# APPROPRIATE ASSESSMENT SCREENING of Public Realm Space at

## G.B. Shaw Theatre and Visual Arts Centre, Carlow

Version 1.0

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#### 1 INTRODUCTION

#### 1.1 BACKGROUND

Lisa Dowling MCIEEM was commissioned by Carlow County Council to prepare a Stage 1 Appropriate Assessment Screening Report for a Part VIII development of the Public Realm Space at G.B. Shaw Theatre and Visual Arts Centre, Carlow.

An Appropriate Assessment Screening report is required due to the proposed site being located c.400m east of the River Barrow which is designated a Special Area of Conservation (SAC), the River Barrow and River Nore SAC (sitecode: 002162) and as such is part of the Natura 2000 network of sites. The EU Habitats Directive requires that any proposed development which potentially may impact either directly or indirectly on a Natura 2000 site be subjected to Stage 1 Screening.

Lisa Dowling has over fourteen years environmental consultancy experience, specialising in the areas of Ecological Impact Assessment and Geographic Information Systems. She obtained an honours degree in Applied Ecology in 1995 from University College Cork; a masters degree in Environmental Resource Management in 1997 from University College Dublin; and a Certificate in Biological Recording and Species Identification from University of Birmingham in 2005. She is a full member of the professional body, the Chartered Institute of Ecology and Environmental Management (CIEEM) since 2006 and is nominated vice-county recorder of the Botanical Society of Britain and Ireland (BSBI) for County Carlow.

#### 1.2 LEGISLATIVE CONTEXT

The Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) provides legal protection for habitats and species of European importance. The main aim of this Directive is "to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies". In order to meet the aims of the Directive, actions must be designed "to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest" (Habitats Directive).

Under the Habitats Directive, Special Areas of Conservation (SAC) or candidate Special Areas of Conservation (cSAC) have been selected as important examples of habitat types listed in Annex I, and the habitats of certain species listed in Annex II of the Habitats Directive. SACs (including cSACs) together with Special Protection Areas (SPAs) (including proposed SPAs) make up a network of European sites called the Natura 2000 network. SPAs are designated under the *Council Directive on the Conservation of Wild Birds (79/409/EEC)*, otherwise known as the "Birds Directive".

Appropriate Assessment is required under the Habitats Directive for any plan or project likely to have a significant effect on a Natura 2000 site. Article 6, paragraphs 3 and 4 of the Directive state:

"6(3) - Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 site) but likely to have significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of

paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

6(4)- If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."

#### 1.3 STAGES OF APPROPRIATE ASSESSMENT

This Stage 1 Appropriate Assessment Screening Report has been prepared in accordance with:

- "Assessment of Plans and Projects Significantly affecting Natura 2000 sites Methodological Guidance on the Provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC" (EC, 2001).
- "Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities" (DEHLG, 2010).
- Rulings of the Justice of the European Union (CJEU) cases relating to Appropriate Assessment, particularly C-323/17 "People Over Wind, Peter Sweetman v Coillte Teoranta", C-258/11 "Peter Sweetman and Others v An Bord Pleanála" and C-521/12 "T.C. Briels and Others v Minister van Infrastructuur en Milieu".

Articles 6(3) and 6(4) of the Habitats Directive lay down a step by step procedure to be followed with respect to proposed plans or projects that may impact on Natura 2000 sites. This procedure comprises four principal stages which are presented in Appendix 1. For the purposes of this document we are only concerned with the first stage, Stage 1 Screening. Screening is undertaken to determine the necessity for a more detailed Stage 2 Appropriate Assessment where potential impacts are deemed to be of significance. This Stage 1 Screening Report will comprise the following four steps:

- Description of the project and local site characteristics;
- Identification of Natura 2000 sites potentially affected, and compilation of information on their qualifying interests and conservation objectives;
- Assessment of likely effects direct, indirect and cumulative; and
- Screening statement with conclusions.

#### 2 DESCRIPTION OF THE PROJECT

#### 2.1 PROPOSED WORKS

Proposed works pertain to the enhancement of the public space to the front of the G. B. Shaw Theatre and Visual Arts Centre on a site of 0.21ha and will include the following elements:

- Replacement of existing concrete surface and grass area (c. 100m²) around Medusa Tree sculpture with granite paving. Partial retention of existing grass bank to be reseeded as required.
- New fixed street furniture to include 4 No. cantilevered curved natural stone benches (450mm x 150mm), Philips CitySoul Gen 2 lamp standards, directional signage located against gabion end of theatre and new signage totem.
- New 250mm in-situ concrete retaining wall.
- New curved and tapered 250mm in-situ concrete wall.
- Upgrade surface and lighting of existing pedestrian access to side of Arts Centre.
- Movable Corten steel visitor information points and limestone benches fronting Arts Centre entrance
- Existing trees to front of St Patricks College will be retained; and
- All associated site works.

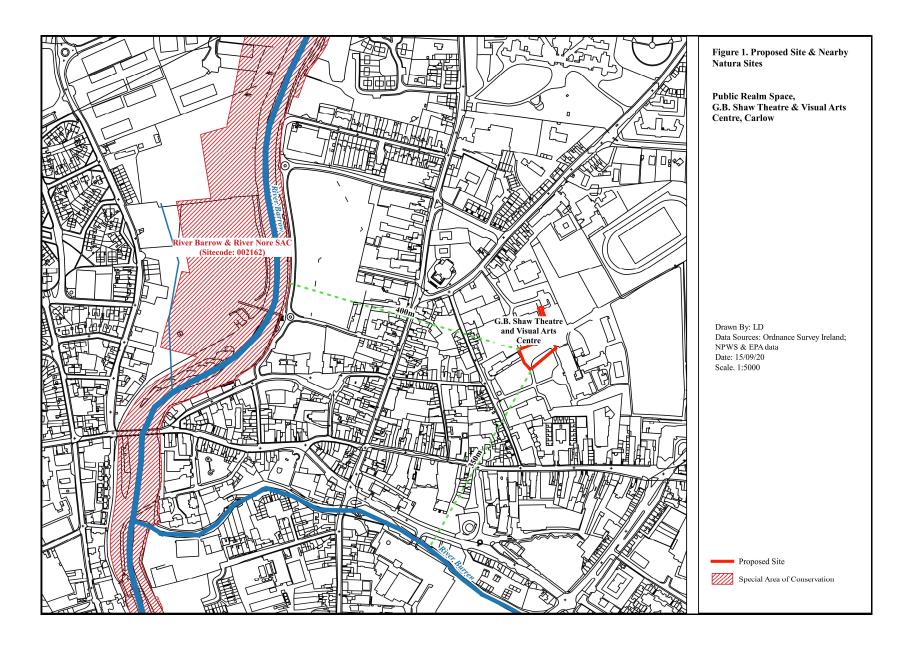
See OS Map and Site Layouts (A2 - 12) contained in Appendix 2 for further details. All works will be undertaken in accordance with standard construction best practice.

#### 2.2 LOCAL SITE CHARACTERISTICS

The proposed site is located within the urban centre of Carlow town, and comprises a public space fronting the G.B. Shaw Theatre & Visual Arts Centre, and adjacent to St Patrick College. A site visit was undertaken on 19/06/2020. Habitats within the site were classified in accordance with the Heritage Council's "A Guide to Habitats in Ireland" (Fossitt, 2000) and "Best Practice Guidance for Habitat Survey and Mapping" (Smith et al., 2011). The majority of the proposed site comprised Buildings and Artificial Surfaces (BL3) where it included existing concrete/tarmacadam surfaces, and Improved Amenity Grassland (GA2). Existing mature trees and saplings (including beech Fagus sylvatica, maple Acer sp. and cherry Prunus sp.) are located near to the southern site boundary in front of St Patricks College.

The closest watercourse is the Burren River located c. 350m south of the proposed site at its closest point (See Figure 1). The Burren River flows into the River Barrow c.150m downstream of Graiguecullen Bridge.

River waterbody WFD status for the period 2013-2018 was 'moderate' for the River Burren (Burren\_060) representing an improvement for the river which had 'poor' status for the period 2010-2015. The River Barrow (Barrow\_160) had 'moderate' status consistently over both the 2010-2015 and 2013-2018 periods (EPA, 2020).



#### 3 NATURA 2000 SITES

This section identifies any Natura 2000 sites within the likely zone of impact of the plan or project. A distance of 15km is currently recommended in the case of plans, and derives from UK guidance (Scott Wilson *et al.*, 2006). DEHLG guidance also recommends that in the case of Natura sites with water dependent habitats or species, it may be necessary to consider the full extent of the upstream and/or downstream catchment where a project or plan may impact on water quality or quantity (DEHLG, 2010).

Each Natura 2000 site within 15km or downstream of the proposed site are briefly summarised below. Where there is no potential pathway for impacts from the development, such Natura sites may be objectively excluded from the Screening process. Natura sites with a potential pathway with the development are considered in subsequent sections.

#### 3.1 IDENTIFICATION OF NATURA SITES

#### River Barrow and River Nore SAC (002162)

This large SAC is located c. 400m west of the proposed site where it includes the River Barrow. This Natura site and its conservation objectives will be considered further in subsequent sections.

#### Slaney River Valley SAC (000781)

This site comprises the freshwater stretches of the River Slaney from its upper reaches in the Wicklow Mountains to the estuary at Ferrycarrig and Wexford Harbour. A number of tributaries of the Slaney are included within the SAC designation. The River Slaney main channel is located c.10.4km east of the proposed site. This Natura site is not hydrologically connected with the proposed site, thus there is no pathway for potential impacts. This site may be excluded from the Screening process at this stage.

#### **Overview**

Natura 2000 sites identified as within the potential zone of influence of the project are limited to the River Barrow and River Nore SAC. All other Natura 2000 sites can be excluded from the screening process due to the localised nature of the project, absence of an impact pathway and the distance between the project and other Natura 2000 sites.

#### 3.2 RIVER BARROW AND RIVER NORE SAC

This large SAC comprises the freshwater stretches of the Barrow and Nore river catchments, from the Slieve Bloom Mountains where both rivers rise, through their confluence north of New Ross, all the way to Creadun Head in Co. Waterford. The site passes through eight counties in total: Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. Many tributaries of both rivers are included within the SAC designation and include the Lerr, Fushoge, Madlin, Mountain, Aughavaud, Owenass, Boherbaun and Stradbally Rivers which are tributaries of the River Barrow.

This Natura site is of considerable conservation importance for the occurrence of good examples of habitats, and populations of plant and animal species, that are listed in Annexes I and II of the Habitats Directive respectively. Good examples of the priority habitat, alluvial wet woodlands, are found along short stretches of both the tidal and freshwater reaches of the site. The site also supports a total of seventeen Red Data Book plant species and five Red Data Book vertebrate species. Furthermore, the SAC site is of ornithological importance for the number of bird species, which are listed in Annex I of the Birds Directive that it supports.

The site is very important for the presence of a number of EU Habitats Directive Annex II animal species including Freshwater Pearl Mussel (both *Margaritifera margaritifera* and *M. m. durrovensis*). This is the only site in the world for the hard water form of the Freshwater Pearl Mussel, *M. m. durrovensis* (only occurs in R. Nore) and one of only a handful of spawning grounds in the country for Twaite Shad.

The main threats to this Natura site include high inputs of nutrients into the river system from agricultural run-off and several sewage plants, over-grazing within the woodland areas, and invasion by non-native species (NPWS, 2016).

#### 3.2.1 Qualifying Interests

The River Barrow and River Nore SAC is selected for 12 No. habitat types (two of which are priority habitats) listed in Annex I of the Habitats Directive, and 10 No. animal species and 1 No. plant species listed in Annex II of the same Directive. These qualifying interests are presented in Table 3.1.

Table 3.1 Qualifying Interests of River Barrow and River Nore SAC

| Code | Qualifying Interest                                   | Code | Qualifying Interest   |
|------|---|------|---|
| 1016 | Desmoulin's whorl snail (Vertigo moulinsiana)         | 1330 | Atlantic salt meadows (Glauco-<br>Puccinellietalia maritimae)   |
| 1029 | Freshwater pearl mussel (Margaritifera margaritifera) | 1355 | Otter (Lutra lutra)   |
| 1092 | White-clawed crayfish (Austropotamobius pallipes)     | 1410 | Mediterranean salt meadows ( <i>Juncetalia maritimi</i> )   |
| 1095 | Sea lamprey (Petromyzon marinus)                      | 1421 | Killarney fern (Trichomanes speciosum)  |
| 1096 | Brook lamprey (Lampetra planeri)                      | 1990 | Nore freshwater pearl mussel (Margaritifera durrovensis). Hard water form.  |
| 1099 | River lamprey (Lampetra fluviatilis)                  | 3260 | Water courses of plain to montane levels with the <i>Ranunculion fluitantis and Callitricho-Batrachion</i> vegetation |
| 1103 | Twaite shad (Alosa fallax)                            | 4030 | European dry heaths   |
| 1106 | Atlantic salmon (Salmo salar) (only in                | 6430 | Hydrophilous tall herb fringe communities of plains and of the montane to alpine                                      |

|      | fresh water)   |       | levels   |
|------|--|-------|--|
| 1130 | Estuaries  | 7220* | Petrifying springs with tufa formation ( <i>Cratoneurion</i> )   |
| 1140 | Mudflats and sandflats not covered by seawater at low tide | 91A0  | Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles                                |
| 1310 | Salicornia and other annuals colonizing mud and sand       | 91E0* | Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) |
| 1170 | Reefs  |       |  |

<sup>\*</sup>Indicates a priority habitat on Annex I of Habitats Directive.

From NPWS (2011)

#### 3.3 CONSERVATION OBJECTIVES

A site-specific conservation objective (Natura sites) aims to define favourable conservation condition for a particular habitat or species at that site.

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 foreseeable future, and
- the conservation status of its typical species is favourable (NPWS, 2011).

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 foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis (NPWS, 2011).

The National Parks and Wildlife Service (NPWS) site-specific objectives for the River Barrow and River Nore SAC detail specific parameters by which each qualifying species and habitat may be measured and stipulate specific targets to be achieved in order to 'restore the favourable conservation condition' of the species or habitat within the Natura 2000 site. See www.npws.ie for further details.

#### 4 IMPACT ASSESSMENT

#### 4.1 SCREENING MATRIX

Assessment Criteria

Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site.

The proposed site is c. 400m distance from the River Barrow & River Nore SAC with no hydrological connection. No direct or indirect impacts are anticipated on the Natura 2000 site.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of:

Land-take, size and scale;

The proposed development is not located within or adjacent to any Natura site, and will therefore not result in any reduction in area of the Natura 2000 network. The development is of minor scale in terms of site footprint and construction works required.

Distance from the Natura 2000 site or key features of the site: The proposed development is c.400m distance from the River Barrow and River Nore SAC. The development will not directly impact on the Natura site.

requirements (water abstraction etc.);

Resource

No additional resources as part of proposed works.

Emissions (disposal to land, water or air);

There are no concerns in relation to emissions arising from the project. Stormwater at this location is diverted via a combined sewer to Carlow wastewater treatment plant (Ger O'Brien, Carlow Co. Council, *personal communication*, 14/09/20).

Excavation and Transportation requirements;

There are no concerns in relation to excavation or transportation requirements associated with the proposed development and the Natura 2000 site in question.

Duration of construction, operation, decommissioning, It is estimated that construction works will take a maximum of 4 months to complete. Duration of construction will not affect level of impact in consideration that no potential indirect impacts are anticipated on the SAC downstream during the construction phase.

etc.;

Other. None.

Describe any likely changes to the site arising as a result of:

Reduction of habitat area:

The proposed development is c. 400m east of the Natura site, therefore, no reduction of habitat area within the SAC will occur.

Disturbance to key

species;

Disturbance to qualifying species ofter is not expected as the proposed works are located within the urban centre of Carlow, c. 350m and c.400m distance

from the River Burrin and River Barrow riparian corridors respectively.

Habitat or species

fragmentation;

No habitat or species fragmentation is predicted.

Reduction in species

density;

No reduction in species density will occur within the SAC as a result of the

proposed development.

Changes in key

indicators of conservation value (water quality etc.); No changes in key indicators of conservation value, including water quality,

are predicted.

Climate change.

Not applicable.

Describe any likely impacts on the Natura 2000 site as a whole in terms of:

Interference with the key relationships that define the structure of the site; The proposed development will not interfere with the key relationships that define the structure of the Natura site.

Interference with key relationships that define the function of the site. The proposed development will not interfere with the key relationships that define the function of the Natura site.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

Loss; Not applicable.

Fragmentation; Not applicable.

**Disruption**; Not applicable.

**Disturbance**; Not applicable.

Change to key elements

of the sites (e.g. water

quality etc.).

Not applicable.

Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.

As discussed above, it can be objectively concluded that the proposed development will have no effects on the nearby River Barrow and River Nore SAC either alone or in combination with other projects. Potential effects of the proposed development on qualifying interests of the SAC are summarised in Table 4.1.

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#### 4.2 FINDING OF NO SIGNIFICANT EFFECTS MATRIX

#### Name of project or plan

Public Realm Space, G.B. Shaw Theatre and Visual Arts Centre, Carlow.

Name and location of Natura 2000 site

River Barrow and River Nore SAC, c. 400m west of proposed site where it includes the River Barrow.

Description of the project or plan

The proposed project entails enhancement of the public space to the fore of the existing G.B. Shaw Theatre and Visual Arts Centre. Works proposed will be undertaken within a site of c. 0.21ha and will involve resurfacing works, new public seating, signage, lighting and all associated works. Resurfacing works will involve the replacement of a minor area (c. 100m²) of improved amenity grassland with granite paving.

Is the project or plan directly connected with or necessary to the management of the site (provide details)?

No

Are there other projects or plans that together with the project or plan being assessed could affect the site (provide details)? In accordance with the EC guidance document on conducting Appropriate Assessment (EC, 2001), other projects or plans in the area must be considered in combination with the project to determine the potential for having any significant cumulative effects on the Natura 2000 sites within the zone of influence of the project. Carlow County Council planning website was consulted with respect to granted or proposed developments within 500m of the proposed development within the last five years which may have cumulative effects with the proposal.

The following developments were granted permission or are pending permission:

- 15320 Change of use from an underground private car park to a proposed car valet centre.
- 16308 Completion of internal fit out of existing partially finished dental surgery.
- 17339 Construction of a proposed single/two storey extension to side of existing community centre.
- 1773 Demolition of existing bedsit and partial demolition of existing lean-to extension to rear of existing terraced house and construction of a new single storey extension to rear of same.
- 1824 Retention of existing 36m high free-standing lattice communication structure carrying antennae.
- 19339 change of use at first floor level from existing commercial use to student accommodation.
- 2038 for alterations to existing ladder access to bell tower of St. Mary's Church of Ireland, Carlow (being a protected structure CT49).

In view of the fact that no direct or indirect impacts are anticipated to arise from the proposal alone on the Natura 2000 network, the potential for in-combination indirect effects arising from the project and any granted or pending projects on the nearby SAC is therefore considered unlikely.

The assessment of significance of effects

Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 sites

No negative direct or indirect effects either alone or cumulatively are anticipated from any aspect of the proposal on the River Barrow and River SAC nearby.

**Explain why these effects are** Not applicable **not considered significant.** 

List of agencies consulted: Not undertaken provide contact name and

telephone or e-mail address.

**Response to consultation.** Not applicable

Data collected to carry out the assessment

Who carried out this assessment?

Lisa Dowling BSc (Hons.) MSc (Ag.) MCIEEM

**Sources of data** Ordnance survey historical mapping.

Ordnance survey aerial photography.

NPWS site synopsis, objectives, data forms.

NPWS conservation designation mapping.

River Waterbody WFD Status data.

National Biodiversity Data Centre database.

Carlow County Council planning database.

See Bibliography for data sources.

Level of assessment completed

Desktop assessment and walkover survey of site.

Where can the full results of the assessment be accessed

and viewed?

Full results of this assessment are contained within this Screening Report. This Report will be available at Carlow County Council offices as part of Part VIII planning.

#### 5 SCREENING STATEMENT

In order to determine the potential impacts, if any, of the proposed Public Realm Space at G.B. Shaw Theatre and Visual Arts Centre, Carlow on the River Barrow and River Nore SAC, Appropriate Assessment Screening was undertaken. In view of best scientific knowledge, and in consideration of the conservation objectives of the Natura site, the proposed development will not, in the absence of any mitigation, result in any likely significant effects on the River Barrow and River Nore SAC (Natura 2000 site), either during construction or operational phases, either alone or in combination with other projects or plans. It is concluded that as no adverse impacts are foreseen on any Natura site, this project may be excluded from the Appropriate Assessment process. There is no necessity to undertake a Stage 2 Appropriate Assessment.

Table 4.1 Predicted Impacts on Qualifying Interests of River Barrow & River Nore SAC

| Qualifying Interest [Code]   | Conservation Objectives: Targets   | Distance from project site   | Does the project<br>have the potential<br>to interact with<br>this Qualifying<br>Interest | Likelihood<br>of Impact |
|--|--|--|---|-------------------------|
| Desmoulin's whorl snail (Vertigo moulinsiana) [1016]   | Lives in permanently wet, usually calcareous, swamps, fens and marshes. Targets include no decline in distribution/densities, preferred habitat quality and moisture levels.   | Known site Borris Bridge.  | No  | None                    |
| Freshwater pearl mussel ( <i>Margaritifera margaritifera</i> ) [1029]                                    | The status of <i>M. Margarifera</i> as a qualifying species for the SAC is currently under review.   | Not hydrologically linked to proposed site. Present in nearby sub-catchments (Mountain, Ballymurphy, Aughavaud). | No  | None                    |
| White-clawed crayfish (Austropotamobius pallipes) [1092]   | Targets include Q3-4 at all EPA sampled sites, no decline in habitat heterogeneity and no instances of disease.  | Present almost throughout SAC.   | No  | None                    |
| Sea lamprey ( <i>Petromyzon marinus</i> ) [1095]   | Targets include channel accessibility from estuary and no decline in spawning beds (clean gravels).  | Potentially in R. Barrow south of confluence with Fushoge c.3.3km d/s of site.                                   | No  | None                    |
| Brook lamprey ( <i>Lampetra planeri</i> ) [1096]<br>River lamprey ( <i>Lampetra fluviatilis</i> ) [1099] |  | Brook/River lamprey known from Barrow channel.   | No  | None                    |
| Twaite shad (Alosa fallax) [1103]  | Known to spawn in the upper tidal limit of the River Barrow downstream of St Mullins, Co. Carlow. Targets include 75% of main channel accessible from estuary, no decline in extent & distribution of spawning habitats and maintenance of stable gravel substrate with very little fine material. | >50km downstream   | No  | None                    |
| Atlantic salmon (Salmo salar) (only in fresh water) [1106]   | Targets include no decline in number and distribution of spawning redds due to anthropogenic causes, accessibility of channel from estuary, and at least Q4 at all sites sampled by EPA.   | ??   | No  | None                    |

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| Otter (Lutra lutra) [1355]   | Targets include no significant decline in distribution, no decline in distribution of habitat (terrestrial, freshwater & marine) and no decline in fish biomass availability.  | Disturbance impacts on otter not predicted given the busy urban environment in which the proposed site is located and that the site is c.400m distance from riparian corridor. | No | None |
|--|--|--|----|------|
| Killarney fern ( <i>Trichomanes</i> speciosum) [1421]  | Targets include no loss of suitable habitat (e.g. shaded rock crevices, caves or gullies) in or near to known colonies, no loss of woodland canopy at or near to known locations and maintenance of suitable hydrological conditions.                              | Terrestrial QI located downstream of Graiguenamanagh. No pathway for impacts.  | No | None |
| Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ) [1330] | Targets for these habitats would not be influenced by the project as these qualifying habitats are a considerable distance downstream of the site (>50km) and dominated by maritime influences.  | >50m downstream.   | No | None |
| Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410]   |  |  |    |      |
| Nore freshwater pearl mussel ( <i>Margaritifera durrovensis</i> ). Hard water form. [1990]   | Targets include restoration of water quality, restoration of substratum quality (at most trace filamentous algae; also, stable cobble & gravel substrate), restoration of appropriate hydrological regimes, and maintenance of sufficient juvenile salmonid hosts. | Not hydrologically linked to proposed site as only present in Nore catchment.  | No | None |
| Water courses of plain to montane levels with the <i>Ranunculion</i> fluitantis and Callitricho-Batrachion vegetation [3260]                                 | Targets include maintenance of appropriate hydrological regimes, maintenance of sufficiently low concentration of suspended solids, and maintenance of sufficiently low nutrient levels in the water column.   | Distribution within SAC unknown but occurs within R. Barrow downstream of the site.  | No | None |
| Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]   | Targets include maintenance in current distribution, appropriate hydrological regimes, sward height and species composition.   | Unknown but occurs in R. Barrow downstream of the site.  | No | None |
| European dry heaths [4030]<br>Petrifying springs with tufa<br>formation ( <i>Cratoneurion</i> ) [7220*]  | Targets for these habitats would not be impacted by the project as these qualifying interests are chiefly terrestrial in nature, and are not hydrologically linked to the proposed site.   | Not hydrologically linked to site.   | No | None |

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

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

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### **APPENDICES**

#### **APPENDIX 1**

#### PRINCIPAL STAGES OF THE APPROPRIATE ASSESSMENT PROCEDURE

**Stage One: Screening** – the process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

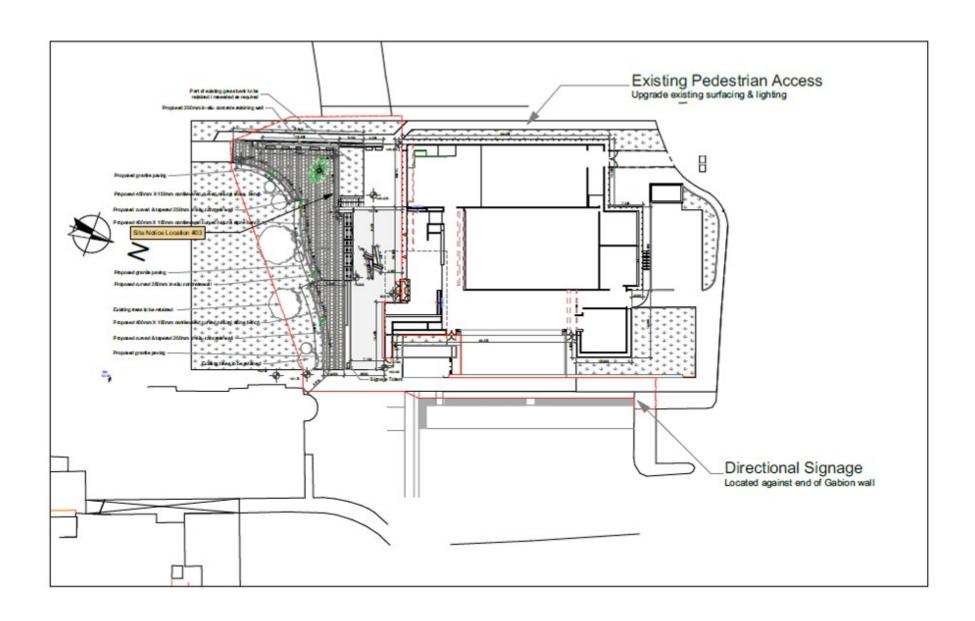
**Stage Two: Appropriate Assessment** – the consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.

**Stage Three: Assessment of Alternative Solutions** – the process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain – an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

From "Assessment of Plans and Projects Significantly Affecting Natura 2000 sites – Methodological Guidance on the Provisions of Articles 6 (3) and (4) of the Habitats Directive 92/43/EEC" (EC, 2001).

## APPENDIX 2 PROPOSED SITE LAYOUT



#### **APPENDIX 3: PHOTOPLATES**





Photoplate 1. Proposed site in a westerly direction.



Photoplate 3. Proposed site in a northerly direction, indicating access to front of St Patrick's College.

Photoplate 2. Proposed site in a westerly direction. Forecourt of Visual Arts Centre.



Photoplate 4. Grass area around Medusa Tree sculpture for replacement with granite paving.