



Comhairle Chontae Liatroma
LEITRIM COUNTY COUNCIL
In partnership with
Carrick on Shannon Rowing Club



LOUGH RINN ROWING COURSE PROJECT

APPROPRIATE ASSESSMENT SCREENING REPORT IN COMPLIANCE WITH EU HABITATS DIRECTIVE ARTICLE 6(3)

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IN PARTNERSHIP WITH CARRICK ROWING CLUB
LOUGH RINN ROWING COURSE PROJECT
APPROPRIATE ASSESSMENT
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STAGE 1- SCREENING REPORT

1 INTRODUCTION

1.1 Background

Leitrim County Council in partnership with Carrick-on-Shannon Rowing Club is seeking Part 8 planning approval to further develop associated changes to the Lough Rinn Rowing Course Facility. The facility is being further developed to host national and international events, and act as a training base for international teams in advance of major competitions.

The original facility was granted Part 8 Planning Approval in May 2012 for the following:

To develop a 2000 metre long rowing course on Lough Rinn with associated launching slips and starting pontoons. The works also included the extension of the existing service block at Lough Rinn caravan park, the extension of the existing carpark to incorporate additional caravan parking bays, the provision of a new grass carpark, the upgrading of the existing pathway along the shore, the construction of viewing stands, the upgrading of the existing sewerage treatment plant, and the construction of a boat trailer park with a storage shed.

This Part 8 Planning Application now seeks approval for the following:

Further develop the finish area of the Lough Rinn Rowing Course Facility with associated site development works.

These works will include the provision of a new trailer park/competition area; additional launch pontoons; provision of new access road to the finish area; provision of car parking at the finish area; create a new entrance to the finish area from Local Road LP-1053-2; construction of an Integrated Constructed Wetland for treatment of existing on-site foul sewerage; construction of a Finish Hut with access walkway and Viewing / Spectator Area within Lough Rinn; and landscaping to overall finish area shoreline.

The Natura 2000 sites that may be impacted by the proposed development are listed in Table 1. This report assesses the impacts, if any, that the proposed development will have on the qualifying interests and conservation objectives of these sites. Please refer to Figure 1 – Designated Areas.

Site Code	Site Name	Distance of the Natura 2000 site from section of underground cable (at closest point)
002348	Clooneen Bog SAC	7km east of site
004101	Ballykenny to Fisherstown Bog SPA	9.5km northeast of the site

Table 1: Natura 2000 sites that may be impacted by the proposed underground cable

1.2 Project Description

The Lough Rinn Rowing Course Facility is located on Lough Rinn in the townlands of Rinn Td., Clooncoe Td., Clooncahir Td., Tawnagh More Td., and Tulcon Td., near Mohill, County Leitrim.

The nature and extent of this proposed development includes the following design elements:-

New Trailer Park/Competition Area

It is proposed to create a new trailer park / competition area to facilitate the temporary storage of rowing / canoe boats during training and competitions events. Rowing boats can measure up to 17m in length. Therefore, the new trailer park / competition area is required to accommodate numerous rowing team entries for National / International Events.

The main elements of the works at the New Trailer Park/Competition Area comprise:-

- Removal of existing topsoil and importation of approximately 11,000m³ of granular material to a level of 41.0m above Ordnance Datum (i.e. above recorded lake flood level of 40.83m.O.D.);
- Construction of rock armour to shoreline of new trailer park / competition area to match existing rock armour on site;
- Surfacing of Trailer Park/Competition Area with Macadam;
- Associated site development works, services, kerbing, drainage and landscaping.

The design philosophy will be to match the finishes of the existing Trailer Park/Competition Area.

Additional Launch Pontoons

It is proposed to install 3 No. additional launch pontoons on the northern end of Lough Rinn. The launch pontoons will provide access to the lake and rowing course from the Trailer Parks / Competition Areas.

The main elements of the Additional Launch Pontoons will comprise:

- Floating – flexible when the water level changes and able to meet working levels in the lake. The structure shall be affixed to a concrete pier (concrete apron with retaining wall or similar structure) on the lake shore;
- Made of steel, plastic, or concrete. The surface to be slip resistant in any weather conditions;
- The pontoons are to be located away from any permanent structures or obstacles that could obstruct the smooth and safe embarkation and disembarkation of the boats;
- Each pontoon to be 6 metres wide, 20 metres long;
- The upper edge of the pontoons to be no more than 15 centimetres above the water level;
- Minimum of 16 metres of clear water between each pontoon.

The design philosophy for the launch pontoons will be to match the finish of the existing pontoon at the existing Trailer Park/Competition Area.

New Access Road to the Finish Area and Car Parking at the Finish Area

It is proposed to construct a 6m wide macadam access road from the existing slipway to the Finish Area. The road will provide access to designated parking areas for competitors and event organisers. In addition, the road will also provide a corridor through the facility for emergency services.

The main elements of the proposed works to the new Access Road to the Finish Area will comprise:

- Construction of 6m wide road, approximately 400m in length from the existing slipway to the Finish Area;

-
- Construction of car park to facilitate up to 22 No. vehicles and designated for event organisers and emergency services;
 - Road build up to consist of imported hardcore sub-base with macadam surfacing;
 - Lighting on low level poles directed inwards and downwards on the subject areas with controls such as timers and movement sensors to save money and minimise light pollution;
 - Associated site development works, services, footpaths, kerbing, speed controls, drainage and landscaping.

In light of pedestrian traffic within the development, the design philosophy for the access road will be to limit the speed of vehicles with appropriate speed controls.

New entrance to the Finish Area from Local Road LP-1053-2

It is proposed to construct a new entrance to the Finish Area from Local Road LP-1053-2. The entrance and road will provide access to designated parking areas for event organisers and emergency services. It is proposed that a permanent lockable gate be erected at the new entrance to prevent unauthorised access.

The main elements of the proposed new entrance from Local Road LP-1053-2 will comprise:

- Create a new entrance from Local Road LP-1053-2 into the development Finish Area;
- Widen the area adjacent to the proposed entrance to facilitate sight lines and traffic movements;
- Provision of road signs and road markings in accordance with the 'Traffic Signs Manual' published by the Department of Transport;
- Construction of 6m wide road, approximately 150m in length from the existing Local Road LP-1053-2 to the Finish Area;
- Erection of permanent lockable gate at the new entrance to prevent unauthorised access;

-
- Associated site development works, services, footpaths, kerbing, speed controls, drainage and landscaping.

The design philosophy for the entrance and road will be to provide access to designated parking areas for event organisers and emergency services.

Integrated Constructed Wetland for treatment of existing on-site foul sewerage

It is proposed to construct an Integrated Constructed Wetland (ICW) for treatment of existing on-site foul sewerage. The ICW will consist of an unlined free surface flow constructed wetland addressing the objectives of cleansing and managing water flow from the facility's wastewater sources, integrating the wetland infrastructure into the landscape and enhancing its biological diversity.

The ICW will replace the existing sewerage treatment on site. Upon commissioning of the ICW the existing sewerage treatment will be decommissioned and removed from site.

The main elements of the Integrated Constructed Wetland comprise:

- Pumping Station and Rising Main to pump untreated effluent to a holding tank within the ICW;
- Construction of an ICW consisting of series of interlinking ponds (up to 5 No.) equivalent to approximately 2,500m² in area. Overall area required for embankments, landscaping and associated works is estimated at approximately 5,000m² (1.2 acres);
- Decommissioning of existing sewerage treatment plant upon completion of the new proprietary Wastewater Treatment Unit.

The design of the proposed ICW provides an integrated high quality appearance, combined with good landscaping and low maintenance properties.

Finish Hut with access walkway and Viewing / Spectator Area within Lough Rinn

It is proposed to construct a Finish Hut on the rowing course finish line (i.e. chainage 2,000m) to facilitate the hosting of National / International events. In order to host International events, the Finish Tower is required to be to World Rowing Federation, *Fédération Internationale des Sociétés d'Aviron* (FISA) regulations. The proposed Finish Hut will be located exactly on the finish line,

approximately 27m from the racing lanes to provide the required un-obstructed views for event finishes.

In order to provide access to the Finish Hut, it is proposed to construct an access walkway with imported granular material. A proposed Viewing / Spectator Area will extend from the Finish Tower along the rowing course to cater for spectator viewing of rowing / canoeing events. Access to the Viewing / Spectator Area will be restricted to pedestrian traffic and authorised vehicular traffic for event organisers and emergency services.

The main elements of the Finish Hut, Access Walkway and Viewing / Spectator Area comprise:

- Finish Hut measuring approximately 4m x 3m on plan and approximately 2.65m high. The Finish Hut to be located 27m from the racing lanes and founded on an elevated and piled steel/concrete platform above recorded lake flood level of 40.83m.O.D. Access to the Finish Hut to be via an elevated steel walkway from the proposed Viewing / Spectator Area;
- Finish Hut external finish to be profiled metal sheeting, grey in colour, with glazed windows overlooking the finish line and racing lanes. Roof of Finish Hut to be used as lookout gantry for race control. Roof to incorporate edge handrailing and ladder for access.
- Importation and placement of approximately 11,500m³ of granular material to create proposed Access Walkway and Viewing / Spectator Area at a level of 41.3m above Ordnance Datum (i.e. above recorded lake flood level of 40.83m.O.D.). Proposed raised area to be protected by rock armour (rip-rap or similar construction), formed with an approximate slope of 1 in 3.
- Surfacing of Access Walkway and Viewing / Spectator Area with surface dressing;
- Associated site development works, services, kerbing, drainage and landscaping.

The design philosophy of the proposed new Finish Hut and ancillary items will be to provide for a high quality appearance, combined with good weathering and low maintenance properties.

Landscaping to overall Finish Area shoreline

In order to accommodate the proposed works and provide views onto the lake, it is proposed to selectively remove existing vegetation from the overall Finish Area shoreline (outlined red on the

Planning Drawings). Upon completion, it is proposed to landscape the overall Finish Area with selected native species to create an area of high amenity value.

The landscaping philosophy for the Finish Area is to create a unique shared space that can be utilized by local communities and national organisations, and that benefit residents, visitors and athletes.

The main elements of proposed landscaping to the overall Finish Area will comprise:

- Selective removal of existing vegetation from the footprint of proposed infrastructure;
- Re-grading and re-shaping of existing topography to above flood level;
- Planting of selected native species into re-graded and re-shaped topography;
- Installation of public information signage;
- Installation of public amenity furniture (i.e. public benches, litter bins, etc.).

The landscaping philosophy for the Finish Area is to create a unique shared space that can be utilized by local communities and national organisations, and that benefit residents, visitors and athletes.

2 REGULATORY CONTEXT

The Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) formed a basis for the designation of Special Areas of Conservation (SACs). Similarly, Special Protection Areas are legislated for under the Birds Directive (Council Directive 79/409/EEC on the Conservation of Wild Birds). Collectively, SACs and SPAs are referred to as Natura 2000 sites. In general terms, they are considered to be of exceptional importance in terms of rare, endangered or vulnerable habitats and species within the European Community. Under Article 6(3) of the Habitats Directive an Appropriate Assessment must be undertaken for any plan or project that is likely to have a significant effect on the conservation objectives of a Natura 2000 site. An Appropriate Assessment is an evaluation of the potential impacts of a plan or project on the conservation objectives of a Natura 2000 site. Where necessary, mitigation or avoidance measures should be proposed to preclude negative effects.

Article 6, paragraphs 3 of the Habitats Directive state that:

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

The statutory agency responsible for Natura 2000 sites is the National Parks and Wildlife Service of the Department of Environment, Heritage and Local Government.

The European Court of Justice issued a judgment on December 13th 2007 in a legal case against Ireland that found that Ireland failed in its statutory duty to confer adequate protection on designated areas. Following on from this the Circular Letter 1/08 & NPWS 1/08 on Appropriate Assessment of Land Use Plans (from the Department of the Environment, Heritage and Local Government) states that all plans and projects will be subject to critical assessment to ensure that they comply with all relevant legislation.

2.1 The Stages in an Appropriate Assessment

There are 4 stages in an Appropriate Assessment as outlined in the European Commission Guidance document (2001). The following is a brief summary of these steps.

Stage 1 - Screening: This stage examines the likely effects of a project either alone or in combination with other projects upon a Natura 2000 Site and considers whether it can be objectively concluded that these effects will not be significant

Stage 2 - Appropriate Assessment: In this stage, the impact of the project on the integrity of the Natura 2000 site is considered with respect to the conservation objectives of the site and to its structure and function.

Stage 3 - Assessment of Alternative Solutions: Should the Appropriate Assessment determine that adverse impacts are likely upon a Natura 2000 site, this stage examines alternative ways of implementing the project that, where possible, avoid these adverse impacts.

Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain: Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the Natura site will be necessary.

3 METHODOLOGY

3.1 Desk study and consultations

A desk study was carried out to collate the available information on the ecological environment. The National Parks and Wildlife Service (NPWS) database was consulted concerning designated conservation areas and records of rare and protected plant and animal species in the vicinity of the proposed development. This assessment was carried out with reference to the relevant guidance, in particular:

- *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 2001
- *Managing Natura 2000 Sites*: The Provisions of Article 6 of the 'Habitats Directive' 92/43/EEC, European Commission, 2000
- *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government. Dublin. 2009.

4 STAGE 1: SCREENING MATRIX

STAGE 1: Screening matrix for Lough Rinn Rowing Course Facility Additional Works, with regard to potential impacts on Clooneen Bog SAC and Ballykenny to Fisherstown Bog SPA

Stage 1. Screening	
1. Description of the project or plan	
Location	The Lough Rinn Rowing Course Facility is located on Lough Rinn in the townlands of Rinn Td., Clooncoe Td., Clooncahir Td., Tawnagh More Td., and Tulcon Td., near Mohill, County Leitrim.
Distance from designated site	Clooneen Bog SAC approximately 7km southwest of Lough Rinn site Ballykenny to Fisherstown Bog SPA approximately 9.5km southwest of Lough Rinn site.
Brief description of the project or plan	The nature of this proposed development includes the following design elements:- - New Trailer Park/Competition area; - Additional Launch Pontoons; - New Access Road to the Finish Area and Car Parking at the Finish Area; - New entrance to the Finish Area from Local Road LP-1053-2; - Integrated Constructed Wetland for treatment of existing on-site foul sewerage; - Finish Tower with access walkway and Viewing / Spectator Area within Lough Rinn; and, - Landscaping to overall Finish Area shoreline.
Brief description of other existing developments in the area	A 2000 metre long rowing course has been developed on Lough Rinn with associated launching slips and starting pontoons. The works also included the extension of the existing service block at Lough Rinn caravan park, the extension of the existing carpark to incorporate additional caravan parking bays, the provision of a new grass carpark, the upgrading of the existing pathway along the shore, the construction of viewing stands, the upgrading of the existing sewerage treatment plant, and the construction of a boat trailer park with a storage shed.
Is the plan directly connected with or necessary to the Natura 2000 site management for nature conservation?	No
2. Brief Description of the Natura 2000 sites	
Name	Ballykenny to Fisherstown Bog
Site designation status	Special Protected Area (SPA) Site Code 004101
Basis	EU Birds Directive (79/209/EEC)
Natura 2000 Site description	<p>Ballykenny-Fisherstown Bog SPA is situated in the north-central midlands and is underlain by Carboniferous limestone. It is centered around Lough Forbes, a naturally eutrophic lake on the River Shannon system which is fed also from the north by the River Rinn. The lake has well-developed swamp vegetation and displays natural transitions to seasonally flooded grassland, marsh and raised bog. Common Reed (<i>Phragmites australis</i>) is a dominant species around the lake, and occurs along with other swamp species such as Common Club-rush (<i>Scirpus lacustris</i>) and Reed Canary-grass (<i>Phalaris arundinacea</i>).</p> <p>The raised bogs, known as the Ballykenny-Fishertown complex, are separated by the Camlin River, which has further areas of callow grassland. The central core areas of the bogs are quite wet with a good complement of bog mosses (<i>Sphagnum spp.</i>) and well-developed hummocks. Ballykenny Bog is unusual in that some of its margins are intact, a rare feature in the Irish midlands. Between the Camlin River and this bog, a complete transition from raised bog to callow grasslands can be seen, while the interface between the bog and lake is colonised by a narrow band of deciduous woodland. The Castle Forbes estate on the eastern shore of the lake is extensively planted with mature semi-natural woodland, including some stands of old Oak</p>

		<p>(<i>Quercus</i> spp.).</p> <p>The lake and callow grasslands provide good habitat for a range of wintering waterfowl species though most occur in relatively low numbers. Counts in two of the winters in the 1995/96 to 1999/00 period are as follows: Cormorant 51, Whooper Swan 40, Wigeon 419, Teal 444, Shoveler 6, Tufted Duck 49 and Goldeneye 11. The bogs were formerly used by part of the Loughs Kilglass and Forbes population of wintering Greenland White-fronted Geese but these appear to have been now abandoned in favour of grassland sites elsewhere. Merlin has been recorded within the site and may nest. Red Grouse are known from the bogs.</p> <p>The raised bogs are vulnerable to water loss from peat-cutting and drainage, though on-going restoration work involves blocking of drains. There are no known threats to the wintering birds though the increased use of the River Shannon system by leisure craft could cause disturbance.</p> <p>The site is of ornithological importance for its wintering waterfowl, breeding Merlin and Red Grouse. The presence of Whooper Swans and Merlin is of particular note as these species are listed on Annex I of the E.U. Birds Directive. Red Grouse is a Red listed species in Ireland as it has declined in numbers in recent decades.</p>
Unit size		1356.25ha
Qualifying (Species)	Interests	<ul style="list-style-type: none"> Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]
Qualifying (Habitats)	Interests	
Conservation Objectives		Objective 1: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interest for Ballykenny to Fisherstown Bog SPA.
Name		Clooneen Bog
Site designation status		Special Area of Conservation (SAC) Site Code 002348
Basis		EU Habitats Directive (92/43/EEC)
Natura 2000 Site description		<p>Clooneen Bog lies approximately 3 km south-east of Roosky in Co. Longford on the east bank of the River Shannon, just north of Lough Forbes. It is located almost entirely in the townlands of Clooneen, Bunanass, Edercloon and Cloonart (North and South). The site comprises areas of high bog, including bog woodland and cutover bog and is bounded by a mineral ridge to the east and agricultural fields to the north. Although it would have originally adjoined the River Shannon to the west and Lough Forbes to the south, it is now separated from these by a road and agricultural fields.</p> <p>The site is a candidate Special Area of Conservation selected for bog woodland, degraded raised bog and Rhynchosporion, habitats that are listed on Annex I of the E.U. Habitats Directive. Degraded raised bog corresponds to those areas of high bog whose hydrology has been adversely affected by peat cutting, drainage and other land use activities, but which are capable of regeneration.</p> <p>The Rhynchosporion habitat occurs in wet depressions, pool edges and erosion channels where the vegetation includes White Beak-sedge (<i>Rhynchospora alba</i>) and/or Brown Beak-sedge (<i>R. fusca</i>), and at least some of the following associated species, Bog Asphodel (<i>Narthecium ossifragum</i>), Sundews (<i>Drosera</i> spp.), Deergrass (<i>Scirpus cespitosus</i>), Carnation Sedge (<i>Carex panicea</i>).</p> <p>The site consists of a narrow dome with cutover to the north, south and west. An interesting feature of this bog is the extensive area of bog woodland growing on a flush in the northern part of the bog. There is also a large flush to the south-east associated with a marginal area which slopes relatively steeply towards an extensive region of old cutover. Wet grassland in this area floods from Lough Forbes. Much of</p>

		<p>the high bog has vegetation typical of the Midland Raised Bog type, with Ling Heather (<i>Calluna vulgaris</i>), Common Cottongrass (<i>Eriophorum angustifolium</i>) and Deergrass all occurring abundantly. Other species present include Cranberry (<i>Vaccinium oxycoccos</i>), Cross-leaved Heath (<i>Erica tetralix</i>), White Beak-sedge and Bog Asphodel.</p> <p>In the narrow central region of the high bog there are small pools containing bog moss (<i>Sphagnum cuspidatum</i>), Great Sundew (<i>Drosera anglica</i>) and Bogbean (<i>Menyanthes trifoliata</i>). Bog mosses are plentiful between these pools with <i>S. capillifolium</i>, <i>S. magellanicum</i> and <i>S. fuscum</i> noted. These pools are associated with a depression and become algal-filled tear pools towards the margins of the high bog.</p> <p>The open bog woodland is dominated by lichen encrusted Downy Birch (<i>Betula pubescens</i>) with a field layer of Purple Moor-grass (<i>Molinia caerulea</i>) and Hare's-tail Cotton-grass (<i>Eriophorum vaginatum</i>) with ericaceous shrubs such as Ling Heather, Crowberry (<i>Empetrum nigrum</i>), Bog-myrtle (<i>Myrica gale</i>) and Bilberry (<i>Vaccinium myrtillus</i>). Mosses such as <i>Hylocomium splendens</i> and <i>Breutelia chrysocoma</i> are also abundant.</p> <p>Species such as <i>Sphagnum recurvum</i>, <i>S. imbricatum</i> and <i>S. palustre</i> are less common. There are also several ferns present including Hard Fern (<i>Blechnum spicant</i>) and Broad Buckler-fern (<i>Dryopteris dilatata</i>). The flush to the south-east is dominated by Purple Moor-grass and may be associated with an area that has subsided. There are occasional clumps of Bog-myrtle with some small Rhododendron (<i>Rhododendron ponticum</i>) bushes encroaching. Common Reed (<i>Phragmites australis</i>) is associated with this flush, indicating some groundwater influence. Old cutover to the north is dominated by Purple Moor-grass with Cottongrass, Ling Heather and Carnation Sedge (<i>Carex panicea</i>).</p> <p>There is some active regeneration in the north-east with Cottongrass dominating over bog moss (<i>S. cuspidatum</i>). Birch and Gorse (<i>Ulex europaeus</i>) scrub occurs on old cutaway to the west and east. An extensive area of cutaway to the south is dominated by Purple Moor-grass and Ling Heather with Bog-myrtle occurring abundantly in places. This area forms a mosaic with wet grassland and there is some flooding from Lough Forbes.</p> <p>Current land use on the site consists of mechanised peat-cutting to the north-west and south-west of the high bog. Some areas of cutover have been reclaimed for agriculture to the south-east and there are small conifer plantations to the east. Damaging activities associated with these land uses include drainage and burning. These are all activities that have resulted in loss of habitat and damage to the hydrological status of the site and pose a continuing threat to its viability. The bog is generally <i>Sphagnum</i>-poor due to burning, but regeneration is taking place.</p> <p>Clooneen Bog is a site of considerable conservation significance comprising as it does a raised bog, a rare habitat in the E.U. and one that is becoming increasingly scarce and under threat in Ireland. Ireland has a high proportion of the total E.U. resource of this habitat type (over 60%) and so has a special responsibility for its conservation at an international level. Bog woodland is listed as a priority habitat on Annex I of the E.U. Habitats Directive - priority status is given to habitats and species that are threatened throughout the E.U. The areas of degraded raised bog and Rhynchosporion are also of conservation importance, being habitats that are listed on Annex I of the E.U. Habitats Directive.</p>
Unit size		215.03 ha
Qualifying (species)	Interest	None
Qualifying (habitats)	Interests	<ul style="list-style-type: none"> • Degraded raised bogs still capable of natural regeneration [7120] • Depressions on peat substrates of the Rhynchosporion [7150] • Bog woodland [91D0]

Conservation Objectives	<ul style="list-style-type: none"> To maintain or restore the favourable conservation condition of the Annex 1 habitats for which the cSAC has been selected; Degraded raised bogs still capable of natural regeneration, Depressions on peat substrates of the Rhynchosporion and Bog woodland.
3. Describe the individual elements of the plan (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 sites.	<p>Construction phase</p> <p>Construction activities of the proposed development include site preparation involving removal of surface vegetation and excavation of topsoil, and importation of granular material (approximately 11,000m³).</p> <p>Construction of rock armour to shoreline of new trailer park / competition area to match existing rock armour on site.</p> <p>Construction of 6m wide road and Surfacing of Trailer Park/Competition Area with Macadam</p> <p>Associated site development works, services, kerbing, drainage and landscaping</p> <p>Construction of 6m wide road, approximately 400m in length from the existing slipway to the Finish Area</p> <p>Construction of car park to facilitate up to 22 No. vehicles</p> <p>Pumping Station and Rising Main to pump untreated effluent to a holding tank within the ICW</p> <p>Construction of an ICW consisting of series of interlinking ponds (up to 5 No.) equivalent to approximately 2,500m² in area. Overall area required for embankments, landscaping and associated works is estimated at approximately 5,000m² (1.2 acres)</p> <p>Decommissioning of existing sewerage treatment plant upon completion of the new proprietary Wastewater Treatment Unit</p> <p>Construction of Finish Hut measuring approximately 4m x 3m on plan and approximately 2.65m high, founded on an elevated and piled steel/concrete platform above recorded lake flood level of 40.83m.O.D</p> <p>Importation and placement of approximately 11,500m³ of granular material to create proposed Access Walkway and Viewing / Spectator Area at a level of 41.3m above Ordnance Datum</p> <p>It is not envisaged, however, that construction activities will impact on either of the Natura 2000 sites within 15km, Ballykenny to Fisherstown Bog SPA or Clooneen Bog SAC, due to their respective distances from the proposed development of 9.5km and 7km.</p> <p>Best practice construction methods will be implemented during the construction of the proposed development to minimise any potential impacts to Lough Rinn proposed Natural Heritage Area.</p> <p>Operational phase</p> <p>No potential impacts are envisaged on either of the Natura 2000 sites during the operational phase of the proposed development.</p>
4. Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of: Size and scale; Land-take; Distance from Natura 2000 site or key features of the site; Resource requirements; Emissions; Excavation requirements;	<p>There will be no direct habitat loss within any of the Natura 2000 sites listed above.</p> <p>It is unlikely that there will be any impact to the qualifying bird species (Greenland White Fronted Geese) of the SPA or habitats which support this species due to the distance of the proposed development from Ballykenny to Fisherstown Bog SPA, which is 9.5km.</p> <p>It is unlikely that there will be any impact to the qualifying habitats of the SAC due to the distance of the proposed development from Clooneen Bog SAC, which is 7km.</p>

Transportation requirements; Duration of construction, operation etc.; Others.	
5. Describe any likely changes to the site arising as a result of: Reduction of habitat area; Disturbance of key species; Habitat or species fragmentation; Reduction in species density; Changes in key indicators of conservation value; Climate change.	<p>No changes are envisaged to either of the Natura 2000 sites as a result of reduction of habitat area, disturbance to key species, habitat or species fragmentation, reduction in species density or changes in key indicators of conservation value.</p> <p>It is estimated that climate change will result in more extended but less frequent wet and dry periods and warmer water temperatures, as rainfall patterns in Ireland are changing. This could result in precipitation increases of over 10% in the winter months, and decreases of approximately 25% in the summer, and annual temperature increases. However, there is insufficient information to predict the effects on the site as these will be more closely related to localised rainfall events.</p>
6. Describe any likely impacts on the Natura 2000 site as a whole in terms of: Interference with the key relationships that define the structure of the site; Interference with key relationships that define the function of the site.	<p>It is envisaged that Ballykenny to Fisherstown Bog SPA or Clooneen Bog SAC will not be impacted as a result of the proposed development given the distance of the designated areas (9.5km and 7km respectively) from the proposed site. No significant impacts are predicted for the Annex I listed bird species, Greenland White Fronted Geese, as a result of the proposed development</p>
7. Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale of magnitude of impacts is not known.	<p>Ballykenny to Fisherstown Bog SPA and Clooneen Bog SAC</p> <p>Given the distance of the proposed development from the designated areas (9.5km and 7km respectively) it is not envisaged that the development will have a negative impact.</p> <p>Conclusion</p> <p>Ballykenny to Fisherstown Bog SPA and Clooneen Bog SAC are the only Natura 2000 sites within 15 km of the proposed development. Disturbance to birds and other fauna will not be significant. Impacts during construction and operation of the proposed development are considered to be insignificant. Therefore a Stage 2 Appropriate Assessment is not required.</p> <p>No significant negative impact on Ballykenny to Fisherstown Bog SPA and Clooneen Bog SAC qualifying interests or Annex I listed bird species are predicted as a result of the proposed development.</p>

5 CONCLUSION

Given the location of the proposed development with regards to the Ballykenny to Fisherstown Bog SPA and Clooneen Bog SAC, it is envisaged that the proposed development will have no impact on the designated areas or their qualifying species or habitats. It was concluded that the likely effects of the proposed development are **Not Significant**.

Therefore no Stage 2 Appropriate Assessment is required.

6 REFERENCES

European Commission (2001) *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 (2000) *Managing Natura 2000 Sites*: The Provisions of Article 6 of the 'Habitats Directive' 92/43/EEC.

European Union Habitats Directive, (1992). Council Directives 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

European Union Birds Directive (1979) *Council Directive 79/209/EEC of 2 April 1979 on the conservation of wild birds*. Brussels: The Council of the European Communities.

NPWS (2009) *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government. Dublin.

APPENDIX A
BALLYKENNY - FISHERSTOWN BOG SPA SITE SYNOPSIS

SITE SYNOPSIS

SITE NAME: BALLYKENNY - FISHERSTOWN BOG SPA

SITE CODE: 004101

Ballykenny-Fisherstown Bog SPA is situated in the north-central midlands and is underlain by Carboniferous limestone. It is centered around Lough Forbes, a naturally eutrophic lake on the River Shannon system which is fed also from the north by the River Rinn. The lake has well-developed swamp vegetation and displays natural transitions to seasonally flooded grassland, marsh and raised bog. Common Reed (*Phragmites australis*) is a dominant species around the lake, and occurs along with other swamp species such as Common Club-rush (*Scirpus lacustris*) and Reed Canary-grass (*Phalaris arundinacea*).

The raised bogs, known as the Ballykenny-Fisherstown complex, are separated by the Camlin River, which has further areas of callow grassland. The central core areas of the bogs are quite wet with a good complement of bog mosses (*Sphagnum* spp.) and well-developed hummocks. Ballykenny Bog is unusual in that some of its margins are intact, a rare feature in the Irish midlands. Between the Camlin River and this bog, a complete transition from raised bog to callow grasslands can be seen, while the interface between the bog and lake is colonised by a narrow band of deciduous woodland. The Castle Forbes estate on the eastern shore of the lake is extensively planted with mature semi-natural woodland, including some stands of old Oak (*Quercus* spp.).

The lake and callow grasslands provide good habitat for a range of wintering waterfowl species though most occur in relatively low numbers. Counts in two of the winters in the 1995/96 to 1999/00 period are as follows: Cormorant 51, Whooper Swan 40, Wigeon 419, Teal 444, Shoveler 6, Tufted Duck 49 and Goldeneye 11. The bogs were formerly used by part of the Loughs Kilglass and Forbes population of wintering Greenland White-fronted Geese but these appear to have been now abandoned in favour of grassland sites elsewhere. Merlin has been recorded within the site and may nest. Red Grouse are known from the bogs.

The raised bogs are vulnerable to water loss from peat-cutting and drainage, though on-going restoration work involves blocking of drains. There are no known threats to the wintering birds though the increased use of the River Shannon system by leisure craft could cause disturbance.

The site is of ornithological importance for its wintering waterfowl, breeding Merlin and Red Grouse. The presence of Whooper Swans and Merlin is of particular note as these species are listed

on Annex I of the E.U. Birds Directive. Red Grouse is a Red listed species in Ireland as it has declined in numbers in recent decades.

APPENDIX B
CLOONEEN BOG SAC SITE SYNOPSIS

SITE NAME: CLOONEEN BOG

SITE CODE: 002348

Clooneen Bog lies approximately 3 km south-east of Roosky in Co. Longford on the east bank of the River Shannon, just north of Lough Forbes. It is located almost entirely in the townlands of Clooneen, Bunanass, Edercloon and Cloonart (North and South). The site comprises areas of high bog, including bog woodland and cutover bog and is bounded by a mineral ridge to the east and agricultural fields to the north. Although it would have originally adjoined the River Shannon to the west and Lough Forbes to the south, it is now separated from these by a road and agricultural fields.

The site is a candidate Special Area of Conservation selected for bog woodland, degraded raised bog and Rhynchosporion, habitats that are listed on Annex I of the E.U. Habitats Directive. Degraded raised bog corresponds to those areas of high bog whose hydrology has been adversely affected by peat cutting, drainage and other land use activities, but which are capable of regeneration.

The Rhynchosporion habitat occurs in wet depressions, pool edges and erosion channels where the vegetation includes White Beak-sedge (*Rhynchospora alba*) and/or Brown Beak-sedge (*R. fusca*), and at least some of the following associated species, Bog Asphodel (*Narthecium ossifragum*), Sundews (*Drosera* spp.), Deergrass (*Scirpus cespitosus*), Carnation Sedge (*Carex panicea*).

The site consists of a narrow dome with cutover to the north, south and west. An interesting feature of this bog is the extensive area of bog woodland growing on a flush in the northern part of the bog. There is also a large flush to the south-east associated with a marginal area which slopes relatively steeply towards an extensive region of old cutover. Wet grassland in this area floods from Lough Forbes. Much of the high bog has vegetation typical of the Midland Raised Bog type, with Ling Heather (*Calluna vulgaris*), Common Cottongrass (*Eriophorum angustifolium*) and Deergrass all occurring abundantly. Other species present include Cranberry (*Vaccinium oxycoccos*), Cross-leaved Heath (*Erica tetralix*), White Beak-sedge and Bog Asphodel.

In the narrow central region of the high bog there are small pools containing bog moss (*Sphagnum cuspidatum*), Great Sundew (*Drosera anglica*) and Bogbean (*Menyanthes trifoliata*). Bog mosses are plentiful between these pools with *S. capillifolium*, *S. magellanicum* and *S. fuscum* noted. These pools are associated with a depression and become algal-filled tear pools towards the margins of the high bog.

The open bog woodland is dominated by lichen encrusted Downy Birch (*Betula pubescens*) with a field layer of Purple Moor-grass (*Molinia caerulea*) and Hare's-tail Cotton-grass (*Eriophorum vaginatum*) with ericaceous shrubs such as Ling Heather, Crowberry (*Empetrum nigrum*), Bog-myrtle (*Myrica gale*) and Bilberry (*Vaccinium myrtillus*). Mosses such as *Hylocomium splendens* and *Breutelia chrysocoma* are also abundant.

Species such as *Sphagnum recurvum*, *S. imbricatum* and *S. palustre* are less common. There are also several ferns present including Hard Fern (*Blechnum spicant*) and Broad Buckler-fern (*Dryopteris dilatata*). The flush to the south-east is dominated by Purple Moor-grass and may be associated with an area that has subsided. There are occasional clumps of Bog-myrtle with some small *Rhododendron* (*Rhododendron ponticum*) bushes encroaching. Common Reed (*Phragmites australis*) is associated with this flush, indicating some groundwater influence. Old cutover to the north is dominated by Purple Moor-grass with Cottongrass, Ling Heather and Carnation Sedge (*Carex panicea*).

There is some active regeneration in the north-east with Cottongrass dominating over bog moss (*S. cuspidatum*). Birch and Gorse (*Ulex europaeus*) scrub occurs on old cutaway to the west and east. An extensive area of cutaway to the south is dominated by Purple Moor-grass and Ling Heather with Bog-myrtle occurring abundantly in places. This area forms a mosaic with wet grassland and there is some flooding from Lough Forbes.

Current land use on the site consists of mechanised peat-cutting to the north-west and south-west of the high bog. Some areas of cutover have been reclaimed for agriculture to the south-east and there are small conifer plantations to the east. Damaging activities associated with these land uses include drainage and burning. These are all activities that have resulted in loss of habitat and damage to the hydrological status of the site and pose a continuing threat to its viability. The bog is generally *Sphagnum*-poor due to burning, but regeneration is taking place.

Clooneen Bog is a site of considerable conservation significance comprising as it does a raised bog, a rare habitat in the E.U. and one that is becoming increasingly scarce and under threat in Ireland. Ireland has a high proportion of the total E.U. resource of this habitat type (over 60%) and so has a special responsibility for its conservation at an international level. Bog woodland is listed as a priority habitat on Annex I of the E.U. Habitats Directive - priority status is given to habitats and species that are threatened throughout the E.U. The areas of degraded raised bog and *Rhynchosporion* are also of conservation importance, being habitats that are listed on Annex I of the E.U. Habitats Directive.