

Noreen McLoughlin, MSc

Environmental Consultant

Whitehill
Edgeworthstown
Co. Longford
☎ (087) 4127248 / (043) 6672775
✉ noreen.mcloughlin@gmail.com

HABITATS DIRECTIVE SCREENING OF A PROPOSED DEVELOPMENT PART 8 DEVELOPMENT AT LOGANSTOWN, TRIM, CO. MEATH



*Meath County Council
Buvinda House
Dublin Road
Navan
Co. Meath*

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1 INTRODUCTION

1.1 BACKGROUND

Article 6 of the EU Habitat's Directive (Council Directive 92/43/EEC) requires that all plans and projects be screened for potential impacts upon Special Areas of Conservation (SACs) or Special Protection Areas (SPAs). The aim of this screening process is to establish whether or not a full Appropriate Assessment of the proposed plan or project is necessary.

A comprehensive assessment of the potential significant effects of a proposed Part 8 development in Loganstown, Trim, Co. Meath on certain designated sites was carried out in May 2022 by Noreen McLoughlin, MSc, MCIEEM of Whitehill Environmental. This assessment will allow the Competent Authority, i.e., Meath County Council, to undertake an Appropriate Assessment determination, as required under Article 6(3) of the Habitats Directive. Permission for these works will be sought under Part 8 of the Planning Process.

The location of the proposed development is within 15km of sites designated under European Law. As such and in accordance with Article 6(3) of the EU Habitat's Directive (Council Directive 92/43/EEC) regarding Appropriate Assessment, this screening exercise for Appropriate Assessment was carried out in order to identify whether any significant impacts on designated sites are likely. This exercise will also determine the appropriateness of the proposed project, in the context of the conservation status of the designated sites.

1.2 REGULATORY CONTEXT

RELEVANT LEGISLATION

The Birds Directive (Council Directive 2009/147/EC) recognises that certain species of birds should be subject to special conservation measures concerning their habitats. The Directive requires that Member States take measures to classify the most suitable areas as Special Protection Areas (SPAs) for the conservation of bird species listed in Annex 1 of the Directive. SPAs are selected for bird species (listed in Annex I of the Birds Directive), that are regularly occurring populations of migratory bird species and the SPA areas are of international importance for these migratory birds.

The EU Habitats Directive (92/43/EEC) requires that Member States designate and ensure that particular protection is given to sites (Special Areas of Conservation) which are made up of or support particular habitats and species listed in annexes to this Directive.

Articles 6(3) and 6(4) of this Directive also call for the undertaking of an Appropriate Assessment for plans and projects not directly connected with or necessary to the

management of, but which are likely to have a significant effect on any European designated sites (i.e. SACs and SPAs).

The Water Framework Directive (WFD) (2000/60/EC), which came into force in December 2000, establishes a framework for community action in the field of water policy. The WFD was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003). The WFD rationalises and updates existing legislation and provides for water management on the basis of River Basin Districts (RBDs). RBDs are essentially administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD. The aim of the WFD is to ensure that waters achieve at least good status by 2027 and that status does not deteriorate in any waters.

Appropriate Assessment and the Habitats Directive

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – the ‘Habitats Directive’ - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as *Natura 2000*. *Natura 2000* sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive sets out the decision-making tests for plans or projects affecting *Natura 2000* sites. Article 6(3) establishes the requirement for Appropriate Assessment:

“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.”

Article 6(4) deals with the steps that should be taken when it is determined, as a result of appropriate assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

"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 a social or economic nature, the Member States 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."

The Appropriate Assessment Process

The aim of Appropriate Assessment is to assess the implications of a proposal in respect of a designated site's conservation objectives.

The 'Appropriate Assessment' itself is an assessment which must be carried out by the competent authority which confirms whether the plan or project in combination with other plans and projects will have an adverse impact on the integrity of a European site.

Screening for Appropriate Assessment shall be carried out by the competent authority as set out in Section 177U(1) and (2) of the Planning and Development Act 2000 (as amended) as follows:

(1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

(2) A competent authority shall carry out a screening for appropriate assessment under subsection (1) before—

(a) a Land use plan is made including, where appropriate, before a decision on appeal in relation to a draft strategic development zone is made, or

(b) consent for a proposed development is given.'

The competent authority shall determine that an Appropriate Assessment is not required if it can be excluded, that the proposed development, individually or in combination with other plans or project will have a significant effect on a European site.

Where the competent authority cannot exclude the potential for a significant effect on a European site, an Appropriate Assessment shall be deemed required.

Where an Appropriate Assessment is required, the conclusions of the Appropriate Assessment Report (Natura Impact Statement (NIS)) should enable the competent authority to ascertain whether the plan or proposed development would adversely affect the integrity of the European site. If adverse impacts on the integrity of a European site cannot be avoided, then mitigation measures should be applied during the appropriate assessment process to the point where no adverse impacts on the site remain. Under the terms of the Habitats Directive consent can only be granted for a project if, as a result of the appropriate assessment either (a) it is concluded that the integrity of any European sites will not be adversely affected, or (b) after mitigation, where adverse impacts cannot be excluded, there is shown to be an absence of alternative solutions, and there exists imperative reasons of overriding public interest for the project should go ahead.

Section 177(V) of the Planning and Development Act 2000 (as amended) outlines that the competent authority shall carry out the Appropriate Assessment, taking into account the Natura Impact Statement (amongst any other additional or supplemental information). A determination shall then be made by the competent authority in line with the requirements of Article 6(3) of the Habitats Directive as to whether the plan or proposed development would adversely affect the integrity of a European site, prior to consent being given.

2 METHODOLOGY

2.1 APPROPRIATE ASSESSMENT

This Statement of Screening for Appropriate Assessment (Stage 1) has been prepared with reference to the following:

- European Commission (2018). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.
- European Commission (2021). 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 (2006). Nature and Biodiversity Cases: Ruling of the European Court of Justice.
- European Commission (2007). Clarification of the Concepts of: Alternative Solution, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission.
- Department of Environment, Heritage and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.

The EC Guidance sets out a number of principles as to how to approach decision making during the process. The primary one is 'the precautionary principle' which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty.

When considering the precautionary principle, the emphasis for assessment should be on objectively demonstrating with supporting evidence that:

- There will be no significant effects on a Natura 2000 site;
- There will be no adverse effects on the integrity of a Natura 2000 site;
- There is an absence of alternatives to the project or plan that is likely to have an adverse effect to the integrity of a Natura 2000 site; and
- There are compensation measures that maintain or enhance the overall coherence of Natura 2000.

This translates into a four stage process to assess the impacts, on a designated site or species, of a policy or proposal.

The EC Guidance states that "each stage determines whether a further stage in the process is required". Consequently, the Council may not need to proceed through all four stages in undertaking the Appropriate Assessment.

The four-stage process is:

Stage 1: Screening – The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether or not these impacts are likely to be significant;

Stage 2: Appropriate Assessment – The consideration of the impact on the integrity of the Natura 2000 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 impacts, an assessment of the potential mitigation of those impacts;

Stage 3: Assessment of Alternative Solutions – The process which examines alternative ways of achieving objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;

Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain – An assessment of the 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.

In complying with the obligations set out in Articles 6(3) and following the guidelines described above, this screening statement has been structured as a stage by stage approach as follows:

- Description of the proposed project;
- Identification of the Natura 2000 sites close to the proposed development;
- Identification and description of any individual and cumulative impacts on the Natura 2000 sites likely to result from the project;
- Assessment of the significance of the impacts identified above on site integrity. Exclusion of sites where it can be objectively concluded that there will be no significant effects.

2.1 STATEMENT OF COMPETENCY

This AA Screening report was carried out by Noreen McLoughlin, BA, MSc, MCIEEM. Noreen has an honours degree in Zoology and an MSc in Freshwater Ecology from Trinity College, Dublin and she has been a full member of the Chartered Institute of Ecology and Environmental Management for over sixteen years. Noreen has over 17 years' experience as a professional ecologist in Ireland.

2.2 DESK STUDIES & CONSULTATION

Information on the site and the area of the proposed development was studied prior to the completion of this statement. The following data sources were accessed in order to complete a thorough examination of potential impacts:

- National Parks and Wildlife Service - Aerial photographs and maps of designated sites, information on habitats and species within these sites and information on protected plant or animal species, conservation objectives, site synopses and standard data forms for relevant designated sites.
- Environmental Protection Agency (EPA)- Information pertaining to water quality, geology and licensed facilities within the area;
- Myplan.ie – Mapped based information;
- National Biodiversity Data Centre (NBDC) – Information pertaining to protected plant and animal species within the study area;
- Bing maps & Google Street View – High quality aerials and street images;
- Meath County Council – Plans and Information Pertaining to the Development. Information on planning history in the area for the assessment of cumulative impacts.
- EurGeol. Dr Robert Meehan – Hydrogeological Assessment of the Site.

2.3 FIELD BASED STUDIES

The site of the proposed works was visited on May 24th 2022, when habitats within the site were noted and recorded in accordance to Level 3 of Fossit (2000).

2.4 ASSESSMENT METHODOLOGY

The proposed development was assessed to identify its potential ecological impacts and from this, the Zone of Influence (Zol) of the proposed development was defined. Based on the potential impacts and their Zol, the Natura 2000 sites potentially at risk from direct, indirect or in-combination impacts were identified. The assessment considered all potential impact sources and pathways connecting the proposed development to Natura 2000 sites, in view of the conservation objectives supporting the favourable conservation condition of the site's Qualifying Interests (QIs) or Special Conservation Interests (SCIs).

The conservation objectives relating to each Natura 2000 site and its QIs/SCIs are cited generally for SACs as "to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or Annex II species for which the SAC has been selected", and for SPAs "to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA".

As defined in the Habitat's Directive, the favourable conservation status of a habitat is achieved when:

- Its natural range and area it covers within that range is 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;

The favourable conservation status of a species is achieved when:

- The 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;
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Where site-specific conservation objectives (SSCOs) have been prepared for a European site, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured. Where potential significant effects are identified, then these SSCO should be considered in detail.

3 SCREENING

3.1 DEVELOPMENT DESCRIPTION

Meath County Council have indicated their intention to develop a new burial ground at Loganstown, Trim, Co. Meath. Works will involve the creation of a graveyard with capacity for 2,400 single plots, along with a car park, a storage compound, a garden of remembrance, a caretakers office and public toilets, fencing, landscaping and all associated site ancillary works. Permission for these works will be sought under Part VIII of planning process.

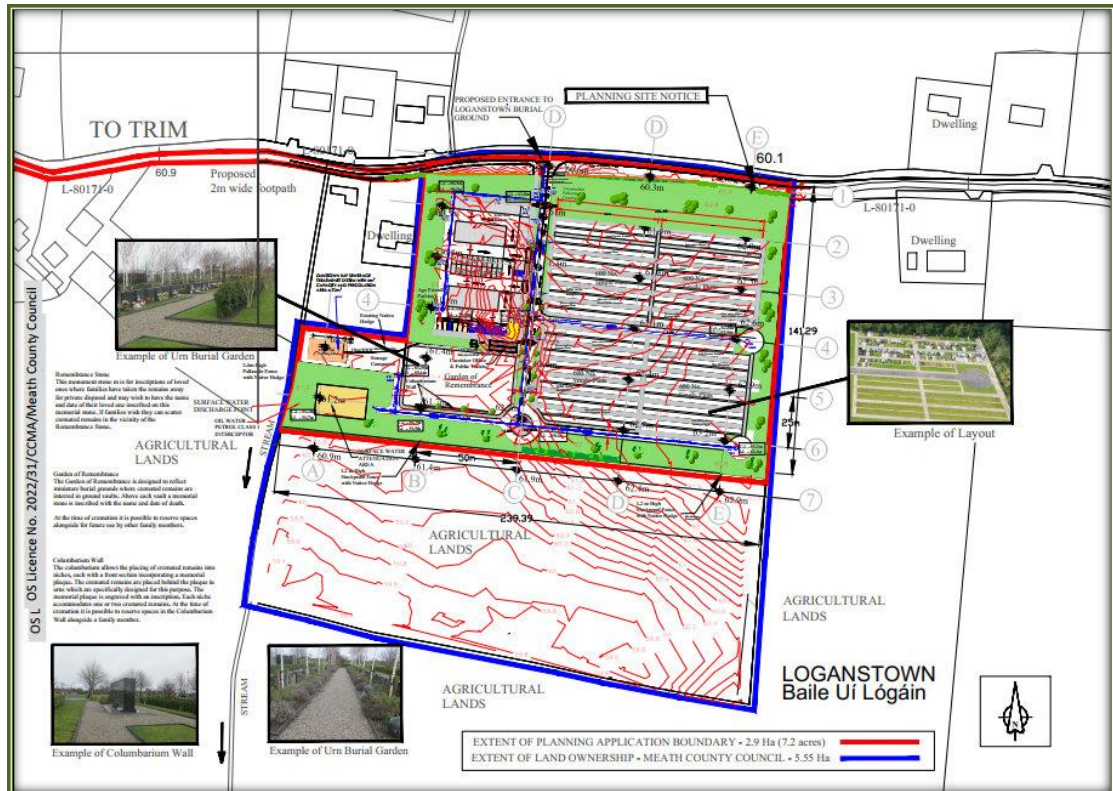


Figure 1 – Extract from Planning Drawings

Surface Water

Surface water from the hard surfaces within the site will be directed to an attenuation tank that will be situated in the south-western corner of the site. Following attenuation, the water will be discharged to a ditch that lies along the western site boundary via a Class 1 petrol interceptor.

Wastewater

The application site is located within a poor aquifer (Pi) with high vulnerability. The site has an R1 groundwater protection response, which means that the proposed risk is acceptable subject to normal good practice. The site characterisation form pertaining to the site (as prepared by EurGeol Dr Robbie Meehan) has recommended that the site is serviced by a septic tank (pre-cast concrete, twin chambered) and percolation area. An O'Reilly Oakstown BAF system has been recommended. This will be constructed and operated in accordance with the EPA (2021) Guidelines. It will discharge to groundwater, which in this area is likely to flow towards the south.

Hydrogeological Assessment

A Hydrogeological Assessment of the site has been prepared by EurGeol Dr Robbie Meehan. This report concluded that that the locality is suitable for burials, especially given the well-drained nature of the surrounding land and the general absence of drains adjacent to the site. No burials will take place at a depth below 2.1m, and this will maintain at least 0.9m depth of unsaturated subsoil between all burials and the water table. In the southernmost portion of the site, where groundwater was met at depths between 2.35m and 2.72m below current ground level, no burials will take place here at depths below 1.45m below current ground level.

3.2 SITE LOCATION AND SURROUNDING ENVIRONMENT

The application site is 3ha (excluding sight lines along the road) and it is situated in a rural area in the townland of Loganstown. The site is 1.9km north-east of Trim and it will be accessed via the creation of an entrance that is just off a local, third-class road. The site is bounded to the north by the local third-class road, to the west by a residential site and agricultural land, and to the south and east by agricultural land.

The land use surrounding the site is mixed. The sub-urban lands of Trim extend to the west of the site and the main habitats associated with these largely residential areas include buildings and artificial surfaces and amenity grasslands and gardens. Beyond these areas and in the rural areas to the north, south and east of the site, agriculture is the dominant land use. The main habitat associated with this use is improved agricultural grasslands. Other habitats represented locally include tillage / arable lands, semi-improved grasslands, hedgerows, treelines and watercourses. The site is 380m north of the River Boyne. The location of the site is shown in Figures 2 and 3, whilst an aerial photo of the site and its surrounding habitats is shown in Figure 4.



Figure 2 – Site Location Map (Site Pinned)



Figure 3 – Site Location Map. Application Site Outlined in Red.

HABITATS WITHIN THE SITE

No part of the site lies within any area that has been designated for nature conservation purposes. The habitats within the site were recorded during the site walkover. The dominant habitat within the application site is improved agricultural grassland that is currently being grazed by cattle. This habitat does not provide any biodiversity value. The northern (roadside) boundary consists of a maintained hedgerow, where the dominant species noted included hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa* and bramble *Rubus fruticosus agg.* The western boundary consists of a hedgerow that merges to a treeline in the southern section of the site. Species noted along this boundary included hawthorn, blackthorn, willow *Salix sp.* and beech *Fagus sylvatica*. There is a ditch along the southern section of this boundary, however no water was noted in this ditch on the day of the survey. The eastern boundary consists of a low hedgerow, and the southern boundary is not defined by any natural feature.

Photographs of the site are provided in Appendix I.

NOTABLE SPECIES

No protected species were not within the site during the site walkover. An examination of the website of the National Biodiversity Data Centre, revealed that there are no records for the presence of any protected species from the relevant 1km square (N8257) of this proposed development.

WATER FEATURES AND QUALITY

The application site is within the Boyne Hydrometric Area (07) and Catchment (07), and the Boyne Sub-Catchment (080) and Sub-Basin (090/100). There are no watercourses within or adjacent to the application site. There is a ditch along the western boundary, but this is dry and it is not considered to be a watercourse. The River Boyne main channel is 380m south of the site. The Littlerath Stream is 307m north-east of the site. This stream flows east until it meets the River Boyne at Grange.

The EPA have defined the ecological status of the River Boyne and its tributaries at points close to the application site as moderate. Under the requirements of the Water Framework Directive, this is unsatisfactory and good status must be achieved here.



Figure 4 – Aerial Photograph of the Site (Outlined in Red) and its Surrounding Habitats

3.3 NATURA 2000 SITES IDENTIFIED

In accordance with the guidelines issued by the Department of the Environment and Local Government, a list of Natura 2000 sites within 15km of the proposed development have been identified and described according to their site synopsis, qualifying interests and conservation objectives. In addition, any other sites further than this, but potentially within its zone of interest were also considered. The zone of impact may be determined by an assessment of the connectivity between the application site and the designated areas by virtue of hydrological connectivity, atmospheric emissions, flight paths, ecological corridors etc.

For significant effects to arise, there must be a potential impact facilitated by having a source, i.e., the proposed development and activities arising out of its construction or operation, a receptor, i.e., the European site and its qualifying interests and a subsequent pathway or connectivity between the source and receptor, e.g., a water course. The likelihood for significant effects on the European site will largely depend on the characteristics of the source (e.g., nature and scale of the construction works), the characteristics of the existing pathway and the characteristics of the receptor, e.g., the sensitivities of the Qualifying Interests (habitats or species) to changes in water quality.

There are two Natura 2000 sites within 15km of this proposed development. These sites are summarised in Table 1. The location of the application site in relation to these designated areas is shown in Figures 5 and 6, and a full synopsis of these sites can be read online on the website of the National Parks and Wildlife Service (www.npws.ie).

Site Name & Code	Distance from Site	Qualifying Interests	Connectivity
The River Boyne and River Blackwater SAC 002299	359m south	<ul style="list-style-type: none"> • River lamprey (<i>Lampetra fluviatilis</i>) • Salmon (<i>Salmo salar</i>) • Otter (<i>Lutra lutra</i>) • Alkaline fens • Alluvial forests with alder <i>Alnus glutinosa</i> and ash <i>Fraxinus excelsior</i> 	<p><i>Hydrological connectivity between the application site and SAC is not considered to exist, as there are no watercourses on the application which lead directly to this SAC. Therefore, pollution to this SAC arising from construction and operation and subsequent significant effects upon this SAC are not likely to occur. However, having regard to the location of this SAC within 1km of this site, potential significant effects upon this site will be considered further.</i></p>

<p>The River Boyne and River Blackwater SPA 004232</p>	<p>382m south</p>	<ul style="list-style-type: none"> • Common Kingfisher <i>Alcedo atthis</i> 	<p><i>Hydrological connectivity between the application site and SPA is not considered to exist, as there are no watercourses on the application which lead directly to this SPA. Therefore, pollution to this SPA arising from construction and operation and subsequent significant effects upon this SPA are not likely to occur. However, having regard to the location of this SPA within 1km of this site, potential significant effects upon this site will be considered further.</i></p>
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Table 1 – Natura 2000 Sites Within 15km of the Proposed Site



Figure 5 – The Application Site (Pinned) in relation to the Natura 2000 Sites Within 15km (SACs – Red Hatching, SPAs – Pink Hatching).

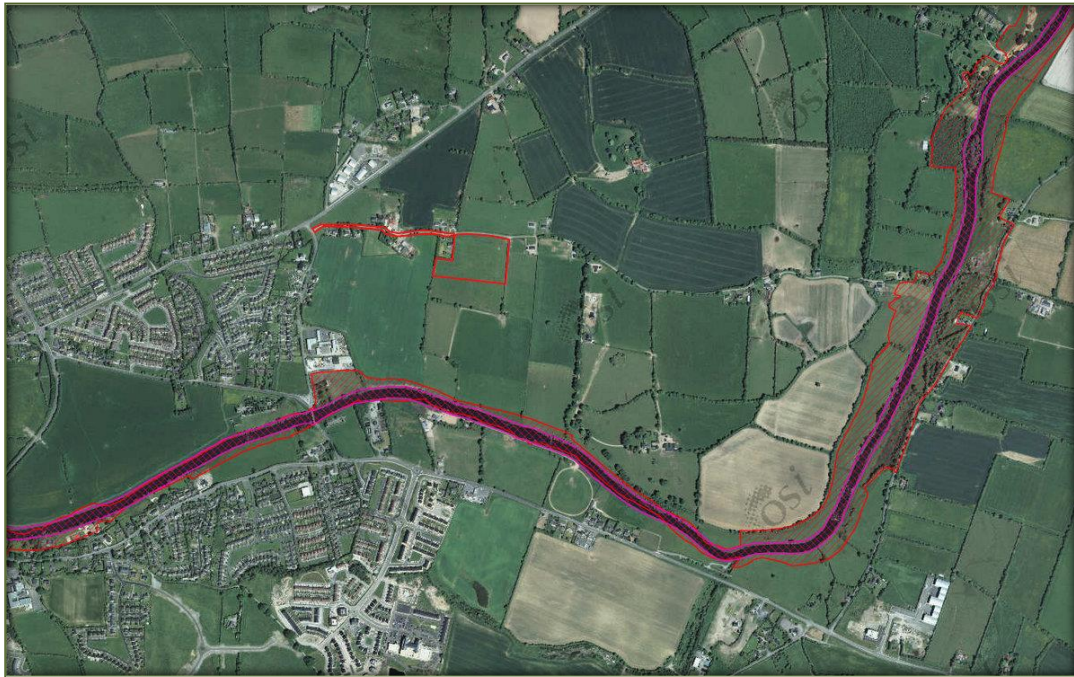


Figure 6 – The Application Site (Outlined in Red) in relation to the River Boyne and Blackwater SAC (Red Hatching) / SPA (Pink Hatching)

THE RIVER BOYNE AND RIVER BLACKWATER SAC 002299

Site Synopsis

This site comprises most of the freshwater element of the River Boyne from upriver of the Boyne Aqueduct at Drogheda, the Blackwater River as far as Lough Ramor and the principal Boyne tributaries, notably the Deel, Stoneyford and Tremblestown Rivers. This system drains a considerable area of Counties Meath and Westmeath and smaller areas of Cavan and Louth. The rivers flow through a landscape dominated by intensive agriculture, mostly of improved grassland but also cereals. Much of the river channels were subject to arterial drainage schemes in the past. Natural flood-plains now exist along only limited stretches of river, though often there is a fringe of reed swamp, freshwater marsh, wet grassland or deciduous wet woodland. Along some parts, notably between Drogheda and Slane, are stands of tall, mature mixed woodland. Substantial areas of improved grassland and arable land are included in site for water quality reasons. There are many medium to large sized towns adjacent to but not within the site.

The main channel of the Boyne contains a good example of alluvial woodland of the *Salicetum albo-fragilis* type which has developed on three alluvium islands. Alkaline fen vegetation is well represented at Lough Shesk, where there is a very fine example of habitat succession from open water to raised bog. The Boyne and its tributaries is one of Ireland's premier game fisheries and offers a wide range of angling, from fishing for spring salmon and grilse to sea trout fishing and extensive brown trout fishing. The site is one of the most

important in eastern Ireland for *Salmo salar* and it has very extensive spawning grounds. The site also has an important population of *Lampetra fluviatilis*, though the distribution or abundance of this species is not well known. *Lutra lutra* is widespread throughout the site. Some of the grassland areas along the Boyne and Blackwater are used by a nationally important winter flock of *Cygnus cygnus*. Several Red Data Book plants occur within the site, with *Pyrola rotundifolia*, *Poa palustris* and *Juncus compressus*. Also occurring are a number of Red Data Book animals, notably *Meles meles*, *Martes martes* and *Rana temporaria*.

Site Specific Conservation Objectives

Site specific conservation objectives for this site have recently been prepared¹ (December 2021). These SSCOs are outlined in Tables 2 – 6.

Alluvial Forests with *Alnus glutinosa* and *Fraxinus excelsior* g1EO

The SSCO for this habitat is to *restore* its favourable conservation condition which is generally defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Ha	Area stable increasing, subject to natural processes
Habitat distribution	Occurrence	No decline, subject to natural processes
Woodland Size	Ha	Area stable or increasing. Where topographically possible, "large" woods at least 25ha in size and "small" woods at least 3ha in size
Woodland Structure: cover and height	Percentage and Metres	Total canopy cover at least 30%; median canopy height at least 7m; native shrub layer cover 10-75%; native herb/dwarf shrub layer cover at least 20% and height at least 20cm; bryophyte cover at least 4%
Woodland Structure: Community Diversity and Extent	Ha	Maintain diversity and extent of community types
Woodland Structure: Natural Regeneration	Seedling: sapling:pole ratio	Seedlings, saplings and pole age-classes of target species for g1Eo* woodlands and other native tree species occur in adequate proportions to ensure survival of woodland canopy
Hydrological Regime: Flooding Depth/Height of Water Table	Metres	Appropriate hydrological regime necessary for maintenance of alluvial vegetation
Woodland Structure: Dead Wood	Number per hectare	At least 19 stems/ha of dead wood of at least 20cm diameter
Woodland Structure: Veteran Trees	Number per hectare	No decline
Woodland Structure: Indicators of Local Distinctiveness	Occurrence' Population Size	No decline in distribution and, in the case of red listed and other rare or localised species, population size
Woodland structure: indicators of overgrazing	Occurrence	All five indicators of overgrazing absent
Vegetation Composition: Native Tree Cover	Percentage	No decline. Native tree cover at least 90% of canopy; target species cover at least 50% of canopy
Vegetation Composition: Typical Species	Occurrence	At least 1 target species for g1Eo* woodlands present; at least 6 positive indicator species for g1Eo* woodlands present

¹ NPWS (2021) Conservation Objectives: River Boyne and River Blackwater SAC 002299. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

Vegetation Composition: Negative Indicator Species	Occurrence	Negative indicator species cover not greater than 10%; regeneration of negative indicator species absent
Vegetation composition: problematic native species	Percentage	Cover of common nettle (<i>Urtica dioica</i>) less than 75%

Table 2 – SSCOs for Alluvial Forests with *Alnus glutinosa* and *Fraxinus excelsior*

Potential Significant Effects

Potential impacts upon this QI have been considered. Locations of this habitat within the SAC have been mapped by NPWS (Map 3, SSCO) and it is acknowledged that many areas have yet to be surveyed. An examination of aerial maps shows that there are areas of woodland occurring along the banks of the River Boyne to the north-east of the site, and these areas of woodland could potentially be considered alluvial. However, as there is no surface water connectivity between the application site and these areas of woodland, and as the burial plots are not considered to constitute any risk to groundwater as per the Hydrogeological report, it is considered that significant effects upon this QI will not arise. The proposed development will have no significant effects upon the favourable conservation condition of alluvial woodland within the SAC, and the attributes and targets that are required for the restoration of this habitat at favourable status within the SAC will not be affected.

Alkaline Fen 7230

The SSCO for this habitat is to *maintain* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat Area	Hectares	The area should be stable or increasing, subject to natural processes.
Habitat Distribution	Occurrence	No decline, subject to natural processes.
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops.	Maintain soil pH and nutrient status within natural ranges.
Ecosystem function: peat formation	Percentage cover of peat-forming vegetation and water table levels	Maintain active peat formation, where appropriate
Ecosystem function: Hydrology – Groundwater levels	Water levels (cm); duration of levels; hydraulic gradients; water supply	Maintain, or where necessary restore, appropriate natural hydrological regimes necessary to support the natural structure and functioning of the habitat.
Ecosystem function: Hydrology – Surface Water Flow	Drain density and form	Maintain, or where necessary restore, as close as possible to natural or semi-natural, drainage conditions.
Ecosystem function: Water quality	Various	Maintain appropriate water quality, particularly pH and nutrient levels, to support the natural structure and functioning of the habitat

Vegetation Composition: Community diversity	Abundance of variety of vegetation communities	Maintain variety of vegetation communities, subject to natural processes
Vegetation composition: typical brown moss	Percentage cover at a representative number of monitoring stops	Maintain adequate cover of typical brown moss species
Vegetation composition: typical vascular plants	Percentage cover at a representative number of monitoring stops	Maintain adequate cover of typical vascular plant species
Vegetation composition; native negative indicator species	Percentage cover at a representative number of monitoring stops	Cover of native negative indicator species at insignificant levels
Vegetation composition: non-native species	Percentage cover at a representative number of monitoring stops	Cover of non-native species less than 1%
Vegetation composition: native trees and shrubs	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of scattered native trees and shrubs less than 10%
Vegetation composition: algal cover	Percentage cover at, and in local vicinity of, a representative number of monitoring stops	Cover of algae less than 2%
Vegetation structure: vegetation height	Percentage cover at a representative number of monitoring stops	At least 50% of the live leaves/flowering shoots are more than either 5cm or 15cm above ground surface depending on community type
Physical structure: disturbed bare ground	Percentage cover at, and in local vicinity of, a representative number of monitoring stops	Cover of disturbed bare ground not more than 10%
Physical structure: tufa formations	Percentage cover in local vicinity of a representative number of monitoring stops	Disturbed proportion of vegetation cover where tufa is present is less than 1%
Indicators of local distinctiveness	Occurrence and population size	No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat; maintain features of local distinctiveness, subject to natural processes
Transitional areas between fen and adjacent habitats	Hectares; distribution	Maintain adequate transitional areas to support/protect the alkaline fen ecosystem and the services it provides

Table 3 – SSCOs for Alkaline Fen

Potential Significant Effects

Potential impacts upon this QI have been considered. The main areas of alkaline fen within the River Boyne and River Blackwater SAC are concentrated in the vicinity of Lough Shesk, Freehan Lough and Newtown Lough. These areas of fen are all in separate hydrological sub-catchments to the application site. They are outside of the Zone of Influence of the application site and there will be no impacts upon surface water quality or groundwater quality or levels in these areas that would undermine the attributes and targets that are required to maintain the favourable conservation condition of this Qualifying Interest in this SAC.

Salmon (1106)

The SSCO for this species is to *restore* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Distribution: extent of anadromy	% of river accessible	100% of river channels down to second order accessible from estuary
Adult spawning fish	Number	Conservation Limit (CL) for each system consistently exceeded
Salmon fry abundance	No of fry / 5 mins electrofishing	Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry / 5 minute sampling
Out-migrating smolt abundance	Number	No significant decline
Number and distribution of redds	Number and Occurrence	No decline in number and distribution of spawning redds due to anthropogenic causes
Water quality	EPA Q Value	At least Q ₄ at all sites sampled by the EPA.

Table 4 – SSCOs for Salmon

Potential Impacts

Salmon occur throughout the Boyne and Blackwater system. The requirements of salmon depend on their life stage but clean, unpolluted water is a requirement throughout the life cycle. They are very sensitive to changes in water quality and increases in sedimentation (<25 mg/L annual average). The main pressures and threats to this species come from agricultural intensification, run-off from agriculture, forestry and household waste waters and poaching.

As there are no direct surface water hydrological linkages between the application site and the SAC and given the small size and scale of the development, significant effects upon this species arising from deteriorations in water quality are unlikely.

Otter (1355)

The SSCO for this species is to *maintain* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Distribution	% positive survey sites	No Significant Decline
Extent of Terrestrial Habitats	Hectares	No significant decline. Area mapped and calculated as 447.6ha along river banks/lake shoreline/around ponds
Extent of Freshwater (River) Habitat	Km	No significant decline. Length mapped and calculated as 263.3km
Extent of Freshwater (Laker) Habitat	Hectares	No significant decline. Length mapped and calculated as 31.6ha
Couching Sites and Holts	Number	No significant decline
Fish Biomass Available	Kg	No significant decline
Barriers to connectivity	Number	No significant increase

Table 5 – SSCOs for Otter

Potential Impacts

The otter occurs throughout the Boyne and Blackwater system. The presence of this species is positively correlated with good water quality and deterioration of same will lead to impacts upon this species. Otters have two basic requirements – aquatic prey and safe refuges where they can rest. In freshwater areas, the diet of the otter consists of a variety of fish from sticklebacks to salmon and eels, whilst crayfish and frog availability can also be important. Impacts that reduce the quality of, or cause disturbance to, their terrestrial or aquatic habitats are likely to affect otters. The main threats to otters in Ireland are thought to be: (1) habitat destruction, including river drainage and the clearance of bank-side vegetation; (2) pollution, particularly organic pollution resulting in fish kills; (3) disturbance of habitat due to recreational activities, and (4) accidental deaths (NPWS, 2009).

Although otters are likely to commute along the River Boyne within the Trim area effects upon this species are not likely to arise. There will be no fragmentation of habitats that are used by the otter as all works will be confined to the development site only, which does not contain suitable habitat for this species. In addition, as there are no direct surface water hydrological linkages between the application site and the SAC and given the small size and scale of the development, significant effects upon this species arising from deteriorations in water quality are unlikely.

River Lamprey (1099)

The SSCO for this species is to *restore* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Distribution: extent of anadromy	% of river accessible	Restore access to all watercourses down to first order streams
Distribution of larvae	Number of positive sites in 2nd order channels (and greater), downstream of spawning areas	Not less than 50% of sample sites with suitable habitat positive for larval brook/river lamprey
Population: structure of larvae	Number of age / size groups	At least three age / size groups of river lamprey present
Larval lamprey density in fine sediment	Juveniles / m ²	Mean density of river larval lamprey in sites with suitable habitat more than 5/m ²
Extent and distribution of spawning nursery habitat	M ² and occurrence	No decline in extent and distribution of nursery beds

Table 6 – SSCOs for River Lamprey

Potential Impacts

Juvenile lamprey (River and Brook) have been recorded throughout the Boyne/Blackwater catchment (O'Connor, 2006). River lampreys require clean gravels, fine sediments and free upstream migration to complete their life cycle. The main threat to this species is dredging, changes to siltation patterns, sedimentation of spawning gravels and the introduction of weirs or other impediments to their migration. They are also sensitive to changes in water quality arising from diffuse or point source pollution.

As there are no direct surface water hydrological linkages between the application site and the SAC and given the small size and scale of the development, significant effects upon this species arising from deteriorations in water quality are unlikely to arise.

THE RIVER BOYNE AND BLACKWATER SPA 004232

The River Boyne and River Blackwater SPA supports nationally important numbers of the kingfisher *Alcedo atthis*. Other species which occur within the site include *Cygnus olor*, *Anas crecca*, *Anas platyrhynchos*, *Phalacrocorax carbo*, *Ardea cinerea*, *Gallinula chloropus*, *Gallinago gallinago* and *Riparia riparia*. The NPWS Natura 2000 Data Form (NPWS, 2017) states that the threats and pressures identified as having the highest impact on this site include urbanisation, roads, motorways and dispersed habitation. A study by Cummins et al., (2010) states that the distribution of kingfisher within the River Boyne catchment is 0.12 kingfisher per km, with a nest density of 0.11 per km. A total of 20-22 territories were estimated to occur within the Boyne River system based on these surveys, and the densities of birds and nesting territories are amongst the highest in the country.

Site Specific Conservation Objectives

Site specific conservation objectives for this site have not yet been prepared and objectives for this site remain generic. There are only two SPAs in Ireland designated for the protection of the kingfisher, i.e., the River Boyne and Blackwater SPA and the River Nore SPA. SSCOs have not been prepared for either site. Therefore, the attributes and targets that should define the favourable conservation condition of the kingfisher were taken from the most common attributes and targets used for the conservation objectives of SPA bird species in general, which are largely the same across all SPAs in Ireland. These are outlined in Table 7 below.

Parameter	Attribute	Target
Population	Population trend	Long term population trend stable or increasing
Range	Distribution	No significant decrease in the range, timing or intensity of use of areas by the QI, other than that occurring from natural patterns of variation

Table 7– SSCOs for Bird Species within SPAs

Potential Impacts

Kingfishers are very vulnerable to changes in water quality, as a depletion of fish stocks due to pollution and eutrophication would mean the loss of their main food source. A reduction in water quality could also affect factors that support the breeding populations, such as prey abundance / biomass. Such impacts could potentially affect nest occupation and productivity, which in turn could affect the number and range of areas used by the kingfisher. Other threats to kingfisher could include human disturbance and bank disturbance.

As there are no direct surface water hydrological linkages between the application site and the SAC and given the small size and scale of the development, significant effects upon this species arising from deteriorations in water quality are unlikely to arise.

3.4 IMPACT ASSESSMENT

The potential impacts of the proposed Part 8 development on the River Boyne and Blackwater SAC / SPA are described below.

Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on nearby Natura 2000 site:

The development of the burial ground at this site will have no significant effects upon the designated sites identified, i.e., the River Boyne and Blackwater SAC/SPA. There are no individual elements of the proposed project that are likely to give rise to negative impacts on these aforementioned sites. The application site is close to the SAC/SPA; however, there are no watercourses on the site and there are no direct source-pathway-receptor linkages between the application site and the SAC / SPA, therefore significant effects upon this site are unlikely to arise. As determined by the Hydrogeological report, there will be no impacts upon groundwater under the site, therefore risks to the SAC / SPA and its QIs arising from pollution to groundwater will not occur.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the nearby Natura 2000 sites by virtue of:

Size and scale: Having regards to small size and scale of the development in relation to the overall size of the River Boyne and Blackwater SAC/SPA, the likelihood of any direct, indirect or cumulative impacts on these designated sites arising from the construction and operation of the proposed graveyard is low.

Land-take: There will be no land-take from any designated site. There will be no interference with the boundaries of any designated site.

Distance from Natura 2000 site or key features of the site: There are two European sites within 15km of the application site. At its closest point, the proposed development site is 359m north of the River Boyne and Blackwater SAC and 382m north of the SPA. In this instance, this distance is sufficient to ensure that no impacts will arise as there are no direct pollution pathways between the application site and the SAC/SPA, therefore the potential for pollution and subsequent effects to arise is low.

Resource requirements (water abstraction etc.): No resources will be taken from any Natura 2000 site and there are no resource requirements that will impact upon any designated site.

Emissions: Neither the construction nor the operation of the graveyard will result in any emissions to the River Boyne and Blackwater SAC or SPA. There will be no run-off from the site directly to the River Boyne and Blackwater SAC or SPA. There will be no run-off from the site into any local

watercourse that leads to the River Boyne. During operation and following attenuation surface water from the site will be discharged via an oil interceptor to the dry ditch that occurs along the western boundary. This will not lead to any significant effects upon the SAC / SPA.

The proposed treatment plant and percolation area will be installed by a suitably qualified person and good management of this plant will be followed at all times during its future operation. It will comply with all EPA requirements (Code of Practice for Wastewater Treatment Systems for Single Houses, 2021). The system will be de-sludged by a registered contractor once a year. Therefore, it can be concluded that there will be no risk of groundwater or surface water pollution from the operation of the proposed system.

Excavation requirements: Excavated material from the works will be disposed of in a responsible manner in a licensed facility away from any designated sites.

Transportation requirements: There will be no additional transportation requirements resulting from the proposed development and associated works that will have any impact upon the Natura 2000 sites identified.

In-Combination / Cumulative Impacts: The proposed application was considered in combination with other developments or proposed developments in the Loganstown/Trim area and potential cumulative impacts were considered. A number of other developments have been granted planning permission in the general area in the last five years. Where necessary these developments were screened for AA, or else AA was carried out and an NIS was submitted.

The proposed development will have no cumulative impacts upon any designated sites when considered in combination with other developments that have been screened properly for AA (Stage I) or where AA has taken place (Stage II). Any future individual application that has the potential to impact upon a Natura 2000 site will be subject to Appropriate Assessment as required under Articles 6(3) of the Habitats Directive.

Duration of construction, operation, decommissioning etc: Once construction begins, it should be complete within one year. Operation of the site as a burial ground will continue long-term.

Describe any likely changes to the nearby Natura 2000 sites arising as a result of:

Reduction of habitat area: The proposed development lies outside the boundaries of the Natura 2000 sites identified in Section 3.3. There will be no reduction of designated habitat area within any SAC or SPA. There will be no impacts upon the habitat qualifying interests of the River Boyne and Blackwater SAC, i.e., alkaline fens or alluvial forests with alder *Alnus glutinosa* and ash *Fraxinus excelsior*. Both these features are outside of the zone of influence of the development and there are no source-pathway-receptor linkages between the application site and these designated features, therefore there are no potential pollution pathways. There will be no interference with the boundaries of the River Boyne and Blackwater SAC/SPA.

Disturbance to key species: There are four species listed as qualifying interests of the River Boyne

and River Blackwater SAC and SPA, i.e., the otter, salmon, river lamprey and kingfisher. There are no direct pollution pathways between the application site and the designated sites, therefore potential impacts upon these listed species will be avoided. There will be no loss of habitats used by the otter.

Habitat or species fragmentation: There will be no habitat or species fragmentation within the River Boyne and Blackwater SAC or SPA. No ecological corridors between the proposed site and the Natura 2000 sites identified will be damaged or destroyed.

Reduction in species density: There will be no reduction in species density within the River Boyne and Blackwater SAC or SPA,

Changes in key indicators of conservation value (water quality etc.): There will be no negative impacts upon surface or ground water quality within the River Boyne and Blackwater SAC or SPA. There will be no negative impacts upon the water quality in any designated site. There will be no changes in groundwater quantity or quality which would lead to impacts upon the protected alkaline fen habitats of the River Boyne and Blackwater SAC or SPA.

Describe any likely impacts on the nearby Natura 2000 sites as a whole in terms of:

Interference with the key relationships that define the structure or function of the site: It is not considered likely that there will be any impacts on the key relationships that define the structure or function of the Natura 2000 sites identified.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

Loss - Estimated percentage of lost area of habitat: None

Fragmentation: None

Disruption & disturbance: None

Change to key elements of the site (e.g. water quality etc.): None

3.5 FINDING OF NO SIGNIFICANT EFFECTS

Finding of No Significant Effects Report Matrix	
Name of project	Development of a Burial Ground and Associated Works at Loganstown, Trim, Co. Meath
Name and location of Natura 2000 site	There are two European sites within 15km of the application site. At its closest point, the proposed development site is 359m north of the River Boyne and Blackwater SAC and 382m north of the SPA.
Description of project	A Part 8 Development for Meath County Council
Is the project directly connected with or necessary to the management of the site?	No
Are there other projects or plans that together with project being assessed could affect the site?	No
The Assessment of Significance of Effects	
Describe how the project is likely to affect the Natura 2000 site	Having regard to the location, nature and scale of the proposed development, it is considered that there is no potential for significant effects either from the proposed development on its own or in combination with other plans and projects.
Explain why these effects are not considered significant	Not applicable as there is no potential for negative impacts
Describe how the project is likely to affect species designated under Annex II of the Habitats Directive.	No impacts likely
Data Collected to Carry out the Assessment	
Who carried out the assessment	Noreen McLoughlin, MSC, MCIEEM. Consultant Ecologist
Sources of data	NPWS, EPA, National Biodiversity Data Centre, Meath County Council
Level of assessment completed	Stage1 Appropriate Assessment Screening
Where can the full results of the assessment be accessed and viewed	Full results included

4 APPROPRIATE ASSESSMENT CONCLUSION

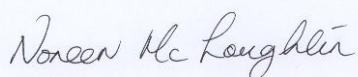
In accordance with Article 6(3) of the Habitats Directive, the relevant case law, established best practice and the precautionary principle, this AA Screening Report has examined the details of the project in relation to the relevant Natura 2000 sites within 15km of the application site.

At this stage of the AA process, it is for the competent authority, i.e., Meath County Council, to carry out the screening for AA and to reach one of the following determinations:

a) AA of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites;

b) AA of the proposed development is *not* required if it can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites.

It is of the opinion of the author that an AA of the proposed development is not required as it can be excluded, on the basis of objective information provided in this report, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites.



Noreen McLoughlin, MSc, MCIEEM.
Ecologist.

(PI Insurance details available on request)

Appendix I: PHOTOGRAPHS



Hedgerow Along Western Boundary



Grassland Habitats Within the Site



Hedgerow Along Northern Boundary



Dry Ditch Along Western Boundary