
Screening for Appropriate Assessment

Proposed residential infill development
at Hill View Terrace, Narraghmore, Co.
Kildare

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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 Hill View Terrace, Narraghmore, Co. Kildare. The proposed development will involve the construction of 4 no. residential units, and associated works.

In accordance with their obligations under the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477/2011), Kildare County Council must assess whether the proposed development could have 'likely significant effects' on any Natura 2000 sites. This document provides supporting information to assist the local authority with an Appropriate Assessment screening exercise, including: a description of the proposed development, details of its environmental setting, a map and list of Natura 2000 sites within the potential zone of impact, and an assessment of potential impacts. It is concluded that the proposed development will not cause direct or indirect impacts on any Natura 2000 sites, and 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 report has been prepared by Nick Marchant, the principal ecologist of NM Ecology Ltd. He has twelve years of professional experience, including nine 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, infrastructure projects (water pipelines, greenways, etc.), and a range of residential and commercial developments.

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.

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, Coastal and Marine* (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 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/EPAMaps/>)
- The Kildare County Development Plan 2017-2023, and details of permitted or proposed developments from the local authority's online planning records

All web-based resources were accessed in October 2019.

2 Description of the Project

2.1 Environmental setting

The site is located in a suburban / rural setting on the edge of Narraghmore village. It currently consists of a small patch of unmanaged grassland, which does not appear to be in current agricultural use. There are residential developments on two sides of the site: there is a line of houses along Hill View Terrace to the south of the site, and the rear gardens of some properties on Lipstown Manor to the east of the site. There is arable land to the north of the site, and grazing pasture to the west.

Geology and soils

The underlying bedrock is calcareous greywacke siltstone & shale, which is a poor aquifer (Geological Survey of Ireland). Sub-soils are limestone till, and soils are 'a fine loamy drift with limestones'. The soils and subsoil appear to be well drained, so it is expected that most rainfall on the site would percolate to ground rather than flowing into surface water features.

Hydrology

The closest watercourse is the 'Mullaghmoyn West' stream, which is located approx. 800 m west of the proposed development site. It flows north and west, and merges with some other watercourses to form the Kildoon River, and subsequently meets the River Barrow at Kilberry, approx. 20 km downstream of the proposed development site. The Barrow then flows south and meets the coast in Waterford Harbour a further 100 km downstream.

Water quality in the Kildoon River is not monitored as part of the Water Framework Directive status assessments. However, the section of River Barrow at its point of confluence is of Good status. The downstream sections of the River Barrow are of Moderate status (ranging from Bad to Good status), as are the transitional waters of Waterford Harbour.

2.2 Description of the proposed development

The proposed development will involve the construction of 4 no. semi-detached, dormer dwellings adjacent to Hill View Terrace, Narraghmore, of which 2 no. will be two-bedroom units, and 2 no. will be three-bedroom units. The existing distributor road will be extended in order to provide access, and parking will be provided as required within the curtilage of each dwelling. Green open space will be provided on the remainder of the land to the north.

Foul water will be discharged to an existing foul sewer adjacent to the proposed units, and will subsequently be treated in the Narraghmore waste water treatment plant. Surface water will discharge into soakaways as required.

2.3 Other nearby developments (potential in-combination effects)

The proposed development site is not zoned under any development plan, but considering its proximity to adjacent residences, it would also be suitable for residential purposes. The surrounding area is relatively settled, and it is unlikely to be under significant development pressure in the short to medium term. Live and recently-approved planning applications in the vicinity of the site were reviewed on the online planning records of Kildare County Council, but all were for small-scale works such as residential modifications / extensions.

In conclusion, the area surrounding the proposed development site is not subject to significant development pressure. No planning applications were identified that could act in-combination with the proposed development to increase the scale of potential ecological impacts.

3 Description of Natura 2000 sites

3.1 Identification of Natura 2000 sites within the zone of influence

The proposed development site is not within or adjacent to any Natura 2000 sites. Potential indirect impacts were considered within a potential zone of influence of 2 km of the site¹, but there are no sites within this radius.

The closest Natura 2000 sites is the 'River Barrow and River Nore' SAC, which is located approx. 6.7 km west of the proposed development site (Figure 1). Potential pathways for indirect impacts on this SAC are addressed in Section 3.3.

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 Culture, Heritage and the Gaeltacht has produced detailed conservation objectives for individual Natura 2000 sites. 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.

¹ In *Appropriate Assessment of Plans and Projects in Ireland*, it is noted that the potential 'zone of impact' of a development "*must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects.*" A radius of 15km may be used for regional development plans, but for small projects it may be as little as 100m.

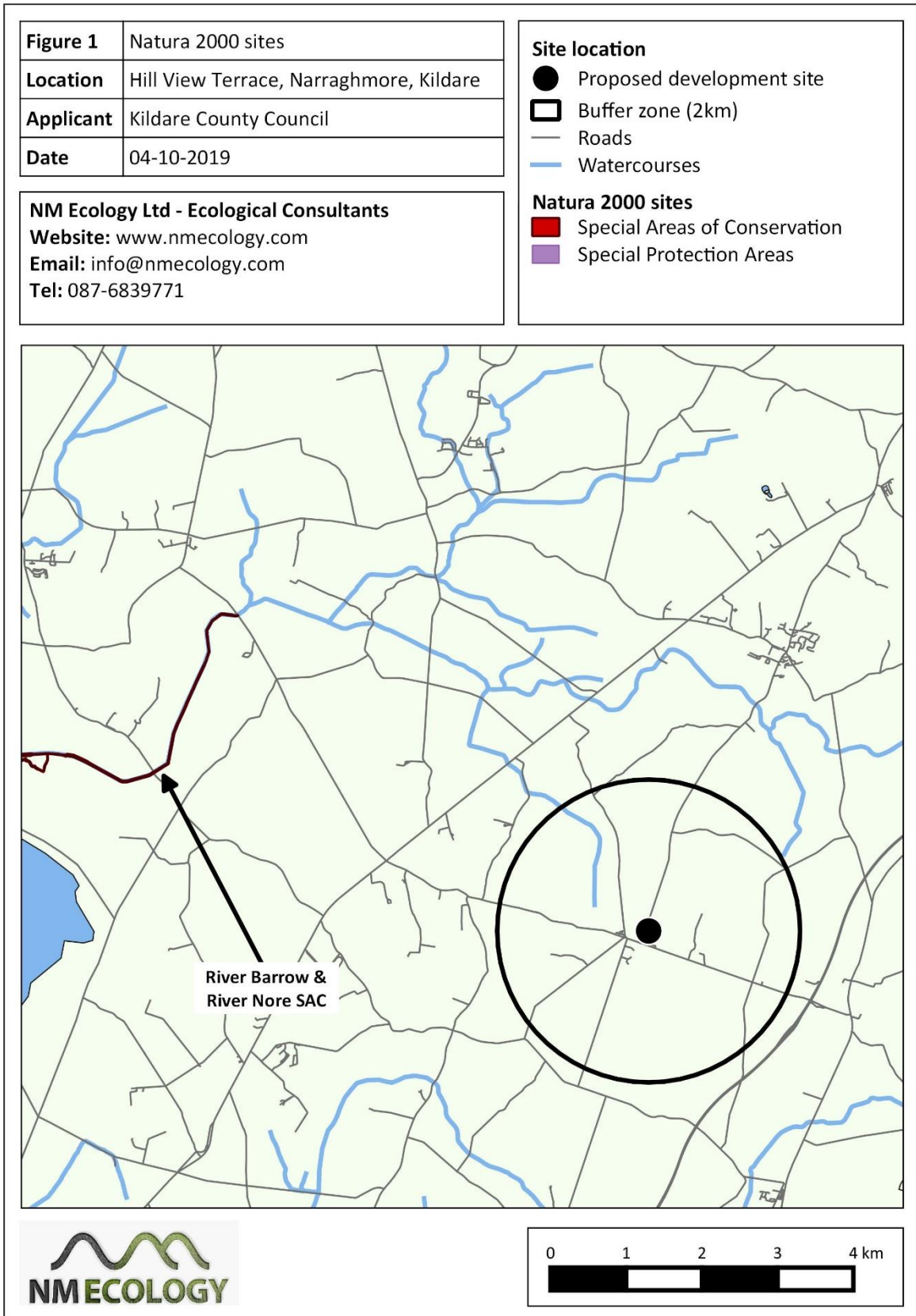


Table 1: Natura 2000 sites of relevance to the proposed development site

Site name	Qualifying Interests
River Barrow & River Nore SAC (site code 2162)	<p>Annex I habitats:</p> <ul style="list-style-type: none"> • Estuaries • Mudflats / sandflats not covered by seawater at low tide • <i>Salicornia</i> 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>Annex II species:</p> <ul style="list-style-type: none"> • 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> (only in fresh water) • Killarney fern <i>Trichomanes speciosum</i> • Otter <i>Lutra lutra</i>

3.3 Identification of potential pathways for indirect impacts

Indirect impacts on Natura 2000 sites can only occur if there is a viable pathway between the source (the proposed development site) and the receptor (the habitats and species for which a site has been designated). The most common pathway for impacts is surface water, for example if a pollutant is washed into a river, carried downstream, and subsequently reaches aquatic habitats or species. 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 for impacts on the Natura 2000 sites referenced in Table 1 is provided below.

The 'Mullaghmoyne West' stream and the Kildoon River could potentially provide a hydrological pathway between the proposed development site and the River Barrow & River Nore SAC. However, the 'Mullaghmoyne West' stream is located more than 800 m from the proposed development site, and there are no obvious intervening watercourses. Any overland flow from

the proposed development site would be intercepted by the adjacent 'Hill View Terrace' Road, and channelled into local authority storm water sewers. Therefore, there is not a viable surface water connection between the proposed development site and the River Barrow or any of its tributaries.

In summary, the proposed development site has no hydrological connection to the River Barrow & River Nore SAC. The distances involved are also too great for impacts via groundwater, air or land pathways. On this basis, we conclude that there are no pathways for impacts on this or any other Natura 2000 sites.

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 fine sediments, and may occasionally cause accidental spills of oil or other toxic chemicals, which can be harmful to aquatic / marine habitats and species. However, no hydrological connections were identified between the proposed development site and any Natura 2000 sites, so there is no pathway for indirect impacts.

Potential changes in water quality (operational phase)

During the operation of the development, foul water will be discharged to an existing foul water sewer and treated in the Narraghmore Waste Water Treatment Plant. It is understood that funding has been assigned by Irish Water for an upgrade to the WWTP, which will provide a high level of treatment prior to discharge to receiving waters.

Surface water from roofs and hard surfaces will be channelled to a soakaway within the boundary of each property. Rainwater is considered to be unpolluted, and the underlying soils are well drained, so there is no risk of any impacts to local watercourses or Natura 2000 sites.

4.3 Potential in-combination effects

No developments were identified in the surrounding area that could potentially lead to in-combination effects.

5 Conclusion of Stage 1: 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, 2018. *Guidelines for Ecological Impact Assessment in the U.K. and Ireland*. 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, DCHG, 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.