

Construction of carpark at
Listerlin, Co Kilkenny

Ecology & Appropriate Assessment Screening

Report prepared for Lenztech Ltd

October 2025

1. INTRODUCTION

The purpose of this report is to examine the development for possible ecological impacts on the integrity of the Natura 2000 network, in particular on the nearby Arrigle River which is part of the River Barrow & River Nore SAC. It is written to accompany a Part 8 planning application.

It was commissioned by Lenztech Surveying and Engineering Ltd on behalf of Kilkenny County Council.

The proposed development has to be screened for an appropriate assessment under Article 6 (3) of the EU Habitats Directive which states:

Article 6 (3): Any plan or project not directly connected with or necessary to the management of the [Natura 2000] 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 [Natura 2000] site in view of the [Natura 2000] site's conservation objectives.

This is transposed into national legislation by Regulation 31 of the European Communities (Natural Habitats) Regulations 1997.

The site was visited in September 2025 and is described at the outset. All work was undertaken by Roger Goodwillie, a full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and a practising ecologist for 40 years.

The sources of information used to collect data on the Natura 2000 network of sites include:

- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie, Google Earth and Bing aerial photography.
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie including; the Natura 2000 network Data Form; Site Synopsis; Generic Conservation Objective data.
- Online databases of rare, threatened and protected species. Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2013).

2. DESCRIPTION OF AREA

The site is at the corner of a pasture field (improved agricultural grassland, GA1 in Fossitt 2000) as shown below. The SW edge abutting the footpath is less regularly mown than the field and supports false oat *Arrhenatherum elatius* and ryegrass *Lolium perenne* as the major grasses along with red clover *Trifolium pratense*, ribwort plantain *Plantago lanceolata*, silverweed *Potentilla anserina* and birdsfoot trefoil *Lotus corniculatus*.



Adjacent roadbanks have a similar selection of species and there is no good development of vegetation until the Arrigle Bridge on the R704. Here, a seepage marsh carries tall wetland species such as tussock sedge *Carex paniculata*, water horsetail *Equisetum fluviatile*, tall valerian *Valeriana officinalis* and purple loosestrife *Lythrum salicaria*, surrounded by willows *Salix cinerea*, *S. aurita* and alder *Alnus glutinosa*. Road drainage from the site is discharged at the bridge to one side of the habitat mentioned but does not impinge on it.

2.2 Fauna

The site has no importance to mammal or bird life and anything seen there will be visiting for short periods. Pine marten, otter, badger and hare have been seen within 1km so are in the area. The site would have no value to bats as it is totally open without trees or bushes.

Jackdaw, woodpigeon and blackbird were the only species seen in the field.

2.3 Evaluation

The habitats at the site are common ones without features of interest. The Arrigle River is the main source of biodiversity in the area. Although it is 310m away, the road drainage discharges at the bridge on the R704.

3. APPROPRIATE ASSESSMENT

3.1 Introduction

Appropriate assessment was introduced by the EU Habitats Directive as a way of determining if a planned project is likely to have a significant effect on the integrity of one of the Natura 2000 sites so far designated (i.e. the candidate SAC's and SPA's), or their conservation objectives. In this case there are three Natura sites within 15km which are shown on the map overleaf. They are:

Name of site	Site Code	Distance
River Barrow & River Nore SAC	2162	100m
River Nore SPA	4233	6.3
Hugginstown Fen SAC	0404	11.4km

In the Irish context the assessment has been interpreted as a four-stage process. Firstly, a screening exercise (Stage 1) determines if a project could have significant effects on a Natura site. If it does or the situation is unclear a Natura Impact Statement (Stage 2) is provided to the planning or regulatory authority which may include mitigation measures to prevent impacts. Examples of significant effects are a loss of habitat area, fragmentation of the habitat, disturbance to species using the site and changes in water resources or quality. If such negative effects come to light in the assessment, alternative solutions are investigated by the proponent (Stage 3) and modifications made unless the project is deemed to be driven by 'imperative reasons of overriding public interest' in its current form. In this case Stage 4 then deals with compensatory action.

The following guidance documents have been used in the screening process:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DEHLG 2009, Revised February 2010).
- EU Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC (EC, 2007).

3.2 Description

The project consists of traffic calming on the R704 with junction improvements on the L3420 Ballyfacey road and Thomastown/Inistioge road. It includes the construction of a public carpark, located in existing agricultural lands on the northeastern side of the junction. This will have new vehicle and pedestrian access, sustainable drainage systems (SuDS) and connections to the existing public road drainage system, landscaping and boundary treatment

The carpark will be constructed and new drainage established before the grass margin on the SW side is altered. This will limit the amount of bare ground exposed at any one time and prevent any overflow of sediment onto the road surface. The western corner of the site is the lowest point and natural surface drainage is down a farm road due west, away from the R704. This will take any surface overflow from the junction works during construction.

3.3 Identification of relevant Natura 2000 sites

The River Barrow & River Nore SAC is the only site with a direct water linkage to the site and therefore is in the zone of influence. Hugginstown Fen SAC has a local catchment and there is no way it can be affected by the project. The River Nore SPA covers the main channel of the river only and any likely materials entering the Arrigle from the project area will have been diluted sufficiently not to cause an effect. The confluence is over 16km downstream

River Barrow and River Nore SAC

The site synopsis (<https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY002162.pdf>) lists the qualifying interests of the site in terms of the Annex I habitats and Annex II species included in the EU Habitats Directive. The qualifying interests of the SAC have been brought together by NPWS (2025), along with supporting survey information and specific conservation objectives. These interests are

- 1016 Desmoulin's whorl snail *Vertigo moulinsiana*
- 1029 Freshwater pearl mussel *Margaritifera margaritifera*
- 1092 White-clawed crayfish *Austropotamobius pallipes*
- 1095 Sea lamprey *Petromyzon marinus*
- 1096 Brook lamprey *Lampetra planeri*
- 1099 River lamprey *Lampetra fluviatilis*
- 1103 Twaite shad *Alosa fallax*
- 1106 Atlantic salmon (*Salmo salar*) (only in fresh water)
- 1130 Estuaries
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1310 *Salicornia* and other annuals colonizing mud and sand
- 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- 1355 Otter *Lutra lutra*
- 1410 Mediterranean salt meadows (*Juncetalia maritimi*)
- 1421 Killarney fern *Trichomanes speciosum*
- 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and

Callitricho-Batrachion vegetation

4030 European dry heaths

6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels

7220 * Petrifying springs with tufa formation (*Cratoneurion*)

91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

91E0 * Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

* indicates priority habitat

The Arrigle River is thought to have a full selection of the aquatic organisms of the main channel although it has not been sampled for fish by IFI in the SERBD programme. Water quality was unsatisfactory (Q3-4, EPA 2022) just below the Arrigle Bridge at Listerlin but improves downriver to Q4-5. The interests that are relevant to this site are: the sea, brook and river lamprey, Atlantic salmon and otter. There are no records of the freshwater crayfish in the river (probably because it runs on acid rather than calcareous rocks) though a few individuals may inhabit the channel at its confluence with the Nore. The 3260 habitat (Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation) occurs in the Arrigle though its location is not as yet surveyed (NPWS).

3.4 Conservation objectives

Conservation objectives have been prepared for all Natura sites and consist of the following:

SAC

To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

The favourable conservation condition of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing
- 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
- the conservation status of its typical species is favourable

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
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

3.3.2 Potential impacts of project

The construction of the carpark and improvement works will have very limited potential to affect the surroundings and none at all if carried out with good site management and the control of run-off.

4. CONCLUSION

There is no likelihood that this development will have significant impacts on the integrity and functioning of the Natura 2000 site network, in particular on the River Barrow & River Nore SAC and its management objectives. This is a finding of no significant effects.

This being the case there is no possibility of cumulative effects and the further, more detailed, stages of appropriate assessment are not required.

References

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