An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

Our Ref: **G Pre00206/2021**
*(Please quote in all related correspondence)*

17th September 2021

Department of Public Expenditure and Reform
Government Buildings
Upper Merrion Street
Dublin 2
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Via email: Kevin.Hogan@per.gov.ie ; enniscorthyschemeconsultation@per.gov.ie

**Re: EIA Consultation under the Arterial Drainage Schemes Act re River Slaney (Enniscorthy Drainage Scheme)**

A chara

I refer to initial letter of 28th July 2020 and subsquent emails received in connection with the above.

Outlined below are heritage-related observations/recommendations co-ordinated by the Development Applications Unit under the stated headings

## Archaeology

### In-stream works

Section 2.4 of the Construction Environmental Management Plan (CEMP) in the submitted River Slaney (Enniscorthy) Drainage Scheme EIAR Addendum - Request for Supplementary Environmental Information (SEI) (April 2021) sets out the proposed methodology for in-stream works to facilitate deepening/dredging of the river channel and certain bank works. It is noted that in-stream works will be undertaken along a *c*. 2km length of the river channel and will involve forming temporary dry work areas through the installation of a mid-channel impermeable barrier, possibly constructed from sheet-piling. Once dry work areas are in place, the channel will be dredged to the required depth. Mechanical excavations to lower the river bed level will involve deepening the channel by approximately 1.2m below the average existing riverbed. Excavations will be deeper in places, such as for a sump pump, construction of a scour protection apron between the bridge piers and underpinning of the piers and quay-structures. The use of heavy machinery to excavate the river sediments may also lead to disturbance well below the average 1.2m deep level.

To date, assessment of the archaeology within the river channel at Enniscorthy has concentrated on underwater survey of the surface of the riverbed, monitoring of geotechnical investigations and limited test-excavations. The significant results of the series of test-excavations undertaken in 2017-2018 and in 2020 (17E0250, 17R0098, 18E0359, 19D0078, and 19R0162) reinforce previous indications made in the EIAR that the River Slaney at Enniscorthy is an important archaeological feature in itself. The EIAR noted that there is potentially *c.* 4m depth of stratigraphy above bedrock level within the river channel (EIAR p. 307), of which a substantial portion is likely to be archaeological stratigraphy underlying a dynamic surface layer comprising in the main of river cobbles: 'There is every reason to expect that the buried riverbed deposits at Enniscorthy retain significant remains that lie at some depth below the surface stratum' (EIAR p. 311). As noted in the EIAR this is a very similar scenario to that which was presented during the River Nore Flood Relief Scheme at Kilkenny, an important medieval town like Enniscorthy. At Kilkenny, the nature of the riverine stratigraphy led to extensive archaeological excavations being undertaken.

In order to adequately characterise the nature, depth, extent and artefact-bearing potential of the riverine stratigraphy at Enniscorthy further assessment, including systematic test excavations, of the riverbed within the zone proposed for deepening is required. A proposed mitigation strategy for the proposed FRS works is required that will then, in turn, require agreement with the National Monuments Service. In addition to this, in 2016 as part of the archaeological monitoring of Site Investigation works, the remains of a wooden wreck were identified (located at NG 297246E, 138848N/ ITM 697173E, 638897N). The wreck (marked as Feature 14) is protected under the National Monuments Acts 1987-2014 and will require agreed further mitigation in advance of any works taking place near it. This should ideally be avoidance to allow preservation *in situ* but if this is not possible then archaeological excavation may be required. Any works in proximity may lead to scouring and thereby indirectly impact the wreck site and this too will need to be addressed and mitigated.

**North Island Deposition Area and Off-Site Deposition area**

It is proposed to cut back the west side of the North Island, strip it of topsoil and cover the bulk of the island in dredging spoil. According to the River Slaney (Enniscorthy) Drainage Scheme Construction Environmental Management Plan (CEMP) (April 2021) contained in the EIAR addendum 'Depositional material will be placed on exposed subsoil and compacted with compaction plant. 300mm of the stored topsoil will be placed on the compacted dredged material and reseeded with an approved grass mix. The depositional zone will be shaped with a 1:2 side slope approximately 1.5m above the existing ground levels' (Section 2.5.3).

Enniscorthy derives its name *Inis Córthaidh* [island of the chest or Córthaidh being a personal name] from the North Island. Although one large (11.7 hectares) island today it is depicted on the 1729 William Munday map and the first edition Ordnance Survey maps as two separate islands, with a smaller one separated by a channel from the larger island to its east. It is marked on an 1822 estate map as one large island called the 'Big Island' and on a near-contemporary map of a proposed canal along the Slaney as the 'Town Island'. The proximity of the island to the probable early medieval ecclesiastical settlement of St Seanán (WX020-031001-) is significant and the east side of the island, divided from the river-bank by a channel, would be classic location for contemporary horizontal mills. Similarly, a 1230 endowment by Gerald de Prendergast to the religious house of St John (precise location unknown but in the south-west of the town) included the tithes of his mills of Enniscorthy. It is quite possible that one or more of these mills was located on the North Island. As occurs at other medieval towns (eg. Kilkenny, New Ross) the low-lying island would also probably have been managed as a common water-meadow (known as 'inches') that was utilised for winter grazing of cattle.

Despite the large area to be stripped (c. 11 hectares) and the high potential for the island to contain archaeology it has not been the subject of archaeological investigation. There is also no specific reference in the EIAR (Section 10.4.1) to construction phase archaeological mitigation of potential impacts to the North Island, other than pre-development measured survey of a ruined building (Feature 2) on the north side of the island (Table 10.7), which has been completed. Given the large area in question and the high archaeological potential of the island an integrated programme of geophysical survey and archaeological test excavations that is aimed at identifying archaeological features is required in order to allow for the formulation of mitigation measures to address any impacts identified. These measures will, in turn, require agreement with the National Monuments Service. Similarly, Section 2.5.3 of the CEMP notes that another area (location not specified) will be utilised for off-site deposition. Depending on where this is located, it may also require further assessment.

**Compounds**

Section 2.1 of the CEMP provides details on the proposed locations of the two main works compounds. The Road Bridge Works site compound will be located on the east bank of the Slaney at Kilagoley. The proposed location for the compound overlaps with a mill-race that is marked on the 1910 25-inch OS map and which is visible on modern aerial photographs. This mill-race is not depicted on the first edition Ordnance Survey map. The location of the compound requires further archaeological investigation, including a topographical survey of the extant mill-race, to determine the precise course of the feature and allow for the formulation of mitigation measures to address any potential impacts that arise. Since the mill-race appears to be still channelling water its preservation *in situ* may be necessary to allow it to continue in use.

The River Works Principle Site Compound will be located on the west bank of the river, opposite the north side of the North Island. Historic maps do not show any features of potential archaeological significance in this area. As mitigation topsoil stripping for the compound should be archaeologically monitored.

**Road Bridge**

The west side of the proposed new road bridge to the south of the town will be located partially in an area depicted on the first edition (1840) OS map as the 'Camp Fields', presumably in reference to its use as a camp during the 1798 Battle of Enniscorthy. Although the area has been extensively disturbed by the railway, spoil for excavations should be metal detected for finds retrieval and any significant results added to the existing 'The Longest Day', Battle of Enniscorthy project dataset.

**Project Archaeologist Role**

It is the National Monuments Service's understanding that a project archaeologist was in place covering the previous archaeological mitigation for the proposed scheme. We had on-going contact with them, i.e. the Archaeological Diving Company (ADCO). Certain archaeological elements for the scheme have been agreed and certain archaeological works undertaken. A Project Archaeologist is cited as one of the Environmental Specialists to be engaged by the contractor (p. 89 in the River Slaney (Enniscorthy) Drainage Scheme EIAR Addendum - Request for Supplementary Environmental Information (SEI)). This appears to contradict the EIAR: 'An archaeologist experienced in maritime archaeology will be retained by Wexford County Council for the duration of the relevant works to advise on and resolve archaeological matters' (p. 314). Clarity is required on the Project Archaeologist structure for the overall future project and the role that the newly appointed OPW FRS Project Archaeologist team will take in this.

**Additional Elements**

<u>Dredging and dredging spoil:</u>

It is the requirement of the National Monuments Service that 100% of spoil dredged from within the Zone of Archaeological Protection (ZAP) be archaeologically assessed by way of spreading and metal detecting. For the future works therefore, provision should be made to include this requirement in any works programme, with sufficient archaeological personnel in place to cover all assessment needs. A full mitigation strategy for the archaeological assessment of dredged material, both inside and outside the ZAP should form part of all future works in any water course.

Areas not previously archaeologically assessed:

If there are any elements of the scheme or new elements introduced since the initial scheme was advertised and the supplementary EIAR published that have not been previously assessed then the project archaeologists shall assess same and proposed a mitigation strategy for the proposed works that will then, in turn, require agreement with the National Monuments Service. These measures may include archaeological impact assessment (both AIA and UAIA), archaeological testing, full excavation and/or archaeological monitoring.

All AIAs and UAIAs will involve the following:

- The services of a suitably qualified and suitably experienced archaeologist/underwater archaeologist to be engaged to carry out the Impact Assessments.
- The Impact Assessment shall be licenced by the Department of Housing, Local Government and Heritage and a detailed method statement shall accompany the application.
- The Impact Assessment shall comprise detailed desktop study and archaeological assessment to include intra-riverine and, if necessary, dive survey (if wading is not possible) and geophysical survey. The assessment shall also include a metal detection survey of the footprint of the proposed works.
- An Impact Assessment Report should be forwarded to the Underwater Archaeology Unit for consideration (and as a update to the archaeological reports already submitted) and further comment and should put forth mitigation to ensure the avoidance/preservation *in situ* of any identified archaeology, as the preferred option or if such avoidance cannot be achieved, then full archaeological mitigation..

It is advised that any diving, should it be necessary, shall adhere to the Health and Safety Authority's Rules and Regulations pertaining to the Health and Welfare at Work (Diving) Regulations 2018 & 2019, SI 254 of 2018.

No permission should be granted for this application until any additional proposed works that have not been previously archaeologically assessed are reported upon and the Report has been received, considered and a response has issued on it from the National Monuments Service.

If the decision is taken by the Local Authority to grant planning permission for this, then the National Monuments Service requests that our requirements be included as CONDITIONS of any such grant of permission.

**Nature Conservation**

Freshwater Pearl Mussel

The Department confirms that the only population of Freshwater Pearl Mussel within the SAC that is protected/covered by the site conservation objectives is within the Derreen River as per the European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009 (S.I. No. 296 of 2009) and agrees that the mortality risk and permanent loss of range for the species is to be considered fully in the EIAR and but is not a fundamental feature of the AA process.

The Department agrees with the report that potential effects to genetic exchange and juvenile recruitment to the Derreen population from the Enniscorthy population must be assessed in the NIS in the context of the conservation objectives of the SAC. This could involve expert scientific opinion from a Freshwater Pearl Mussel Expert and a Fisheries Biologist. It should be borne in mind that Freshwater Pearl Mussel is a long-lived species (>100 years) and any conclusions drawn should consider the long-term situation and not just a snapshot of current conditions. Issues to consider would include Freshwater Pearl Mussel reproductive capacity at Enniscorthy, presence of host fish, species and age class of host fish and whether there is a current or future realistic possibility of host fish moving upstream from the Enniscorthy area to the Derreen River.

Floating River Vegetation (3260)

It is clear from the project details and Waddenzee case (C-127/02) that the project will undermine the Floating River Vegetation (FRV) conservation objective Attribute 'Habitat Distribution' and associated Target 'No Decline, subject to natural processes, for the known extent' as the project partly overlaps the known extent of this habitat as depicted on Map 6 of the Site Conservation Objectives document.

The Department is of the view that any permanent loss of habitat extent could constitute an adverse effect on the integrity of the site, the test to determine whether the project can be considered under Article 6 (3) of the Habitats Directive being whether the project will adversely affect the integrity of the site and not whether the project is likely to have a significant effect on the site, the latter being the trigger for Appropriate Assessment.

Floating River Vegetation is a dynamic habitat in constant flux as evidenced by the change in its distribution between 2003 and 2016. Due to regular disturbance (through variations in flow), river macrophytes rarely reach a climax condition but frequently occur as transient communities. Guidance has indicated that the meaning of site integrity in a dynamic ecological context can be considered as having the sense of resilience and ability to evolve in ways that are favourable to conservation. FRV can be considered a highly resilient habitat with the capacity for self-repair and self-renewal under suitable conditions.

The Department advises that scientific evidence must be provided demonstrating that the suitable conditions for FRV within the habitat's maximum extent in the project area must remain after the project. The habitat's maximum extent is considered to be the potential FRV habitat mapped in red in Figure 2.2 of the Enniscorthy Flood Defense Scheme: Macrophyte Survey July 2017 (Appendix D of the NIS) (see below) combined with 2016 extent of FRV mapped in yellow in Figure 2.4 of this survey report.

The project proponents must be satisfied that conditions in these areas will allow the successful reestablishment of FRV. Suitable conditions that are connected to the presence of FRV are outlined in the habitat's conservation objectives and include river flow, substratum composition and water quality. Consideration should also be given to the presence of undisturbed FRV habitat upstream which will provide a source of seed and vegetative material and to water depth.

It is noted that the placement of rock armour on the riverbed to form flow deflectors may result in the permanent loss of riverbed substrate between chainage 5620 and 5675, chainage 5450 and 5515 and chainage 5175 and 5215 (ref.: Appendix B of NIS Addendum document). It is further noted that an area of river will be infilled upstream of the Railway bridge between river chainage 5775 to river chainage 6175 (approximately 400m). It must be established whether potential and actual FRV habitat as defined above is present at these locations. If so, the impact of the permanent loss of this habitat must be assessed in the NIS in light of the sites conservation objectives.

The Department agrees with the CAAS report that the use of habitat restoration as a mitigation measures is impermissible under Article 6(3) as outlined in the case of Grace and Sweetman (C-164/17). Mitigation measures, which aim to avoid or reduce impacts or prevent them from happening in the first place, must not be confused with compensatory measures, which are intended to compensate for any damage that may be caused by the project. Compensatory measures can only be considered under Article 6(4) if the plan or project has been accepted as necessary for imperative reasons of overriding public interest and where no alternatives exist.

The Department considers that the plan to remove the top 10 cm of sediment from selected areas pre-dredging and replace it in recipient areas outlined in a Floating River Vegetation Mitigation Plan to be a compensatory measure and should not be taken into account in the assessment under Article 6 (3). Furthermore, the Department understands that this material may contain *Elodea nutalli*, a species listed on the Third Schedule of the Birds and Natural Habitats Regulations. Under Regulation 49 (2) of the above regulations save in accordance with a licence granted under paragraph (7), any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place specified in relation to such plant in the third column of Part 1 of the Third Schedule, any plant which is included in Part 1 of the Third Schedule, shall be guilty of an offence.

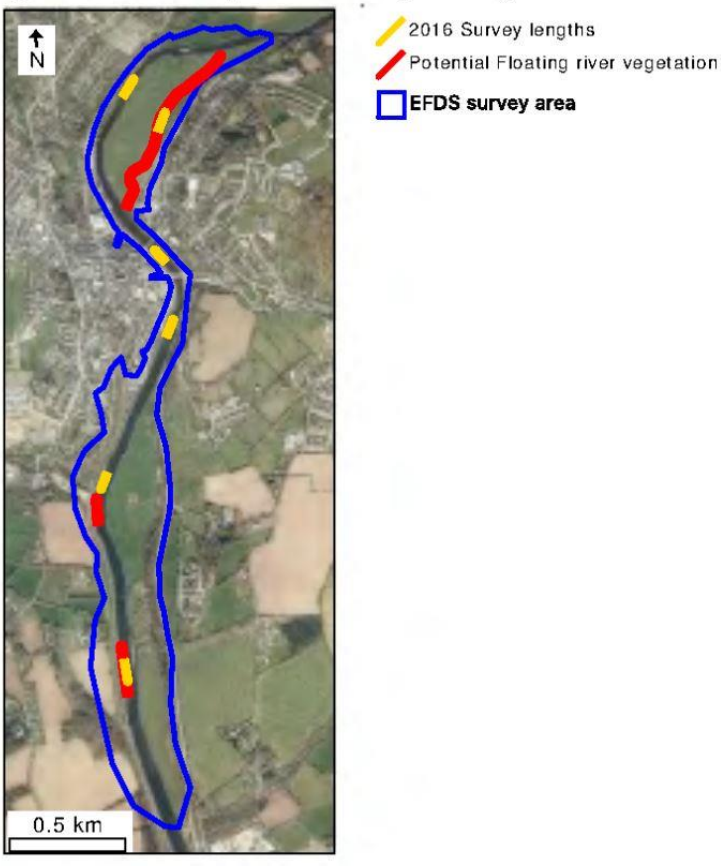
It is stated on page 73 of the NIS addendum that FRV will regrow on the retained habitat post works with or without this measure which is designed to speed the recolonisation (of FRV) process up. As this is a measure which cannot be considered as mitigation under Article 6(3), FRV will re-establish naturally anyway and the measure may lead to the spread

of an invasive species, the Department advises that this measure should not be included in the project.

The fact that the project will lead to an increase of greater than five times the amount of potential FRV habitat should not be considered when carrying out Appropriate Assessment in accordance with Case C-258/11.

In relation to the statement 'In addition to these points, the data failed to identify the community composition of the floating river vegetation in the areas identified in Figure 1 as no community composition surveys were undertaken in these areas', the areas identified in Figure 1 are the areas marked in red in Figure 2.2 of the Enniscorthy Flood Defense Scheme: Macrophyte Survey July 2017 (Appendix D of the NIS)(see below). These are areas of potential FRV based on a desk survey of previous records and do not depict the current distribution of the habitat.

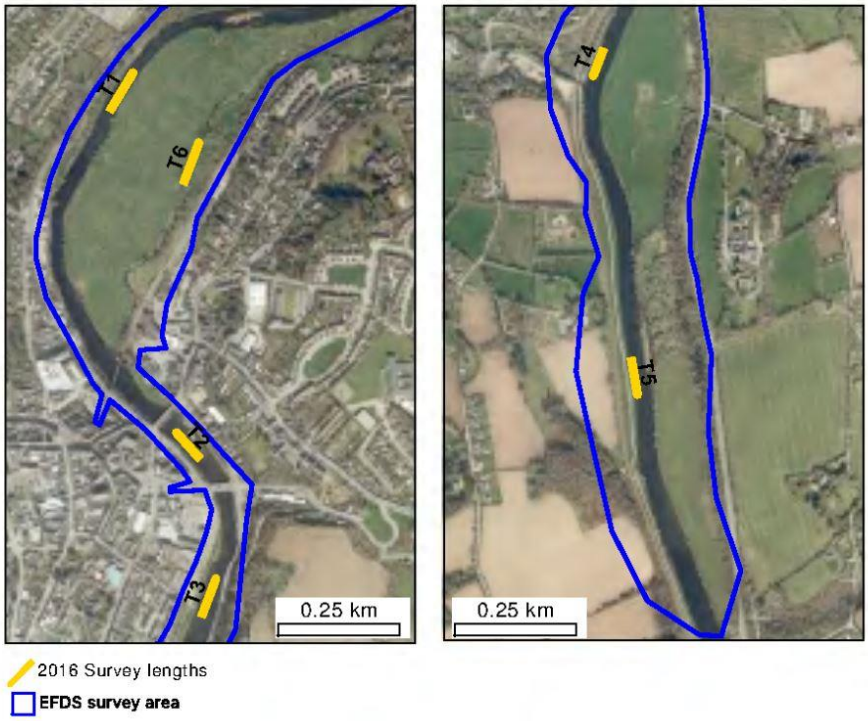
**Figure 2.2. Location of potential Floating River Vegetation based on 2003 survey data**



The areas of FRV actually found are shown on Fig. 2.5 (see below). These areas align with areas surveyed (See Fig. 2.4 below). It is standard ecological practice to determine habitat composition within an area of similar habitat through the use of best practice sampling techniques in a subsets of the larger area. In this case, very little habitat was not subject to detailed sampling as can be seen by comparing Figure 2.4 and Figure 2.5. The Department considers that sampling was sufficient to determine habitat composition within the project area.

**Figure 2.5. Location of Annex I habitat Floating River Vegetation within survey area**

Figure 2.4: Location of transects surveyed in 2016




Lamprey

The Department agrees with the CAAS report in relation to Lamprey species and with the further information request. The Department recommends that Inland Fisheries Ireland, who have responsibilities in respect of Annex 1 fish species, are consulted in relation to this matter.

The above observations/recommendations are based on the papers submitted to this Department on a pre-planning basis and are made without prejudice to any observations that the Minister may make in the context of any consultation arising on foot of any development application referred to the Minister, by the planning authority/ies, in the role as statutory consultee under the Planning and Development Act, 2000, as amended.

You are requested to send further communications to the Development Applications Unit (DAU) at **manager.dau@housing.gov.ie**, or to the address below.

Is mise le meas**,**

**Diarmuid Buttimer**
**Development Applications Unit**

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