
Appropriate Assessment report comprising a

Stage 1 Screening Report and Stage 2 Natura Impact Statement (NIS)

regarding an application made to An Bord Pleanála under Section 177AE of the Planning Development Act 2000 (1)(a) for approval to resurface the access road to the Wexford Wildfowl Reserve, North Slob, Wexford.

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Report compiled for the National Parks and Wildlife Service

— Report dated 2 April 2024 —

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SWC Promotions: promoting the natural heritage resource values of the South Wexford Coast.

— Summary of this report —

1. The National Parks and Wildlife Service of the Department of Housing, Local Government and Heritage is applying to An Bord Pleanála under Section 177AE of the Planning Development Act 2000 (1)(a) for approval to resurface the access road to the Wexford Wildfowl Reserve, North Slob, Wexford. The proposed development has the same footprint as the existing surface.
2. The proposed development is located in a designated Natura 2000 site: Wexford Harbour and Slob Special Protection Area (SPA), Site Code IE0004076 (for further information about Natura 2000 sites see Appendix 1 in Section 12 below).
3. The proposed development is not considered to be directly connected with the management of the Natura 2000 site.
4. All plans and projects which are not directly connected with or necessary to the management of a Natura 2000 site, but which either individually or in combination with other plans or projects, are likely to have a significant effect on a Natura 2000 site, require an assessment of these effects to determine if they will adversely affect the integrity of these sites (for further information about the assessment process see Appendix 2 in Section 12 below).
5. Mindful of the precautionary principle it is considered that the proposed development has the potential to impact negatively on a conservation objective, qualifying interest, and/or special conservation interest of the Natura 2000 site (for further information about the precautionary principle see Appendix 3 in Section 12 below).
6. It is an objective of Wexford County Council to protect the integrity of Natura 2000 sites in its administrative area (for further information about objectives of Wexford County Council see Appendix 4 in Section 12 below).

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7. This report presents both a screening and initial scrutiny and assessment of the likely impacts of the proposed development on the qualifying interests and conservation objectives of the Wexford Harbour and Sloba Natura 2000 site and other adjacent sites, and a Natura Impact Assessment (NIS).

8. Based on the information to hand, this report concludes that mindful of the nature, size, and scale of the proposed development, the conservation objectives of the impacted sites, and the precautionary principle, the proposed resurfacing works, both alone and in combination with other plans and projects, are unlikely to adversely impact in a significant way the integrity of the Wexford Harbour and Sloba Natura 2000 site or any other Natura 2000 site, or any protected area or species.

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Part 1: Screening Report

(Stage 1 of the Appropriate Assessment process)

1. INTRODUCTION

1.1. Background

- 1.1.1. The proposed development constitutes a project. Background to the project is set out in the 'Summary of this report' above.
- 1.1.2. The developer is the National Parks and Wildlife Service (NPWS) of the Department of Housing, Local Government and Heritage, and the contact person is Ciarán Foley, Regional Manager, South Eastern Region Mid & South Wexford & Carlow, NPWS.
- 1.1.3. The project is not considered necessary for the management of any Natura 2000 site.

1.2. The project

- 1.2.1. The project is outlined in the 'Summary of this report' above and a full description is contained in Section 3 below.

1.3. Aim and purpose of the project

- 1.3.1. The existing tarmac surface of the main access road to the Wexford Wildfowl Reserve (<https://www.wexfordwildfowlreserve.ie/>) is in a deteriorating state of repair and is breaking up in places. The road was last resurfaced about 15 years ago and is now in a state of disrepair. Localised patching and infilling of potholes is no longer sustainable. Emergency works were conducted during 2023 to repair the worst section. It is now proposed to upgrade and resurface the entire access road and to open it for improved and safe public use vehicular, pedestrian and agricultural access for staff, visitors, and members of the public visiting the Wexford Wildfowl Reserve Visitor Centre. The road also services local landowners who both own and rent land in the North Slob. The proposed development is a like-for-like project as it has the same footprint as the existing tarmac surface.

1.4. Need for this report

- 1.4.1. Appropriate Assessment is required to provide background information to inform decisions by the consent authority regarding whether the project would be likely to have a significant effect on any Natura 2000 site. A 'significant effect' is defined as "*An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment*" (EPA, 2022).
- 1.4.2. For further information regarding the legislative requirement, the Natura 2000 network, and the Appropriate Assessment process, and the Precautionary Principal, see the appendices at Section 12 below.

1.5. Terms of reference

- 1.5.1. Jim Hurley, SWC Promotions, was commissioned by Ciarán Foley, Regional Manager, South Eastern Region Mid & South Wexford & Carlow, NPWS to compile this report.

1.5.2. This report is the result and outcome of that commission.

1.6. Statement of competence

1.6.1. Jim Hurley (B.Sc., UCD 1965; Zoology, Botany, Geology) is a naturalist and conservationist. He has been involved in environmental and ecological matters and their related planning issues for over forty years and has successfully compiled several reports for Appropriate Assessment.

2. METHODOLOGY

2.1. Legislative context

2.1.1. The legislative context regarding appropriate assessment is set out in Appendix 1 and Appendix 2 below (Section 12).

2.2. Procedure followed

2.2.1. The methodology followed in compiling this report comprised the conducting and completion of the following elements: a desk study, a site visit and site walkover, and compilation and production of this report.

2.2.2. A desk study was undertaken, and the following data and information sources were accessed and utilised.

- Data provided by the client's agent and used to inform this report included a site location map and site plan, together with details of the proposed development and other relevant reports.
- Electronic copies of planning files containing in Wexford County Council's online document and map-viewing facility at <https://dms.wexfordcoco.ie/index.php>.
- Standard Data Forms, site boundaries, site synopses, qualifying interests, and conservation objectives for impacted Natura 2000 sites were studied. The locations and boundaries of all Natura 2000 sites potentially impacted by the proposed development were identified from the NPWS Designations Viewer (<https://experience.arcgis.com/experience/edf34d92e28040fd87d3d14f55d8d95f>).
- Other online mapping reviewed included GeoHive maps, aerial photography, Geological Survey Ireland (GSI) (www.gsi.ie) and EPA maps (<https://gis.epa.ie/EPAMaps/>) for information on bedrock, soils, groundwater, aquifers, waterbodies, catchment areas, hydrological connections, flow paths, water quality, risk status, etc.
- Department of Housing, Local Government and Heritage Environmental Impact Assessment portal (<https://housinggov.ie/maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1>).
- National Planning Application Map viewer (<https://www.myplan.ie/national-planning-application-map-viewer/>).
- Records from the National Biodiversity Data Centre (<https://biodiversityireland.ie/>) for relevant grid squares.

Other information sources consulted are referenced below (Section 10).

- 2.2.3. The site of the proposed development and its environs were visited on 20 March 2024. A walkover baseline survey was conducted, and the ecological context of the proposed development was examined. The baseline ecological conditions within the proposed development site and immediate surrounding areas were determined. Some of the photographs taken are reproduced below (Section 11). Habitats on site were recorded to Level 3 of the Fossitt hierarchical classification system (Fossitt, 2000).
- 2.2.4. This report was prepared and compiled in accordance with the requirements of the European Union Habitats Directive and European Commission and Irish methodological guidance, relevant objectives, and evolving case law. Guidance documents used to inform the assessment methodology are listed below (Section 10.2).
- 2.2.5. The level of detail provided in this report is proportionate to the scale and complexity of the project, the characteristics of the receiving environment, the importance of sites that are protected for their natural heritage resources, and the impacts that the project are likely to have on the integrity of Natura 2000 sites in their environs.

3. THE PROJECT

3.1. Description of the project

- 3.1.1. Planning approval is sought for the resurfacing the access road to the Wexford Wildfowl Reserve, North Slob, Wexford. The proposed development has the same footprint as the existing surface.

3.2. Location of the proposed development

- 3.2.1. The proposed development site is located at the Wexford Wildfowl Reserve on the North Slob, adjoining Ardcavan, approximately 4km northeast of Wexford town (Figure 1). The Wildfowl Reserve is bordered to the north by flat, agricultural land reclaimed from the sea in the period 1846-1852, and to the south by the Lower Slaney Estuary / Wexford Harbour. The proposed development site comprises the access road to the reserve, is 1.1km long approximately and no more than 2.4m wide. The road falls from an elevation of 0.9m above Ordnance Survey datum at the entrance to a low of 0.108m near the Pump House. The Wexford Wildfowl Reserve is owned jointly by the National Parks and Wildlife Service (NPWS) and BirdWatch Ireland and is run by the NPWS. The reserve covers only part of the North Slob, the remainder of the property being privately owned farmland.



Figure 1. Location of the proposed development site.

3.2.2. The proposed development site is located in the townland of North West Slob adjoining Arcdavan as shown below (Figure 3).

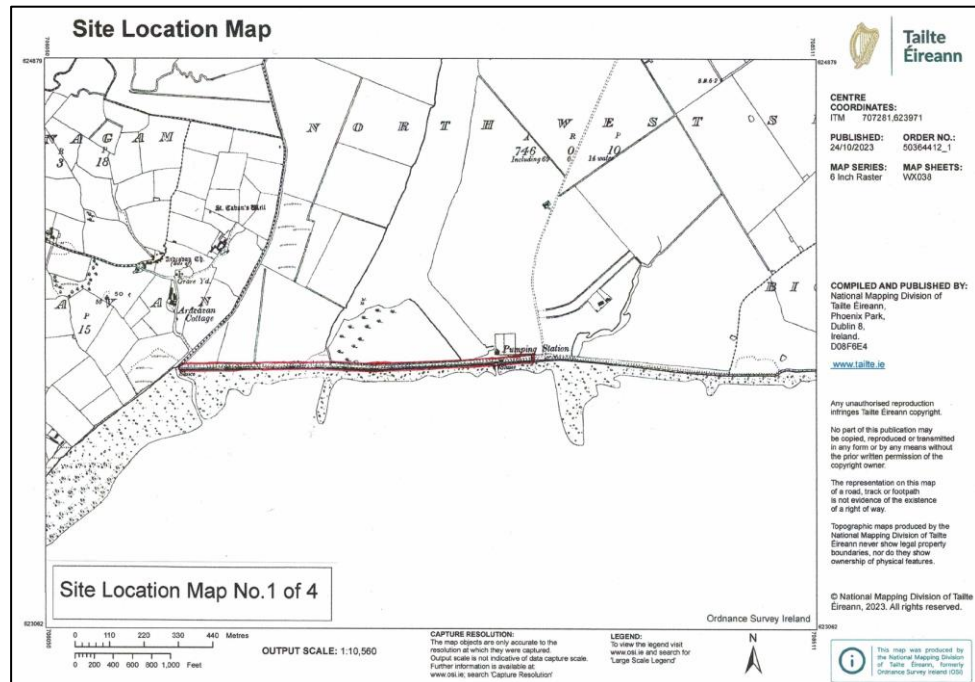


Figure 2. Site location map.

(Source: National Parks and Wildlife Service)

3.2.3. Arcdavan Lane (L-70083-1), the local tertiary public road, runs to the entrance of the Wexford Wildfowl Reserve (Figure 3). From the concrete bridge deck at the entrance to the reserve the proposed development site (Figure 3, red) runs in parallel with the Wexford Harbour sea wall and its associated embankment and grass verge. On the northern side of the proposed development site (Figure 3, red), there are three existing lay-bys, the Pat Walshe Hide, entrances to fields, the Pump House Hide, the Pump House, and the visitor car park (see photographs in Section 11 below).



Figure 3. The proposed development site (red).

3.3. Description of the proposed development

- 3.3.1. The proposed development comprises resurfacing the access road to the Wexford Wildfowl Reserve, North Slob, Wexford. The proposed development has the same footprint as the existing surface.
- 3.3.2. The western extremity of the site is the concrete bridge deck at the entrance to the reserve the proposed. The eastern extremity is the gate south of the storage shed and workshop adjoining the visitor centre car park.
- 3.3.3. A site layout plan of the proposed development is featured below (Figure 4).

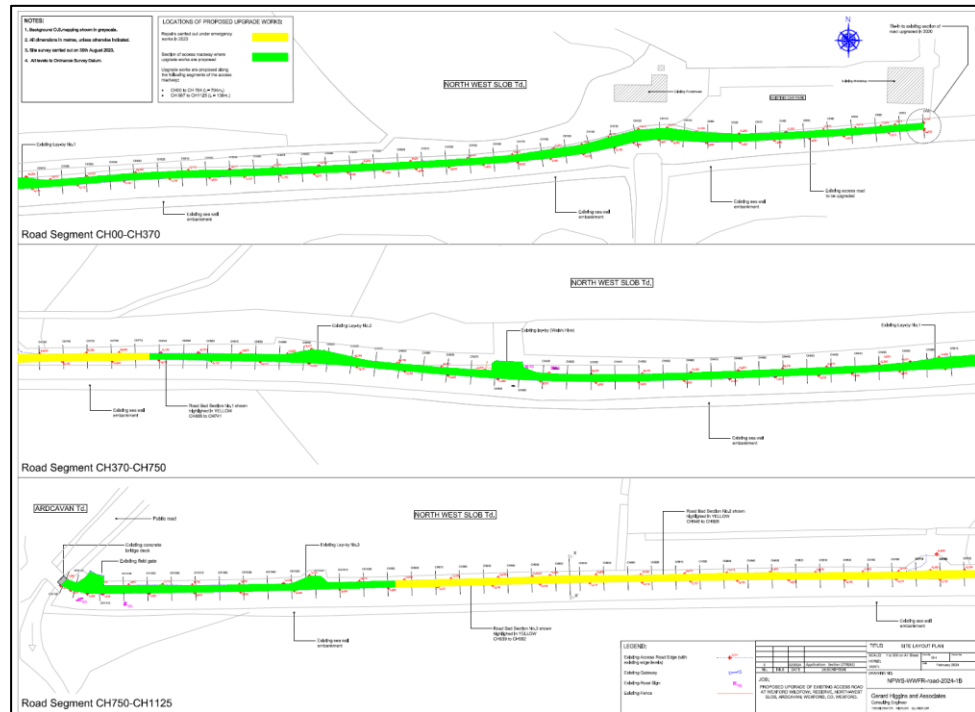


Figure 4. Site layout plan.

(Source: Drawing NPWS-WWFR-road-2024-1B by Gerard Higgins and Associates, Consulting Engineer)

Note on Figure 4. Drawings of the proposed development site start bottom left and finish to right.

Sections of the access roadway where repairs were carried out in 2023 under emergency works are shown highlighted in yellow; sections where upgrade works are proposed are shown highlighted in green.

3.4. The works involved

- 3.4.1. The project is a like-for-like upgrading with no material change in design, function, use and maintenance to the existing access. The top layer of the road will be removed using an excavator bucket to provide a level surface. Excavated material will be removed to a site compound using a dumper. A mini/standard paving machine will be used to lay 50mm of hot rolled macadam [to Clause 910/919/920] with a camber of 1:50. Layers will be fully compacted using a roller and rolling will continue until full compaction is achieved.

The expected duration of resurfacing is approximately 30 days. On-going maintenance will include inspection and repair of the macadam pavement and grassed verge maintenance and management. Measures will be taken to make repairs and remove debris from paths after storm conditions. The excavation and handling of inert material will be carefully managed in such a way as to prevent any potential negative impact on the receiving water environment.

- 3.4.2. The activities associated with the proposed development are summarised as follows.
- **Investigation phase.** Engineering, planning, and other technical surveys and assessments of the site and its environs.
 - **Construction phase.** The activities outlined above.
 - **Operation phase.** Use of the amenity by National Parks and Wildlife Service staff, local landowners, and the public visiting the Wexford Wildfowl Reserve for recreational birdwatching.
 - **Decommission phase.** No activities planned.

4. THE RECEIVING ENVIRONMENT

4.1. Baseline description of the proposed development site

- 4.1.1. **Location.** The location of the proposed development site, access to it, and its shape, size, elevation, and orientation are shown and described above (Section 3) together with details and a description of the proposed works at that location.
- 4.1.2. **Land use.** The proposed development site is an area of made ground providing access facilities for staff and visitors to the Wexford Wildfowl Reserve and local landowners.
- 4.1.3. **Bedrock geology.** There are no outcrops of bedrock at the proposed development site. The bedrock underlying the site is classified as dolomitised pale grey limestone, part of the Wexford Formation (Code: WX) of Carboniferous Period age (Figure 5, orange).

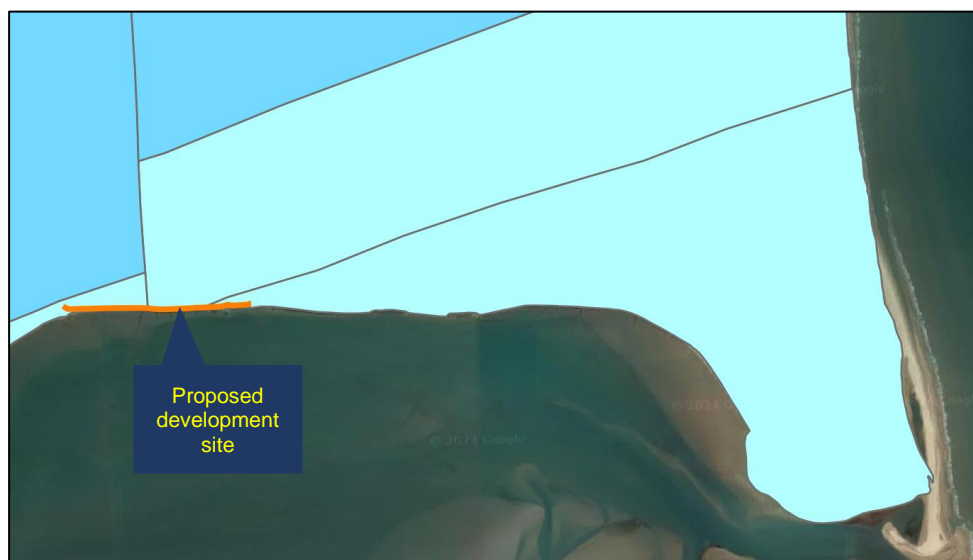


Figure 5. Bedrock geology map, 100km.

- 4.1.4. **Quaternary sediments.** From beginning to end, the site of the proposed development is underlaid with sediments deposited during the last ice age comprising “*Estuarine silts and clays; Code: Mesc*” (Figure 6, yellow) with an area of ‘made ground’ (Figure 6, no colour) at the Pump House, visitor centre car park, and environs. Both extremities of the site are bordered by “*Irish Sea Till derived from Lower Palaeozoic sandstones and shales; Code: IrSTLPSsS*” (Figure 6, blue).



Figure 6. Quaternary sediments map.

(Source:

<https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aac3c228>)

- 4.1.5. **Soils and subsoils.** The North Slob was reclaimed from the sea during the period 1846-1852. The subsoils at the site of the proposed development are classified as marine and estuarine sediments. The overlying soil is classified as ‘*tidal marsh*’ (green Xs).

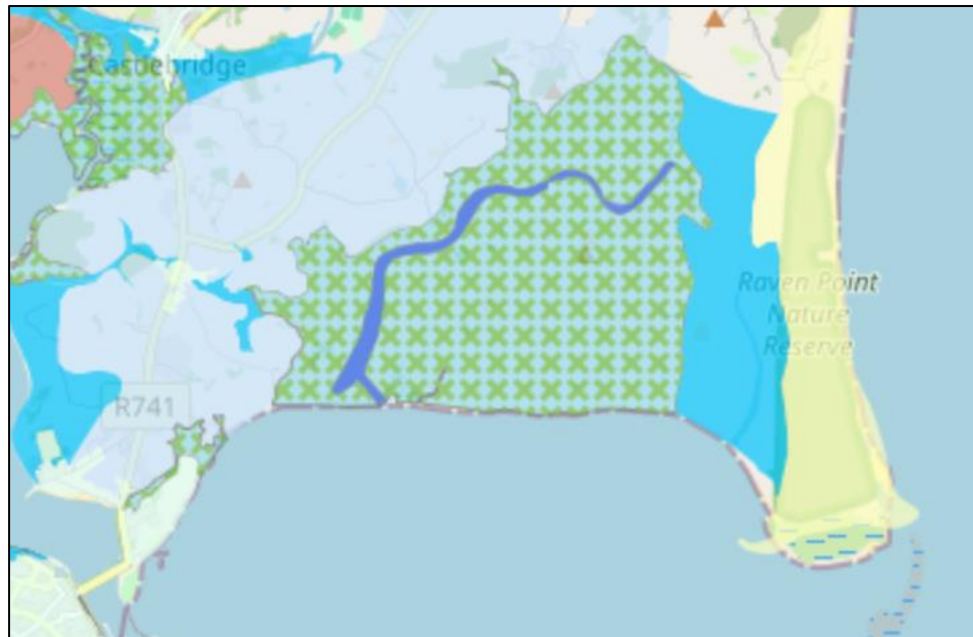


Figure 7. Soil map of the proposed development site.

(Source: <https://gis.epa.ie/EPAMaps/default>)

- 4.1.6. **Hydrology.** The site of the proposed development is part of the Slaney & Wexford Harbour catchment (WFD ID Code: 12) and the Whiteford subcatchment (WFD Id: 12_15. Name: WHITEFORT_SC_010) (<https://gis.epa.ie/EPAMaps/AAGeoTool> / Catchments).

4.1.7. **Hydrogeology.** There are no watercourses at the application site but there are two waterbodies immediately adjoining: a drainage channel to the north and Wexford Harbour to the south (Figure 8). Surface rainwater runoff from the proposed development site drains to these two waterbodies. Both are classified as transitional waterbodies (North Slob Channels Code: IE_SE_040_0100. EPA Name: North West Slob) and Lower Slaney Estuary Code: IE_SE_040_0200). The WFD 2016-2021 water quality status of the North Slob Channels is rated “*Moderate*”, and the Lower Slaney Estuary “*Poor*”.



Figure 8. Watercourses in the vicinity of the application site.

(Source: <https://gis.epa.ie/EPAMaps/Water>)

The application site is underlaid by the Castlebridge South ground waterbody (Code: IE_SE_G_033) described as a “*Productive fissured bedrock*”. The GSI bedrock aquifer (AquiferCode: Rkd) is described as a “*Regionally Important Aquifer - Karstified (diffuse)*”, its WFD 2016-2021 water quality status is rated “*Good*”, its vulnerability is rated “*Low*”, and its projected risk status is ‘*Not at Risk*’ (Source: <https://gis.epa.ie/EPAMaps/Water>).



Figure 9. Ground waterbody at the proposed development site.

(Source: <https://gis.epa.ie/EPAMaps/Water>)

The EPA risk tool rates the aquifer vulnerability (“*the ease with which groundwater may be contaminated by human activities*”) as ‘*low vulnerability*’ on the five point scale: low (green), moderate (yellow), high (brown), high because the bedrock is near the surface (violet), and extreme (red) (Figure 10) ([https://qis.epa.ie/EPAMaps/ Land & Soils / Land / Geology GSI Vulnerability](https://qis.epa.ie/EPAMaps/Land%20%26%20Soils/Land%20%2F%20Geology%20GSI%20Vulnerability)).



Figure 10. Bedrock aquifer GSI vulnerability ratings.

(Source: <https://qis.epa.ie/EPAMaps/>)

- 4.1.8. **Flood risk.** Flooding at the subject site is not considered to represent a significant risk (<https://www.floodinfo.ie/map/floodmaps/>).
- 4.1.9. **Invasive aliens.** No plant species subject to restrictions under Regulation No 49 and No 50 of the *European Communities (Birds and Natural Habitats) Regulations 2011*, SI No 477 of 2011 (<https://www.irishstatutebook.ie/eli/2011/si/477/>), and listed in the Third Schedule of these Regulations, was recorded at the site of the proposed development during the walkover survey.
- 4.1.10. **Annex IV species.** Annex IV of the Habitats Directive lists “*Animal and plant species of Community interest in need of strict protection*” (consolidated Version 1.1, 2007 at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1992L0043:20070101:EN:PDF>). The following species listed in Annex IV are found in Ireland and require strict protection
- All bats (nine resident species and at least one vagrant)
 - All cetaceans (24 species of whales, dolphins and the Harbour Porpoise *Phocaena phocaena*)
 - The Eurasian Otter *Lutra lutra*
 - The Leatherback Turtle *Dermochelys coriacea*
 - The Natterjack Toad *Epidalea calamita*
 - The Kerry Slug *Geomalacus maculosus*
 - The Killarney Fern *Trichomanes speciosum*
 - The Slender Naiad *Najas flexilis*
 - The Yellow Marsh Saxifrage *Saxifraga aizoides*

Of those species listed above, bats occur at the proposed development site, and it is considered that transient Otters probably also occur.

- 4.1.11. **Protected species.** Licences are required from the National Parks and Wildlife Service under the Wildlife Acts if there are impacts on protected species or their resting or breeding places (<http://www.npws.ie/licences/disturbance/>). The issue of licences does not arise in the present case as there are no known protected plant species, otter holts, badger setts or bat roosts at the site of the proposed development.
- 4.1.12. **Habitats.** The application site comprises an artificial surface (BL3) of made ground, an existing pavement of tarmacadam. At its western extremity at the end the Ardavan Lane, the site crosses a channel (FW4) draining the reclaimed wetland that lies to the north. On its southern side, the site is bordered for its entire length by Wexford Harbour and is separated from it by a grass verge (GS2), the sea wall (CC1), and a tidal strip of mixed sediment beach (LS5). The northern side of the application site is bordered by agricultural land, three existing lay-bys (BL3), the Pat Walshe Hide (BL3), entrances to fields, a line of scrubby trees (WS1) with an associated drain (FW4), the Pump House Hide (BL3), the Pump House (BL3), and the visitor car park (BL3) (see photographs in Section 11 below).



Figure 11. Habitat map of the proposed development site (red).

5. POTENTIAL IMPACTS

5.1. Impact identification and prediction

- 5.1.1. This section considers the likely effects and impacts of the proposed development described above (Section 3) by identifying the individual elements of the development likely to give rise to adverse impacts either directly, indirectly, short-term or long-term, alone, cumulative and/or in combination with other plans or projects, taking account of the construction, operation and decommissioning phases involved in both timescale and extent. The three parameters within the Source-Pathway-Receptor (S-P-R) conceptual model are considered, and the extent of the zone of impact and influence is identified and quantified.
- 5.1.2. Whether the proposed development has the potential to have significant impacts on any Natura 2000 site is evaluated via several significance indicator questions in order to lay down a *de minimis* threshold (Table 1, after EC, 2001).

Question	Answer
Is the application directly connected with, or necessary to, the nature conservation management of any Natura 2000 site or protected area?	No.
Is the application site in, overlapping, or adjacent to a Natura 2000 site?	Yes it is located in a Natura 2000 site.
Will advancement of the application result in the loss, reduction, alteration, or fragmentation of habitat from any Natura 2000 site, make any protected habitat more vulnerable to change or less resilient to external change (e.g. to flooding, fire or drought)?	No.
Will advancement of the application result in the loss, reduction, displacement and/or disturbance of any protected species or key species that the sites have been selected for, or change either directly or indirectly the ecological community, population size, characteristics or reproductive success of a protected species (e.g. lighting close to a bat roost entrance)?	It has the potential to cause disruption.
Is there a clear pathway of interaction between the application site and any protected area?	Yes, it is in hydrological connection.
Will there be any significant emissions to air, water or land from the application site likely to change the physical/chemical quality of the environment in a way which may cause the deterioration of habitats (e.g. applying lime to an acidic soil), or change the key indicators of conservation value such as deterioration in the quality and/or quantity of water and/or other resources that sustain Natura 2000 sites?	No emissions are planned but there is a potential for accidental spillages.

Table 1. Tests for potential significant impacts.

- 5.1.3. The answers given above (Table 1) indicate that advancement of the application may have the potential to impact on protected Natura 2000 sites.

- 5.1.4. In general, the reasons for designating Natura 2000 sites and for having conservation objectives for them are *“to contribute to enabling the natural habitat types and the species present on the site to be maintained or, where appropriate, restored at a favourable conservation status”* (https://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/commission_note_EN.pdf).
- 5.1.5. 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 near future, and
 - the conservation status of its typical species is favourable.
- 5.1.6. 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 near future, and
 - there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

5.2. S-P-R modelling

- 5.2.1. The three parameters within the Source-Pathway-Receptor (S-P-R) conceptual model (Figure 12) are
- **Source:** the cause of any potential impact,
 - **Pathway:** how the source may reach what is affected, and
 - **Receptor:** what is affected and how the effect relates to the conservation objectives of the Natura 2000 site.



Figure 12. The S-P-R model.

5.3. Explanation of likely effects

- 5.3.1. This section has established that the proposed development has the potential to give rise to adverse impacts either directly, indirectly, short-term or long-term, alone, cumulative and/or in combination with other plans or projects, taking account of the construction, operation and decommissioning phases involved in both timescale and extent.
- 5.3.2. The sources of potential impact are considered to be (1) disturbance of key species of wild birds that the site has been selected and designated for, and (2) runoff of deleterious matter to the adjoining waterbodies resulting in a deterioration in the quality of the waters that sustain these sites and/or the underlying groundwater.

- 5.3.3. These sources are likely to have effects because the site of the proposed development is located in a Natura 2000 site that is selected and designated for named species of wild birds, and it adjoins another Natura 2000 site selected and designated for named habitats and species that may be adversely impacted by any runoff of deleterious matter.

5.4. The zone of impact and influence

- 5.4.1. The zone of impact and influence for a project is the geographical area over which ecological features may be affected by changes as a result of advancement of a development and associated activities.
- 5.4.2. Further to both impact identification and prediction, and S-P-R modelling, the zone of impact and influence identified is the immediate environs of the proposed development extending outwards with diminishing impact to a maximum distance considered to be no more than 300m (Figure 13).

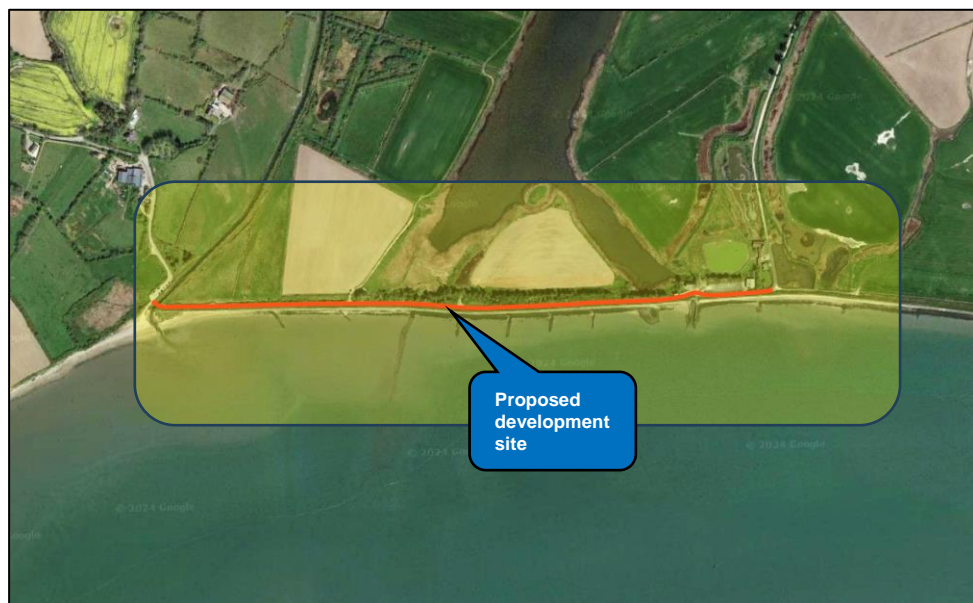


Figure 13. Indicative footprint of zone of possible impact (yellow fill).

- 5.4.3. It is not considered likely that Natura 2000 sites more distant than 300m from the subject site could suffer adverse effects from the proposed development by virtue of separation distance. These sites are therefore no longer considered.
- 5.4.4. The potentially impacted Natura 2000 sites are identified in the next section (Section 6) together with their qualifying interests and conservation objectives.

6. POTENTIALLY IMPACTED SITES

6.1. Identification of Natura 2000 sites

- 6.1.1. Natura 2000 is a network of nature protection areas in the territory of the European Union; the network is made up of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) (for details see Appendix 1 in Section 12.1 below). The sensitive receptors located within the zone of impact are two Natura 2000 sites (Table 2 and Figure 14).

Distance from the subject site	Natura 2000 Site Name	SAC Site Code	SPA Site Code
0m	Wexford Harbour and Slobs	-	IE0004076
10m	Slaney River Valley	IE0000781	-

Table 2. Natura 2000 sites in the zone of impact of the subject site.

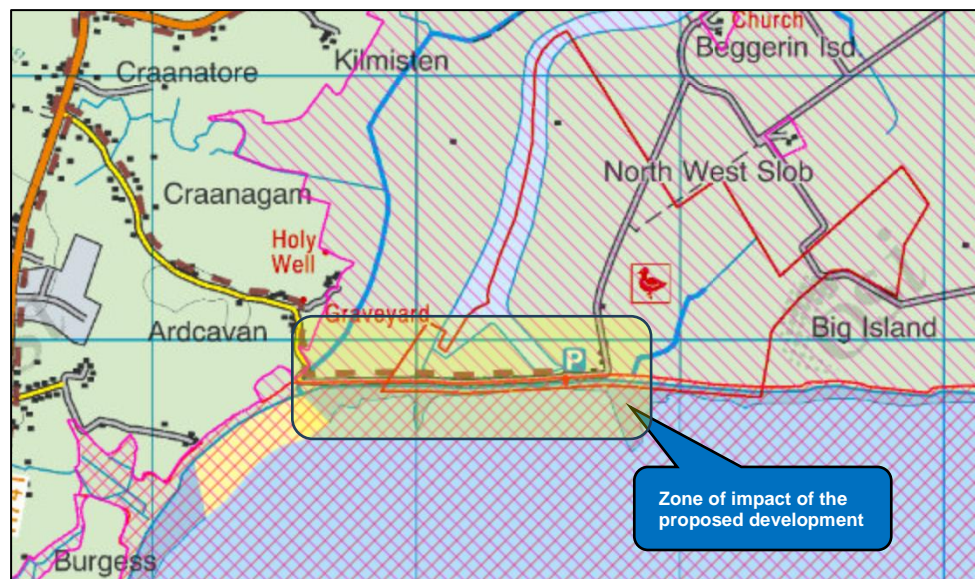


Figure 14. Natura 2000 sites in the zone of impact of the subject site.

(Source: screen snip from <http://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=8f7060450de3485fa1c1085536d477ba>)

- 6.1.2. The Wexford Harbour and Slobs SPA (Figure 15, top) and the Slaney River Valley SAC overlapping with the Wexford Harbour and Slobs SPA (Figure 15, bottom) are featured below.

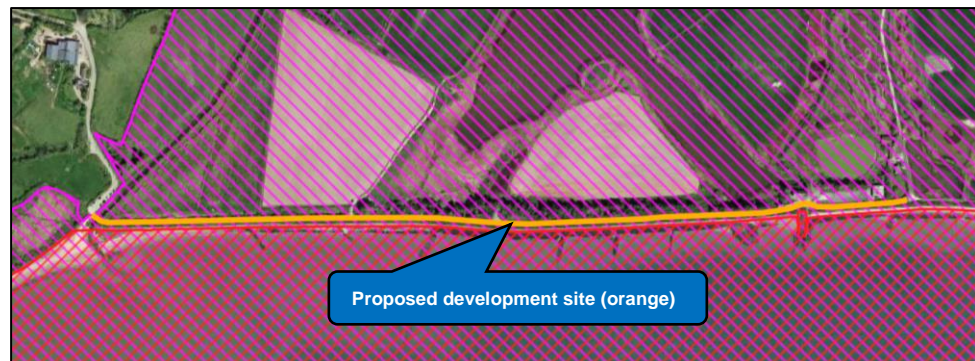
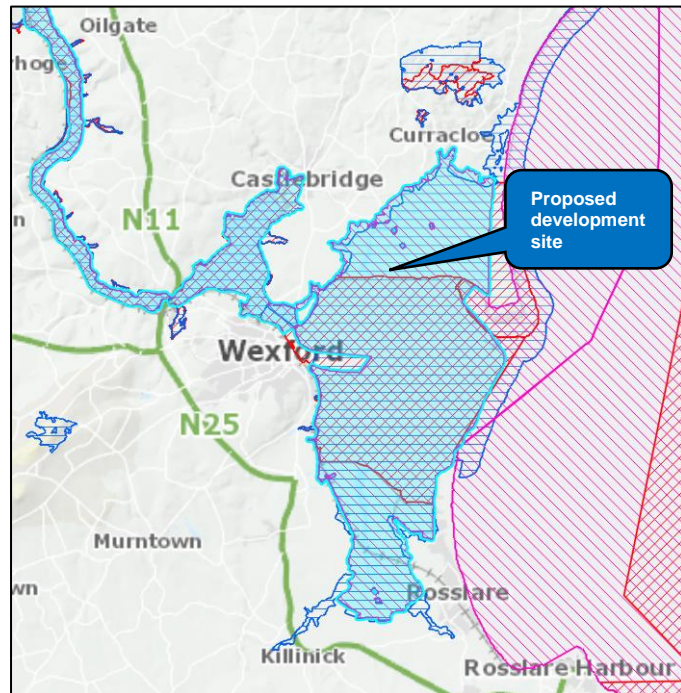


Figure 15. Impacted Natura 2000 sites.

- 6.1.3. Natura 2000 sites that are unlikely to be subject to any appreciable effects are excluded from any further assessment.
- 6.1.4. The two Natura 2000 sites that are likely to be subject to effects are described below.

6.2. Wexford Harbour and Slobs SPA

6.2.1. **Natura 2000 site:** Wexford Harbour and Slobs, Special Protection Area (SPA) Site Code IE0004076 (highlighted blue right). The proposed development is located in the SPA.



6.2.2. **Extent:** The SPA site comprises Wexford Harbour, the estuary and tidal waters of the River Slaney, the intertidal mudflats, and the extensive slobs or agri-polders intaken during the nineteenth century reclamation of wetlands north (1846-1852) and south (1852-1860) of Wexford Harbour.

6.2.3. **Qualifying interests:** The qualifying interests of the site are 'Wetland and Waterbirds' [A999] together with the following 32 named species of wild birds.

- Little Grebe *Tachybaptus ruficollis* [A004]
- Great Crested Grebe *Podiceps cristatus* [A005]
- Cormorant *Phalacrocorax carbo* [A017]
- Grey Heron *Ardea cinerea* [A028]
- Bewick's Swan *Cygnus columbianus bewickii* [A037]
- Whooper Swan *Cygnus* [A038]
- Light-bellied Brent Goose *Branta bernicla hrota* [A046]
- Shelduck *Tadorna tadorna* [A048]
- Wigeon *Anas penelope* [A050]
- Teal *Anas crecca* [A052]
- Mallard *Anas platyrhynchos* [A053]
- Pintail *Anas acuta* [A054]
- Scaup *Aythya marila* [A062]
- Goldeneye *Bucephala clangula* [A067]
- Red-breasted Merganser *Mergus serrator* [A069]
- Hen Harrier *Circus cyaneus* [A082]
- Coot *Fulica atra* [A125]
- Oystercatcher *Haematopus ostralegus* [A130]
- Golden Plover *Pluvialis apricaria* [A140]
- Grey Plover *Pluvialis squatarola* [A141]
- Lapwing *Vanellus* [A142]
- Knot *Calidris canutus* [A143]
- Sanderling *Calidris alba* [A144]
- Dunlin *Calidris alpina* [A149]
- Black-tailed Godwit *Limosa limosa* [A156]
- Bar-tailed Godwit *Limosa lapponica* [A157]
- Curlew *Numenius arquata* [A160]
- Redshank *Tringa totanus* [A162]
- Black-headed Gull *Chroicocephalus ridibundus* [A179]
- Lesser Black-backed Gull *Larus fuscus* [A183]
- Little Tern *Sterna albifrons* [A195]
- Greenland White-fronted Goose *Anser albifrons flavirostris* [A395]

- 6.2.4. **Conservation objectives:** The conservation objectives for the site are to maintain the favourable conservation condition of the habitats that support the wild birds. Conservation objectives, attributes and targets are detailed in a 42-page report (NPWS, 2012a).
- 6.2.5. **Overlap:** The site overlaps with parts of The Raven SPA No IE0004019, The Raven Point Nature Reserve SAC No 0000710, the Slaney River Valley SAC No IE0000781, and the Seas off Wexford candidate SPA No 004237 (Figure 16).

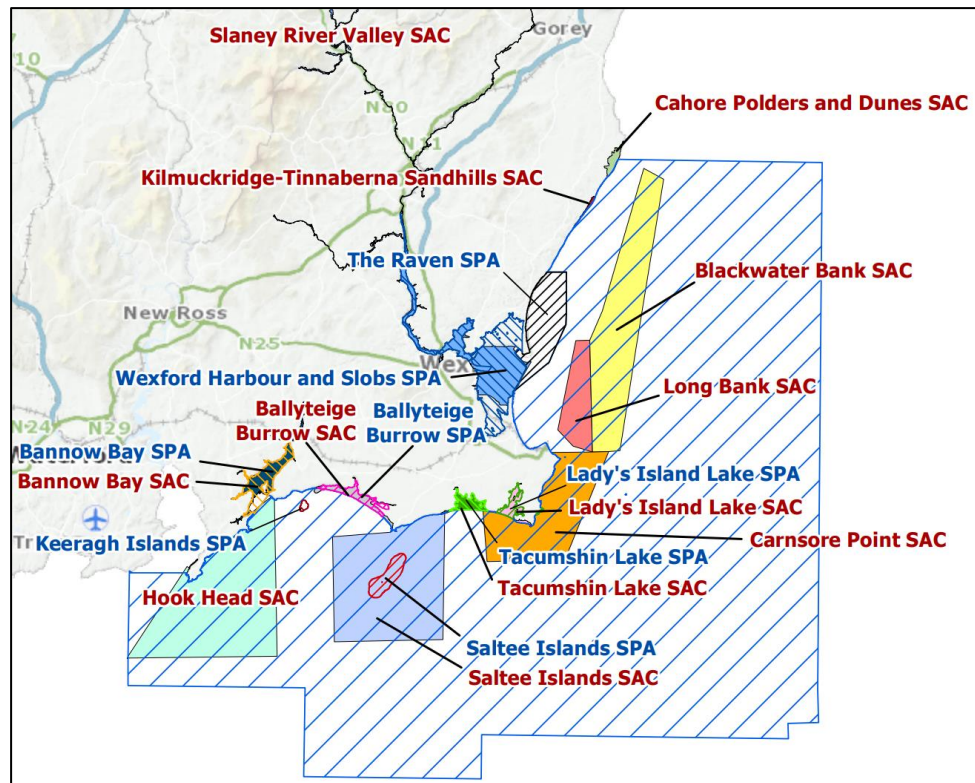


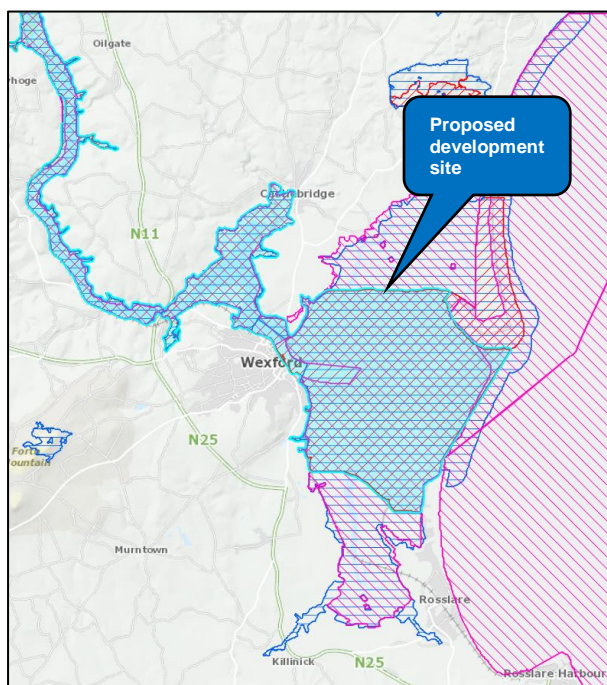
Figure 16. Overlapping Natura 2000 sites.

(Source: Extract of Map 2 at https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004237.pdf)

6.3. Slaney River Valley SAC

6.3.1. **Natura 2000 site:** The Slaney River Valley SAC is a large site extending from the source of the 117.5km-long river on Lugnaquilla Mountain in the western Wicklow Mountains to its estuary by Wexford town. The proposed development site is located adjoining the SAC (right, blue).

6.3.2. **Extent:** The SAC site comprises Wexford Harbour, the estuary of the Slaney River, the tidal waters of the Slaney River, and the inter-tidal mudflats of Wexford Harbour.



6.3.3. **Qualifying interests:** The qualifying interests of the site are the following five habitat types, the Freshwater Pearl Mussel, five species of fish and two species of mammal.

6.3.4. Habitat types

- Estuaries [1130]
- Mudflats and sandflats not covered by seawater at low tide [1140]
- Water courses of plain to montane levels with the *Ranunculus fluitans* and *Callitriche-Batrachion* vegetation [3260]
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [91A0]
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) [91E0]

6.3.5. Life forms

- Freshwater Pearl Mussel *Margaritifera margaritifera* [1029]
- Sea Lamprey *Petromyzon marinus* [1095]
- Brook Lamprey *Lampetra planeri* [1096]
- River Lamprey *Lampetra fluviatilis* [1099]
- Twait Shad *Alosa fallax* [1103]
- Salmon *Salmo salar* [1106]
- Otter *Lutra lutra* [1355]
- Common Seal *Phoca vitulina* [1365]

6.3.6. **Conservation objectives:** The conservation objectives for the site are to maintain the favourable conservation condition of the aforementioned habitat types and life forms. Conservation objectives, attributes and targets are detailed in a 34-page report (NPWS, 2011).

6.3.7. **Overlap:** The site overlaps with parts of The Raven SPA No IE0004019, The Raven Point Nature Reserve SAC No IE0000710, Wexford Harbour and Slobs SPA No IE0004076, and the Seas off Wexford candidate SPA No 004237 (Figure 16).

6.4. Qualifying interests and conservation objectives

- 6.4.1. The overriding conservation objective of Natura 2000 sites is the maintenance or restoration of the habitats and species that these sites have been selected and designated for.

Potential impact site	Qualifying interests	Conservation objectives
Wexford Harbour and Slobs SPA Site Code IE0004076	'Wetland and Waterbirds' [A999] and 32 named species of wild birds (paragraph 6.2).	Site specific: To maintain the favourable conservation condition of the species of special conservation interest in Wexford Harbour and Slobs SPA. That objective is defined by both the population trend and distribution of the species in question. Details are given in a 39-page report (NPWS, 2012a).
Slaney River Valley SAC Site Code IE0000781	Five habitat types, the Freshwater Pearl Mussel, five species of fish and two species of mammal.	Site specific: To maintain or restore the favourable conservation condition of the Annex I habitats and/or Annex II species for which the SAC has been selected. Details are given in a 27-page report (NPWS, 2011).

Table 3. Qualifying interests and conservation objectives.

6.5. Geological heritage sites

- 6.5.1. The site of the proposed development is not rated among the 42 sites rated of geological or of geomorphological importance in Co Wexford (yellow stars in Figure 17). The nearest sites of geological or of geomorphological importance to the site of the proposed development are at Wexford Harbour, Tincone, and Curracloe Beach and The Raven Point, (Meehan *et al*, 2019).



Figure 17. Geological heritage sites (starred).

(Meehan, *et al*, 2019 page 58 at <https://www.gsi.ie/en-ie/publications/Pages/The-Geological-Heritage-of-Wexford.aspx>)

7.IMPACT SCREENING

7.1. Screening matrix

- 7.1.1. The first step in the assessment process is screening. *“The triggers for appropriate assessment [the second step in the Appropriate Assessment process] are based on a ‘likelihood’ (read as ‘possibility’) of a potential significant effect occurring and not on certainty. This test is based on the precautionary principle.”* (OPR, 2021 page 7).
- 7.1.2. It is considered that a likelihood (read as ‘possibility’) exists of potentially significant effects occurring if the proposed development is advanced, namely (1) disturbance of key species of wild birds that the site has been selected and designated for, and (2) runoff of deleterious matter to the adjoining waterbodies resulting in a deterioration in the quality of the waters that sustain these sites and/or the underlying groundwater (Source: paragraph 5.2.1).
- 7.1.3. Bearing in mind the size, nature and scale of the project (Section 3), the sensitivity of the receiving environment (Section 4), the outcome of potential impact identification and/or prediction, S-P-R modelling, and the identification of both the zone of impact and influence (Section 5), and potentially impacted Natura 2000 sites (Section 6), all Natura 2000 sites within a radius of 15km of the site of the project are screened in the following table (Table 4) to determine if the project has any potential to impact on the conservation objectives of these sites via the source-pathway-receptor risk assessment conceptual modelling tool.

Distance from the subject site	Natura 2000 Site Name	SAC Site Code	SPA Site Code	Potential impact on the conservation objectives of the Natura 2000 sites	Screen in or out
0-5km	Wexford Harbour and Slobs	-	IE0004076	Adverse impacts due to both disturbance and water pollution are considered possible.	In
	Slaney River Valley	IE0000781	-		
5-10km	Screen Hills	IE0000708		Adverse impacts are considered unlikely due to the separation distance that is in excess of 5km. The zone of impact and influence of possible adverse impacts is considered to extend for no more than 300m (paragraph 5.4.2 and Figure 13).	Out
	The Raven	-	IE0004019		
	Raven Point Nature Reserve	IE0000710	-		
10-15km	Seas Off Wexford	-	c004237		
	Blackwater Bank	IE0002953	-		
	Long Bank	IE0002161	-		

Table 4. Screening matrix.

7.2. Screening conclusion, determination, and statement

- 7.2.1. The proposed development is not directly connected to, or necessary for, the management of any Natura 2000 site.
- 7.2.2. In accordance with Article 6(3) of the Habitats Directive and Part 5 of the Birds and Natural Habitats Regulations, relevant case law, established best practice, and the precautionary principle, this screening report concludes, based on objective information, that the development has the potential to adversely affect the integrity of both the Wexford Harbour and Slobbs Natura 2000 site and the Slaney River Valley Natura 2000 site.
- 7.2.3. In reaching the conclusion of the screening assessment, no account was taken of any project-specific mitigation measures intended to avoid or reduce any potentially harmful effects of the project on any Natura 2000 site.
- 7.2.4. Appropriate Assessment and the submission of a Natura Impact Statement (NIS) is therefore required considering that the triggers for appropriate assessment are based on a 'likelihood' and not on certainty.
- 7.2.5. While access to more data is always highly desirable, it is considered that sufficient information is available to carry out an assessment of the significant effects likely to arise from the proposed development. Any insufficiency of information is compensated for by the application of the precautionary principle.

Part 2: Natura Impact Statement

(Stage 2 of the Appropriate Assessment process)

8. IMPACT EVALUATION

8.1. Overview

- 8.1.1. Since the proposed development is considered to have the potential to have adverse impacts on both the Wexford Harbour and Sloba Natura 2000 site and the Slaney River Valley Natura 2000 site due to (1) disturbance of key species of wild birds that the site has been selected and designated for, and (2) runoff of deleterious matter to the adjoining waterbodies resulting in a deterioration in the quality of the waters that sustain these sites and/or the underlying groundwater (paragraph 5.2.1), and since these impacts cannot be mitigated in the absence of project-specific measures, the project must proceed to Stage 2 of the Appropriate Assessment process, that is, Natura Impact Assessment for both the Wexford Harbour and Sloba Natura 2000 site and the Slaney River Valley Natura 2000 site.
- 8.1.2. This section evaluates the potential adverse impacts identified above (Section 5) against the conservation objectives of both the Wexford Harbour and Sloba Natura 2000 site and the Slaney River Valley Natura 2000 site, the two sites considered to be in the zone of impact and influence of the proposed development.
- 8.1.3. Since the proposed development adjoins Wexford Harbour, specific questions detailed in guidance regarding 'Marine Natura Impact Statements in Irish Special Areas of Conservation' (NPWS, 2012b) that need to be considered when conducting a screening assessment of likely effects are outlined below (Table 5). A precautionary approach is regarded as fundamental, and, in cases of uncertainty, it should be assumed the effects could be significant.

Question	Response
Is it likely that the potential ecological effects associated with the operation/activity alone or in combination with other operations/activities might have a significant adverse impact on an Annex I habitat for which the Special Area of Conservation is designated?	Yes, it is likely when 'likely' is interpreted to mean 'possible' (OPR, 2021 page 7).
Is it likely that the potential ecological effects associated with the operation/activity alone or in combination with other operations/activities might have a significant adverse impact on the habitat of an Annex II species for which the Special Area of Conservation is designated?	Yes, it is likely when 'likely' is interpreted to mean 'possible' (OPR, 2021 page 7).
Is it likely that the potential ecological effects associated with the operation/activity alone or in combination with other operations/activities might have a significant adverse impact on an Annex II species for which the Special Area of Conservation is designated?	Yes, it is likely when 'likely' is interpreted to mean 'possible' (OPR, 2021 page 7).

Table 5. Assessment of potential impacts.

8.2. Potentially adverse effects

- 8.2.1. **Management of Natura 2000 sites.** The proposed development is not directly connected with or necessary to the management of Natura 2000 sites.
- 8.2.2. **The sensitive receptors.** Elements of the proposed development are identified and assessed for their potential to cause likely significant effects on the Wexford Harbour and Slobs Natura 2000 site and the Slaney River Valley Natura 2000 site, the two sensitive receptors of the Natura 2000 network located in the zone of impact and influence.
- 8.2.3. **Impact significance.** Impacts are considered significant if the risk of them actually occurring cannot be ruled out.
- 8.2.4. **Direct versus indirect.** The proposed development has the potential to have a direct effect on the Wexford Harbour and Slobs SPA because it is located in that site. Potential impacts on the Slaney River Valley SAC are considered to be indirect as the proposed development is located outside that site.
- 8.2.5. **Direct impacts.** Direct impacts that may arise on the Wexford Harbour and Slobs SPA from the proposed development are tabulated below (Table 6).

Impact	Sources	Path	Receptor	Significance for the receptor
Disturbance	Noise and activities associated with the proposed development.	Air	Wild birds that the site has been selected and designated for.	<ul style="list-style-type: none"> Disturbance and displacement. Disruption of feeding and/or roosting. Expenditure of additional energy.
Water pollution	Accidental spillages of fuels, oils, and/or other deleterious matter associated with the proposed development.	Water	Runoff, surface waters, and/or groundwater.	<ul style="list-style-type: none"> Deterioration of water quality and substrates in the Natura 2000 site. Resulting adverse impacts on habitats and species. Knock-on adverse impacts, via food chains and food webs, on wild birds that are qualifying interests that the Wexford Harbour and Slobs SPA has been designated for.

Table 6. Significance of direct impacts.

8.2.6. **Indirect impacts.** Indirect impacts that may arise on the Slaney River Valley SAC from the proposed development are tabulated below (Table 7).

Impact	Sources	Path	Receptor	Significance for the receptor
Water pollution	Pollutants entering surface waters and/or groundwater and draining ultimately to the Slaney River Valley Natura 2000 site in Wexford Harbour.	Water	Habitats and species that the site has been selected and designated for.	<ul style="list-style-type: none"> • Deterioration of water quality and substrates in the Natura 2000 site. • Resulting adverse impacts on habitats and species that are qualifying interests of the Slaney River Valley SAC. • Knock-on adverse impacts, via food chains and food webs.

Table 7. Significance of indirect impacts.

8.2.7. **Impact assessment.** The significance of a risk is assessed and evaluated against the conservation objectives of the impacted Natura 2000 site. Conservation objectives are, in turn, defined by attributes and corresponding targets. Impacts are regarded significant if the risk they pose is likely to undermine the conservation objectives of any Natura 2000 site either alone or in-combination with other plans and projects.

8.2.8. **Conservation objectives.** The conservation objective for each of the water-dependent qualifying interests of both the Wexford Harbour and Slob's Natura 2000 site and the Slaney River Valley SAC that occur in the zone of influence is to maintain the favourable condition of each listed habitat. These objectives are defined by attributes (https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000781.pdf).

8.2.9. **Assessment of direct impacts.** Direct impacts that may arise on the Wexford Harbour and Slobbs SPA from the proposed development are assessed below (Table 8).

Impact	Assessment
<ul style="list-style-type: none"> • Disturbance and displacement of wild birds. • Disruption of feeding and/or roosting. • Expenditure of additional energy. 	<p>Impacts are not considered significant as the proposed development comprises the upgrading of an existing access road. Consequently, human activity, and vehicle and machinery movements and associated noises, are all normal everyday characteristics of the site that wild birds using the area are habituated to, in particular the 'Wetland and Waterbirds' [A999] together with the 32 named species of wild birds that the site has been selected and designated for (paragraph 6.2.3 above). Furthermore, the construction phase will be temporary, and the operational phase will be no different than that that prevailed when the former road was in use.</p> <p>Furthermore, for much of its length the site is screened from the sloblands by trees (see photographs Section 11). For all of its length, the site is screened from Wexford Harbour by the sea wall embankment.</p> <p>The conservation objectives for the special conservation interests (SCIs) of Wexford Harbour and Slobbs SPA are to maintain the favourable conservation condition of the SCIs. These, in turn, are defined by the following two attributes: population trend and distribution. Advancement of the proposed development will not adversely impact either the population trend or the distribution of the site's SCIs as no adverse impacts on these attributes have been identified.</p>
<ul style="list-style-type: none"> • Deterioration of water quality and substrates in the Natura 2000 site. • Resulting adverse impacts on habitats and species. • Knock-on adverse impacts, via food chains and food webs, on wild birds that are qualifying interests that the Wexford Harbour and Slobbs SPA has been designated for. 	<p>Impacts are not considered significant as there is no plan to discharge any deleterious matter to either surface waters or to groundwater. Any discharges of any deleterious matter will be entirely accidental and are likely to be of inconsequential. The receiving waters in the drain adjoining the site are very slow moving because of the flatness of the reclaimed wetland and mitigation measures will be in place to address any unplanned accidental spillages.</p>

Table 8. Assessment of direct impacts.

8.2.10. **Assessment of indirect impacts.** Indirect impacts that may arise on the Slaney River Valley SAC from the proposed development are assessed below (Table 9).

Impact	Assessment
<ul style="list-style-type: none"> • Deterioration of water quality and substrates in the Natura 2000 site. • Resulting adverse impacts on habitats and species that are qualifying interests of the Slaney River Valley SAC. • Knock-on adverse impacts, via food chains and food webs. 	<p>Of the five habitats that the Slaney River Valley SAC is designated for (paragraph 6.3.4 above) two occur in Wexford Harbour: Estuaries [1130], and Mudflats and sandflats not covered by seawater at low tide [1140]. The conservation objectives of both of these habitats are to maintain their favourable conservation condition as defined by the following two attributes: habitat area and community distribution. Habitat area will not be impacted and in the event of a spillage, prompt clean-up operations and dilution due to the tidal nature of the impacted site will result in a negligible impact on community distribution.</p> <p>The Slaney River Valley SAC is designated for eight species (paragraph 6.3.5 above). Neither the Freshwater Pearl Mussel <i>Margaritifera margaritifera</i> [1029] nor the Brook Lamprey <i>Lampetra planeri</i> [1096] can be impacted as they do not occur in tidal waters.</p> <p>Of the remaining six species, the Sea Lamprey <i>Petromyzon marinus</i> [1095], River Lamprey <i>Lampetra fluviatilis</i> [1099], Twaite Shad <i>Alosa fallax</i> [1103], and Salmon <i>Salmo salar</i> [1106] are known to move through Wexford Harbour in order to spawn. These fish species are unlikely to be impacted as their presence is temporary, they swim in deeper channels, and are highly mobile.</p> <p>The remaining two species: Otter <i>Lutra lutra</i> [1355] and Common Seal <i>Phoca vitulina</i> [1365] are very unlikely to frequent the area during working hours. Tidal flushing twice each day will remove any trace of accidental spillages.</p> <p>Impacts are therefore not considered significant as there is no plan to discharge any deleterious matter to either surface waters or to groundwater. Any discharges of any deleterious matter will be entirely accidental and are likely to be of inconsequential as mitigation measures will be in place to address any unplanned accidental spillages. If any habitat deterioration occurs it is likely to be of low impact and to be temporary.</p>

Table 9. Assessment of indirect impacts.

8.3. Overlap and adjacent sites

8.3.1. The potentially impacted sites, the Wexford Harbour and Slobbs Natura 2000 site and the Slaney River Valley Natura 2000 site overlap so the conservation objectives of both sites are considered in conjunction (paragraph 6.2.5 and Figure 16).

8.3.2. The only other adjacent designated site is the Wexford Wildfowl Nature Reserve.

8.4. In-combination impacts

- 8.4.1. In-combination impacts are impacts arising from other plans or projects that could act in-combination with the current project to affect the conservation objectives of a Natura 2000 site.
- 8.4.2. The consideration of in-combination effects is not restricted to similar types of plans or projects covering the same sector of activity. All types of plans or projects that could, in-combination with the project under consideration, have a significant effect, should be considered. In-combination effects must examine plans or projects that are completed, approved but not started or uncompleted, proposed, i.e., for which an application for approval or consent has been made, including refusals subject to appeal and not yet determined, proposals in adopted plans, and proposals in finalised draft plans formally published or submitted for consultation or adoption.
- 8.4.3. While there are several plans and a very large number of projects in the wider environs of the proposed development (Figure 18) that could act in-combination with the current project to affect the conservation objectives for Wexford Harbour, there are only four in the immediate vicinity of the proposed development at North West Slob, Ardcahan (Figure 19, Figure 19, and Table 10).

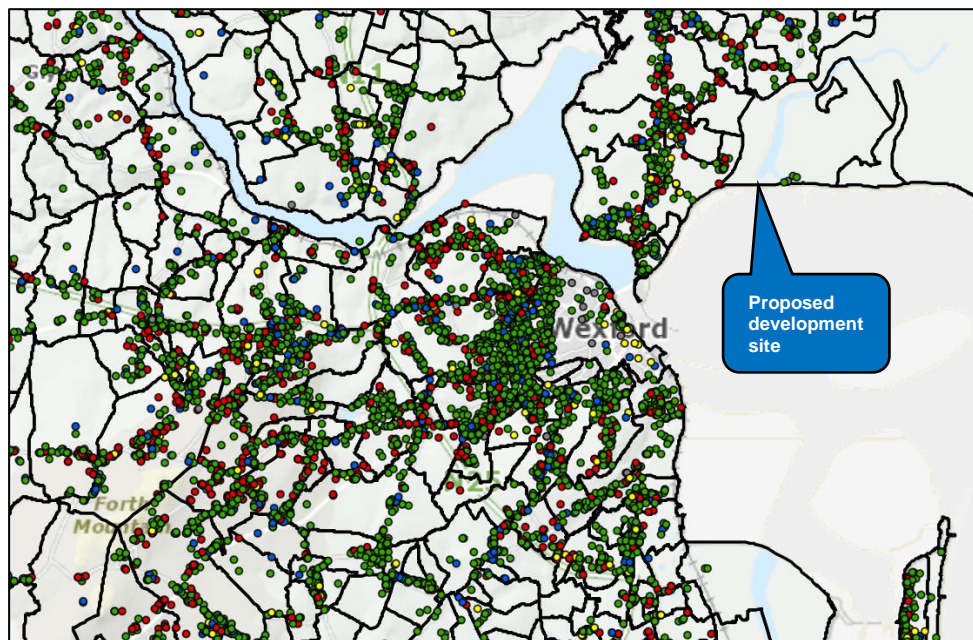


Figure 18. Planning points in the wider vicinity of the proposed development.

(Source: <https://maps.wexford.ie/imaps/>)

Note: Planning points are colour coded as follows: Green = granted, Red = refused, Blue = invalid or withdrawn, and Yellow = no decision.



Figure 19. Planning points in the immediate vicinity of the proposed development.

(Source: <https://maps.wexford.ie/imaps/>)

Planning reference number	Application type	Registration date	Proposed development	Decision
82381	Permission	15 February 1999	Extension to and reconstruction of the visitor centre	Granted subject to conditions
20033339	Permission	1 October 2003	Erect a new channel / sea watch bird hide	Granted subject to conditions
20064590	Permission	30 November 2006	Erection of agricultural workshop and storage shed. Conversion of existing garage to offices	Granted subject to conditions
EXD00507	Exempted development	23 October 2013	Ramped and stepped access to existing building, provision of a disabled parking	Exempted development

Table 10. Planning applications in the vicinity of the proposed development.

8.5. *Ex situ* and wider countryside impacts

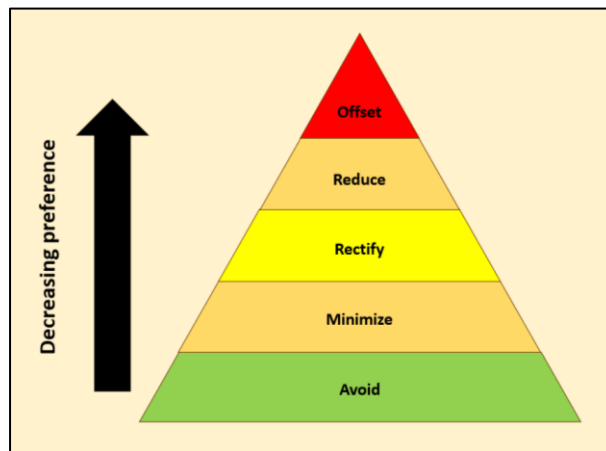
- 8.5.1. *Ex situ* impacts are 'off-site' impacts regarding adjacent Natura 2000 sites, for example, impacts on birds that are protected in a Special Protection Area but that obviously fly out of that protected area and into areas where they do not enjoy any level of protection.
- 8.5.2. *Ex situ* impacts do not arise in the present case.

8.6. Mitigation

8.6.1. The assessment conducted under Article 6(3) of the Habitats Directive must contain complete, precise and definitive findings and conclusions on the effects of the plan/project proposed on the Natura 2000 site concerned. The competent authorities can only approve the project after having ascertained that it will not adversely affect the integrity of the site (EC, 2022 page 8).

8.6.2. Where the appropriate assessment cannot exclude adverse effects on the integrity of the site, even after applying mitigation measures, it should identify residual adverse effects. This will be important in case the project is intended to be subject to the derogation procedure according to Article 6(4) (EC, 2022 page 8).

8.6.3. The risk mitigation hierarchy in order of decreasing preference is avoid, minimise, rectify, reduce, and offset. Avoidance is not possible in the present case as the proposed development is site-specific to its location. Any adverse impacts can be minimised, and any damage done can be rectified and reduced. Offsetting (Hayes and Morrison-Saunders, 2007) does not arise as,



since there will be no loss of habitat from any Natura 2000 site, there will be no requirement to offset the loss of habitat resulting from the presently proposed development.

8.6.4. The only issues arising from the present application with a potential to have an adverse impact on both the Wexford Harbour and Slob's Natura 2000 site and the Slaney River Valley Natura 2000 site are considered to be (1) disturbance of key species of wild birds that the site has been selected and designated for, and (2) runoff of deleterious matter to the adjoining waterbodies resulting in a deterioration in the quality of the waters that sustain these sites and/or the underlying groundwater (paragraph 5.2.1).

8.6.5. It is proposed to mitigate these potentially adverse impacts via the following combination of standard procedures and site-specific measures.

- **Standards.** Works on site will be conducted in line with best practice by qualified and reputable contractors. All contractors employed on site will be contractually obliged to comply with all measures mandated by the conditions attached to any approval granted and any additional measures required by the developers. The Site Manager will be responsible for the implementation of both planning conditions and mitigation measures.

- **Disturbance.** Since many of the key species of wild bird that the Natura 2000 site is selected and designated for are wintering waterbirds and are present onsite only during the period September to March, work on the proposed development will be conducted during the period early April to late August to avoid disturbance of key species. Works will also be confined to daylight hours during the normal working day when movements and noise on the application site are regular characteristics of the site..
- **Drainage.** It is not proposed to discharge any liquids to the existing land drains draining to Wexford Harbour.
- **Toxic chemicals.** No toxic chemicals will be used onsite.
- **Fuel.** No fuel will be stored on site, and no refuelling of vehicles will be conducted on site. Parked vehicles will have no direct flow path to water. An emergency spill kit will be available on site. All site operatives will be appropriately trained or instructed, and an Emergency Response Procedure will be put in place to deal with minor spillages. All waste oil, empty oil containers and other hazardous wastes will be disposed of in conjunction with the requirements of the Waste Management Act 1996.
- **Waste management.** Minor wastes generated on site will be collected for recycling and/or disposal by permitted contractors in accordance with Waste Management Regulations and via existing waste management practices at the test centre.

8.7. Appropriate Assessment screening matrix

8.7.1. Direct impacts on wild birds listed as Special Conservation Interests of the Wexford Harbour and Slobbs Natura 2000 site are screened in the summary matrix below (Table 8).

Direct impact	Source	Receptor	Significance	Screened in or out
Disturbance and Water pollution	Noise and movements of people and machinery Pollutants, deleterious matter, silt and sediment entering surface waters and/or groundwater from the construction phase of the proposed development and draining ultimately to the Natura 2000 site.	<ul style="list-style-type: none"> • Little Grebe <i>Tachybaptus ruficollis</i> [A004] • Great Crested Grebe <i>Podiceps cristatus</i> [A005] • Cormorant <i>Phalacrocorax carbo</i> [A017] • Grey Heron <i>Ardea cinerea</i> [A028] • Bewick's Swan <i>Cygnus columbianus bewickii</i> [A037] • Whooper Swan <i>Cygnus</i> [A038] • Light-bellied Brent Goose <i>Branta bernicla hrota</i> [A046] • Shelduck <i>Tadorna tadorna</i> [A048] • Wigeon <i>Anas penelope</i> [A050] • Teal <i>Anas crecca</i> [A052] • Mallard <i>Anas platyrhynchos</i> [A053] • Pintail <i>Anas acuta</i> [A054] • Scaup <i>Aythya marila</i> [A062] • Goldeneye <i>Bucephala clangula</i> [A067] • Red-breasted Merganser <i>Mergus serrator</i> [A069] • Hen Harrier <i>Circus cyaneus</i> [A082] • Coot <i>Fulica atra</i> [A125] • Oystercatcher <i>Haematopus ostralegus</i> [A130] • Golden Plover <i>Pluvialis apricaria</i> [A140] • Grey Plover <i>Pluvialis squatarola</i> [A141] • Lapwing <i>Vanellus</i> [A142] • Knot <i>Calidris canutus</i> [A143] • Sanderling <i>Calidris alba</i> [A144] • Dunlin <i>Calidris alpina</i> [A149] • Black-tailed Godwit <i>Limosa limosa</i> [A156] • Bar-tailed Godwit <i>Limosa lapponica</i> [A157] • Curlew <i>Numenius arquata</i> [A160] • Redshank <i>Tringa totanus</i> [A162] • Black-headed Gull <i>Chroicocephalus ridibundus</i> [A179] • Lesser Black-backed Gull <i>Larus fuscus</i> [A183] • Little Tern <i>Sterna albifrons</i> [A195] • Greenland White-fronted Goose <i>Anser albifrons flavirostris</i> [A395] 	Disturbance and/or displacement Deterioration of water quality and substrates in the Natura 2000 site resulting in adverse impacts on the species that the site has been designated for. Knock-on adverse impacts via food chains and food webs on the species that are the Special Conservation Interests that the Special Protection Area has been designated for.	Screened out as a result of the mitigation measures proposed (Section 8.6).

Table 11. Appropriate Assessment screening matrix.

8.7.2. Indirect impacts on water-dependent habitats and species listed as qualifying interests of the Slaney River Valley Natura 2000 site are screened in the summary matrix below (Table 12).

Indirect impact	Source	Receptor	Significance	Screened in or out
Water pollution	Pollutants, silt and sediment entering surface waters or groundwater from the operational phase of the proposed development and draining ultimately to the Natura 2000 site.	<p>The following five water-dependent habitats:-</p> <ul style="list-style-type: none"> • Estuaries [1130] • Mudflats and sandflats not covered by seawater at low tide [1140] • Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260] • Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] 	Deterioration of water quality and substrates in the Natura 2000 site resulting in adverse impacts on habitats, plant species, and plant communities that are qualifying interests that the Special Area of Conservation has been classified for.	Screened out as a result of the mitigation measures proposed (Section 8.6).
		<p>The following eight named species:-</p> <ul style="list-style-type: none"> • Freshwater Pearl Mussel <i>Margaritifera margaritifera</i> [1029] • Sea Lamprey <i>Petromyzon marinus</i> [1095] • Brook Lamprey <i>Lampetra planeri</i> [1096] • River Lamprey <i>Lampetra fluviatilis</i> [1099] • Twaité Shad <i>Alosa fallax</i> [1103] • Salmon <i>Salmo salar</i> [1106] • Otter <i>Lutra lutra</i> [1355] • Common Seal <i>Phoca vitulina</i> [1365] 	Knock-on adverse impacts via food chains and food webs on the species that are the Special Conservation Interests that the Special Protection Area has been classified for.	

Table 12. Appropriate Assessment screening matrix.

9. CONCLUSIONS

9.1. Integrity of Site Checklists

- 9.1.1. The following 'Integrity of Site Checklist' is presented with regard to both the Wexford Harbour and Slobbs Natura 2000 site and the Slaney River Valley Natura 2000 site (DEHLG, 2010 page 83 after Box 10, EC, 2002).

Conservation objectives: does the project or plan have the potential to	Yes/No
Cause delays in progress towards achieving the conservation objectives of the site?	No
Interrupt progress towards achieving the conservation objectives of the site?	No
Disrupt those factors that help to maintain the favourable conditions of the site?	No
Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site?	No
Other objectives: does the project or plan have the potential to	Yes/No
Cause changes to the vital defining aspects (e.g., nutrient balance) that determine how the site functions as a habitat or ecosystem?	No
Change the dynamics of the relationships (between, for example, soil and water or plants and animals) that define the structure and/or function of the site?	No
Interfere with predicted or expected natural changes to the site (such as water dynamics or chemical composition)?	No
Reduce the area of key habitats?	No
Reduce the population of key species?	No
Change the balance between key species?	No
Reduce diversity of the site?	No
Result in disturbance that could affect population size or density or the balance between key species?	No
Result in fragmentation?	No
Result in loss or reduction of key features (e.g., tree cover, tidal exposure, annual flooding, etc.)?	No

Table 13. Integrity of Site Checklist.

- 9.1.2. In the context of appropriate assessment there is a clear difference between the 'impact' which is the source and the 'effect' which is how it relates to the conservation objectives.
- 9.1.3. The effects of the proposed works on the integrity of both the Wexford Harbour and Slobbs Natura 2000 site and the Slaney River Valley Natura 2000 site may be assessed via the following checklist (Table 14) (EC, 2022 page 8).

Does the plan or project have the potential to:-	Yes/No
hamper or cause delays in progress towards achieving the site's conservation objectives?	No
reduce the area, or quality, of protected habitat types or habitats of protected species present on the site?	No
reduce the population of the protected species significantly present on the site?	No
result in disturbance that could affect the population size or density or the balance between species?	No
cause the displacement of protected species significantly present on the site and thus reduce the distribution area of those species in the site?	No
result in a fragmentation of Annex I habitats or habitats of species?	No
result in a loss or reduction of key features, natural processes or resources that are essential for the maintenance or restoration of relevant habitats and species in the site (e. g. tree cover, tidal exposure, annual flooding, prey, food resources)?	No
disrupt the factors that help maintain the favourable conditions of the site or that are needed to restore these to a favourable condition within the site?	No
interfere with the balance, distribution and density of species that are the indicators of the favourable conditions of the site?	No

Table 14. Assessment of effects on the integrity of a site: a checklist.

(Source: EC, 2022 page 8)

9.2. Concluding statement and determination

- 9.2.1. The proposed development is not directly connected to, or necessary for, the management of any Natura 2000 site.
- 9.2.2. It has been established that no Natura 2000 site other than the Wexford Harbour and Slobs Natura 2000 site and the Slaney River Valley Natura 2000 site is likely to be adversely impacted by advancement of the proposed development.
- 9.2.3. Possible impacts on the Wexford Harbour and Slobs Natura 2000 site are considered to be direct as the proposed development is located in that Natura 2000 site. Possible impacts on the Slaney River Valley Natura 2000 site are considered to be indirect as the proposed development is not located in that Natura 2000 site.
- 9.2.4. It has been established that the only sources of possible impact are the disturbance of wild birds and deterioration of water quality in the impacted sites.
- 9.2.5. Since Wexford Harbour and Slobs Natura 2000 site has been selected and designated for the protection of wild birds, that Natura 2000 site has the potential to be subject to indirect impacts.
- 9.2.6. Since both the Wexford Harbour and Slobs Natura 2000 site and the Slaney River Valley Natura 2000 site are in hydrological connection with the proposed development site and are down-gradient receptors for both groundwater and surface water draining from the subject site, these Natura 2000 sites have the potential to be subject to indirect impacts.
- 9.2.7. The nature, size and location of the proposed works and possible impacts arising from same, the qualifying interests, conservation objectives of the relevant Natura 2000 sites, and the potential for cumulative impacts arising from other plans and current activities or existing pressures on the relevant Natura 2000 sites were all considered in impact evaluation.
- 9.2.8. The proposed mitigation measures for the proposed development ensure that the proposed development is unlikely to have any significant impact on the integrity of either the Wexford Harbour and Slobs Natura 2000 site or the Slaney River Valley Natura 2000 site. *“The ‘integrity of the site’ can be usefully defined as the coherent sum of the site’s ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated”* (EC, 2018 page 50).
- 9.2.9. Therefore, in accordance with Article 6(3) of the Habitats Directive and Part 5 of the Birds and Natural Habitats Regulations, relevant case law, established best practice, and the precautionary principle, the overall conclusion and determination of this Natura Impact Statement is, based on the evidence set out above, that provided the mitigation measures set out in Section 8.6 are fully implemented, the proposed development will not, either alone or in combination with other plans or projects, give rise to significant negative effects on the conservation objectives or site integrity of the Wexford Harbour and Slobs SPA, the Slaney River Valley SPA, or any other Natura 2000 site and is not likely to compromise any nature conservation objectives or the integrity of any Natura 2000 site.

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11. PHOTOGRAPHS

All photographs were taken by Jim Hurley on 20 March 2024.



Plate 1. Southern extremity of Ardcavan Lane (local tertiary public road L-70083-1) (foreground) with the entrances to Ardcavan Strand (centre) and the Wexford Wildfowl Reserve (left). The entrance to the Wexford Wildfowl Reserve is across a land drainage channel that discharges on Ardcavan Strand.



Plate 2. Outlet of the land drainage channel on Ardcavan Strand with a view east along the sea wall and Wexford Harbour (right).



Plate 3. Entrance to the access road to the Wexford Wildfowl Reserve with the concrete deck (foreground) of the bridge over the land drainage channel, and signage on the embankment of the sea wall (right).



Plate 4. View east of the existing access road and site of the proposed resurfacing.



Plate 5. View east with a field entrance and the sloblands (left) and the sea wall embankment (right).



Plate 6. The first of three laybys.



Plate 7. Emergency repair works on a pot-holed section of the road that was breaking up, with stone filling (left) to attenuate surface rainwater runoff. Note that from this point on the road is screened from the sloblands (left) by vegetation.



Plate 8. The second of three laybys.



Plate 9. The Pat Walshe Hide with a parking area and an agricultural entrance (left).



Plate 10. The third of three laybys.



Plate 11. The Pump House Hide (left) with part the Pump House visible behind it, and the entrance to the Visitor Centre Car Park with the reserve workshop and storage shed visible behind the car park.



Plate 12. The Visitor Centre Car Park and the reserve workshop and storage shed (left) and the end point of the proposed resurfacing works (arrowed)

12. APPENDICES

12.1. Appendix 1: The Natura 2000 network.

Natura 2000 is a network of areas designated to protect threatened species and habitats throughout the European Union (EU). It is the largest coordinated network of protected areas in the world, extending across all 27 EU member states, both on land and at sea (Source: <https://www.eea.europa.eu/themes/biodiversity/natura-2000/the-natura-2000-protected-areas-network>). In February 2022, the Natura 2000 network comprised 26,935 sites (Source: <https://op.europa.eu/en/publication-detail/-/publication/2f41bbd8-9916-11ec-8d29-01aa75ed71a1/language-en/format-PDF/source-252120630>).

In 1979, the Birds Directive (as amended in 2009) established an EU-wide protection regime for all bird species naturally occurring in the EU. It included classification by member states of Special Protection Areas (SPAs) for 194 particularly threatened bird species and for all migratory birds.

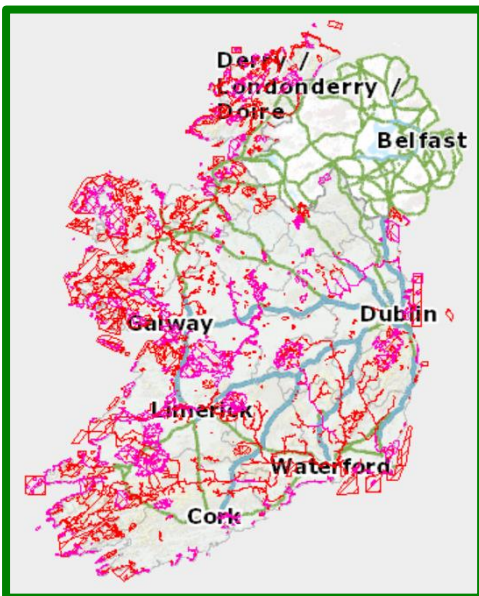
This approach was extended through the 1992 Habitats Directive, which also provided for the establishment of a representative system throughout the EU of legally protected habitats (places) and species other than birds. The areas are named Sites of Community Importance (SCI) and aim for the conservation of the 233 habitat types listed in Annex I of the Directive and the 900 plus species listed in Annex II. Member states identify SCIs and designate them as Special Areas of Conservation (SACs).



SPAs under the Birds Directive and SACs under the Habitats Directive together make up the Natura 2000 network.

The target of both directives (specifically set out within the Habitats Directive and echoed in the Birds Directive) is to ensure the long-term sustainability of the habitats and species they have been set up to protect.

Natura 2000 sites in Ireland



The requirement under the Birds Directive and the Habitats Directive to designate Natura 2000 sites is transposed into national legislation by Part XAB, Section 177U of the *Planning and Development Act, 2000 S I No 30/2000* as amended, and Regulation 42 of the *European Communities (Birds and Natural Habitats) Regulations 2011-2021*. Natura 2000 sites are known in Irish legislation as 'European sites'.

Of the 27,031 Natura 2000 sites in the European Union, 604 are in the Republic of Ireland (IE) covering an area of 19,480km² or 13% of the country's land area (*Natura 2000 Barometer*, No 52, August 2022).

All 604 Natura 2000 sites found in Ireland are detailed on the website of the government's

National Parks and Wildlife Service (NPWS) at <https://www.npws.ie/> with site descriptions, maps, aerial photographs, legislation, etc.

12.2. Appendix 2: The Appropriate Assessment process.

Definition. Appropriate Assessment (AA) is an assessment of the potential adverse effects of a plan or project on Natura 2000 sites.

Regulatory context and legislative requirements. Natura 2000 sites are protected by national and European law (see Appendix 12.1). The requirement for Appropriate Assessment is set out in Articles 6(3) and 6(4) of the Habitats Directive (Directive 92/43/EEC) (<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31992L0043>). The Habitats Directive and the associated Bird Directive (2099/147/EC) (https://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm) are transposed into Irish law by Part XAB, Section 177U of the *Planning and Development Act, 2000 S I No 30/2000* as amended (<https://www.irishstatutebook.ie/eli/2000/act/30/enacted/en/html>) and consolidated, and the *European Communities (Birds and Natural Habitats) Regulations 2011*, S I No 477/2011 as amended (<http://www.irishstatutebook.ie/eli/2011/si/477/made/en/print>). Part 4 of these Habitats Regulations addresses activities, plans or projects affecting European sites, while Part 5 addresses Appropriate Assessment. In Irish legislation, Natura 2000 sites are known as ‘European sites’.

Four stages. The AA process is conducted in the following four stages. The outcome at each successive stage determines whether a further stage in the process is required.

Stage One: Screening for Appropriate Assessment. Screening is the process that addresses and records the reasoning and conclusions in relation to whether a plan or project is directly connected to or necessary for the management of the site, and whether that plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of the site’s conservation objectives. If no adverse effects are identified, the project may proceed. If adverse effects are identified that are deemed to be potentially significant, significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2. A detailed description of the screening process may be accessed at <https://www.opr.ie/wp-content/uploads/2021/03/9729-Office-of-the-Planning-Regulator-Appropriate-Assessment-Screening-booklet-15.pdf>.

Stage Two: Appropriate Assessment. This stage considers the adverse effects of the plan or project identified in Stage One, establishes if they are likely to be potentially significant either alone or in combination with other projects or plans, and determines if they will have adverse effects on the integrity of any Natura 2000 site. It also includes any mitigation measures necessary to avoid, reduce or offset negative effects. If potentially adverse effects are not deemed to be significant or if they can be mitigated, the project may proceed. If the assessment is negative, then the process must proceed to Stage Three or Stage Four, or the plan or project should be abandoned.

Stage Three: Alternative Solutions. This stage assesses any alternative solutions or options that could enable the plan or project to proceed without adverse effects on the integrity of a Natura 2000 site. The process must return to Stage Two as alternatives will require appropriate assessment to proceed. Demonstrating that all reasonable alternatives have been considered and assessed, and that the least damaging option has been selected it is then necessary to progress to Stage Four.

Stage Four: Imperative Reasons of Overriding Public Interest (IROPI). This stage is the main derogation process of Article 6(4) which examines whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project that will have adverse effects on the integrity of a Natura 2000 site to

proceed in cases where it has been established that no less damaging alternative solution exists. Compensatory measures must be proposed and assessed. The Commission must be informed of the compensatory measures. Compensatory measures must be practical, implementable, likely to succeed, proportionate and enforceable, and must be approved by the Minister.

Stage One and Stage Two are summarised below (Figure 20).

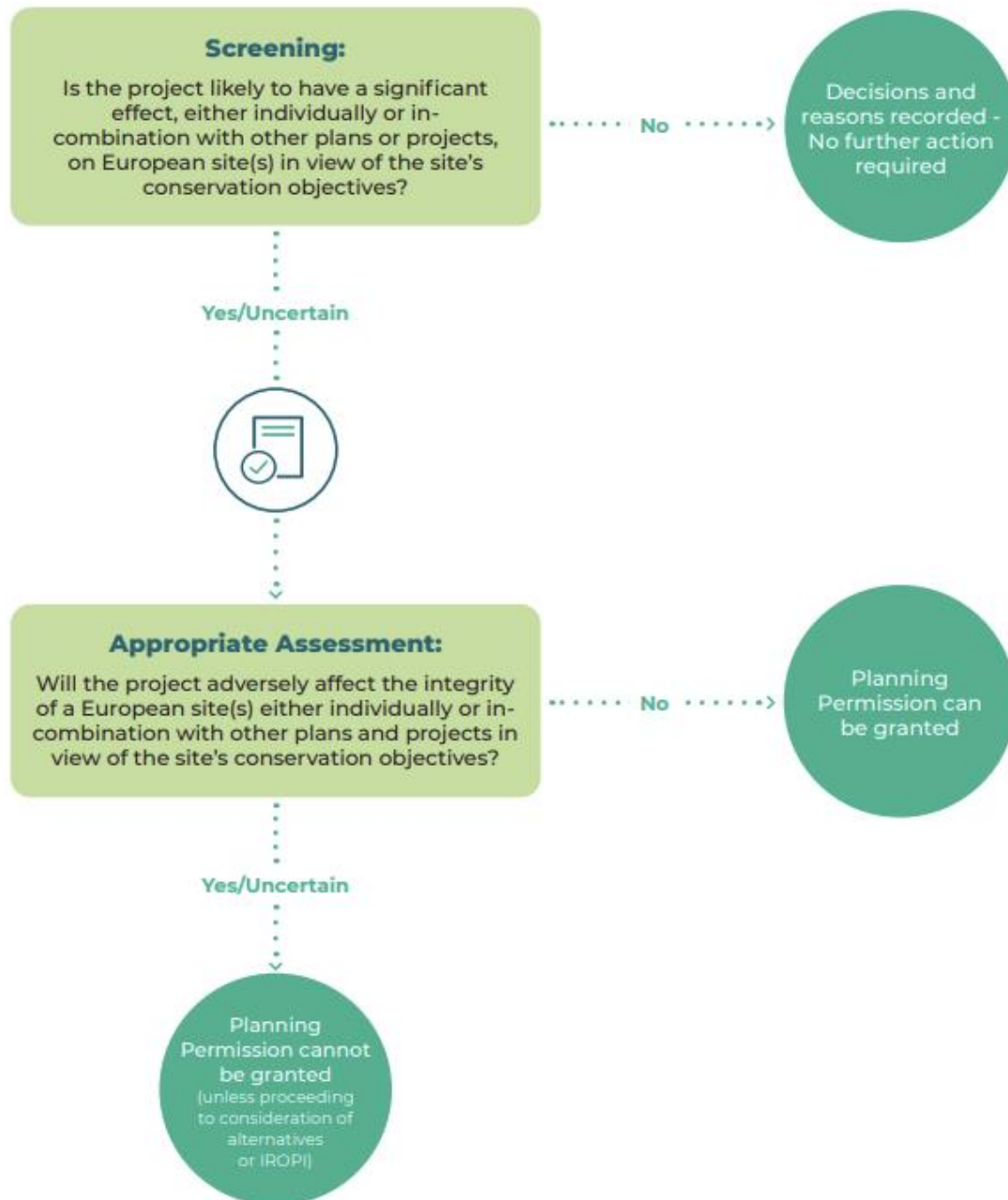


Figure 20. Overview of Screening and Appropriate Assessment.

(OPR, 2021 page 3)

See also Planning Leaflet No 11 produced by the Office of the Planning Regulator, available online at <https://www.opr.ie/planning-leaflets/>.

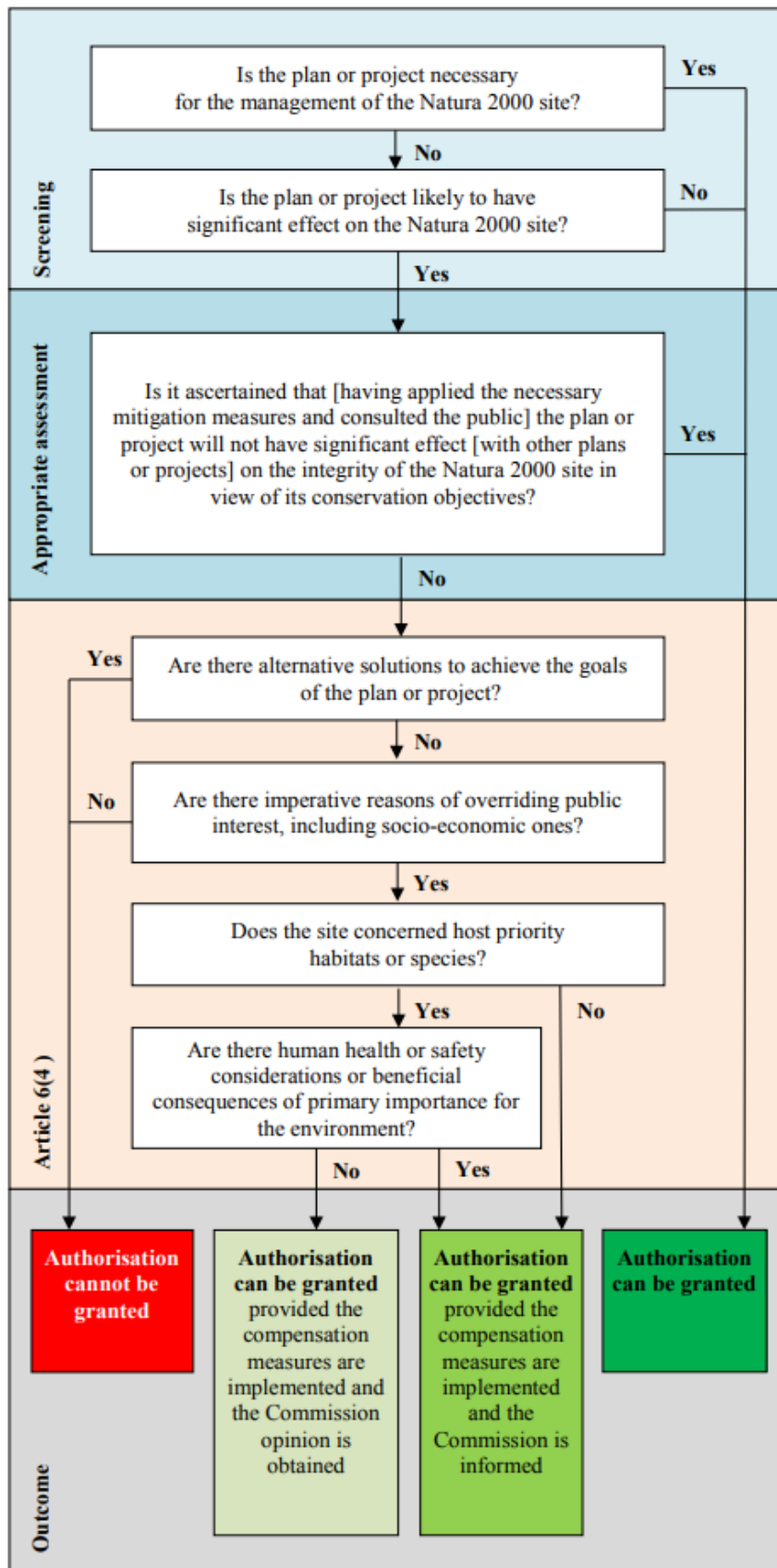


Figure 21. Flow chart of the Article 6(3) and (4) procedure.

(Source; EC, 2022 page 5)

12.3. Appendix 3: The Precautionary Principle.

The precautionary principle is a concept that originated in Germany during the 1970s and is now a fundamental part of environmental legislation; it urges caution when dealing with something new or unknown.

The presumption of innocence is a legal principle that every person accused of any crime is considered innocent until proven guilty. Under the presumption of innocence, the legal burden of proof is thus on the prosecution.

Unlike our legal system, the precautionary principle employs a guilty-until-proven-innocent methodology.

Regarding the Natura 2000 network, the precautionary principle is a compulsory standard that is applied to all proposed plans or projects. The approach urges caution if it is not clear if advancement of the proposed plan or project would be likely to have an adverse impact on the network. To proceed, clarity must be provided that no harm will result from advancement of the proposed plan or project.

The burden of proof is on both the applicant for planning permission, and the compiler of the Screening Report or Natura Impact Statement to provide the required clarity by means of evidence to show that no harm will result from advancement of the proposed plan or project.

The absence of evidence cannot be used as justification for approval. Evidence that no harm is likely must be provided. In the absence of evidence, it cannot be assumed that adverse impacts will not occur, and that if any possible adverse impacts do occur that they are not likely to be significant.

The Planning Authority or other consent authority or decision maker determines whether no harm will result from advancement of the proposed plan or project. If unambiguous evidence is not provided to the Planning Authority or other decision maker to inform their decision, or if there is uncertainty regarding the likelihood of adverse impacts, the plan or project cannot be permitted to proceed, and the permission sought must be refused.

Guidance from the European Commission states as follows.

*“Like all EU environmental legislation, the Habitats Directive is based on the **precautionary principle** ⁽⁸⁾, i.e., that absence of scientific evidence on the significant negative effect of an action cannot be used as justification for approval of this action. When applied to Article 6(3) procedure, the precautionary principle implies that the absence of a negative effect on Natura 2000 sites has to be demonstrated before a plan or project can be authorised. In other words, if there is a lack of certainty as to whether there will be any negative effects, then the plan or project cannot be approved.”*

Reference: ⁽⁸⁾ Article 191 of the Treaty on the Functioning of the European Union.

(Source: EC, 2021)

12.4. Appendix 4: Wexford County Development Plan.

Note: In Irish law, a Natura 2000 site is called a “European site”.

Objective EM02

To ensure that planning permission will only be granted for a development proposal that, either individually or in combination with existing and/or proposed plans or projects, will not have a significant effect on a European site, or where such a development proposal is likely or might have such a significant effect (either alone or in combination), the planning authority will, as required by law, carry out an appropriate assessment as per requirements of Article 6(3) of the Habitats Directive 92/43/EEC of the 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, as transposed into Irish legislation. Only after having ascertained that the development proposal will not adversely affect the integrity of any European site, will the planning authority agree to the development and impose appropriate mitigation measures in the form of planning conditions. A development proposal which could adversely affect the integrity of a European site may only be permitted in exceptional circumstances, as provided for in Article 6(4) of the Habitats Directive as transposed into Irish legislation.

Objective EM04

To ensure that plans, including land use plans, will only be adopted, if they either individually or in combination with existing and/or proposed plans or projects, will not have a significant effect on a European Site, or where such a plan is likely or might have such a significant effect (either alone or in combination), Wexford County Council will, as required by law, carry out an appropriate assessment as per requirements of Article 6(3) of the Habitats Directive 92/43/EEC of the 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, as transposed into Irish legislation. Only after having ascertained that the plan will not adversely affect the integrity of any European site, will Wexford County Council adopt the plan, incorporating any necessary mitigation measures. A plan which could adversely affect the integrity of a European site may only be adopted in exceptional circumstances, as provided for in Article 6(4) of the Habitats Directive as transposed into Irish legislation.

Objective NH08

To ensure that any plan/project and any associated works, individually or in combination with other plans or projects, are subject to Screening for Appropriate Assessment to ensure there are no likely significant effects on any Natura 2000 site(s) and that the requirements of Article 6(3) and 6(4) of the ED Habitats Directive are fully satisfied. Where a plan/project is likely to have a significant effect on a Natura 2000 site or there is uncertainty with regard to effects, it shall be subject to Appropriate Assessment. The plan/project will proceed only after it has been ascertained that it will not adversely affect the integrity of the site or where, in the absence of alternative solutions, the plan/project is deemed by the competent authority imperative for reasons of overriding public interest.

(Source: Wexford County Development Plan 2022-2028, Volume 1. Available online at <https://www.wexfordcoco.ie/planning/development-plans-and-local-area-plans/current-plans>)