



# Appropriate Assessment Screening Report

Arcadia Phase 2, Athlone, Co. Westmeath

August 2020

## Final Report

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# DOCUMENT CONTROL

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## Field Investigations and Data

Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by EcoNorth Ltd. for inaccuracies in the data supplied by any other party.

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## 1. Introduction

EcoÉireann was commissioned by the Capital Housing Design Team of Westmeath County Council to carry out an Appropriate Assessment (AA) screening exercise for a small social housing development, Arcadia Phase 2, in Athlone, Co. Westmeath, central grid reference N 03956 42433.

The purpose of this report is to provide information and appraise the potential for this project to have significant effects, either individually or in combination with other plans or projects, on any relevant Natura 2000 sites (hereafter 'European sites').

## 2. Legislation and Background

Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter 'the Habitats Directive') and EC Directive 2009/147/EC on the Conservation of Wild Birds (the "Birds Directive") requires that, any plan or project not directly connected with or necessary to the management of a European site, but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to an AA of its implications for the site in view of the site's conservation objectives. The requirements of the EC directives set out above are enforced in Ireland through the European Communities (Birds and Natural Habitats Regulations 2011). The possibility of there being a significant effect on a European site will generate the need for an AA to be carried out by the competent authority for the purposes of Article 6(3). Accordingly, a screening for AA in respect of an application for consent for proposed development must be carried out by the competent authority (in this case, the Local Authority) in order to assess, in view of best scientific knowledge, if the proposed project, individually or in combination with another plan or project is likely to have a significant effect on any European site.

A Stage Two AA is required if it cannot be excluded, on the basis of objective information, that a proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site. The Screening (Stage One) operates merely to determine whether an AA (Stage Two) must be undertaken on the implications of the plan or project for the conservation objectives of relevant European sites.

This document comprises sufficient information to enable the competent authority to perform a Stage One Screening for AA. The information in relation to the Screening Stage is presented in Section 4 of this document which comprises the Screening Report.

### 3. Guidance

This AA screening report has been prepared with reference to the following guidance documents 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 NPW 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)
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC Environment Directorate-General, 2000 updated draft April 2015)
- Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC
- Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive. Findings of an international workshop on Appropriate Assessment in Oxford, December 2009

### 4. Methodology

#### 4.1 Site Visit and Desk Study

The information collected for this report, to assist the competent authority to screen the proposal for AA, was based on a desktop study and a single site visit carried out on Monday 27<sup>th</sup> July 2020 to view the proposed development site and surrounding area.

Information relied upon included the following information sources, which included maps and ecological data:

- Ordnance Survey of Ireland mapping and aerial photography available from [www.osi.ie](http://www.osi.ie)
- Online data available on European sites as held by the National Parks and Wildlife Service (NPWS) from [www.npws.ie](http://www.npws.ie)
- Information on the location and operation of the potential development supplied by the client in the form of their own safety statements, maps and related materials
- Information on the status of EU protected habitats and species in Ireland (National Parks & Wildlife Service)

The following planning and policy documents relevant to this site were consulted with respect to considering in combination effects with other plans and projects;

- Westmeath County Development Plan 2014-2020 (including variations)
- Westmeath County Development Plan 2020-2026 Chief Executives Report Pre-draft Consultation 2018
- Strategic direction on the Draft Westmeath County Development Plan 2020-2026
- Athlone Town Development Plan 2014- 2020 (Including variations)
- National Biodiversity Action Plan 2017-2021
- Westmeath Biodiversity Action Plan 2014-2020
- Westmeath Biodiversity Action Plan 2014-2020 Issues Paper

## 4.2 Authors Qualifications & Expertise

This AA Screening has been prepared by Eoin Cussen, Ecological Consultant, EcoÉireann and authorised by Executive Director John Thompson MCIEEM.

Eoin gained an honours degree in Zoology from University College Cork in 2014 and a Masters degree in Ecological Assessment from University College Cork in 2016. Eoin is an experienced ecologist, nature conservation and botanical specialist with over 1.5 years professional post-graduate experience. His relevant experience includes planning related casework for state and non-governmental organisations within Ireland, input to, and preparation of, environmental impact statements, appropriate assessment screening assessments, preliminary habitat assessments & protected species assessments. He is an experienced mammal ecologist and has extensive knowledge of survey and conservation management of forestry, urban and grassland habitats gained from professional experience. Eoin currently carries out a wide range of relevant work including ecological assessment and advisory works for a diverse group of commercial clients.

John is a practising ecologist with >15 years professional consultancy experience as well as a number of years operating as a site manager of a range of Natura 2000 sites. John has completed screening assessments and appropriate assessments under the requirements of the relevant European directives on a wide range of sites and for a range of different projects across both Ireland and the UK.

## 4.3 Stage 1 - Screening

The above referenced guidance (Section 3) documents set out a staged process for carrying out AA, the first stage of which is referred to as **Screening** and involves the following process:

1. Determining whether a project or plan is directly connected with or necessary to the conservation management of any European sites
2. Describing the details of the project/plan proposals and other plans or projects that may cumulatively affect any European sites
3. Describing the characteristics of relevant European sites, and
4. Appraising likely significant effects of the proposed project on relevant European sites

#### 4.4 Stage Two – Appropriate Assessment

Appropriate assessment will only proceed if there is assessed to be a likelihood of significant effects occurring on any European sites, as a result of the proposed project, either alone or in combination with other plans and projects and where there is no requirement to apply the 'precautionary principle'.

## 5. Overview of Proposed Project & the Receiving Environment

### 5.1 Description of Proposed Project

It is proposed to develop a social housing scheme of 24 residential units together with associated gardens, open space, access roads and ancillary services on the proposed site.

There is a mix of residential units proposed for development within the site, listed in table 1, below.

**Table 1 Proposed Residential Unit Site Schedule**

Unit Type	No. of bedrooms	No. of People	No. of Storeys	Unit Area (m <sup>2</sup> )	Description	Total
<b>House types</b>						
1	1	2	1	46	Single storey corner unit	2
2	2	4	1	77	Single storey corner unit	1
3	2	4	2	86	2-storey terrace	4
4	2	4	2	86	2-storey end of terrace	4
<b>Duplex</b>						
6	2	4	2	81.9	2-storey duplex with access stair per unit	4
<b>Apartment</b>						
5	2	4	1	78.5	Ground floor units	2
7	2	3	1	67.69	Ground & first floor units	2
8	1	2	1	47.36	Ground & first floor units	2
9	1	2	1	55.30	Ground, first & second floor units	3

The total site area comprises 6,492m<sup>2</sup> or 0.6492ha, incorporating 0.125ha (1250m<sup>2</sup>) of open space/ green area representing 19.25% of the total area, see Figures 1 and 2, below.

Drainage, foul water and surface water attenuation is illustrated in Figures 3 and 4, below. Foul water and surface water from the site are to be connected to the existing public foul water and surface water systems which will be maintained and protected during construction and operation. A minor diversion of the existing 225mm public sewer is proposed in the north-east corner of the site.

The attenuation tank will take all surface water via drains to be constructed as part of the development, with a hydrocarbon /petrol interceptor installed at the inflow to limit and reduce the chances of hydrocarbon pollutants being discharged into the attenuation tank and thus potentially into the public surface water system. All water management materials will be approved by the resident engineer and Irish Water before being put in situ.

A hydrobrake manhole will be put in place that will limit flows from the proposed attenuation tank on site to the public surface water system.





Figure 1 Proposed Development Area





Figure 2 Proposed Site Layout

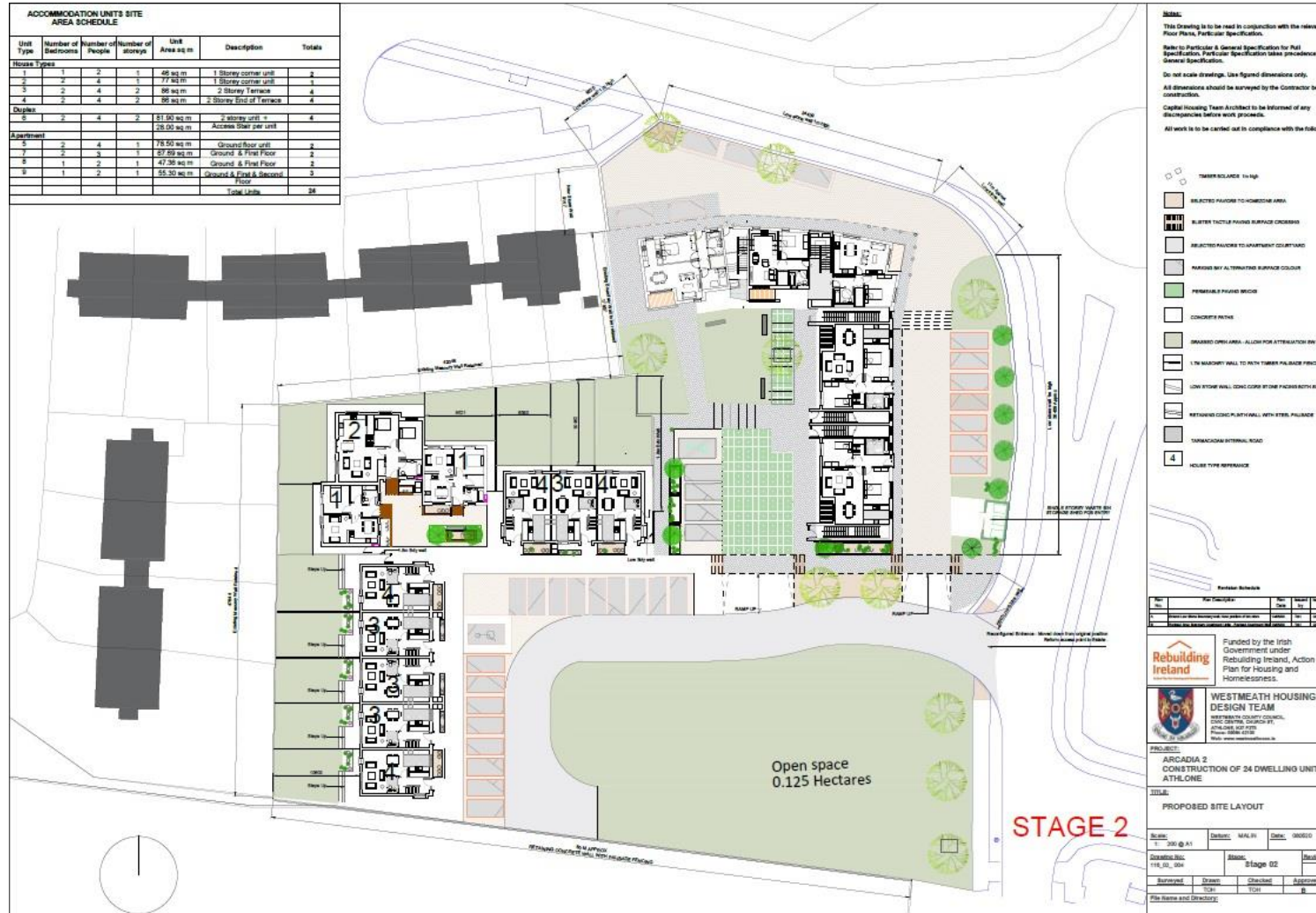




Figure 3 Proposed Foul Sewer Layout



**LEGEND**  
 Existing Foul Sewer ————  
 Foul Sewer to be Diverted ————  
 Proposed Foul Sewer - - - - -

REV	DESCRIPTION	DATE	BY

**Rebuilding Ireland** FUNDED BY THE IRISH GOVERNMENT UNDER REBUILDING IRELAND ACTION PLAN FOR HOUSING AND HOMELESSNESS

**WESTMEATH HOUSING DESIGN TEAM**  
 WESTMEATH COUNTY COUNCIL,  
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**PROJECT:**  
 ARCADIA 2  
 CONSTRUCTION OF 24 DWELLING UNITS  
**TITLE:**  
 PROPOSED FOUL SEWER LAYOUT

Drawn	Issue	Checked	Scale	Date	Approved
116_02_008					

	Drawn	Checked	Approved

FILE NUMBER: 116\_02\_008  
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Figure 4 Proposed Surface Water Drainage Layout



## 5.2 Description of Receiving Environment

Figure 1, above, outlines the indicative location of the proposed development site, which is located within Athlone Town. The proposed site has dual road frontage, Coosan Road to the north and an access road for a primary school and Esker Housing Estate to the east. The site bounds an existing residential site to the west and a sports ground associated with St. Kieran's Community Centre/ Club to the south. Across Coosan Road is commercial land to the north-east and north-west and a vacant lot to the north, with an additional vacant lot to the east.

The site was previously used as a material and spoil storage area for Westmeath County Council and as a site compound and parking lot for the newly constructed Esker Housing Estate to the south-east.

Currently the site consists of man-made bare ground, consisting of hardcore and gravel, with some recolonising bare ground around the perimeter of the site. The western portion of the site is currently in use as a storage area for boulders, which will be incorporated into the development as a permeable base layer for the access road. A line of young willow *Salix* sp. and butterfly bush *Buddleja davidii* bound the northern portion of the site along Coosan Rd.

The north-east corner of the site has previously been used for illegal fly tipping. No non-native invasive flora species were recorded during the site visit.

Site Photographs are provided in Appendix 3

## 6. Provision of Information for Stage One Screening

### 6.1 Zone of Influence of the Proposed Project

While there is no recommended distance from a proposal for which European sites are considered as being relevant for AA, the guidance (NPWS, 2010) recommends that 'the distance should be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in combination effects'.

As a general rule, it is often considered appropriate to look at Natura sites which fall within 15km of the project, however, those which might introduce significant ecological or environmental factors such as significant traffic or pollution risk for example, may require sites to be examined at greater distance through potential catchment effects. Similarly, where large scale territories or ranging of important birds may take them beyond the boundaries of a designated site then a development in excess of 15km may have the potential to impact upon qualifying interests of a European site.

When analysing potential ecological impacts source-receptor-pathway connectivity is considered. For significant effects to arise, there must be:

1. A risk from a 'source' such as construction works at a site
2. A 'receptor' such as a Natura site or its qualifying interests
3. A pathway between the source and the receptor such as a blockage obstructing a flightpath to or from a Natura site or a hydrological link

It must be noted, however, that the presence of a pathway does not necessarily mean that likely significant effects will arise. The likelihood for significant effects will depend upon the characteristics of the source (e.g. duration of construction works), the characteristics of the pathway (e.g. water quality status of a watercourse receiving run-off from construction) and the characteristics of the receptor (e.g. the sensitivities of the European site and its qualifying interests).

## 6.2 Relevant European Sites and Qualifying Interests

The works will not take place within the boundary of any protected area. The predicted working practices are considered to be low impact, however due to the proximity and the water reliant class of surrounding protected areas, a 15km radius was considered to be appropriate to assess the impacts of this proposed development on surrounding sites. There are four European Sites located within 15km of the development site (all distances are approximate) (Appendix 1). The relevant sites, their interest, features, distance, and direction from the proposed development are presented in Table 2.

**Table 2 European Sites and Qualifying Interest Features within 15km**

Site name	Qualifying Features	Distance	Direction
Lough Ree SPA (Site Code: 004064)	Little Grebe ( <i>Tachybaptus ruficollis</i> ), Whooper Swan ( <i>Cygnus cygnus</i> ); Wigeon ( <i>Anas penelope</i> ) Teal ( <i>Anas crecca</i> ); Mallard ( <i>Anas platyrhynchos</i> ); Shoveler ( <i>Anas clypeata</i> ); Tufted Duck – breeding ( <i>Aythya fuligula</i> ); Common Scoter – breeding ( <i>Melanitta nigra</i> ); Goldeneye ( <i>Bucephala clangula</i> ); Coot ( <i>Fulica atra</i> ); Golden Plover ( <i>Pluvialis apricaria</i> ); Lapwing ( <i>Vanellus vanellus</i> ); Common Tern - breeding ( <i>Sterna hirundo</i> ); Wetland and Waterbirds	880m	West
Lough Ree SAC (Site Code: 000440)	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation; Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (*important orchid sites); Degraded raised bogs still capable of natural regeneration; Alkaline fens; Limestone pavements; Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; Bog woodland; Otter ( <i>Lutra lutra</i> )	800m	West

River Shannon Callows SAC (Site Code: 000216)	Molinia meadows on calcareous, peaty or clayey silt-laden soils ( <i>Molinia caerulea</i> ); Lowland hay meadows ( <i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i> ) Limestone pavements; Alluvial forests with alder <i>Alnus glutinosa</i> and ash <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ); Otter <i>Lutra lutra</i>	1.5km	South
Middle Shannon Callows SPA (Site Code: 004096)	Whooper Swan ( <i>Cygnus cygnus</i> ); Wigeon ( <i>Anas penelope</i> ); Corncrake ( <i>Crex crex</i> ) - Breeding; Golden Plover ( <i>Pluvialis apricaria</i> ); Lapwing ( <i>Vanellus vanellus</i> ) – breeding & wintering; Blacktailed Godwit ( <i>Limosa limosa</i> ); Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ); Wetland and Waterbirds	1.5km	South
Crosswood Bog SAC (Site Code: 002337)	Active raised bogs; Degraded raised bogs still capable of natural regeneration	4.3km	South-east
Carn Park Bog SAC (Site Code: 002336)	Active raised bogs; Degraded raised bogs still capable of natural regeneration	6.6km	East
Castlesampson Esker SAC (Site Code: 001625)	Turloughs; Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (* important orchid sites)	9.1km	West
Ballynamona Bog & Corkip Lough SAC (Site Code 002339)	Turloughs; Active raised bogs; Degraded raised bogs still capable of natural regeneration; Depressions on peat substrates of the <i>Rhynchosporion</i> ; Bog woodland	9.1km	West
Pilgrim's Road Esker SAC (Site Code: 001776)	Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (*important orchid sites)	10.7km	South
Mongan Bog SAC (Site Code: 000580)	Active raised bogs; Degraded raised bogs still capable of natural regeneration; depressions on peat substrates of the <i>Rhynchosporion</i>	11km	South
Mongan Bog SPA (Site Code: 004017)	Greenland White-fronted Goose ( <i>Anser albifrons flavirostris</i> )	11.2km	South
Fin Lough (Offaly) SAC (Site Code: 000576)	Alkaline fens; Geyer's Whorl Snail <i>Vertigo geyeri</i>	12.6km	South
Lough Funshinagh SAC (Site Code: 000611)	Turloughs; Rivers with muddy banks with <i>Chenopodium rubri</i> p.p. and <i>Bidention</i> p.p. vegetation	11.9km	North-east
* Extracted from the relevant NPWS site synopsis for each site			

### 6.3 Identifying Potential Effect Pathways

Given the nature of the proposed development, the habitats identified within the proposed site and the range of qualifying habitats/ species associated with Natura 2000 designations listed in Table 2, above, consideration of the following potential effect pathways are contained within this screening assessment.

1. Pollution events during works and operation of the site

Given the distance between the Natura sites identified and the site boundary, and the nature of the proposed development effects of direct habitat loss or damage and construction stage disturbance are not considered within this assessment.

Table 3, below, outlines the conservation objectives of sites listed in Table 2 in addition to identified threats and pressures of each outlined by NPWS.

**Table 3 European Sites and Associated Conservation Objectives**

<b>Lough Ree SAC</b>
<b>Conservation Objectives</b>
To restore the favourable conservation condition of; Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation; Seminatural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (* important orchid sites); Degraded raised bogs still capable of natural regeneration; Alkaline fens; Limestone pavements; Bog woodland
Maintain the favourable conservation condition of Otter found in the Lough
Conservation objective of Old sessile oak woods with Ilex and Blechnum in the British Isles is currently under review by NPWS.
Site Specific Conservation Objectives (SSCO) for the site are outlined in Appendix 2.
<b>Lough Ree SPA</b>
<b>Conservation Objectives</b>
To maintain or restore the favourable conservation condition of the wetland habitat at Lough Ree SPA as a resource for the regularly occurring migratory waterbirds that utilise it (Table 2, above)
<b>River Shannon Callows SAC</b>
<b>Conservation Objectives</b>
To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected (Table 2, above)
<b>Middle Shannon Callows SPA</b>
<b>Conservation Objectives</b>
To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (Table 2, above)
<b>Crosswood Bog SAC</b>
<b>Conservation Objectives</b>
To restore the favourable conservation condition of Active raised bogs.



<p>The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established therefore, the conservation objective for this habitat is inherently linked to that of Active raised bogs and a separate conservation objective has not been set in Crosswood Bog SAC.</p> <p>The SSCO for the site are outlined in Appendix 2.</p>
<b>Carn Park Bog SAC</b>
<b>Conservation Objectives</b>
<p>To restore the favourable conservation condition of Active raised bogs.</p> <p>The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established; therefore, the conservation objective for this habitat is inherently linked to that of Active raised bogs and a separate conservation objective has not been set in Carn Park Bog SAC.</p> <p>The SSCO for the site are outlined in Appendix 2.</p>
<b>Castlesampson Esker SAC</b>
<b>Conservation Objectives</b>
<p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected (Table 2, above).</p>
<b>Ballynamona Bog &amp; Corkip Lough SAC</b>
<b>Conservation Objectives</b>
<p>To restore the favourable conservation condition of Turloughs, Active raised bogs and Bog woodland.</p> <p>The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established therefore, the conservation objective for this habitat is inherently linked to that of Active raised bogs and a separate conservation objective has not been set in Ballynamona Bog and Corkip Lough SAC.</p> <p>Depressions on peat substrates of the <i>Rhynchosporion</i> is an integral part of good quality Active raised bogs and thus a separate conservation objective has not been set for the habitat in Ballynamona Bog and Corkip Lough SAC.</p> <p>The SSCO for the site are outlined in Appendix 2.</p>
<b>Pilgrim's Road Esker SAC</b>
<b>Conservation Objectives</b>
<p>To maintain the favourable conservation condition of Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco- Brometalia</i>)</p>
<b>Mongan Bog SAC</b>
<b>Conservation Objectives</b>
<p>To restore the favourable conservation condition of active raised bogs.</p> <p>The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established; therefore, the conservation objective for this habitat is inherently linked to that of Active raised bogs and a separate conservation objective has not been set in Mongan Bog SAC</p> <p>Depressions on peat substrates of the <i>Rhynchosporion</i> is an integral part of good quality Active raised bogs and thus a separate conservation objective has not been set for the habitat in Mongan Bog SAC</p> <p>The SSCO for the site are outlined in Appendix 2.</p>
<b>Mongan Bog SPA</b>

<b>Conservation Objectives</b>
To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (Table 2, above)
<b>Fin Lough (Offaly) SAC</b>
<b>Conservation Objectives</b>
To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected (Table 2, above)  The SSCO for the site are outlined in Appendix 2.
<b>Lough Funshinagh SAC</b>
<b>Conservation Objectives</b>
To maintain the favourable conservation condition of Turloughs and Rivers with muddy banks with <i>Chenopodium rubri</i> p.p. and <i>Bidention</i> p.p. vegetation.  SSCOs for the site are outlined in Appendix 2.

Table 4 provides a screening analysis to highlight SAC / SPA qualifying features and identifies potential receptors/ pathways and “Likely Significant Effects” (LSE) of impacts upon each Natura 2000 site based on current development proposals.

**Table 4 Analysis of Relevant European Sites/Qualifying Interests**

<b>Lough Ree Special Area of Conservation (SAC)</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Natural eutrophic lakes with <i>agnopotamion</i> or <i>Hydrocharition</i> - type vegetation [3150]	Lough Ree is located upstream from the proposed development site, therefore the hydrological pathway is very unlikely	Given the SAC is located upstream from the proposed site, the scale of the proposal (minor increase in residences), the proposed foul water and surface water plans to discharge into the public foul and surface water systems. With attenuation, a hydrocarbon interceptor and a hydrobrake on the surface water system to ensure levels of surface water discharge remain similar to predevelopment green field levels, it is considered that the proposed development will not have a negative impact on the Lough Ree system.	No
Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (* important orchid sites) [6210]			
Active raised bogs [7110]			
Degraded raised bogs still capable of natural regeneration [7120]			
Alkaline fens [7230]			
Limestone pavements [8240]			
Bog woodland [91D0]			
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ) [91E0]			
<i>Lutra lutra</i> (Otter) [1355]			
<b>Lough Ree Special Protected Area (SPA)</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Little Grebe ( <i>Tachybaptus ruficollis</i> ) [A004]	Lough Ree is located upstream from the proposed development site, therefore the hydrological pathway is very unlikely	Given the SPA is located upstream from the proposed site, the scale of the proposal (minor increase in residences), the habitats recorded onsite, the proposed foul water and surface water plans to discharge into the public foul and surface water systems. With attenuation, a hydrocarbon interceptor and a hydrobrake on the surface water system to ensure levels of surface water discharge remain similar to predevelopment green field levels, it is considered that the proposed development will not have a negative impact on the Lough Ree system.	No
Whooper Swan ( <i>Cygnus cygnus</i> ) [A038]			
Wigeon ( <i>Anas penelope</i> ) [A050]			
Teal ( <i>Anas crecca</i> ) [A052]			
Mallard ( <i>Anas platyrhynchos</i> ) [A053]			
Shoveler ( <i>Anas clypeata</i> ) [A056]			
Tufted Duck ( <i>Aythya fuligula</i> ) [A061]			

Common Scoter ( <i>Melanitta nigra</i> ) [A065]		Given the SPA is located upstream from the proposed site, the scale of the proposal (minor increase in residences), the habitats recorded onsite, the proposed foul water and surface water plans to discharge into the public foul and surface water systems. With attenuation, a hydrocarbon interceptor and a hydrobrake on the surface water system to ensure levels of surface water discharge remain similar to predevelopment green field levels, it is considered that the proposed development will not have a negative impact on the Lough Ree system.	No
Goldeneye ( <i>Bucephala clangula</i> ) [A067]			
Coot ( <i>Fulica atra</i> ) [A125]			
Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]			
Lapwing ( <i>Vanellus vanellus</i> ) [A142]			
Common Tern ( <i>Sterna hirundo</i> ) [A193]			
Wetland and Waterbirds [A999]			
<b>River Shannon Callows SAC</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Molinia meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> ) [6410]	A potential pathway exists for excess foul and surface water to impact on the River Shannon system, which is downstream from the proposed development site.	Given the scale of the proposal (minor increase in residences), the proposed foul water and surface water plans to discharge into the public foul and surface water systems. With attenuation, a hydrocarbon interceptor and a hydrobrake on the surface water system to ensure levels of surface water discharge remain similar to predevelopment green field levels, it is considered that the proposed development will not have a negative impact on the River Shannon system.	No
Lowland hay meadows ( <i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i> ) [6510]			
Limestone pavements [8240]			
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ) [91E0]			
<i>Lutra lutra</i> (Otter) [1355]			
<b>Middle Shannon Callows SPA</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Whooper Swan ( <i>Cygnus cygnus</i> ) [A038]	A potential pathway exists for excess foul and surface water to impact on the River Shannon system, which is downstream from the proposed development site.	Given the scale of the proposal (minor increase in residences), the habitats recorded onsite, the proposed foul water and surface water plans to discharge into the public foul and surface water systems. With attenuation, a hydrocarbon interceptor and a hydrobrake on the surface water system to ensure levels of surface water discharge remain similar to predevelopment green field levels, it is considered that the proposed development will not have a negative impact on the River Shannon system.	No
Wigeon ( <i>Anas penelope</i> ) [A050]			
Corncrake ( <i>Crex crex</i> ) [A122]			
Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]			
Lapwing ( <i>Vanellus vanellus</i> ) [A142]			
Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]			
Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179]			
Wetland and Waterbirds [A999]			

<b>Crosswood Bog SAC</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Active raised bogs [7110]	No perceived pathway	Given the absence of hydrological pathways, the scale of the proposal (minor increase in residences), the location of the site and its distance from the SAC, no likely "effect pathway" has been identified for this site.	No
Degraded raised bogs still capable of natural regeneration [7120]			
<b>Carn Park Bog SAC</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Active raised bogs [7110]	No perceived pathway	Given the absence of hydrological pathways, the scale of the proposal (minor increase in residences), the location of the site and its distance from the SAC, no likely "effect pathway" has been identified for this site.	No
Degraded raised bogs still capable of natural regeneration [7120]			
<b>Castlesampson Esker SAC</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Turloughs [3180]	No perceived pathway	Given the absence of hydrological pathways, the scale of the proposal (minor increase in residences), the location of the site and its distance from the SAC, no likely "effect pathway" has been identified for this site.	No
Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (* important orchid sites) [6210]			
<b>Ballynamona Bog &amp; Corkip Lough SAC</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Turloughs [3180]	No perceived pathway	Given the absence of hydrological pathways, the scale of the proposal (minor increase in residences), the location of the site and its distance from the SAC, no likely "effect pathway" has been identified for this site.	No
Active raised bogs [7110]			
Degraded raised bogs still capable of natural regeneration [7120]			
Depressions on peat substrates of the <i>Rhynchosporion</i> [7150]			
Bog woodland [91D0]			

<b>Pilgrim's Road Esker SAC</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (* important orchid sites) [6210]	No perceived pathway	Given the scale of the proposal (minor increase in residences), the location of the site and its distance from the SAC, no likely "effect pathway" has been identified for this site.	No
<b>Mongan Bos SAC</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Active raised bogs [7110]	No perceived pathway	Given the absence of hydrological pathways, the scale of the proposal (minor increase in residences), the location of the site and its distance from the SAC, no likely "effect pathway" has been identified for this site.	No
Degraded raised bogs still capable of natural regeneration [7120]			
Depressions on peat substrates of the <i>Rhynchosporion</i> [7150]			
<b>Mongan Bog SPA</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Greenland White-fronted Goose ( <i>Anser albifrons flavirostris</i> ) [A395]	No perceived pathway	Greenland White Fronted Goose is not considered likely to be found on the site or surrounding area, due to the developed nature of the surrounding area and the habitats found onsite. Given the scale of the proposal (minor increase in residences), the location of the site and its distance from the SPA, no likely "effect pathway" has been identified for this site.	No
<b>Fin Lough (Offaly) SAC</b>			
<b>Qualifying Interest or feature</b>	<b>Receptor/pathway</b>	<b>Analysis of likelihood of impact</b>	<b>LSE</b>
Alkaline fens [7230]	No perceived pathway	Given the absence of hydrological pathways, the scale of the proposal (minor increase in residences), the location of the site and its distance from the SAC, no likely "effect pathway" has been identified for this site.	No
<i>Vertigo geyeri</i> (Geyer's Whorl Snail) [1013]			

Lough Funshinagh SAC			
Qualifying Interest or feature	Receptor/pathway	Analysis of likelihood of impact	LSE
Turloughs [3180]	No perceived pathway	Given the absence of hydrological pathways, the scale of the proposal (minor increase in residences), the location of the site and its distance from the SAC, no likely “effect pathway” has been identified for this site.	No
Rivers with muddy banks with <i>Chenopodium rubri</i> p.p. and <i>Bidention</i> p.p. vegetation [3270]			

## 7. Effect of the Project in Combination with Other Plans or Projects

A search of the Westmeath County Council e-planning database of proposed, conditional and accepted planning applications in the last 5 years was carried out for the surrounding Athlone region. There were a number of developments within the listed applications within the last 5 years in the surrounding area, listed below in Table 5.

During the site visit there was a newly completed housing estate (Esker Housing Estate) located to the south-east of the proposed development, on what was a previously vacant lot. This development was not provided on the Westmeath County Council Planning Applications web-mapping portal, so details are not provided in Table 5 below, however, it was considered within the cumulative assessment of the proposed development.

**Table 5 Surrounding Major Planning Applications**

Planning Reference	Development Address	Decision Status	Decision Date	Development Summary
197165	Clark Road/ Coosan Road, Athlone	Conditional	6/10/2019	Construction of a two-storey, part single-storey Community Nursing Unit/residential care unit and day centre (ca 5,032sqm gross floor area) comprising 50 ensuite bedrooms with associated resident accommodation including dining rooms, kitchenettes, day rooms, activities rooms, resident areas with family overnight room, visitors room, treatment room, hairdresser room etc; internal courtyards and first floor balcony spaces; and associated back of house areas (including kitchen and laundry areas), staff accommodation and ancillary office space. Permission is also sought for associated landscaping, site services, generator, waste compound (47sqm) and ESB substation (25sqm) and all associated site and development works.
177030	Tormey Villas, Athlone	Conditional	7/4/2017	Planning Permission to construct an extension to the rear of existing community centre at ground floor level and retention permission to retain extension to office area and conservatory area to the side of existing community centre at ground floor level and all associated site works
177168	Athlone Water Treatment Plant, Athlone	Conditional	2/11/2017	The development will consist of the installation of a new pumping system at the existing pump station building, which is a protected structure (RPS No 095 in Athlone Town Development Plan 2014-2020) and NIAH listed building (NIAH No 15004120) due to its Architectural Heritage. The proposed works also includes the installation of a new pipe through the wall of the existing pump house building, and associated ancillary works including an increase in the size of the existing external concrete thrust block, to enclose the increased diameter pipeline, and other enabling civil works. The development will also include installation of flood control gates at the external doors of the same building.
177143	Coosan West Pumping Station, Old	Conditional	29/9/2017	The development will consist of decommissioning of existing pumping station and all associated ancillaries (underground chambers and above ground kiosks); Provision of new higher volume underground pumping station (area c.50m2) to the East



	Coosan Road			of the existing location including underground pumping and pipework chambers. A new underground storm water storage tank with a capacity of 110m <sup>3</sup> and overall depth of 6.3m. All associated pumping equipment, 7m high vent column, new gantry and other ancillary facilities. New site boundary treatment with access road from existing Old Coosan Road and All associated site works.
207054	Abbey Hous, Coosan Road	Further Information	N/A	Construct 1) A new rear and side extension to an existing house (a Protected Structure RPS No.087, NIAH no15004033); 2) internal and external alterations to the existing house; 3) new connection to the public sewer via a new pumping station with the decommissioning of the existing septic tank; 4) the construction of a new road entrance and associated driveway 5) the construction of a new riverside flood defence wall; and 6) all ancillary site works.
167146	Burgess Park River Shannon	Conditional	27/2/2017	The development will consist of the construction of a reinforced concrete boat slipway.
191	Lissywollen, Athlone	Pre-validation	N/A	Residential development of 547 no. dwellings comprised of 279 no. 2, 3 & 4 bed 2 storey detached, semi-detached & terraced units, 104 no 1,2 & 3 bed 3 storey duplex/apartment units, 164 no. 1 & 2 bed apartments in 9 no. 3-4 storey blocks and 2 no. 1 storey crèches on a 17.5ha site at Lissywollen, Athlone.
177144	The Quay Road, The Strand, Athlone	Conditional	29/9/2017	Permission for a tunnel sewer crossing under the River Shannon and associated shafts in Athlone Townland and Athlone and Bigmeadow Townland, Athlone Town Centre between The Quay Road on the western side of the river to The Strand Carpark south west of Strand St. on the eastern side of the river including works on Quay Road and in the Strand Carpark. The development will consist of the construction of the following: A new combined sewer (Upper Shannon Crossing), up to 1500mm diameter, tunnelled underneath the River Shannon from Quay Road to the Strand Carpark constructed within a 10m wide construction corridor.1 No. tunnel shaft on The Quay Road and all associated site works constructed within a works construction area.1 No. tunnel shaft in the Strand Carpark and all associated site works constructed within a works construction area. Temporary works compounds at each of the 2 No. tunnel shafts. Temporary removal and reinstatement of two cast iron bollards that are listed as a Protected Structure, RPS Ref No 075 and NIAH Reg. No. 15000414 along the Quay Road. Temporary car parking and occasional storage for existing commercial use located adjacent to the proposed temporary works construction compound on The Quay Road. Temporary works area up to 10m wide on a floating pontoon located on the River Shannon adjacent to the quay wall on The Quay Road.
177182	Deerpark Road, Athlone	Conditional	15/1/2018	Planning Permission for development of new sewers in Athlone, Co. Westmeath on Deerpark Road in Doovoge Townland, through Athlone Showgrounds in Athlone & Big Meadow Townland and across the River Shannon River to the east bank in Burgess Park in Golden Island (Kilmaine) Townland. The development will consist of the following: A new 450mm diameter open cut combined sewer on Deerpark Road and Clonown Road

				<p>constructed within a works construction area. A new combined tunnel sewer, up to 1200mm diameter, through the Showgrounds from Deerpark Road to the West bank of the River Shannon constructed within a 10m wide construction corridor. A new combined tunnel sewer (Lower Shannon Sewer Crossing), up to 1500mm diameter, that runs underneath the River Shannon to the east bank in Burgess Park at Golden Island constructed within a 10m wide construction corridor. 1 No. Tunnel Shaft and associated temporary works construction compound in Burgess Park in Golden Island (Kilmaine) Townland. 3 no Tunnel Shafts and associated temporary works construction compounds west of the Shannon in Athlone Showgrounds and in Athlone &amp; Big Meadow and Townland. 2 no Tunnel Shafts and associated temporary works construction compounds on Deerpark Road in Athlone &amp; Big Meadow Townland and Doovoge Townland. Decommissioning and demolition of the existing West Side Pumping Station. Temporary construction access road along the sewer route in Athlone Showgrounds. Temporary construction access through Burgess Park. Decommissioning and demolition of the existing siphon inlet chamber and storm overflow chamber, and all associated site works</p>
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There exists the potential for 'in-combination' effects on water quality in the River Shannon from any other projects carried out within Co. Westmeath or any other county level land use plans, including the County Development Plan (WCC) which can influence conditions in the River Shannon via rivers and other surface water features. However, there are protective policies and objectives in place at a strategic planning level to protect water quality in the River Shannon.

The majority of the projects listed above are either still in the application process, have only recently been approved or have started/ finished construction, therefore the projects will be and have been conducted in a staggered nature, which will limit the potential for cumulative effects upon water quality. Significant avoidance and control measures have been implemented on the larger of the projects listed above including planning reference 177144, 177182 & 167146, as part of the Stage 2 Appropriate Assessment Natura Impact Statements, to ensure there are no residual impacts on the River Shannon system.

Following the implementation of the avoidance and control measures designed and implemented to mitigate the potential impacts on the River Shannon system from the projects outlined above, and due to the absence of likely effects as a result of the proposed scheme assessed in this document, it is considered that the proposed project will not have 'in-combination' impacts with current or proposed future developments.

## 8. Conclusions on Information Provided for Stage One Screening Assessment

### ***Determination of whether a project or plan is directly connected with or necessary to the conservation management of any European sites***

This project is not connected with the conservation management of any of the European sites identified within 15km of the proposed development.

### ***Appraising likely significant effects of the proposed project on relevant European sites***

This document sets out a screening process undertaken to refine the requirement for AA undertaken thereafter. This screening process eliminated risk of likely significant effect on the European Sites within 15km of the proposed development site.

An analysis of the development and its potential to interact with or impact upon the relevant European Sites Qualifying Interests is provided in Table 4. **In view of best scientific knowledge and on the basis of objective information, it is concluded that the proposed development, whether individually or in combination with other plans or projects, beyond reasonable scientific doubt will not have significant effects on the European Sites referred to in Table 2 above.**

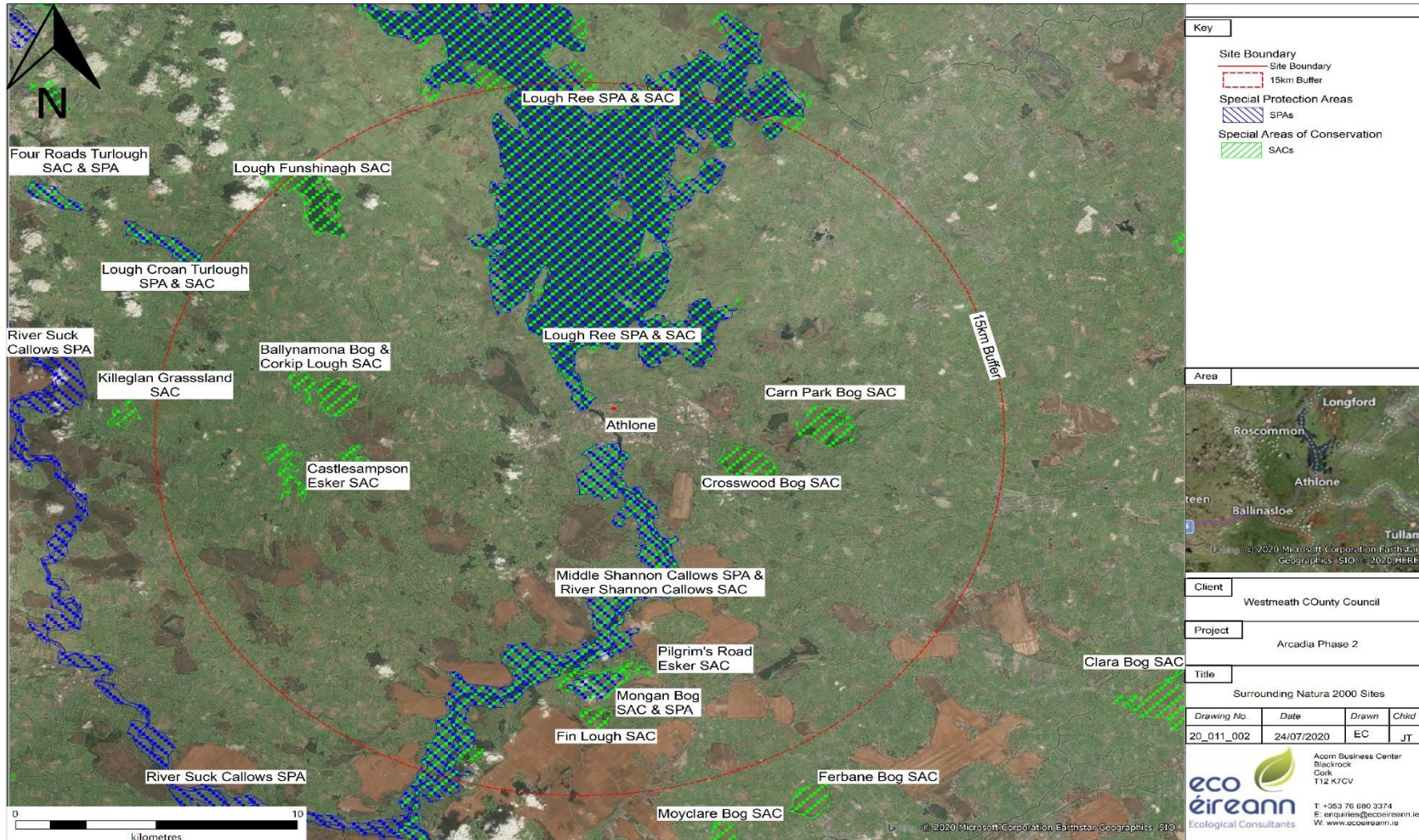
## 9. Additional Ecological Recommendations

It is recommended that any vegetation clearance required to facilitate the proposed development is carried out outside of the bird breeding season (March 1<sup>st</sup> - August 31<sup>st</sup>, inclusive) including removal of the roadside willow and butterfly bush, along the northern boundary of the site and the crack willow *Salix fragilis*, located in the western portion of the site.

It is recommended that proposed landscaping/ planting incorporates native species only, and preferentially of local origin.



# Appendix 1 – European Sites within 15km





## Appendix 2 – Site Specific Conservation objectives

Table AP2 – Site Specific Conservation Objectives

Lough Ree SAC
<b>Site Specific Conservation Objectives</b>
<ul style="list-style-type: none"> <li>• Restore area of active raised bog to 70.1ha, subject to natural processes</li> <li>• No decline in extent of high bog necessary to support the development and maintenance of active raised bog</li> <li>• Restore appropriate water levels throughout the site</li> <li>• Restore, where possible, appropriate high bog topography, flow directions and slopes</li> <li>• Restore adequate transitional areas to support / protect the active raised bog and the services it provides</li> <li>• Restore 35.1ha of central ecotope/active flush/soaks/bog woodland as appropriate</li> <li>• Restore adequate cover of high quality microtopographical features</li> <li>• Restore adequate cover of bog moss (Sphagnum) species to ensure peat-forming capacity</li> <li>• Restore, where appropriate, typical active raised bog flora</li> <li>• Restore, where appropriate, typical active raised bog fauna</li> <li>• Maintain features of local distinctiveness, subject to natural processes</li> <li>• Non-native invasive species at insignificant levels and not more than 1% cover</li> <li>• Air quality surrounding bog close to natural reference conditions. The level of N deposition should not exceed 5kg N/ha/yr</li> <li>• Water quality on the high bog and in transitional areas close to natural reference conditions</li> </ul>
<b>Crosswood Bog SAC</b>
<b>Site Specific Conservation Objectives</b>
<ul style="list-style-type: none"> <li>• Restore active raised bog to 21.4ha</li> <li>• Restore the distribution and variability of active raised bog across the SAC</li> <li>• No decline in extent of high bog necessary to support the development and maintenance of active raised bog</li> <li>• Restore appropriate water levels</li> <li>• Restore, where possible, appropriate high bog topography, flow directions and slopes</li> <li>• Restore adequate transitional areas to support / protect active raised bog and the services it provides</li> <li>• Restore 10.7ha of central ecotope/active flush/soaks/bog woodland as appropriate</li> <li>• Restore adequate cover of high quality microtopographical features</li> <li>• Restore adequate cover of bog moss (Sphagnum) species to ensure peat-forming capacity</li> <li>• Restore, where appropriate, typical active raised bog flora</li> <li>• Restore, where appropriate, typical active raised bog fauna</li> <li>• Maintain features of local distinctiveness, subject to natural processes</li> <li>• No introduction of negative / non-native species</li> <li>• Air quality surrounding bog close to natural reference conditions. The level of N deposition should not exceed 5kg N/ha/yr</li> <li>• Water quality on the high bog and in transitional areas close to natural reference conditions</li> </ul>
<b>Carn Park Bog SAC</b>
<b>Site Specific Conservation Objectives</b>
<ul style="list-style-type: none"> <li>• Restore active raised bog to 13.7ha subject to natural processes</li> <li>• Restore the distribution and variability of active raised bog across the SAC</li> <li>• No decline in extent of high bog necessary to support the development and maintenance of active raised bog</li> <li>• Restore appropriate water levels throughout the site</li> <li>• Restore, where possible, appropriate high bog topography, flow directions and slopes</li> <li>• Restore adequate transitional areas to support / protect active raised bog and the services it provides</li> <li>• Restore 6.9ha of central ecotope/active flush/soaks/bog woodland as appropriate</li> <li>• Restore adequate cover of high quality microtopographical features</li> <li>• Restore adequate cover of bog moss (Sphagnum) species to ensure peat-forming capacity</li> <li>• Restore, where appropriate, typical active raised bog flora</li> <li>• Restore, where appropriate, typical active raised bog fauna</li> <li>• Maintain features of local distinctiveness, subject to natural processes</li> <li>• Non-native invasive species at insignificant levels and not more than 1% cover</li> </ul>



<ul style="list-style-type: none"> <li>• Air quality surrounding bog close to natural reference conditions. The level of N deposition should not exceed 5kg N/ha/yr</li> <li>• Water quality on the high bog and in transitional areas close to natural reference conditions</li> </ul>
<b>Ballynamona Bog &amp; Corkip Lough SAC</b>
<b>Site Specific Conservation Objectives</b>
<ul style="list-style-type: none"> <li>• Restore active raised bog to 18.9ha subject to natural processes</li> <li>• Restore the distribution and variability of active raised bog across the SAC</li> <li>• No decline in extent of high bog necessary to support the development and maintenance of active raised bog</li> <li>• Restore appropriate water levels throughout the site. In restoring the hydrological regime of the raised bog, consideration should be given to turlough hydrological regime and, particularly, to supporting and restoring transitional vegetation between these two priority habitats.</li> <li>• Maintain/restore appropriate groundwater contribution necessary for the natural functioning of the turlough</li> <li>• Restore, where possible, appropriate high bog topography, flow directions and slopes</li> <li>• Restore adequate transitional areas to support / protect active raised bog and the services it provides</li> <li>• Restore 12.0ha of central ecotope/active flush/soaks/bog woodland as appropriate</li> <li>• Restore adequate cover of high quality microtopographical features</li> <li>• Restore adequate cover of bog moss (Sphagnum) species to ensure peat-forming capacity</li> <li>• Restore, where appropriate, typical active raised bog flora</li> <li>• Restore, where appropriate, typical active raised bog fauna</li> <li>• Maintain features of local distinctiveness, subject to natural processes</li> <li>• Non-native invasive species at insignificant levels and not more than 1% cover</li> <li>• Air quality surrounding bog close to natural reference conditions. The level of N deposition should not exceed 5kg N/ha/yr</li> <li>• Water quality on the high bog and in transitional areas close to natural reference conditions</li> <li>• Restore natural temporal pattern in flood area and flood depth for turlough</li> <li>• Restore any areas of permanent or semi-permanent flooding or water-logging</li> <li>• Maintain variety, area and extent of soil types necessary to support turlough vegetation and other biota</li> <li>• Maintain/restore nutrient status (phosphorus and nitrogen concentrations) appropriate to soil types and vegetation communities</li> <li>• Maintain sufficient wet bare ground, as appropriate</li> <li>• Maintain CaCO<sub>3</sub> deposition rate and/or soil concentration</li> <li>• Maintain average annual TP concentration of ≤10µg/l TP, or ≤20µg/l TP, as appropriate</li> <li>• Maintain/restore appropriate water colour</li> <li>• Maintain appropriate chlorophyll α concentrations</li> <li>• Maintain trace/ absent epiphyton as algal mats (&lt;2% cover)</li> <li>• Restore active peat formation, where appropriate</li> <li>• Maintain area of sensitive and high conservation value vegetation communities/units.</li> <li>• Maintain the vegetation zonation/mosaic characteristic of the site.</li> <li>• Maintain sward heights appropriate to the vegetation unit, and a variety of sward heights across the turlough</li> </ul>
<b>Mongan Bog SAC</b>
<b>Site Specific Conservation Objectives</b>
<ul style="list-style-type: none"> <li>• Restore active raised bog to 62.8ha subject to natural processes</li> <li>• Restore the distribution and variability of active raised bog across the SAC</li> <li>• No decline in extent of high bog necessary to support the development and maintenance of active raised bog</li> <li>• Restore appropriate water levels throughout the site</li> <li>• Restore, where possible, appropriate high bog topography, flow directions and slopes</li> <li>• Restore adequate transitional areas to support / protect active raised bog and the services it provides</li> <li>• Restore 47.2ha of central ecotope/active flush/soaks/bog woodland as appropriate</li> <li>• Maintain and restore adequate cover of high quality microtopographical features</li> <li>• Restore adequate cover of bog moss (Sphagnum) species to ensure peat-forming capacity</li> <li>• Restore, where appropriate, typical active raised bog flora</li> <li>• Restore, where appropriate, typical active raised bog fauna</li> <li>• Maintain features of local distinctiveness, subject to natural processes</li> </ul>



- Non-native invasive species at insignificant levels and not more than 1% cover
- Air quality surrounding bog close to natural reference conditions. The level of N deposition should not exceed 5kg N/ha/yr
- Water quality on the high bog and in transitional areas close to natural reference conditions

#### **Fin Lough (Offaly) SAC**

##### **Site Specific Conservation Objectives**

- Area stable or increasing, subject to natural processes
- No decline in habitat distribution, subject to natural processes
- Maintain soil pH and nutrient status within natural ranges
- Maintain active peat formation, where appropriate
- Maintain, or where necessary restore, appropriate natural hydrological regimes necessary to support the natural structure and functioning of the habitat
- Maintain, or where necessary restore, as close as possible to natural or semi-natural drainage conditions
- Maintain appropriate water quality, particularly pH and nutrient levels, to support the natural structure and functioning of the habitat
- Maintain variety of vegetation communities, subject to natural processes
- Maintain adequate cover of typical brown moss species
- Maintain adequate cover of typical vascular plant species
- Cover of native negative indicator species at insignificant levels
- Cover of non-native species less than 1%
- Cover of scattered native trees and shrubs less than 10%
- Total cover of soft rush (*Juncus effusus*) and common reed (*Phragmites australis*) less than 10%
- Total cover of litter not more than 25%
- Cover of disturbed bare ground not more than 10%
- Disturbed proportion of vegetation cover where tufa is present is less than 1%
- 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
- No decline in distribution of *Vertigo geyeri*, subject to natural processes.
- No decline in suitable habitat of *Vertigo geyeri*, subject to natural processes
- Area of suitable habitat stable or increasing, subject to natural processes; no less than 0.7ha of at least suboptimal habitat
- No decline in habitat quality: vegetation structure and height, subject to natural processes
- No decline in habitat quality: soil wetness, subject to natural processes; at least 50% of a representative number of sample points in areas of optimal habitat should be classified as optimal wetness; at least 25% in areas of suboptimal habitat

#### **Lough Funshinagh SAC**

##### **Site Specific Conservation Objectives**

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes
- Maintain appropriate groundwater contribution necessary for the natural functioning of the habitat
- Maintain appropriate natural spatial and temporal patterns in flood duration
- Maintain natural annual temporal patterns in flood frequency
- Maintain natural temporal and spatial pattern in flood area
- Maintain natural temporal and spatial patterns in flood depths
- Maintain any areas of permanent or semi-permanent flooding or water-logging
- Maintain variety, area and extent of soil types necessary to support turlough vegetation and other biota
- Maintain nutrient status (phosphorus and nitrogen concentrations) appropriate to soil types and vegetation communities
- Maintain sufficient wet bare ground, as appropriate
- Maintain calcium carbonate (CaCO<sub>3</sub>) deposition rate and/or concentration in soil
- Maintain average annual total phosphorus (TP)
- Maintain appropriate water colour
- Maintain appropriate chlorophyll  $\alpha$  concentrations
- Maintain trace/absent epiphyton as algal mats (<2% cover)



- Maintain active peat formation, where appropriate
- Maintain area of sensitive and high conservation value vegetation communities/units
- Maintain the vegetation zonation/mosaic characteristic of the site
- Maintain sward heights appropriate to the vegetation unit, and a variety of sward heights across the turlough
- Maintain typical species within and across the habitats and turloughs (terrestrial and aquatic invertebrates, birds and flora)
- Maintain marginal fringing habitats that support turlough vegetation, invertebrate, mammal and/or bird populations
- Maintain appropriate turlough woodland diversity and structure.





## Appendix 3 – Site Photographs

View of the Proposed site from the south-east corner



View of the proposed site from the north-east corner





View of boulder storage in the western portion of the site



Old spoil storage material, view towards the north-east corner of site





**View from the south-east corner of the site to the west**



**Fly tipping in north-west corner**





**View of northern boundary from roadside**



**View of northern boundary from inside the site**





Proposed entrance, looking east



Proposed entrance, looking west

