

Natura Impact Statement for development at Newtownmoyaghy, Kilcock, Co. Meath

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1 Introduction

This document provides information to allow the planning authority (An Bord Pleanála) to carry out an Appropriate Assessment of the proposed project. This document assesses whether adverse effects to the integrity of the Natura 2000 network are likely to occur as a result of granting planning permission in accordance with Article 6(3) of the Habitats Directive and the Planning and Development (Amendment) Acts.

This report determines whether mitigation measures are required to ensure that adverse effects can be avoided to the Natura 2000 network.

This report is based on a separate Screening Report for AA which has been prepared by Openfield Ecological Services and which concluded that significant effects to Natura 2000 areas could not be ruled out.

Under the European Communities (Birds and Natural Habitats Regulations) 2011 a Natura Impact Statement (NIS):

...means a report comprising the scientific examination of a plan or project and the relevant European Site or European Sites, to identify and characterise any possible implications of the plan or project individually or in combination with other plans or projects in view of the conservation objectives of the site or sites, and any further information including, but not limited to, any plans, maps or drawings, scientific information or data required to enable the carrying out of an Appropriate Assessment.

It should be noted that under Article 42(1) of the aforementioned legislation it is the relevant competent authority, in this case An Bord Pleanála, which carries out any AA or screening for AA, stating:

A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.

This NIS therefore aids in the decision-making process.

It should be noted that there is no prescribed format for an NIS. This report therefore follows the generally accepted format for AA provided by the European Commission.

2 Methodology

The methodology used for this assessment is set out in a document prepared by Environment DG for the European Commission entitled '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'. Annex 2 provides the template for an AA report.

In accordance with this guidance, the following methodology has been used to produce this Natura Impact Statement:

Step 1: Information Required

This assesses whether adequate information is available in order to complete the AA or if, taking the Precautionary Principle into account, additional data are required.

Step 2: Impact Prediction

This identifies the likely impacts that may arise as a result of the project.

Step 3: Conservation Objectives

An assessment of whether or not there will be adverse effects on the integrity of the Natura 2000 site as defined by the conservation objectives and status of the site.

Step 4: Mitigation Measures

Mitigation through avoidance of adverse effects must be proposed. Where it is likely that significant effects will remain despite mitigation then a full assessment of alternative options must be undertaken and an application for the project to proceed made under Article 6(4) of the Habitats Directive: Imperative Reasons of Overriding Public Interest (IROPI).

The steps are compiled into an AA report, a template of which is provided in Appendix II of the EC methodology.

Reference is also made to guidelines for Local Authorities from the Department of the Environment, Heritage and Local Government (DoEHLG, 2009).

A full list of literature sources that have been consulted for this study is given in the References section to this report while individual references are cited within the text where relevant.

3 Appropriate Assessment

The headings within the appropriate assessment report template provided in the European Commission guidance document 'Assessment of plans and projects significantly affecting Natura 2000 sites'¹ have been used to provide a basis to examine the potential impacts of the proposed development on the Rye Water Valley/Carlton SAC.

This section of the report sets out the potential implications of the plan or project (either alone or in combination with other projects or plans) on the integrity of the Natura 2000 site with respect to the conservation objectives of the site and to its structure and function. The precautionary principle should be applied when considering the potential implications and the focus should be on demonstrating, with supporting evidence, that there will be no adverse effects on the integrity of the Rye Water Valley/Carlton SAC. Where this is not the case, adverse effects must be assumed.

3.1 Step 1 – Information Required

Describe the elements of the project (alone or in combination with other projects or plans) that are likely to give rise to significant effects on the Natura 2000 site

The proposed development will consist of:

- i. The construction of 575 No. residential units comprising of:
 - a) 43 No. 2-bedroom houses;
 - b) 270 No. 3-bedroom houses;
 - c) 75 No. 4-bedroom houses;
 - d) 121 No. duplex units; and,
 - e) 66 No. apartments.
- ii. The construction of a 623 sq.m creche to provide for 119 No. children;
- iii. The provision of 314 No. bicycle parking spaces;
- iv. A total of 1,019 No. car-parking spaces;
- v. New boundary walls and fences, open space, internal site roads, pavements, public lighting, tree planting, bin storage;
- vi. Provision of new GAA changing room facilities and associated entrance road and carpark;
- vii. Infrastructure works including:
 - o Surface Water – Surface water from the northern site will be discharged into 2 No. detention basins to the south of the proposed development site. Surface water from the southern site will be discharged into a detention basin to the southeast of the development site.

¹ http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf

- SUDS measures such as permeable paving, swales, filter trenches etc. will be provided to intercept and provide treatment to surface-water run-off at source.

Freshwater for the development will be from a mains supply. The origin of this is from the water treatment plant at Ballymore Eustace, which supplies reservoirs at Castlewarden and Ballycaghan. The original supply of this water is from abstraction points on the River Liffey.

There is currently no attenuation of surface water run-off and rain falling on the land either percolates to ground or enters local drainage ditches. As part of this project it is planned to include attenuation measures to maintain run-off at a 'greenfield' runoff rates in accordance with the Greater Dublin Strategic Drainage Strategy (GDSDS). SUDs measures, such as permeable paving, swales and detention basins, have been incorporated into the design. Surface water run-off will ultimately enter the public surface water drainage network (which is totally separate from the wastewater or sewer system) which in turn enter the Rye Water. There will be no discernible changes to the quality or quantity of surface run-off as a result of this project.

Wastewater will be treated at the Leixlip Waste Water Treatment Plant (WWTP). In 2017, this plant was reported as meeting its effluent quality standards under the Urban Wastewater Treatment Directive and is operating within its design capacity. It discharges treated water into the River Liffey downstream of the Rye Water. It is licenced for this discharge by Irish Water (licence no.: D0004-02). The most recent Annual Environmental Report (AER), for the calendar year 2017, showed that the discharge was fully compliant with emission limit standards for this period. Monitoring of the receiving environment both upstream and downstream of the discharge point indicates that the plant is 'not having an observable negative impact on water quality'.

The site is currently a combination of disturbed ground and agricultural land as outlined in the report entitled 'Information to Inform a Stage I Appropriate Assessment Screening' prepared by Openfield and included under separate cover.

Recent aerial photography shows the area to be adjacent to the Rye Water and this was confirmed during a site walkover. The site is within the catchment of the Rye Water Carton Special Area of Conservation (site code: 1398). The site location is shown in figures 1 and 2.

This site is not located within any Natura 2000 area (SAC or SPA). Figures 1 & 2 show that there are no such areas within the immediate vicinity of the development site. However, impacts can occur at large distances depending on the zone of influence of the project. In this case the Rye Water enters the Rye Water Valley/Carnton SAC approximately 5km downstream of the subject site. This SAC therefore falls within the zone of influence of this project.

The proposed development is located within an area that is already composed of modified and other artificial surfaces as well as agricultural land. Development in the locality are increasingly of an urban nature with transport, commercial, residential, and amenity uses. These developments are associated with noise and artificial lighting with little biodiversity value.

3.2 Step 2 - Impact Prediction

The Information to Inform a Stage I AA Screening report describes one effect arising from the development project and which may give rise to significant effects to Natura 2000 areas:

Pollution during construction

During construction there will be earth movement and the exposure of soils. Given the proximity of the Rye Water to the construction areas, the risk of pollution is high. This may include silt and sediment as well as toxic substances such as concrete, oils and fuels. Although there is no direct evidence that pollution which may arise from construction could affect qualifying interests of the SAC, given a precautionary approach it is prudent to conclude that significant effects cannot be ruled out to the SAC.



Figure 1 – Site location (red circle). The boundary of the Rye Water Carton SAC is shown in tan (from www.epa.ie).



Figure 3 – Site layout

3.3 Step 3 – Conservation Objectives

Set out the conservation objectives of the site

The generic Conservation Objectives document for the Rye Water/Carlton SAC (site code: 001398) are given as:

To maintain or restore the favourable conservation condition of the Annexed habitats/species for which the SAC has been selected. (NPWS, 2018).

In a generic sense 'favourable conservation status' of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long - term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

While the 'favourable conservation status' of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Describe how the project will affect key species and key habitats. Acknowledge uncertainties and any gaps in information.

Hydrological pathways exist to the Rye Water. The conservation objectives are generic and so taking a precautionary approach, and given the potential for water pollution to occur during the construction phase, significant effects cannot be ruled out to the Rye Water/Carton SAC.

Describe how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project or plan (e.g. loss of habitat, disturbance, disruption, chemical changes, hydrological changes and geological changes, etc.). Acknowledge uncertainties and any gaps in information.

Although the link between water pollution and the qualifying interests of the Rye Water Valley/Carton SAC are not well established, a precautionary approach is being taken which assumed that pollution during the construction phase may result in effects to the integrity of the SAC.

Impacts on the integrity of the site, as determined by its structure, function and conservation objectives, are not anticipated as a result of the proposed development.

3.4 Step 4 - Mitigation

Describe what mitigation measures are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of the site. Acknowledge uncertainties and any gaps in information.

1. Pollution prevention during construction

Construction will follow guidance from Inland Fisheries Ireland (IFI, 2016) for the protection of fish habitat. This will include the erection of a robust silt curtain (or similar barrier) along the southern boundary to prevent the ingress of silt to the Rye Water. Similar silt barriers will protect drainage ditches on the site which lead to the Rye Water. Water leaving the site will pass through an appropriately-sized silt trap or settlement pond so that only silt-free run-off will enter the Rye Water.

Dangerous substances, such as oils, fuels etc., will be stored in a bunded zone. Emergency contact numbers for the Local Authority Environment Section, Inland Fisheries Ireland, the Environmental Protection Agency and the National Parks and Wildlife Service will be displayed in a prominent position within the site compound. These agencies will be notified immediately in the event of a pollution incident.

Site personnel will be trained in the importance of preventing pollution and the mitigation measures described here to ensure same.

The site manager will be responsible for the implementation of these measures. They will be inspected on at least a daily basis for the duration of works, and a record of these inspections will be maintained.

List of agencies consulted

Consultation was carried with Inland Fisheries Ireland, which responded to a request for fisheries observations on October 15th 2019:

The River Ryewater supports Atlantic salmon and Sea trout in addition to resident Brown trout populations.

An electrofishing survey carried out in 2018 recorded Brown Trout, Minnow, Pike, Stickleback and Lamprey upstream of Carton house.

A recent electrofishing survey during the summer found brown trout, stone loach, minnow and stickleback at Millerstown Estate on the Ryewater in Kilcock. At another location at Riversdale Estate both juvenile and mature Brown Trout were recorded. Protected crayfish Austropotamobius pallipes is also present in the Ryewater.

The Ryewater is not in great condition and the main pressures in the Kilcock area is from agriculture inputs. The river is very open, channelised with very little riparian habitat to provide shade.

4 Conclusion

This report contains an analysis of the proposed project and its potential effects on the integrity of sites designated under the Habitats and Birds Directives. Pathways exist between the development site and a number of such areas and these have been described in detail in the AA Screening report. Following this analysis, it is concluded that significant effects to the Rye Water Valley/Carlton SAC could not be ruled out. Specifically, this may arise from pollution during the construction phase. Arising from this assessment, mitigation has been proposed. With the implementation of these measures adverse effects to the integrity of the Rye Water SAC will not occur. This conclusion is based on best scientific knowledge.

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