
Screening for Appropriate Assessment
Proposed development at St Johns Convent,
Rathangan, Co. Kildare

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NM Ecology Ltd - Consultant Ecologists
38 Maywood Avenue, Raheny, Dublin 5
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 Sophia Housing (the applicant) regarding a proposed development at St John's Convent, Rathangan, Co. Kildare. The proposed development will involve the demolition of some existing buildings, the construction of 24 apartments and a community room, and associated works.

In accordance with their obligations under the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477/2011), the competent authority (in this case Kildare County Council) must assess whether the proposed development could have 'likely significant effects' on any European sites. This document provides supporting information to assist the competent authority with an Appropriate Assessment screening exercise, including: a description of the proposed development, a map and list of European sites within the potential zone of impact, and a review of potential source-pathway-receptor links.

There is no risk of direct impacts on European sites. Potential pathways for indirect impacts were considered, but none were found to be feasible. Therefore, we conclude that the proposed development will not cause direct or indirect impacts on any European sites, and thus that Appropriate Assessment is not required.

1 Introduction

1.1 Background to Appropriate Assessment

Approximately 14% of the land area of Ireland is included in the European Network of Natura 2000 sites (hereafter referred to as European 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 European sites].*” To ensure compliance with this regulation, planning authorities must screen all planning applications for potential impacts on European sites. Supporting information may be requested from the applicant to assist with this process.

This document provides background information to assist the competent authority with a *Screening for Appropriate Assessment* exercise for the proposed development. It includes a description of the proposed development, a review of the Site's environmental setting, details of European sites within the potential zone of impact, an appraisal of *source-pathway-receptor* relationships, and an assessment of potential impacts.

1.2 Statement of authority

This report was written by Nick Marchant, the principal ecologist of NM Ecology Ltd. He has 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.

He has fifteen years of professional experience, including twelve years as an ecological consultant, one year as a local authority biodiversity officer, and two years managing an NGO in Indonesia. He provides ecological assessments for developments throughout Ireland and Northern Ireland, including wind farms, infrastructural projects (roads, water pipelines, greenways, etc.), and a range of residential and commercial developments.

1.3 Methods

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

- *OPR Practice Note PN01: Appropriate Assessment Screening for Development Management* (Office of the Planning Regulator 2021)
- *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4), E.C., 2021*
- *Appropriate Assessment of Plans and Projects in Ireland* (Department of the Environment, Heritage and Local Government, 2009)
- *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal* (Chartered Institute of Ecology and Environmental Management, 2018)

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

1. Description of the project and local site characteristics
2. Identification of relevant European sites, and compilation of information on their qualifying interests and conservation objectives
3. Assessment of potential impacts upon European 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 European sites from www.npws.ie
- Bedrock, soil, subsoil, surface water and ground water maps from the Geological Survey of Ireland webmapping service (dcenr.maps.arcgis.com), the National Biodiversity Data Centre (<http://maps.biodiversityireland.ie/>), and the Environmental Protection Agency web viewer (gis.epa.ie/EPAMaps/)
- The *Kildare County Development Plan 2017-2023*, and details of permitted or proposed developments from the local authority's online planning records

Desktop data from internet resources was accessed in March 2023.

2 Description of the Project

2.1 Environmental setting

Site location and surroundings

The proposed development site (hereafter referred to as the Site) is in a suburban setting in the north-east of Rathangan Town. It contains a two-storey building formerly used by the Sisters of Mercy, which has been unoccupied since 2017. The remainder of the site consists of extensive gardens, mature trees, and some former garden stores.

The southern boundary of the Site is formed by New Street (R414), the eastern boundary by the grounds of a former convent and church, the western boundary by residential properties and small commercial sites, and the northern boundary by arable land. The broader surroundings are characterised by low-density housing, small commercial premises, schools, religious buildings and agricultural land.



Figure 1. Site location (red outline) and setting

Geology and soils

The underlying bedrock is limestone (thick-bedded limestone, locally peloidal), which is a regionally-important, karstified aquifer. Subsoils are limestone gravel, and soils are a fine loam. The topography of the Site is broadly level.

Hydrology

The River Slate is located approx. 20 m south of the Site, on the far side of New Street. It flows west and meets the River Figile approx. 8 km downstream. The River Figile then flows south and meets the River Barrow approx. 6.5 km downstream near Monasterevin. The River Barrow flows south and meets the coast 120 km downstream at Waterford Harbour.

The Barrow branch of the Grand Canal is located approx. 250 m south of the Site, on the far side of the River Slate. It is a self-contained hydrological feature that is not connected to surrounding surface water features and is isolated from groundwater, so it has no connection with the Site.

Water quality in Irish rivers is monitored under the Water Framework Directive, with the latest status assessments from 2016-2021. The River Slate was of Moderate status in the vicinity of Rathangan, while the River Figile was of Good status. The River Barrow is of Poor status upstream of Monasterevin, and of Good status downstream.

2.2 Description of the proposed development

Characteristics of the proposed development

The proposed development will involve the demolition of the existing two-storey building and garden stores, and the construction of two buildings containing one-bed and two-bed apartments, comprising a total of 24 residential units. A community room will also be provided. A new road access point will be provided in the south-west of the site, leading to an internal road / shared surface and parking areas. Much of the existing gardens and mature trees will be retained, and the remainder of the Site will be landscaped.

Foul water will be discharged to an Irish Water combined sewer on New Street to the south of the Site, which will convey it to the Rathangan Waste Water Treatment Works.

Rainfall from roofs and other impermeable surfaces will be collected in an attenuation tank and discharged to the Irish Water combined sewer on New street. Some external surfaces will have permeable paving. Rainfall on green areas of the Site will percolate to ground in situ.

3 Description of European sites

3.1 Identification of European sites within the zone of influence

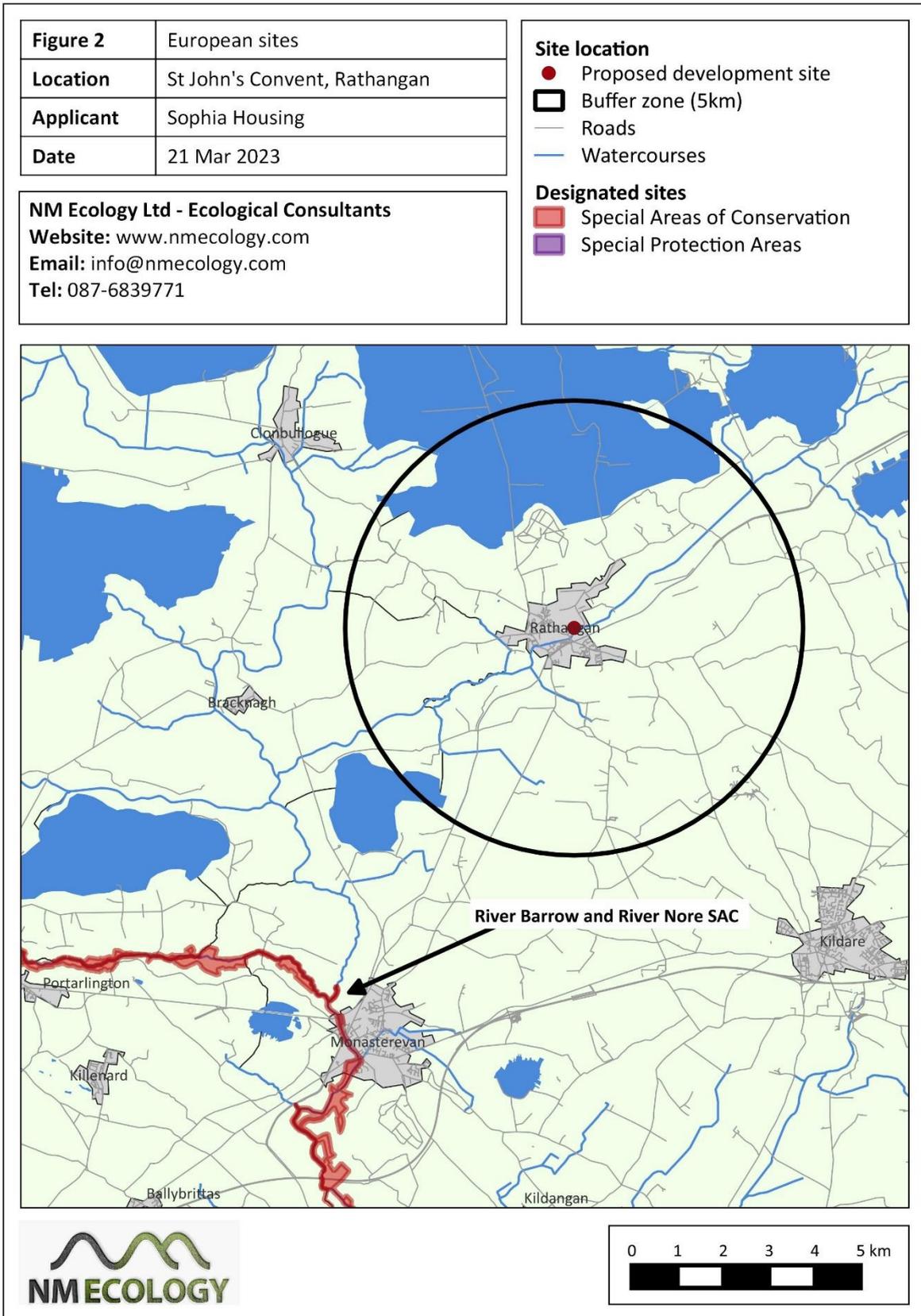
The Site is not located within or adjacent to any designated sites. Potential indirect impacts were considered using the source-pathway-receptor model. A buffer zone of 5 km is displayed on Figure 2 to assist with interpretation of scale. The locations of relevant sites are shown in Figure 2, and details are provided in Table 1.

Table 1: European sites of relevance to the Site

Site Name	Distance	Reasons for designation
River Barrow and River Nore SAC (2162)	9.5 km south-west	<p>Annex I habitats: Estuaries, mudflats / sandflats not covered by seawater at low tide, Salicornia and other annuals colonizing mud and sand, Atlantic salt meadows, Mediterranean salt meadows, water courses of plain to montane levels, european dry heaths, hydrophilous tall herb fringe communities of plains, petrifying springs with tufa formation (<i>Cratoneurion</i>), old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i>, alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i></p> <p>Annex II species: Desmoulin's whorl snail <i>Vertigo moulinsiana</i>, freshwater pearl mussel <i>Margaritifera margaritifera</i>, Nore freshwater pearl mussel <i>Margaritifera durrovensis</i>, white-clawed crayfish <i>Austropotamobius pallipes</i>, sea lamprey <i>Petromyzon marinus</i>, brook lamprey <i>Lampetra planeri</i>, river lamprey <i>Lampetra fluviatilis</i>, twaite shad <i>Alosa fallax</i>, Atlantic salmon <i>Salmo salar</i>, Killarney fern <i>Trichomanes speciosum</i>, otter <i>Lutra lutra</i></p>

3.2 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 Housing, Local Government and Heritage has produced detailed conservation objectives for the European sites listed in Table 1. They 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.



3.3 Identification of potential impact pathways

Indirect impacts can occur if there is a viable pathway between the source (the Site) and the receptor (the habitats and species for which a European site has been designated). The most common pathway for impacts is surface water, e.g. if a pollutant is washed into a river and carried downstream into a European site. Other potential pathways are groundwater, air (e.g. airborne dust or sound waves), or land (e.g. flow of liquids, vibration). The zone of effect for hydrological impacts can be several kilometres, but for air and land it is rarely more than one hundred metres. An appraisal of potential pathways to European sites is provided below.

The *River Barrow and River Nore* SAC is a very large SAC that was designated to protect a range of habitats and species throughout the Barrow and Nore catchments. If any waterborne pollutants from the Site could reach the River Slate (20 m to the south), it could theoretically provide a surface water pathway to the SAC. However, the connection is very distant, comprising approx. 14.5 km of intervening watercourses. A groundwater pathway can be ruled out due to distance, because Site is approx. 9.5 km from the SAC boundary (measured as a straight line, rather than along watercourses). Pathways via land and air can also be ruled out due to distance.

On this basis, we conclude that there is a distant surface water pathway linking the Site and the *River Barrow and River Nore* SAC. There are no other feasible pathways to this or any other European sites.

4 Assessment of potential impacts

4.1 Direct impacts

The Site is not located within any European 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 fine sediments, and may occasionally cause accidental spills of concrete, oil or other toxic chemicals. As noted in Section 3.3, the Rivers Slate and Figile could potentially provide a distant surface water pathway between the Site and the *River Barrow and River Nore* SAC. It is theoretically possible that some pollutants generated during the construction of the proposed development could reach the SAC.

Having established that potential pathways exist, the next step is to determine whether there is any risk that pollutants could be "*likely to have a significant effect*" on the qualifying of the

SAC. The topography of the Site is level and the underlying soils are well-drained (a regionally-important, karstified aquifer), so it is expected that most rainfall on the Site would percolate to ground rather than flowing over the surface. The river is 20 m south of the Site, and any pollutants would have to cross New Street before they would reach the river. If any pollutants reached the river, they would be diluted by 14.5 km of intervening watercourse, reducing them to negligible concentrations before they reached the SAC. In this context, it is not considered possible that any pollutants from the Site could reach the SAC in detectable concentrations, even in the event of a large or sustained pollution event. Therefore, there is not considered to be any risk that pollutants generated at the Site could have a negative effect on the SAC.

Potential changes in water quality (operational phase)

Foul water will be discharged to an Irish Water combined sewer under New Street and conveyed to the Rathangan Waste Water Treatment Works (WWTW). It is the responsibility of Irish Water to provide adequate treatment of foul water, and to assess any potential impacts that it may have on European sites.

Rainfall from roofs and other impermeable surfaces will be collected in an attenuation tank and discharged to the Irish Water combined sewer on New street. This will also be treated in the WWTW. Some areas will have permeable paving. Rainfall on green areas of the Site will percolate to ground in situ.

Therefore, neither foul nor surface water generated during the operation of the proposed development pose any risk of significant impacts on European sites.

4.3 Potential in-combination effects

The Site is in a suburban setting. Under the Kildare County Development Plan 2023-2029 it is included in Zone A: Town Centre, for which the planning objective is *“To provide for the development and improvement of appropriate town centre uses including retail, residential, commercial and civic uses.”*

Planning applications in the vicinity of the site were reviewed on the online planning records of Kildare County Council. The only recent development in the surrounding area was for the retention of a single-storey extension to an existing residence (planning reference 2038). This is a small-scale development that has already been constructed, so it poses no risk of in-combination effects.

Therefore, no nearby developments were identified that could potentially lead to in-combination effects.

5 Screening Statement

In Section 3 of the OPR guidance (OPR 2021), it is stated that the first stage of the AA process can have two possible conclusions:

1. No likelihood of significant effects

Appropriate assessment is not required and the planning application can proceed as normal. Documentation of the screening process including conclusions reached and the basis on which decisions were made must be kept on the planning file.

2. Significant effects cannot be excluded

Appropriate assessment is required before permission can be granted. A Natura Impact Statement (NIS) will be required in order for the project to proceed.

Having considered the particulars of the proposed development, we conclude that this application meets the first conclusion, because there is no likelihood of significant impacts on any European sites. Therefore, with regard to Article 42 (7) of the *European Communities (Birds and Natural Habitats) Regulations 2011*, it can be excluded on the basis of objective scientific information following screening, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site. Therefore, we conclude that Appropriate Assessment is not required.

In accordance with the OPR 2021 guidance, we note that no mitigation measures have been considered when reaching this conclusion.

References

Chartered Institute of Ecology and Environmental Management, 2018. *Guidelines for Ecological Impact Assessment in the U.K and Ireland: Terrestrial, Freshwater, Coastal and Marine* (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. 2020. *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.

Office of the Planning Regulator 2021. *Practice Note PN01: Appropriate Assessment Screening for Development Management*. Available online at opr.ie