis vernicosus (Slender Green Feather-moss) [6216] | | There are no surface water features present within or adjacent to the development site that could provide a pathway to the SAC or its QI habitats and species. |
| Wooddown Bog SAC 2205 | Degraded raised bogs still capable of natural regeneration [7120] | 2.5km | No source-pathway-receptor links and no risk of likely significant effects were identified, either alone or in |
| River Boyne And River Blackwater SAC 2299 | Alkaline fens [7230] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] | 11.1km | combination with other plans or projects. |

| | Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] Active raised bogs [7110] | | |
|-------------------------------------|--|--------|--|
| Mount Hevey Bog SAC 2342 | Degraded raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] | 14.7km | |
| Lough Derravaragh SPA 4043 | Whooper Swan (Cygnus cygnus) [A038] Pochard (Aythya ferina) [A059] Tufted Duck (Aythya fuligula) [A061] Coot (Fulica atra) [A125] Wetland and Waterbirds [A999] | 9.8km | Works occur within an urban area with high levels of anthropogenic disturbance (a roadway). This area could not support and provide any significant foraging, roosting and nesting habitat ex-situ for any of the SCI species of this SPA. The potential for indirect effects on the terrestrial QIs (Wetlands) can be ruled out due to the terrestrial nature of the habitats, the |
| Lough Iron SPA 4046 | Whooper Swan (Cygnus cygnus) [A038] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Shoveler (Anas clypeata) [A056] Coot (Fulica atra) [A125] | | intervening distance between the development site and the SPA. No source-pathway-receptor links and no risk of likely significant effects were identified, either alone or in combination with other plans or projects |

| | Golden Plover (Pluvialis apricaria) [A140] Greenland White-fronted Goose (Anser albifrons flavirostris) [A395] Wetland and Waterbirds [A999] | |
|--|--|---|
| Lough Owel SPA 4047 | Shoveler (Anas clypeata) [A056] Coot (Fulica atra) [A125] Wetland and Waterbirds [A999] | |
| River Boyne and River Blackwater SPA 4232 | Kingfisher (Alcedo atthis) [A229] | Works occur within an urban area with high levels of anthropogenic disturbance (a roadway). This area could not support and provide any significant foraging, roosting and nesting habitat ex-situ for any of the SCI species of this SPA. No source-pathway-receptor links and no risk of likely significant effects were identified, either alone or in combination with other plans or projects |

Figure 5: European designated sites within 15km of the proposed works



5. ASSESSMENT CRITERIA

5.1. Relation To Management Of Nearby Designated Site(s)

The proposed project is not necessary to or connected with the management of any Designated Sites.

5.2. Direct Or Indirect Impacts

Applying the concept of the source-pathway-receptor model, there are no identifiable direct impacts on nearby Designated sites. Surface waters and disturbance were the only identified pathways from the site of works for possible impacts to any designated sites. These sources and pathways are considered and are discussed further in this section

5.2.1. Surface pollution

A drainage ditch is found on the opposite side of Ardmore Road to the Holy Family National School. It is understood that this drainage ditch has connectivity to the Brosna River via a series of drains and culverts through town over a distance of 1.8km. The Brosna eventually discharges in to Lough Ennell SAC/SPA a further 3.5km downstream. While this could in theory provide a pathway for possible hydrological connectivity to this SAC/SPA. However, given the intervening distance between the development site and the SAC/SPA via both the drainage network and the Brosna impacts to water quality are not considered likely to occur. Any possible pollutants including sediments that may enter the drainage network would have to be transported over 1.8km within the drainage network likely during a significant rainfall event. Any possible pollutants then entering the Brosna would either settle out or be reduced to negligible quantities via dilution before being transported over 3.5km to Lough Ennell SPA/SAC.

5.2.2. Construction/installation of infrastructure and potential disturbance impacts

Works occur within an urban area with high levels of anthropogenic disturbance (a roadway). This area could not support and provide any significant foraging, roosting and nesting habitat ex-situ for any of the QI species of this Lough Ennell SPA.

5.3. Cumulative And In combination Impacts

A number of local planning applications were reviewed. Most are associated with the alterations to or construction of residential or commercial properties and lands. The most relevant local applications to the proposed development are shown below.

Table 4: Previous site application

| Westmeath CoCo Planning Reference Number. | Description of Development | Risk of Cumulative and In combination Impacts and Rationale |
|---|---|---|
| 22547 | development to vary the An Bord Pleanala planning permission reference PL25M.239612 to replace 27 No. granted house types as follows: remove granted house unit numbers 80, 81 & 94 to 118 inclusive consisting of 3 & 4-bedroom 2 & 3-storey houses, to be replaced with 27 No. 3-bedroom 2-storey houses and all associated site works. | No risk of LSE to any Natura 2000 sites was identified during the planning and design phase for this development. No risk of a likely significant effect identified, either alone or in combination with other plans or projects as a result of this project. |
| 2260036 | development of 65 no. residential units at Ardmore Hills, Marlinstown, Mullingar, Co. Westmeath, a site of circa. 2.24 Has. The proposed development will comprise the construction of 3 no. 2-bedroom semi- detached & mid-terrace houses; 32 no. 3- bedroom semi-detached & mid-terrace houses; 27 no. 4-bedroom semi-detached houses; 3 no. 5-bedroom detached houses. The development provides for 123 no. car parking spaces, provision of communal open spaces, all associated hard and soft landscaping, boundary treatments, footpaths, and all other ancillary works above and below ground | No risk of LSE to any natura 2000 sites identified during the planning and design phase for this development. No risk of a likely significant effect identified, either alone or in combination with other plans or projects as a result of this project. |
| 22347 | a new Advanced Building Solution consisting of office and light industrial/production spaces. Permission is also sought for vehicular/pedestrian entrance, signage, new timber post-and-rail boundaries, car parking, cycle shelters, landscaping, gas skid, underground storage tank, independent ESB substation & switch room building, access road and all associated site works. The development has been subject of a Screening for Appropriate Assessment in accordance with Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) and the Planning and Development Act 2000 as amended. The Screening for Appropriate Assessment will be submitted to the Planning Authority with the Planning Application | No risk of LSE to any natura 2000 sites identified within the planners report for this development. No risk of a likely significant effect identified, either alone or in combination with other plans or projects as a result of this project. |

No impacts or effects to any designated sites were noted as a result of any local recent or ongoing developments. As no impacts or effects have been identified as a result of the proposed development upon any designated site. No cumulative or in combination impacts can therefore exist.

6. Article 6(3) Appropriate Assessment Screening Statement and Conclusion

The findings of this Screening Assessment are presented following the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2001) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010).

The determination has been reached in the consideration of the information reviewed in this screening exercise including the nature, location and scale of the project and its influence to naturally ensure no LSE occur. In addition it has also considered the implementation of the outcomes of the CEMP, including proposed mitigation measure (which are considered standard best practise measures for a project of the nature and not connected with the protection of Natura site or supporting habitats.

6.1 Data Collected to Carry Out Assessment

In preparation of the report, the following sources were used to gather information:

- Review of NPWS Site Synopses, Conservation Objectives and Map for the European Sites Reviewed
- Review of OS maps and aerial photographs of the site of the proposed project.
- Site visit conducted by Ian Douglas (B.Sc., MSc.) and 25 February 2023
- Birds and Mammal surveys following NRA (2009) and;
- Habitat surveys Fossitt (2000).x

6.2 Screening Conclusions

In our professional opinion and in view of the best scientific knowledge and in view of the conservation objectives of the European sites reviewed in the screening exercise, the proposed development individually/in combination with other plans and projects (either directly or indirectly) are not likely to have any significant effects on any of the European sites. It is therefore the conclusion of this report that

progression to the second stage, a full Appropriate Assessment and accompanying Natura Impact Statement will not be required.

References

Bruce-White, C., & Shardlow, M., 2011. Impact of Artificial Light on Invertebrates. Buglife – The Invertebrate Conservation Trust. March 2011. ISBN 978-1-904878-99-5: https://cdn.buglife.org.uk/2019/08/A-Review-of-the-Impact-of-Artificial-Light-on-Invertebratesdocx 0.pdf

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester. https://cieem.net/wp-content/uploads/2019/02/Combined-EcIA-guidelines-2018-compressed.pdf

European Commission DE (2021). Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC.

Environmental Protection Agency, Appropriate Assessment Tool: <u>https://gis.epa.ie/EPAMaps/AAGeoTool</u> Fossitt, J.A. (2000) A Guide to Habitats in Ireland. The Heritage Council, Kilkenny.

Geological Survey of Ireland (accessed 2022) Maps and Data: <u>https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx</u>

JNCC (2010) Handbook for Phase 1 Habitat Survey. Joint Nature Conservation Committee, Peterborough, UK.

National Biodiversity Data Centre (accessed 2022) Biodiversity Maps: <u>https://maps.biodiversityireland.ie/</u> National Planning Application Map Viewer: <u>https://myplan.ie/national-planning-application-map-viewer/</u> National Roads Authority (2009) Ecological Surveying Techniques for Protected flora and fauna during the Planning of National Road Schemes. NRA (now Transport Infrastructure Ireland), Dublin.

Scannell, M J P and Synott, D M, 1987, Census Catalogue of the Flora of Ireland. Stationary Office, Dublin. Smith, G.F., O'Donoghue, P., O'Hora, K. and Delaney, E., 2011. Best practice guidance for habitat survey and mapping. The Heritage Council: Ireland.

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

Appendix I: Photos

| Figure no. | Description | Image |
|---------------|--|-------|
| 1 | Works area northern extent | |
| 2 | Area of grassy verge and hedgerow due for removal. Adjacent improved grassland in the background | |

| 3 | The centre of the scheme opposite the primary school with immature Ash trees and the existing footpath opposite. | |
|---|--|--|
| 4 | Agricultural field drain that will require culverting | |

Appendix 2 : Site Synopsis

An Roinn Tithiochta, Rialtais Áitiúil agus Oidhreachta Department of Housing, Local Government and Heritage

SITE SYNOPSIS

Site Name: Lough Ennell SAC

Site Code: 000685

Lough Ennell is a large, limestone lake, located 3 km south of Mullingar in Co. Westmeath. Much of the lake is shallow with a marl deposit. The River Brosna flows into the lake from the north at Butler's Bridge, and out from the south. Lough Ennell is a very good example of a marl lake with stonewort and cyanobacterial crust vegetation.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[3140] Hard Water Lakes [7230] Alkaline Fens

Lough Ennell supports a specialist and diverse aquatic flora, dominated by stoneworts. A total of 13 stonewort species has been recorded, including two Red Data Book species, *Chara denudata* and *C. tomentosa*. *C. tomentosa* does not occur in Great Britain, is restricted to Irish marl lakes and has been known from Lough Ennell since 1841. Distinct zones of other marl lake specialist stoneworts occur in Lough Ennell, including *C. curta, C. rudis, C. contraria, C. virgata* and *C. denudata*. A characteristic and highly-sensitive cyanobacterial (blue-green algal) crust (or krustenstein) occurs in shallow waters. Average crust cover at Lough Ennell is 94% and average thickness 6 mm, similar to values in many of the best Irish marl lakes. Oncoids have been found in great abundance in shallow waters. These are pebble-like structures composed of calcified layers of cyanobacterial crust, particularly filamentous taxa such as *Schizothrix, Calothrix* and *Rivularia*. Water movement gives rise to their rounded shape.

Lough Ennell was severely impacted by eutrophication in the 1970s and 1980s owing mainly to the discharge of inadequately treated sewage effluent from Mullingar. This resulted in significant biological changes in the lake including a rapid decline in the cover abundance, density and depth distribution of stoneworts, increases in phytoplankton and filamentous algal biomass, decreased mayfly emergence and the collapse of the Brown Trout fishery. Since the installation and upgrade of an urban waste water treatment plant there has been significant, on-going recovery in Lough Ennell. Phytoplankton biomass and, hence, turbidity have declined with a corresponding increase in water transparency. As a result, the depth-distribution and abundance of stoneworts has increased and the characteristic stonewort zonation has recovered. Further habitat recovery is needed, however, including colonisation of deeper water (7 m+) by stoneworts and reductions in the chlorophyll a concentrations of the cyanobacterial crust.

Much of the lakeshore consists of dry, stony ground colonised by calcareous grassland. These areas were formerly part of the lake bed but are now exposed as a consequence of drainage. Species such as Mountain Everlasting (Antennaria dioica), Hairy Lady's-mantle (Alchemilla filicaulis subsp. vestita), Frog Orchid (Coeloglossum viride), Fairy Flax (Linum catharticum) and Yellow-wort (Blackstonia perfoliata) occur here.

Alkaline fen is also found on the lake shore, with species such as Grass-of-parnassus (*Parnassia palustris*), Marsh Pennywort (*Hydrocotyle vulgaris*) and Bottle Sedge (*Carex rostrata*). In wet marshy patches along the shore Marsh-marigold (*Caltha palustris*), Brookweed (*Samolus valerandi*) and Lesser Water-plantain (*Baldellia ranunculoides*) are common.

Reedbeds and species-poor swamp vegetation fringe the lake in places, particularly around the points of inflow and outflow, and on the eastern shore around Tudenham Park. Common Reed (*Phragmites australis*) is abundant here. Water-plantain (*Alisma plantago-aquatica*), Cowbane (*Cicuta virosa*), Frogbit (*Hydrocharis morsus-ranae*) and Tufted-sedge (*Carex elata*) also occur. The latter two species are of note in that they have restricted distributions in Ireland. The rare Fibrous Tussock-sedge (*Carex appropinquata*) has also been recorded from this site.

Mixed woodland of Beech (Fagus sylvatica), Ash (Fraxinus excelsior) and Downy Birch (Betula pubescens) fringes the lakeshore to the north-west. Bluebell (Hyacinthoides nonscripta) and Lords-and-ladies (Arum maculatum) are among the woodland ground flora. Yellow Archangel (Lamiastrum galeobdolon), a rare plant listed in the Red Data Book, has been recorded in the woods along the eastern shores of Lough Ennell. This is the only record for this species outside the south-east of Ireland. The rare Myxomycete fungus, Licea castanea, has been recorded from woodland in the site.

Scharff's Char (Salvelinus scharffi), a distinct race of char which was once found only in Lough Owel and Lough Ennell, is now extinct. Notable aquatic invertebrates recorded from the lake include *Tinodes maculicornis* (Order Trichoptera), *Metalype fragilis* (Order Trichoptera), *Limnephilus nigriceps* (Order Trichoptera), *Picromerus bidens* (Order Heteroptera), *Monarthia humili* (Order Hemiptera) and *Donacia obscura* (Order Coleoptera).

This site shares an internationally important Greenland White-fronted Goose flock with Loughs Iron, Glen and Owel. The numbers of geese which visit Lough Ennell are lower than for the other lakes: 9l birds (3 year average peak). Nationally important bird populations which have been recorded on Lough Ennell are: Cormorant (average peak 149; absolute maximum 448); Mute Swan (average peak 424); Pochard (average peak 889; maximum 2,600 on 8/ll/85); Tufted Duck (average peak 720) and Coot (average peak 639). All of these data were compiled from counts

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made over 3 seasons, 1984/85 - 1986/87. A single count of 522 Golden Plover was obtained in that period, constituting a regionally important population.

Lough Ennell is an important amenity area, much used for fishing, boating and camping. Sections of the shoreline are managed for visitor access and amenity.

Lough Ennell is of significance as a midlands marl lake which supports a rich variety of lower plant and invertebrate species. Its lakeshore habitats, which include alkaline fen, a habitat listed on Annex I of the E.U. Habitats Directive, support a diverse flora. These habitats also provide important refuges for wildfowl.

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SITE SYNOPSIS

SITE NAME: LOUGH ENNELL SPA

SITE CODE: 004044

Lough Ennell is a large, limestone lake located south of Mullingar in Co. Westmeath. It has a length of approximately 6.5 km along its long axis and is mostly about 2 km wide. The River Brosna is the principal inflowing and outflowing river. It is a relatively shallow lake, with a maximum depth of c. 30 m. The water is hard, with low colour and markedly alkaline pH. The lake is classified as a mesotrophic system though it has been eutrophic in the past. The lake bottom is of limestone with a marl deposit.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Pochard, Tufted Duck and Coot. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

Lough Ennell is one of the most important Midland lakes for wintering waterfowl, with nationally important populations of Pochard (738), Tufted Duck (1,303) and Coot (433) - all figures are mean peaks for the 5 winters 1995/96-1999/2000. The population of Tufted Duck represents over 3% of the all-Ireland population. The site is also utilised by an internationally important population of non-migratory Mute Swan (340). Other species which occur include Golden Plover (1,000 in 1998/99), Lapwing (673), Mallard (93), Little Grebe (30), Great Crested Grebe (24) and Goldeneye (22).

Lough Ennell is of ornithological significance for wintering waterfowl, with three migratory species having populations of national importance. The occurrence of Golden Plover in the vicinity of the lake is of note as this species is listed on Annex I of the E.U. Birds Directive. Lough Ennell is a Ramsar Convention Site.