Screening for Appropriate Assessment

Proposed residential development at
Nancy's Lane, Clane

12 February 2018

NM Ecology Ltd - Consultant Ecologists
276 Harold's Grange Road, Dublin 16
Website: www.nmecology.com
Email: info@nmecology.com
Tel: 087-6839771

Executive Summary

This *Screening for Appropriate Assessment* report has been prepared by NM Ecology Ltd on behalf of Kildare County Council (the applicant), as part of a planning application for a residential development at Nancy's Lane in Clane, Co. Kildare. The proposed development will consist of 77 residential units, with associated internal roads, parking spaces, green areas and services.

The proposed development site is within the catchment of the River Liffey, which provides a remote hydrological connection to some Natura 2000 sites in Dublin Bay. In accordance with their obligations under the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477/2011), the competent authority must assess whether the proposed development could have 'likely significant effects' on this or any other Natura 2000 sites.

This document provides supporting information to assist the competent authority with an Appropriate Assessment screening exercise, including: a description of the proposed development, details of its environmental setting, and a map and list of Natura 2000 sites within the potential zone of impact. Following an assessment of potential impact pathways, we conclude that the proposed development will not cause direct or indirect impacts on any Natura 2000 sites, and thus that Appropriate Assessment is not required.

1 Introduction

1.1 Background to Appropriate Assessment

Approximately 10% of the land area of Ireland is included in the European Network of Natura 2000 sites, which includes Special Protection Areas (SPAs) to protect important areas for birds, and Special Areas of Conservation (SACs) to protect a range of habitats and species. Legislative protection for these sites is provided by the *European Council Birds Directive* (79/409/EEC) and *E.C. Habitats Directive* (92/43/EEC, as amended), which are jointly transposed into Irish law by the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477/2011, as amended).

Regulation 42 (1) states that: "*Screening for Appropriate Assessment of a plan or project for which an application for consent is received* […] *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* [any Natura 2000 sites]." To ensure compliance with this regulation, planning authorities must screen all planning applications for potential impacts on Natura 2000 sites. Supporting information may be requested from the applicant to assist with this process.

This document provides background information to assist the local authority with a *Screening for Appropriate Assessment* exercise for the proposed development. It includes an outline of the proposed works, details of the environmental setting of the site, an appraisal of future development proposals in the area (potential for 'in-combination effects'), a map and list of Natura 2000 sites within the potential zone of impact, and an assessment of potential impacts.

1.2 Statement of authority

This assessment was carried out by Nick Marchant, a qualified and experienced ecologist. He has ten years of professional experience, including seven years as an ecological consultant, one year as a local authority biodiversity officer, and two years managing an NGO overseas. He provides ecological assessments for developments throughout Ireland and Northern Ireland, including wind farms, infrastructural projects (roads, water mains, etc), and a range of commercial and residential developments.

He holds an MSc in Ecosystem Conservation and Landscape Management from NUI Galway and a BSc in Environmental Science from Queens University Belfast. He is a member of the Chartered Institute of Ecology and Environmental Management and operates in accordance with their code of professional conduct.

1.3 Methods

This report has been prepared with reference to the following guidelines:

- *Appropriate Assessment of Plans and Projects in Ireland* (Department of the Environment, Heritage and Local Government, 2009)
- *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4)*, E.C., 2002
- *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal* (Chartered Institute of Ecology and Environmental Management, 2016)

In accordance with Section 3.2 of *Appropriate Assessment of Plans and Projects in Ireland*, a screening exercise comprises the following steps:

1. Description of the project and local site characteristics
2. Identification of relevant Natura 2000 sites, and compilation of information on their qualifying interests and conservation objectives
3. Assessment of potential impacts upon Natura 2000 sites, including:
    - Direct impacts (e.g. loss of habitat area, fragmentation)
    - Indirect impacts (e.g. disturbance of fauna, pollution of surface water)
    - Cumulative / 'in-combination' effects associated with other concurrent projects
4. Screening Statement with conclusions

A desk-based study was carried out using data from the following sources:

- Plans and specifications for the proposed development
- Qualifying interests / conservation objectives of Natura 2000 sites from www.npws.ie
- Bedrock, soil, subsoil, surface water and ground water maps from the Geological Survey of Ireland webmapping service (www.gsi.ie/mapping.htm), the National Biodiversity Data Centre (http://maps.biodiversityireland.ie/), and the Environmental Protection Agency web viewer (http://gis.epa.ie/Envision/)
- The (draft) *Clane Local Area Plan 2017 - 2023*, and details of permitted or proposed developments from the local authority's online planning records

All web-based resources were accessed between November 2016 and October 2017. A site inspection was carried out in November 2016.

2 Description of the Project

2.1 Environmental setting

The site is located on the western outskirts of Clane town. It covers parts of two fields of arable crops, which are bordered by hedgerows / treelines on the northern, eastern and western sides. There is similar farmland to the west of the site, and some unmanaged farmland to the south and east (although these areas will be developed in the coming years). There are housing estates to the north / north-east of the site, and a school approx. 200m to the southeast.

2.2 Description of the proposed development

The proposed development will consist of 77 residential units. Road access will be from the College Wood Manor estate on the northern boundary of the site, which will lead to internal roads and paved parking areas. Landscaped areas will be developed in the centre and east of the site, including a 10m set-back alongside the Nancy's Lane Heritage Trail on the eastern boundary of the site.

Foul water will be discharged to a local authority foul sewer in the College Wood Manor housing estate, and treated in the Osberstown waste water treatment plant. There is capacity in the waste water treatment plant to cater for the planned growth in Clane, and it is understood that the local collection network will be upgraded by Irish Water in coming years.

Surface water will be passed through a petrol interceptor and stored in an on-site attenuation tanks, and will be discharged to a surface water sewer in the College Wood Manor housing estate.

2.3 Environmental setting

Geology and soils

The underlying bedrock is Argillaceous bioclastic limestone and shale of the Malahide formation. Subsoils are limestone till and soils are grey-brown podzolics / brown earths, which are deep, well-drained soils derived from basic materials. Therefore, it is expected that most rainwater would percolate to ground rather than flowing into surface water drainage features.

Hydrology

The only surface-water features on the site are shallow drainage ditches at the base of the hedgerows, but all were dry at the time of survey in November 2016. The closest watercourses are the Betaghstown and Kilmurry/Gollymochy rivers, which are located approx. 360m south and 1.2km north-east of the proposed development site, respectively. Both are tributaries of

the River Liffey, which passes approx. 1.5km to the east of the site, on the far side of Clane. The River Liffey is currently of good status downstream as far as Celbridge, after which it declines to poor - moderate status until it reaches the coast (Water Framework Directive Status Assessments 2010-2015).

2.4 Other nearby developments (potential in-combination effects)

The proposed development site is marked as a 'key development area' in the draft Clane Local Area Plan 2017-2023, with an indication that there should be an amenity focus in the area. There are proposals to develop a 'strategic connection' between the College Wood Manor estate and the R403 road to the south, for which an indicative route has been reserved along the northern and western boundaries of the proposed development site. Overall, it is likely that there will be relatively-intensive development in this area over the next 5-10 years.

There is a live planning application to the east of the proposed development site, which is for 92 residential units and a creche; it was granted planning permission in 2008, and was recently granted an extension until 2019. If constructed at the same time as the proposed development, it is possible that they could act in-combination to increase the scale of potential ecological impacts (if applicable). No other approved or pending planning applications were identified in the vicinity of the site.

3 Description of Natura 2000 sites

3.1 Identification of Natura 2000 sites within the zone of impact

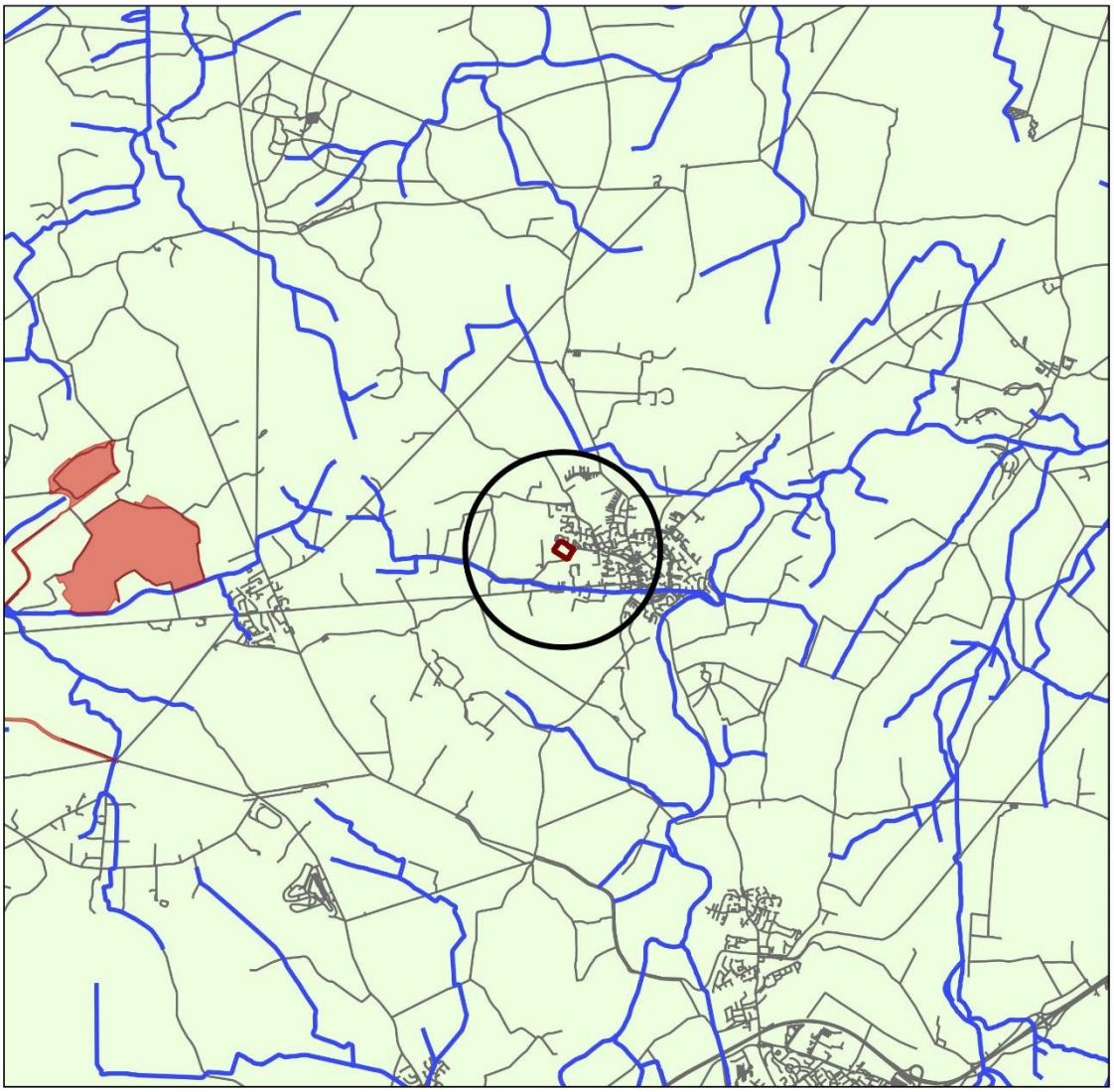
The proposed development site is not located within or adjacent to any Natura 2000 sites. Potential indirect impacts were considered within a potential zone of influence of 1km, but no Natura 2000 sites were identified within this zone.

Figure 1	Designated sites
Location	Nancy's Lane, Clane
Applicant	Kildare County Council
Date	27-10-2017

NM Ecology Ltd - Ecological Consultants
Website: www.nmecology.com
Email: info@nmecology.com
Tel: 087-6839771

Site location
- Proposed development site
- 1km buffer
- Roads
- Watercourses

Natura 2000 sites
- Special Areas of Conservation
- Special Protection Areas



NM ECOLOGY

0 1 2 3 4 5 km

3.2 Potential pathways for indirect impacts on Natura 2000 sites outside the zone of influence

The closest Natura 2000 site is the Ballynafagh Bog SAC, which is located 4.3km to the west of the proposed development site (Figure 1). However, the SAC is located in a different river catchment (the River Barrow), so there is no potential hydrological pathway for impacts.

The River Liffey provides a very distant hydrological connection to some SACs and SPAs at the mouth of the river in Dublin Bay. However, before reaching the Natura 2000 site, any surface water runoff from the site would have to flow approx. 300 – 400m through agricultural drains to reach the Betaghstown stream, and then approximately 45km downstream through the River Liffey to the mouth of the river. Considering the distances involved, the dilution effect of intervening waterbodies, and that standard pollution-prevention measures will be implemented during construction works (this is considered to be a component of the design), the concentration of any pollutants would be reduced to negligible levels before they could reach the SAC or SPA. On this basis, there is not considered to be a viable hydrological pathway between the proposed development site and the Natura 2000 sites in Dublin Bay.

3.3 Conservation objectives

The standard conservation objective for all SACs and SPAs in Ireland is "*to maintain or restore the favourable conservation condition of the qualifying interests for which the SAC / SPA has been selected*". In addition, the Department of Arts, Heritage and the Gaeltacht have produced detailed conservation objectives for many Natura 2000 sites in Ireland, which can be viewed on the website of the National Parks and Wildlife Service (http://www.npws.ie/protected-sites), but are not reproduced here in the interests of brevity.

4 Assessment of potential impacts

4.1 Direct impacts

The proposed development site is not located within any Natura 2000 sites, so there is no risk of habitat loss, fragmentation or any other direct impacts.

4.2 Indirect impacts

Potential changes in water quality (construction phase)

Construction works typically generate suspended sediments, and may occasionally result in accidental spills of oil or other toxic chemicals, all of which pose a risk of indirect impacts on downstream waterbodies and associated fauna. However, no viable hydrological pathways were identified by which these pollutants could reach any Natura 2000 sites within the zone of influence. Consequently, the risk that pollutants from the construction site could cause

significant negative impacts upon any Natura 2000 sites is negligible, even in a worst-case scenario and in the absence of standard site-management measures.

Potential changes in water quality (operational phase)

All foul water from the proposed development will be discharged to a local authority sewer and treated in the Osberstown waste water treatment plant. The plant has recently been upgraded and is currently within capacity and providing adequate treatment before discharge to the River Liffey. It is the responsibility of Irish Water to provide appropriate treatment to foul water in municipal waste water treatment plants, and the responsibility of the local authority to assess any potential impacts on water quality at the discharge point, which is usually undertaken during the preparation of county development plans or local area plans.

All surface-water runoff from hard surfaces will percolate to ground or will be discharged to a local authority sewer (via a petrol interceptor). Rainwater that percolates to ground is considered to be free of pollutants and does not pose a risk to local watercourses. Any rainwater discharged to local authority sewers will receive appropriate treatment prior to discharge to receiving waters.

Consequently, it can be concluded that foul water and surface water treatment during the operational phase would not cause any significant impacts upon receiving waters. There is no risk of any other impacts during the operation of the proposed development.

4.3 Potential in-combination effects

As the proposed development will not have any impacts on nearby waterbodies or Natura 2000 sites, there is no risk of in-combination effects with other concurrent developments.

5 Screening Statement

Article 42 (7) of the *European Communities (Birds and Natural Habitats) Regulations 2011* states that: "*The public authority shall determine that an Appropriate Assessment of a plan or project is not required* […] *if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site."*

To assist the planning authorities with the screening exercise, we have provided supporting information including: a description of the proposed development; an outline of its environmental setting; details of Natura 2000 sites within the potential zone of impact; and an assessment of potential impacts. Based on this information, we have demonstrated that there will be no risk of direct or indirect impacts on any Natura 2000 sites, so we conclude that Appropriate Assessment is not required.

References

Chartered Institute of Ecology and Environmental Management, 2016. *Guidelines for Ecological Impact Assessment in the U.K and Ireland: Terrestrial, Freshwater and Coastal* (2nd Edition). C.I.E.E.M., Hampshire, England.

Department of the Environment, Heritage and Local Government, 2009. *Appropriate Assessment of Plans and Projects in Ireland.* National Parks and Wildlife Service, DAHG, Dublin, Ireland.

European Commission. 2002. *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*. Office for Official Publications of the European Communities, Luxembourg.

Fossitt, J.A., 2000. *A Guide to Habitats in Ireland*. Heritage Council, Kilkenny