



An  
Bord  
Pleanála

## Inspector's Report ABP-309365-21

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<b>Development</b>	Construction of an overflow, flood relief culvert at Shannon Stream
<b>Location</b>	Shannon Road, Mountrath, Co. Laois
<b>Local Authority</b>	Laois County Council
<b>Type of Case</b>	Application for approval made under Section 177AE of the Planning and Development Act 2000 (local authority development requiring appropriate assessment)
<b>Prescribed Bodies</b>	Dept. of Tourism, Culture, Arts, Gaeltacht, Sports and Media
<b>Observers</b>	Mountrath Development Association
<b>Date of Site Inspection</b>	28 <sup>th</sup> July 2021
<b>Inspector</b>	Niall Haverty

## 1.0 Introduction

- 1.1. Laois County Council is seeking approval from An Bord Pleanála to construct an overflow flood relief culvert for the stated purpose of alleviating adverse flood impacts from the Shannon Stream at Shannon Street, Mountrath, Co. Laois.
- 1.2. The Shannon Stream flows into the White Horse River (also referred to as the Mountrath River), which is a tributary of the River Nore. The White Horse River is within the River Barrow and River Nore SAC, a designated European site, and it joins the River Nore c. 3km south of the point at which the Shannon Stream joins it. The River Nore at that location is within both the abovementioned SAC and the River Nore SPA. An application under Section 177AE, accompanied by a Natura Impact Statement (NIS), was lodged by the Local Authority on the basis of the proposed development's likely significant effect on a European site.
- 1.3. Section 177AE of the Planning and Development Act 2000, as amended ('PDA'), requires that where an appropriate assessment is required in respect of development by a local authority the authority shall prepare an NIS and the development shall not be carried out unless the Board has approved the development with or without modifications. Furthermore, Section 177V of the PDA requires that the appropriate assessment shall include a determination by the Board as to whether or not the proposed development would adversely affect the integrity of a European site and the appropriate assessment shall be carried out by the Board before consent is given for the proposed development.

## 2.0 Site Location and Description

- 2.1. The Shannon Stream flows in a general east to west direction as an open water course along the northern edge of Shannon Road in Mountrath town, before passing in a culvert under Shannon Street (R430) and under a house on the western side of Shannon Street, after which it continues as an open water course, before again entering a culvert and following a meandering route through Mountrath public park and an adjacent sawmill premises after which it enters the White Horse River.
- 2.2. The proposed flood relief culvert would be primarily located within the public park and would follow a more direct route to the White Horse River.

### 3.0 Proposed Development

- 3.1. The proposed development, which is described as an overflow flood relief culvert, comprises a 600mm diameter pipe with associated concrete headwalls, a non-return valve and all other ancillary works. Two manholes would be located within the public park at changes in culvert direction.
- 3.2. The inlet headwall would accommodate both the existing and proposed culverts, with the proposed culvert at a higher invert level to allow the existing culvert and discharge point to operate as normal during low flow and normal rainfall events. Currently, during heavy rainfall events, it is stated that the existing culvert becomes overwhelmed due to its lack of capacity, resulting in flood waters spilling into private property and through the public park, creating an informal overland flow path into the White Horse River. The proposed culvert will provide additional capacity, reducing flooding impacts and damage to property and formalising the flow path for the flood waters.
- 3.3. The application was accompanied by: copies of the notices and notifications to prescribed bodies; drawings including a Site Location and Layout Maps and details of the proposed culvert; an explanatory booklet and a Natura Impact Statement. A copy of Laois County Council's EIA Screening Report was included as an Appendix to the NIS.

### 4.0 Planning History

- 4.1. I am not aware of any recent relevant planning history relating to this site.

### 5.0 Legislative Context

- 5.1. **The EU Habitats Directive (92/43/EEC):** This Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) and 6(4) require an appropriate assessment of the likely significant effects of a proposed development on its own and in combination with other plans and projects which may have an effect on a European Site (SAC or SPA).
- 5.2. **European Communities (Birds and Natural Habitats) Regulations 2011, as amended:** These Regulations consolidate the European Communities (Natural

Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in CJEU judgements. The Regulations in particular require in Reg 42(21) that where an appropriate assessment has already been carried out by a 'first' public authority for the same project (under a separate code of legislation) then a 'second' public authority considering that project for appropriate assessment under its own code of legislation is required to take account of the appropriate assessment of the first authority.

5.3. European sites located in proximity to the subject site include:

- River Barrow and River Nore SAC.
- River Nore SPA.
- Knockacoller Bog SAC
- Coolrain Bog SAC
- Slieve Bloom Mountains SAC.
- Slieve Bloom Mountains SPA.

5.4. **Planning and Development Act 2000, as amended:** Part XAB of the PDA sets out the requirements for the appropriate assessment of developments which could have an effect on a European site or its conservation objectives.

- Section 177AE sets out the requirements for the appropriate assessment of developments carried out by or on behalf of local authorities.
- Section 177AE (1) requires a local authority to prepare, or cause to be prepared, a Natura impact statement in respect of the proposed development.
- Section 177AE (2) states that a proposed development in respect of which an appropriate assessment is required shall not be carried out unless the Board has approved it with or without modifications.
- Section 177AE (3) states that where a Natura impact assessment has been prepared pursuant to subsection (1), the local authority shall apply to the Board for approval and the provisions of Part XAB shall apply to the carrying out of the appropriate assessment.

- Section 177V (3) states that a competent authority shall give consent for a proposed development only after having determined that the proposed development shall not adversely affect the integrity of a European site.
- Section 177AE (6)(a) states that before making a decision in respect of a proposed development the Board shall consider the NIS, any submissions or observations received and any other information relating to:
  - The likely effects on the environment.
  - The likely consequences for the proper planning and sustainable development of the area.
  - The likely significant effects on a European site.

## 6.0 Policy Context

### 6.1. Laois County Development Plan 2017-2023

6.1.1. Mountrath is identified as a Service Town in the Development Plan. Section 4 of Volume 2 of the Plan comprises a Settlement Plan for Mountrath. The public park within which the proposed development would primarily be located is described as follows:

“Mountrath Amenity Park is located adjacent to the river, near the Market Square and provides picnic areas and a playground. A sculpture and mature trees add visual interest. The Mountrath River is a Special Area of Conservation and joins with the River Nore south of the town between Castletown and Kilbricken. Stepping stones and pedestrian bridges join the left and right bank of the Mountrath River at the Amenity Park. A linear walk skirts the rear of properties that lie on the western side of the Main Street and joins the Amenity Park with the R440 to the Slieve Blooms. Several pedestrian linkages join this river walk with the Main Street including the Council’s car park, the Quaker graveyard and narrow laneways.”

6.1.2. The following Objectives are noted:

- **MO24:** Avoid encroachment on the Natura 2000 site and implement buffer zone;

- **MO25:** Ensure that any development that has the potential to impact on the Natura 2000 site is subject to Appropriate Assessment in accordance with Article 6 of the Habitats Directive. This includes recreation Plans or maintenance Plans for the river area that have the potential to impact on the Natura 2000 site. Road developments that involve crossing the Natura 2000 site or other impacts will ensure that the alternative routes have been considered to minimise the impact on the Natura 2000 sites;
- **MO 27:** Ensure full compliance with relevant measures prescribed under the South Eastern River Basin Management Plan;

6.1.3. Map 2.4 relates to Mountrath and the location of the proposed development is within the identified development boundary for the town. Two tree stands in the vicinity of the site are identified with the legend “protect tree stand”, and the playground in the park is identified with the legend “maintain play ground”. The White Horse River is identified with the legend “clean out river” and “provide walkway on riversides”.

6.1.4. A protected structure is identified to the south of the proposed works. It appears that this is ‘Two Piece Standing Stone’ (RPS 735), a modern sculpture.

6.1.5. Section 6.3 of the Development Plan relates to ‘Surface Water. Drainage and Flooding’. The following Policies are noted:

- **FD3:** Prioritise plans for flood defence works in the towns as indicated in the Strategic Flood Risk Assessment in order to mitigate against potential flood risk;
- **FD4:** Ensure new development does not increase flood risk elsewhere, including that which may arise from surface water runoff;
- **FD5:** Protect water sinks because of their flood management function, as well as their biodiversity and amenity value and encourage the restoration or creation of water sinks as flood defence mechanisms, where appropriate.

## 7.0 The Natura Impact Statement

7.1. Laois County Council’s application for the proposed development was accompanied by a Natural Impact Statement (NIS), prepared by Atkins, which scientifically examined the proposed development and the European sites. The NIS identified and

characterised the possible implications of the proposed development on the European sites, in view of the sites' conservation objectives, and provided information to enable the Board to carry out an appropriate assessment of the proposed works.

7.2. The NIS includes a description of the works to be undertaken and details of habitats and species on the site, informed by desktop review and site visits.

## 8.0 Consultations

### 8.1. Statutory Bodies

8.1.1. The application was circulated by the applicant to the following bodies:

- An Taisce.
- Arts Council.
- Inland Fisheries Ireland.
- Irish Water.
- Laois County Council.
- National Parks and Wildlife Service.
- Office of Public Works.
- Heritage Council.
- Failte Ireland.
- Health Service Executive.
- Environmental Protection Agency.
- Waterways Ireland.

8.1.2. The only response received was from the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media (Development Applications Unit). It can be summarised as follows:

- Proposed development is partially within the zone of constraint for Recorded Monument LA017-037—Town.

- Any groundworks should be archaeologically monitored and a condition should be included in any grant of permission. (Suggested phrasing included).

## 8.2. Public Observations

8.2.1. One observation was received from Mountrath Development Association (MDA) and can be summarised as follows:

- MDA was the body instrumental in securing funding for the playground, landscaping etc. in the amenity area and they maintain the facilities.
- Works to relieve flood risk are welcomed, but MDA seeks assurances that the works will not damage the equipment or surfacing or existing trees and planting.
- Any damage should be reinstated to the highest quality with damaged grass and hedgerow replaced.
- There is an existing raised manhole in the area of the proposed culvert and this trip hazard should be lowered and incorporated as part of the works.
- Works should be carried out in a timely fashion given the demand on amenities due to Covid-19 restrictions and as works to improve accessibility and biodiversity of the amenity are held up until the culvert works have commenced. This will significantly impact on Tidy Towns judging.
- Stepping stones across the river should be retained, as they are much loved by the community. New community orchard on the far side of the river should also be retained, with any damage replaced.

## 9.0 Assessment

### 9.1. Overview

9.1.1. Under the provisions of Section 177AE(6) of the PDA the Board is required to consider the following in respect of this type of application:

- (i) The likely effects on the environment,



(ii) The likely consequences for the proper planning and sustainable development of the area, and

(iii) The likely impact on any European sites (i.e. Appropriate Assessment).

## **9.2. Likely Consequences for Proper Planning and Sustainable Development**

- 9.2.1. As outlined above, consent is sought by Laois County Council for the construction of an overflow flood relief culvert in Mountrath Town Centre. The purpose of the proposed development is to provide overflow capacity for the outflow of water from the Shannon Stream to the White Horse River. The existing culvert through which the stream passes has inadequate hydraulic capacity to cater for heavy rainfall events, with the excess water resulting in recurring flooding issues affecting public roads, the public park and at least one private dwelling. Photographs of the recurrent flooding were included as an Appendix to the NIS.
- 9.2.2. I note from CFRAM mapping that Mountrath is subject to flood risk associated from both the Shannon Stream and the White Horse River. The proposed development will not resolve these wider flood risks, but instead is intended to address capacity issues with the existing culvert.
- 9.2.3. The proposed development will reduce the likelihood of flooding by providing a piped path for this excess water to reach the White Horse River rather than through overland flow. It is of note that the proposed overflow culvert will have a higher invert level, ensuring that the existing culvert will remain the primary pathway during normal flow conditions.
- 9.2.4. The proposed development will not materially alter the nature of the hydrological connections in Mountrath or drain additional lands. It will, however, reduce the likelihood of flooding of public roads, a public park and private property (noting in particular that a house is built over the existing culvert) within Mountrath Town Centre.
- 9.2.5. Having regard to the nature and purpose of the proposed development, and the positive impact it will have for public amenities and private properties in the vicinity of the Shannon Stream which experience flooding due to the overwhelming of the existing culvert, I am satisfied that the proposed development would be in accordance with the principles of proper planning and sustainable development.

### 9.3. Likely Effects on the Environment

9.3.1. Having reviewed the application and supporting documentation and drawings, I consider that the likely effects of the proposed development on the environment can be addressed under the following headings. Likely effects on European sites are addressed separately below in the Appropriate Assessment Section:

- Water quality and flooding.
- Residential and visual amenity.
- Archaeological and architectural heritage.
- Impact on public park.

#### 9.3.2. Water Quality and Flooding

9.3.3. The proposed development comprises an overflow flood relief culvert and I note that it will not discharge any new or additional waters into the White Horse River. Neither will it result in any material change to the existing manner by which the Shannon Stream connects to the White Horse River. The culverted and circuitous nature of the final stretches of the Shannon Stream clearly results in capacity constraints and the Local Authority states that, while the culvert operates effectively during normal flow conditions, it becomes overwhelmed during heavy rainfall events. When the capacity of the existing culvert is exceeded in this way, there is consequent flooding affecting private properties, the public roads and the public park (refer to photographs included in NIS). This flooding results in overground flow creating an informal flow path to the White Horse River.

9.3.4. The proposed development will formalise this flow path, allowing excess water to reach the White Horse River in a more controlled manner. Fundamentally, however, it will not change the source or destination of the water. Providing a piped overflow is likely, however, to reduce the volume of soil, pollutants and detritus that may otherwise be washed into the river as a result of overground flow and flooding and consequently may have a minor positive impact on water quality.

9.3.5. I note that the invert level of the proposed culvert will be at a higher level than the invert of the existing culvert. As a result, the Shannon Stream will continue to discharge to the White Horse River via the existing culvert and discharge point

during normal flow conditions, with the proposed culvert and discharge point only coming into operation during/following heavy rainfall events when capacity issues currently arise.

9.3.6. I am satisfied that the proposed development will not negatively impact water quality in the Shannon Stream or the White Horse River and that it will not result in additional waters entering the White Horse River and thereby increasing flood risk elsewhere.

9.3.7. Residential and Visual Amenity

9.3.8. During construction of the proposed development there will be temporary disruption to an access lane to the rear of the properties on Shannon Street. The Local Authority states, in Section 7 of their Explanatory Booklet, that notification procedures will be put in place and that impacts will be minimal. Noting that the stated duration of the construction works is 6 No. days, I would agree with this assessment. The nature of the construction works, comprising mostly excavation and backfilling works, is not likely to result in significant impacts in terms of noise, vibration or dust and the volume of construction traffic is not likely to be significant given the scale of the development.

9.3.9. The proposed development will alleviate the capacity issues on the existing culvert and will reduce the likelihood of flooding for properties on Shannon Street, which it is noted have suffered from recurring flood issues. I therefore conclude that the proposed development will have a positive impact on residential amenity.

9.3.10. With regard to visual amenity, the only visible elements of the proposed development are two manholes and the headwalls. I do not consider that these elements will give rise to any visual amenity issues. The potential impact on the public park is addressed separately below.

9.3.11. Archaeological and Architectural Heritage

9.3.12. There are no recorded archaeological features on the site. However, as noted by the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media in their submission, the site is partially within the zone of constraint for Recorded Monument LA017-037-Town.

- 9.3.13. Given the proximity of the proposed development to the historic town centre and the linear excavations that will be undertaken, I consider the inclusion of an archaeological monitoring condition to be appropriate.
- 9.3.14. A protected structure is identified to the south of the proposed works and appears to be 'Two Piece Standing Stone' (RPS 735), a modern sculpture. I am satisfied that there will be no direct or indirect impact on this protected structure or its setting or character as a result of the proposed development.
- 9.3.15. Impact on Public Park
- 9.3.16. The Mountrath Development Association made a submission in which they welcome the proposed development but seek to ensure that it does not impact on the public park including its amenities and landscaping and that any damage be reinstated.
- 9.3.17. As noted above, the stated duration of the construction works is 6 No. days. While there will be some short-term disruption to the park, the Local Authority has advised that the portion of the park to the north of the works area will continue to function as normal during this period. Given the short duration of the construction phase, I do not consider that there will be any significant impacts on use of the park as a public amenity.
- 9.3.18. With regard to the potential impact on the stepping stones within the River, I note that the proposed culvert would be located a minimum of 11m from the stepping stones, and that water would be discharged further downstream of the stones. I therefore do not consider that there will be any impact on the stepping stones.
- 9.3.19. With regard to the existing planting and mature trees in the park, there is unlikely to be any significant loss of vegetation. Grassed areas will be reinstated post-completion of construction works and the only visible elements of the development will be two manholes and the headwalls. Nevertheless, given the public amenity use of the site, I recommend that a condition be imposed requiring reinstatement of planting and replacement of any damaged or removed trees or hedgerows.

#### 9.4. Likely Effects on any European Sites (Appropriate Assessment)

9.4.1. The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, section 177AE of the PDA are considered fully in this section. The areas addressed in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive.
- The Natura Impact Statement.
- Screening the need for Appropriate Assessment.
- Appropriate Assessment.

#### 9.4.2. Compliance with Article 6(3) of the EU Habitats Directive

9.4.3. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

#### 9.4.4. The Natura Impact Statement

9.4.5. The application included a NIS (Atkins, 11/11/2019), which described the proposed development, the project site and the surrounding area. The NIS contained a Stage 1 Screening Assessment which concluded that a Stage 2 Appropriate Assessment was required. The NIS outlined the methodology used for assessing potential impacts on the habitats and species within several European Sites that have the potential to be affected by the proposed development. It predicted the potential impacts for these sites and their conservation objectives, it suggested mitigation measures, assessed in-combination effects with other plans and projects and it identified any residual effects on the European sites and their conservation objectives.

9.4.6. The NIS was informed by the following studies, surveys and consultations:

- A desk top study, including reference to relevant guidance documents, biodiversity and water quality records, and examination of aerial photography and maps.
- Consultation with Inland Fisheries Ireland (IFI). It is stated that IFI raised no issues with the proposed works.
- A site survey of the proposal site and surroundings on the 23<sup>rd</sup> October 2019.

9.4.7. No habitat types corresponding with Annex I habitats were recorded within the proposed works area. The habitats identified included treelines (WL2), hedgerow (WL1), scattered trees and parkland (WD5), amenity grassland (improved) (GA2) and dry meadows and grassy verges (GS2). Other habitat types in the vicinity of the works include (mixed) broad-leafed woodland (WD1) and depositing/lowland river (FW2). The White Horse/Mountrath River at the location of the discharge point is stated to have the substrate composition and flow types which have the potential to support Atlantic salmon, lamprey, otter and white-clawed crayfish. While the lack of complex bankside vegetation limits the potential for otter holts, a holt was recorded 400m downstream, and otters are stated to be likely to be using the river. The river is stated to support suitable habitat for Kingfisher. No potential Kingfisher perches were recorded in the vicinity of the proposed works area, however a previous survey of the lower reaches of the river recorded a single Kingfisher. No pearl mussels were seen, with the nearest record of Nore pearl mussel being c. 13.5km downstream, on the main channel of the River Nore.

9.4.8. The NIS concluded that, subject to the implementation of best practice and the recommended mitigation measures, there would be no residual impacts and the proposed development would not have an adverse effect on the integrity of the River Barrow and River Nore SAC and the River Nore SPA.

9.4.9. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided and they are summarised in Section 6.3 of the NIS. I am satisfied that the information is sufficient to allow for appropriate assessment of the proposed development.

9.4.10. Stage 1 Screening for Appropriate Assessment

- 9.4.11. The proposed development is not directly connected to or necessary to the management of any European Site and therefore is subject to the provisions of Article 6(3).
- 9.4.12. The screening contained within the NIS considers European Sites within 15km of the proposed development. Having regard to the nature of the proposed development, the nature of the receiving environment and the source-pathway-receptor model, I consider this to be a reasonable zone of influence. There are 6 No. European Sites within the zone and Table 9.1 below lists the qualifying interests of these sites, their conservation objectives and identifies possible connections between the proposed development (source) and the sites (receptors).
- 9.4.13. Having regard to: the information and submissions available; the nature, size and location of the proposed development; its likely direct, indirect and cumulative effects; the source-pathway-receptor model; and the sensitivities of the ecological receptors, I consider that the 6 No. identified sites are relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects.

Table 9.1: European Sites considered for Stage 1 Screening					
European Site (Code)	Distance (Direction)	Qualifying Interest(s)	Conservation Objectives	Connections (Source-Pathway-Receptor)	Considered further in screening
River Barrow and River Nore SAC (002162)	0km (adjacent)	<p>Estuaries [1130]</p> <p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>Reefs [1170]</p> <p>Salicornia and other annuals colonising mud and sand [1310]</p> <p>Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330]</p> <p>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</p> <p>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260]</p> <p>European dry heaths [4030]</p> <p>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</p> <p>Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p>	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected, as defined by a list of specific attributes and targets.	<p><b>Yes</b></p> <p>Proposed development is immediately adjacent to SAC, with headwall located within the SAC boundary.</p> <p>Both construction phase and operational phase hydrological connections.</p>	<p><b>Yes</b></p> <p>Hydrological connection to SAC could give rise to changes in water quality during construction and/or operational phases.</p> <p>Construction works could impact on qualifying habitats or species through sedimentation, contamination or disturbance.</p>



		<p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</p> <p><i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016]</p> <p><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</p> <p><i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</p> <p><i>Petromyzon marinus</i> (Sea Lamprey) [1095]</p> <p><i>Lampetra planeri</i> (Brook Lamprey) [1096]</p> <p><i>Lampetra fluviatilis</i> (River Lamprey) [1099]</p> <p><i>Alosa fallax fallax</i> (Twaite Shad) [1103]</p> <p><i>Salmo salar</i> (Salmon) [1106]</p> <p><i>Lutra lutra</i> (Otter) [1355]</p> <p><i>Trichomanes speciosum</i> (Killarney Fern) [1421]</p> <p><i>Margaritifera durrovensis</i> (Nore Pearl Mussel) [1990]</p>			
Knockacoller Bog SAC (002333)	4.7km (SW)	<p>Active raised bogs [7110]</p> <p>Degraded raised bogs still capable of natural regeneration [7120]</p>	To restore the favourable conservation condition of Active raised bogs, as defined by a list of specific attributes and targets.	<b>No</b> No hydrological connection.	<b>No</b> Due to lack of pathway and distance.

		Depressions on peat substrates of the Rhynchosporion [7150]	Separate conservation objectives are not set for the other qualifying interests.		
Slieve Bloom Mountains SAC (000412)	5.1km (N)	Northern Atlantic wet heaths with Erica tetralix [4010] Blanket bogs (* if active bog) [7130] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	To restore the favourable conservation condition of the qualifying interests, as defined by a list of specific attributes and targets for each QI.	<b>No</b> No hydrological connection as SAC is upstream of Mountrath.	<b>No</b> Due to lack of pathway and distance.
Coolrain Bog SAC (002332)	8.1km (SW)	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]	To restore the favourable conservation condition of Active raised bogs, as defined by a list of specific attributes and targets. Separate conservation objectives are not set for the other qualifying interests.	<b>No</b> No hydrological connection.	<b>No</b> Due to lack of pathway and distance.
River Nore SPA (004233)	3.5km (S)	Kingfisher (Alcedo atthis) [A229]	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.	<b>Yes</b> The Mountrath River is a tributary of the River Nore. Both construction phase and operational phase hydrological connections.	<b>Yes</b> Hydrological connection to SPA could give rise to changes in water quality during construction and/or operational phases. Construction works could impact on qualifying bird species through water quality impacts such as

					sedimentation, contamination or by disturbance.
Slieve Bloom Mountains SPA (004160)	3.7km (N)	Hen Harrier ( <i>Circus cyaneus</i> ) [A082]	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.	<b>No</b> No hydrological connection and application site does not provide suitable habitat for Hen Harriers.	No Due to lack of connection, unsuitable habitat and distance.

9.4.19. Based on my examination of the NIS and supporting information, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, separation distance and functional relationship between the proposed works and the European Sites, their conservation objectives and taken in conjunction with my assessment of the subject site and the surrounding area, I would conclude that a Stage 2 Appropriate Assessment is required for two of the 6 No. European Sites referred to above, namely the River Barrow and River Nore SAC and the River Nore SPA.

9.4.20. The remaining 4 No. sites can be screened out from further assessment because of the scale of the proposed development, the nature of the Conservation Objectives, Qualifying and Special Conservation Interests, the separation distances and in particular the lack of a substantive linkage between the proposed development and the European sites.

9.4.21. Screening Determination

9.4.22. Following the screening process, it has been determined that Appropriate Assessment is required as it cannot be excluded on the basis of objective information that the proposed development individually or in-combination with other plans or projects will have a significant effect on the following European Sites in view of their conservation objectives (i.e. there is the possibility of significant effect):

- River Barrow and River Nore SAC (002162).
- River Nore SPA (004233).

9.4.23. The possibility of significant effects on other European Sites has been excluded on the basis of objective information. The following European Sites have been screened out for the need for appropriate assessment.

- Knockacoller Bog SAC (002333).
- Slieve Bloom Mountains SAC (000412).
- Coolrain Bog SAC (002332).
- Slieve Bloom Mountains SPA (004160).

9.4.24. Measures intended to reduce or avoid significant effects have not been considered in the screening process.

9.4.25. Appropriate Assessment of Implications of the Proposed Development

9.4.26. The following is a summary of the objective scientific assessment of the implications of the proposed development on the qualifying interest features of the European Sites using the best scientific knowledge in the field. All aspects of the proposed development which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

9.4.27. The following European Sites are subject to Appropriate Assessment:

- River Barrow and River Nore SAC (Site Code 002162).
- River Nore SPA (Site Code 004233).

9.4.28. A description of the sites and their Conservation and Qualifying Interests/Special Conservation Interests, including any relevant attributes and targets for these sites, are set out in the NIS and summarised in Tables 9.2 and 9.3 of this report as part of my assessment. I have also examined the Natura 2000 data forms as relevant and the Conservation Objectives supporting documents for these sites available through the NPWS website ([www.npws.ie](http://www.npws.ie)).

9.4.29. Aspects of the Proposed Development

9.4.30. In my opinion, having reviewed the development proposals, the main aspects of the proposed development that could adversely affect the conservation objectives of the European Sites arise during the construction phase and include;

- Impacts to water quality through construction related pollution events (e.g. chemicals, oil/fuel, cementitious materials etc.) or sediments/silt run-off.
- Introduction/spread of invasive species or biosecurity issues during construction.
- Disturbance of QI species during construction.

9.4.31. These potential construction phase adverse effects and associated mitigation measures are identified in Tables 9.2 and 9.3 below. In addition to the proposed mitigation measures, I note that the proposed construction methodology and phasing of works, as described in the NIS, allows for the majority of work to be undertaken in dry conditions, with the proposed headwall installed at a set-back from the river, and

the final 'plug' of material to be removed once the culvert pipeline is installed and backfilled. Similarly the new culvert pipe will be left unconnected to the existing active drain until the headwall is constructed and the 'plug' removed. I also note that there will be no need for machinery to enter the White Horse River, that pumped water arising from the headwall construction will be discharged to an existing foul sewer within the public park and that the duration of construction works is estimated to be 6 No. days.

9.4.32. During the operational phase, the proposed overflow culvert will not result in any additional lands being drained into the White Horse River, or any material change to the hydrological pathways that currently exist. I note in this regard that, as a result of the proposed invert levels, the existing culvert will continue to be the default route for water during normal flow conditions, with the overflow culvert only being utilised in periods of heavy flow when the capacity of the existing culvert is exceeded. This will alleviate upstream flood risk and uncontrolled overground flow towards the River. Consequently, I do not consider that the proposed development – once operational – is likely to adversely affect the integrity of the aforementioned European Sites in light of their conservation objectives, and that no mitigation measures are required during the operational phase.

Tables 9.2 and 9.3: Summary of Appropriate Assessment of implications of the proposed development on the integrity of European Sites alone and in combination with other plans and projects in view of the sites' Conservation Objectives.

Table 9.2: River Barrow and River Nore SAC (002162)					
Summary of Key issues that could give rise to adverse effects:					
<ul style="list-style-type: none"> <li>• Water quality impacts due to pollutants or soil/silt run-off during construction.</li> <li>• Disturbance of QI species during construction.</li> <li>• Introduction/spread of invasive species or biosecurity issues during construction.</li> </ul>					
Conservation Objectives: <a href="https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf">https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf</a>					
Summary of Appropriate Assessment					
Qualifying Interest feature	Conservation Objectives Targets and attributes	Potential adverse effects	Mitigation measures	In-combination effects	Can adverse effects on integrity be excluded?
<b>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</b>	<b>Maintain favourable conservation condition.</b> No decline in occupied sites (see Map 7 of Conservation Objectives document for 2 No. known sites); At least 5 adult snails in at least 50% of samples; Adult snails present in at least 60% of samples per site; Minimum of 1ha of suitable habitat per site; 90% of samples in habitat classes I and II as defined in Moorkens & Killeen (2011); 90% of samples in moisture class 3-4 as defined in Moorkens & Killeen (2011)	<u>No</u> Habitats within likely Zone of Influence of proposed development are not suitable for this species due to hydrological conditions and vegetation.	No mitigation required.	None	<b>Yes</b> Habitat not within Zol
<b>Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]</b>	Status of freshwater pearl mussel as a qualifying Annex II species for the SAC is currently under review. No site-specific conservation objective currently.	<u>Yes – Indirect</u> No direct effect due to distance (13.5km downstream) but potential indirect effects	Best practice pollution prevention methods are set out in Section 6.3 of the NIS and include detailed measures to	No likely significant in-combination effects.	<b>Yes</b> No direct effects. No doubt as to the effectiveness or implementation of

		due to hydrological link and sensitivity of species to pollution of watercourse with chemicals, silt/soil, contaminants etc. during construction phase.	mitigate impacts to water quality. I recommend that a condition be included requiring that an Ecologist be appointed to monitor compliance with the specified mitigation measures and conditions.		mitigation measures proposed to prevent indirect effects.
<b>Austropotamobius pallipes (White-clawed Crayfish) [1092]</b>	<b><u>Maintain favourable conservation condition.</u></b> No reduction in distribution from baseline; Juveniles and/or females with eggs in at least 50% of positive samples; No alien crayfish species; No instances of disease; Water quality at least Q3-4 at all sampled sites; No decline in heterogeneity or habitat quality.	<b><u>Yes – Direct &amp; Indirect</u></b> Potential direct and indirect effects due to hydrological link and sensitivity of species to pollution of watercourse with chemicals, silt/soil, contaminants etc. during construction phase. Risk of introduction of crayfish plague.	Best practice pollution prevention methods are set out in Section 6.3 of the NIS and include detailed measures to mitigate impacts to water quality. Biosecurity protocols set out in Section 6.3.2 of the NIS to prevent introduction of crayfish plague from construction equipment/materials. I recommend that a condition be included requiring that an Ecologist be appointed to monitor compliance with the specified mitigation measures and conditions.	No likely significant in-combination effects.	<b>Yes</b> No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent direct or indirect effects on integrity.



<p><b>Petromyzon marinus (Sea Lamprey) [1095]</b></p>	<p><b><u>Restore favourable conservation condition.</u></b> Greater than 75% of main stem length of rivers accessible from estuary; At least three age/size groups present; Juvenile density at least 1/m<sup>2</sup>; No decline in extent and distribution of spawning beds; More than 50% of sample sites positive for juvenile habitat.</p>	<p><u>No</u> Due to distance to relevant estuaries.</p>	<p>No mitigation required.</p>	<p>None.</p>	<p><b>Yes</b> Species not within Zol.</p>
<p><b>Lampetra planeri (Brook Lamprey) [1096]</b></p>	<p><b><u>Restore favourable conservation condition.</u></b> Access to all watercourses down to first order streams; At least three age/size groups of brook/river lamprey present; Mean catchment juvenile density of brook/river lamprey at least 2/m<sup>2</sup>; No decline in extent and distribution of spawning beds; More than 50% of sample sites positive for juvenile habitat.</p>	<p><u>Yes – Direct &amp; Indirect</u> Potential direct and indirect effects due to hydrological link and sensitivity of species to pollution of watercourse with chemicals, silt/soil, contaminants etc. during construction phase.</p>	<p>Best practice pollution prevention methods are set out in Section 6.3 of the NIS and include detailed measures to mitigate impacts to water quality. I recommend that a condition be included requiring that an Ecologist be appointed to monitor compliance with the specified mitigation measures and conditions.</p>	<p>No likely significant in-combination effects.</p>	<p><b>Yes</b> No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent direct or indirect effects on integrity.</p>
<p><b>Lampetra fluviatilis (River Lamprey) [1099]</b></p>	<p><b><u>Restore favourable conservation condition.</u></b> Greater than 75% of main stem and major tributaries down to second order accessible from estuary; At least three age/size groups of river/brook lamprey present; Mean catchment juvenile density of brook/river lamprey at least 2/m<sup>2</sup>; No decline in extent</p>	<p><u>Yes – Direct &amp; Indirect</u> Potential direct and indirect effects due to hydrological link and sensitivity of species to pollution of watercourse with chemicals, silt/soil, contaminants etc. during construction phase.</p>	<p>Best practice pollution prevention methods are set out in Section 6.3 of the NIS and include detailed measures to mitigate impacts to water quality. I recommend that a condition be included</p>	<p>No likely significant in-combination effects.</p>	<p><b>Yes</b> No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent direct or indirect effects on integrity.</p>

	and distribution of spawning beds; More than 50% of sample sites positive for juvenile habitat.		requiring that an Ecologist be appointed to monitor compliance with the specified mitigation measures and conditions.		
<b>Alosa fallax fallax (Twaite Shad) [1103]</b>	<b>Restore favourable conservation condition.</b> Greater than 75% of main stem length of rivers accessible from estuary; More than one age class present; No decline in extent and distribution of spawning habitats; Water oxygen levels no lower than 5mg/l; Maintain stable gravel substrate with very little fine material, free of filamentous algal growth and macrophyte growth	<u>No</u> Due to distance to spawning grounds of species in River Barrow. Breeding is not confirmed in the River Nore.	No mitigation required.	None.	<b>Yes</b> Species not within Zol.
<b>Salmo salar (Salmon) [1106]</b>	<b>Restore favourable conservation condition.</b> 100% of river channels down to second order accessible from estuary; Conservation Limit for each system consistently exceeded; Maintain or exceed 0+ fry mean catchment-wide abundance threshold value - currently set at 17 salmon fry/5 min sampling; No significant decline in out-migrating smolt abundance; No decline in no. and distribution of spawning redds due to anthropogenic causes; Water quality at least Q4 at all sampled sites.	<u>Yes – Direct &amp; Indirect</u> Potential direct and indirect effects due to hydrological link and sensitivity of species to pollution of watercourse with chemicals, silt/soil, contaminants etc. during construction phase.	Best practice pollution prevention methods are set out in Section 6.3 of the NIS and include detailed measures to mitigate impacts to water quality. I recommend that a condition be included requiring that an Ecologist be appointed to monitor compliance with the specified mitigation measures and conditions.	No likely significant in-combination effects.	<b>Yes</b> No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent direct or indirect effects on integrity.

<p><b>Lutra lutra (Otter)</b> <b>[1355]</b></p>	<p><b>Restore favourable conservation condition.</b> No significant decline in distribution; No significant decline in terrestrial habitat (122.8ha above high water mark; 1136.0ha along river banks / around ponds); No significant decline in marine habitat (857.7ha); No significant decline in river habitat (Length 616.6km); No significant decline in lake habitat (2.6ha); No significant decline in couching sites and holts; No significant decline in fish biomass.</p>	<p><u>Yes – Direct &amp; Indirect</u> Potential direct and indirect effects due to hydrological link and sensitivity of species to pollution of watercourse with chemicals, silt/soil, contaminants etc. during construction phase. Potential disturbance to foraging habitats due to highly mobile nature of species (holt recorded c. 400m downstream).</p>	<p>Best practice pollution prevention methods are set out in Section 6.3 of the NIS and include detailed measures to mitigate impacts to water quality. Duration of construction phase is c. 6 No. days and no significant disturbance is likely. I recommend that a condition be included requiring that an Ecologist be appointed to monitor compliance with the specified mitigation measures and conditions.</p>	<p>No likely significant in-combination effects.</p>	<p><b>Yes</b> No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent direct or indirect effects on integrity.</p>
<p><b>Margaritifera durrovensis (Nore Pearl Mussel)</b> <b>[1990]</b></p>	<p><b>Restore favourable conservation condition.</b> Maintain distribution at 15.5km; Restore population to 5,000 adult Mussels; Restore to at least 20% of population no more than 65mm in length; and at least 5% of population no more than 30mm in length; Mortality no more than 5% decline from previous number of live adults counted and dead shells less than 1% of the adult population and scattered in distribution; Restore suitable habitat in length of river corresponding to distribution target (15.5km) and any additional stretches necessary for</p>	<p><u>Yes – Indirect</u> No direct effect due to distance (13.5km downstream) but potential indirect effects due to hydrological link and sensitivity of species to pollution of watercourse with chemicals, silt/soil, contaminants etc. during construction phase.</p>	<p>Best practice pollution prevention methods are set out in Section 6.3 of the NIS and include detailed measures to mitigate impacts to water quality. I recommend that a condition be included requiring that an Ecologist be appointed to monitor compliance with the specified mitigation measures and conditions.</p>	<p>No likely significant in-combination effects.</p>	<p><b>Yes</b> No direct effects. No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent indirect effects.</p>

	<p>salmonid spawning; Restore water quality- macroinvertebrates: EQR greater than 0.90 and phytobenthos: EQR greater than 0.93; Restore substratum quality- filamentous algae: absent or trace (&lt;5%), macrophytes: absent or trace (&lt;5%); Restore substratum quality- stable cobble and gravel substrate with very little fine material and no artificially elevated levels of fine sediment; Restore redox potential to no more than 20% decline from water column to 5cm depth in substrate; Restore appropriate hydrological regimes; Maintain sufficient juvenile salmonids to host glochidial larvae</p>				
<p><b>Trichomanes speciosum (Killarney Fern) [1421]</b></p>	<p><b><u>Maintain</u> favourable conservation condition.</b> No decline in distribution; Maintain at least three colonies of gametophyte, and at least one sporophyte colony of over 35 fronds; At least one of the locations to have a population structure comprising sporophyte, unfurling fronds, 'juvenile' sporophyte and gametophyte generations; No loss of suitable habitat, such as shaded rock crevices, caves or gullies in or near to, known colonies. No loss of woodland canopy at or near to known locations; Maintain hydrological conditions at the locations so that all colonies are in dripping or damp seeping habitats and water is visible at all</p>	<p><u>No</u> Killarney Fern is not known in this area (NPWS, 2011).</p>	<p>No mitigation required.</p>	<p>None</p>	<p><b>Yes</b> Habitat not within Zol</p>

	locations; No increase in no. of dessicated fronds; No changes in shading due to anthropogenic impacts; Invasive species absent or under control				
<b>Estuaries [1130]</b>	<b><u>Maintain</u> favourable conservation condition.</b> The permanent habitat area is stable or increasing, subject to natural processes; The following sediment communities should be maintained in a natural condition: Muddy estuarine community complex; Sand to muddy fine sand community complex; Fine sand with Fabulina fabula community; Maintain the natural extent of the Sabellaria alveolata reef, subject to natural process.	<u>No</u> Coastal habitat, not located within likely Zone of Influence of proposed development.	No mitigation required.	None	<b>Yes</b> Habitat not within Zol
<b>Mudflats and sandflats not covered by seawater at low tide [1140]</b>	<b><u>Maintain</u> favourable conservation condition.</b> The permanent habitat area is stable or increasing, subject to natural processes; The following sediment communities should be maintained in a natural condition: Muddy estuarine community complex; Sand to muddy fine sand community complex.	<u>No</u> Coastal habitat, not located within likely Zone of Influence of proposed development.	No mitigation required.	None	<b>Yes</b> Habitat not within Zol
<b>Reefs [1170]</b>	Omitted from Conservation Objectives document.	<u>No</u> Coastal habitat, not located within likely Zone of Influence of proposed development.	No mitigation required.	None	<b>Yes</b> Habitat not within Zol
<b>Salicornia and other annuals</b>	<b><u>Maintain</u> favourable conservation condition.</b> Area stable or increasing,	<u>No</u> Coastal habitat, not located within likely	No mitigation required.	None	<b>Yes</b> Habitat not within Zol

<b>colonising mud and sand [1310]</b>	<p>subject to natural processes, including erosion and succession (0.03ha); No decline in occurrence, subject to natural processes; Maintain or where necessary restore natural circulation of sediments and organic matter, without any physical obstructions; Maintain natural tidal regime; Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession; Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession; Maintain structural variation within sward; Maintain more than 90% of area outside creeks vegetated; Maintain range of sub-communities with typical species listed in Saltmarsh Monitoring Project (McCorry &amp; Ryle, 2009).; No significant expansion of <i>Spartina</i>. No new sites for this species and an annual spread of less than 1% where it is already known to occur.</p>	<p>Zone of Influence of proposed development.</p>			
<b>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</b>	<p><b>Restore favourable conservation condition.</b> Area stable or increasing, subject to natural processes, including erosion and succession; No decline in habitat distribution, subject to natural processes; Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions; Maintain natural tidal regime; Maintain/restore</p>	<p><u>No</u> Coastal habitat, not located within likely Zone of Influence of proposed development.</p>	<p>No mitigation required.</p>	<p>None</p>	<p><b>Yes</b> Habitat not within Zol</p>

	creek and pan structure, subject to natural processes, including erosion and succession; Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession; Maintain structural variation within sward; Maintain more than 90% of area outside creeks vegetated; Maintain range of sub-communities with typical species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009; No significant expansion of Spartina. No new sites for this species and an annual spread of less than 1% where it is already known to occur.				
<b>Mediterranean salt meadows (Juncetalia maritimi) [1410]</b>	<b>Restore favourable conservation condition.</b> Area stable or increasing, subject to natural processes, including erosion and succession; No decline in habitat distribution, subject to natural processes; Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions; Maintain natural tidal regime; Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession; Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession; Maintain structural variation within sward; Maintain more than 90% of area outside	<u>No</u> Coastal habitat, not located within likely Zone of Influence of proposed development.	No mitigation required.	None	<b>Yes</b> Habitat not within ZOI

	creeks vegetated; Maintain range of sub-communities with typical species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009; No significant expansion of Spartina. No new sites for this species and an annual spread of less than 1% where it is already known to occur.				
<b>Water courses of plain to montane levels with the Ranunculon fluitantis and Callitricho-Batrachion vegetation [3260]</b>	<p><b>Maintain favourable conservation condition.</b></p> <p>No decline in occurrence, subject to natural processes; Area stable or increasing, subject to natural processes; Maintain appropriate hydrological regimes; The groundwater flow to the habitat should be permanent and sufficient to maintain tufa formation; The substratum should be dominated by large particles and free from fine sediments; The groundwater and surface water should have sufficient concentrations of minerals to allow deposition and persistence of tufa deposits; The concentration of suspended solids in the water column should be sufficiently low to prevent excessive deposition of fine sediments; The concentration of nutrients in the water column should be sufficiently low to prevent changes in species composition or habitat condition; Typical species of the relevant habitat sub-type should be present and in good condition; The area of active floodplain at and</p>	<p><u>Yes – Indirect</u></p> <p>No floating river vegetation recorded in the vicinity of the proposed development, but it was noted further downstream. Potential indirect effects due to hydrological link and sensitivity of species to pollution of watercourse with chemicals, silt/soil, contaminants etc. during construction phase.</p>	<p>Best practice pollution prevention methods are set out in Section 6.3 of the NIS and include detailed measures to mitigate impacts to water quality. I recommend that a condition be included requiring that an Ecologist be appointed to monitor compliance with the specified mitigation measures and conditions.</p>	<p>No likely significant in-combination effects.</p>	<p><b>Yes</b></p> <p>No direct effects. No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent indirect effects.</p>



	upstream of the habitat should be maintained.				
<b>European dry heaths [4030]</b>	<p><b>Maintain favourable conservation condition.</b></p> <p>No decline from current habitat distribution, subject to natural processes; Area stable or increasing, subject to natural processes; No significant change in soil nutrient status, subject to natural processes; No increase or decrease in area of natural rock outcrop; Cover of characteristic sub-shrub indicator species at least 25%: gorse (<i>Ulex europaeus</i>) and where rocky outcrops occur bilberry (<i>Vaccinium myrtillus</i>) and woodrush (<i>Luzula sylvatica</i>); Cover of senescent gorse less than 50%; Long shoots of bilberry with signs of browsing collectively less than 33%; Cover of scattered native trees and shrub less than 20%; Number of positive indicator species at least 2 (e.g. gorse and associated dry heath/acid grassland flora); Cover of positive indicator species at least 60% (including gorse, bilberry and associated acid grassland flora); Number of bryophyte or non-crustose lichen species present at least 2; Cover of bracken less than 10%; Cover of agricultural weed species (negative indicator species) less than 1%; Cover of non-native species less than 1%; No decline in distribution or population sizes</p>	<p><b>No</b></p> <p>Habitat is not present in vicinity of proposed development. No potential for indirect effects due to nature of proposed development and potential effects arising.</p>	N/A	None	<p><b>Yes</b></p> <p>Habitat not within Zol</p>

	of rare, threatened or scarce species, including Greater Broomrape ( <i>Orobanche rapum-genistae</i> ) and the legally protected clustered clover ( <i>Trifolium glomeratum</i> ); Cover of disturbed bare ground less than 10% (but if peat soil less than 5%); No signs of burning within sensitive areas				
<b>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</b>	<b><u>Maintain</u> favourable conservation condition.</b> No decline in occurrence, subject to natural processes; Area stable or increasing, subject to natural processes; Maintain appropriate hydrological regimes; 30-70% of sward is between 40 and 150cm in height; Broadleaf herb component of vegetation between 40 and 90%; At least 5 positive indicator species present; Negative indicator species, particularly non-native invasive species, absent or under control.	<b><u>No</u></b> Habitat is not present in vicinity of proposed development. No potential for indirect effects due to nature of proposed development and potential effects arising.	N/A	None	<b>Yes</b> Habitat not within Zol
<b>Petrifying springs with tufa formation (Cratoneurion) [7220]</b>	<b><u>Maintain</u> favourable conservation condition.</b> Area stable or increasing, subject to natural processes; No decline in occurrence; Maintain appropriate hydrological regimes; Maintain oligotrophic and calcareous conditions; Maintain occurrence of typical species.	<b><u>No</u></b> Habitat is not present in vicinity of proposed development. No potential for indirect effects due to nature of proposed development and potential effects arising.	N/A	None	<b>Yes</b> Habitat not within Zol
<b>Old sessile oak woods with Ilex and Blechnum in</b>	<b><u>Restore</u> favourable conservation condition.</b> Area stable or increasing, subject to natural processes (85.08ha); No decline	<b><u>No</u></b> Habitat is not present in vicinity of proposed development. No	N/A	None	<b>Yes</b> Habitat not within Zol

<p><b>the British Isles</b> <b>[91A0]</b></p>	<p>in occurrence; Woodland area stable or increasing; Woodland to have diverse structure with a relatively closed canopy containing mature trees, subcanopy layer with semi-mature trees and shrubs and well-developed herb layer; Maintain diversity and extent of Woodland community types; Seedlings, saplings and pole age-classes occur in adequate proportions to ensure survival of woodland canopy; Ensure at least 30m<sup>3</sup>/ha of fallen timber greater than 10cm dia., 30 snags/ha, both categories should include stems greater than 40cm dia.; No decline in veteran trees per hectare; No decline in occurrence of indicators of local distinctiveness; No decline in native tree cover (not less than 95%); A variety of typical native species present; Negative indicator species, particularly non-native invasive species, absent or under control.</p>	<p>potential for indirect effects due to nature of proposed development and potential effects arising.</p>			
<p><b>Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)</b> <b>[91E0]</b></p>	<p><b>Restore favourable conservation condition.</b> Area stable or increasing, subject to natural processes (181.54ha); No decline in occurrence; Woodland area stable or increasing; Woodland to have diverse structure with a relatively closed canopy containing mature trees, subcanopy layer with semi-mature trees and shrubs and well-developed herb layer; Maintain diversity and extent of Woodland</p>	<p><u>No</u> Habitat is not present in vicinity of proposed development. No potential for indirect effects due to nature of proposed development and potential effects arising.</p>	<p>N/A</p>	<p>None</p>	<p><b>Yes</b> Habitat not within Zol</p>

	<p>community types; Seedlings, saplings and pole age-classes occur in adequate proportions to ensure survival of woodland canopy; Appropriate hydrological regime necessary for maintenance of alluvial vegetation; Ensure at least 30m<sup>3</sup>/ha of fallen timber greater than 10cm dia., 30 snags/ha, both categories should include stems greater than 40cm dia. (greater than 20cm dia. in the case of alder); No decline in veteran trees per hectare; No decline in occurrence of indicators of local distinctiveness; No decline in native tree cover; A variety of typical native species present; Negative indicator species, particularly non-native, invasive species, absent or under control.</p>				
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**Overall conclusion: Integrity test**

Following the implementation of mitigation, the construction and operation of the proposed development will not adversely affect the integrity of the River Barrow and River Nore SAC in light of the site's Conservation Objectives. No reasonable scientific doubt remains as to the absence of such effects.

**Table 9.3: River Nore SPA (004233)**

**Summary of Key issues that could give rise to adverse effects:**

- Water quality impacts due to pollutants or soil/silt run-off during construction.
- Disturbance of QI species during construction.
- Introduction/spread of invasive species or biosecurity issues during construction.

**Conservation Objectives:** [https://www.npws.ie/sites/default/files/protected-sites/conservation\\_objectives/CO004233.pdf](https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004233.pdf)

**Summary of Appropriate Assessment**

Qualifying Interest feature	Conservation Objectives Targets and attributes	Potential adverse effects	Mitigation measures	In-combination effects	Can adverse effects on integrity be excluded?
<b>Kingfisher (Alcedo atthis) [A229]</b>	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.  Only generic Conservation Objectives are defined for this SPA, with no published targets or attributes.	<u>Yes - Indirect</u> No direct effect, no kingfisher recorded on site and no removal of potential burrowing or perching sites on river. Potential for indirect effects as site is hydrologically linked to SPA, and Kingfisher may be sensitive to indirect effects from pollution of watercourses with chemicals, silt, contaminants etc. during construction phase.	Best practice pollution prevention methods are set out in Section 6.3 of the NIS and include detailed measures to mitigate impacts to water quality. I recommend that a condition be included requiring that an Ecologist be appointed to monitor compliance with the specified mitigation measures and conditions.	No likely significant in-combination effects.	<b>Yes</b> No adverse effects on population or distribution of this species due to robust water pollution control measures during construction phase. No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent indirect effects.

**Overall conclusion: Integrity test**

Following the implementation of mitigation, the construction and operation of the proposed development will not adversely affect the integrity of the River Nore SPA in light of the site's Conservation Objectives. No reasonable scientific doubt remains as to the absence of such effects.

#### 9.4.33. Mitigation Measures

9.4.34. The proposed mitigation measures are set out in Section 6.3 of the NIS and are grouped under the headings of 'measures to mitigate impacts to water quality' and 'biosecurity protocols'.

9.4.35. The proposed measures to mitigate impacts to water quality are as follows:

1. The proposed works shall be carried out during July 1st and September 30th inclusive, unless otherwise agreed with IFI. The works shall not take place during high water levels or prior to forecast of heavy rainfall.
2. A site-specific method statement will be submitted by the appointed contractor to Laois County Council for agreement prior to the commencement of the works.
3. The weather forecast must be monitored daily. In the event of adverse weather and flood events, all scaffolding and equipment must be removed from the river channel. A designated area that is located outside the predicted flood zone must be identified for the re-location and storage of these materials prior to the commencement of works. This area shall be documented in the Contractor's method statement.
4. The site compound shall be located as far from the Mountrath River as is feasibly possible. This location shall be outside the flood zone to avoid flooding of the site compound. The site compound will be used to securely store hydrocarbon based fuels and substrates and clause 804 for lining the trench.
5. Only plant and materials necessary for the construction of the works will be permitted to be stored at the compound location.
6. Machinery will be refueled off site within the site compound.
7. Site establishment by the Contractor will include access to the site, traffic management, site facilities and appropriate signage.
8. If chemicals and fuels are required to be stored on site, they will be stored in the site compound. Storage containers will be bunded. Bunds shall be 110% capacity of the largest vessel contained within the bunded area or 25% of the total volume of substances that could be stored within the bunded area

9. Absorbents shall be stored on site to contain spillages of hazardous materials. These could be in the form of items such as booms or pads. These shall be disposed of in the correct manner off-site.
  10. Vegetation removal shall be restricted to the corridor in which the pipe is to be laid and the location of the headwall. It will not involve the stripping of vegetation and soils which results in bare loose soils along the riverbanks.
  11. An appropriate water management system shall be installed to maintain a dry working area for the duration of the works to prevent silt laden surface waters entering the Mountrath River.
  12. Dewatering of the headwall works area will require pumping. The discharge from the working area will be pumped to an existing manhole within the playground. From here it will enter the foul network and will be treated appropriately at the Mountrath Wastewater Treatment Plant prior to discharging to the Mountrath River. If sand-bags are to be used, these shall be doublebagged and sealed.
  13. Where pumps are used, the pump(s) and hose(s) must be regularly checked for leaks. If leaks are found they must be addressed immediately.
  14. Post completion of the works and prior to the removal of the water management system, the contractor shall ensure that all construction materials are removed from the works area. Water ingress to the works area should be carried out in a gradual and phased manner.
  15. Headwall – design of outfall channel. The outfall will be constructed at the highest possible level relative to the Mountrath (Whitehorse) River. The proposed angle of discharge will allow the drain to empty freely in the actual direction of flow. The outfall will be stepped back from the bank face.
- 9.4.36. I consider that the proposed mitigation measures for water quality impacts comprise relatively standard good practice measures for construction works in the vicinity of watercourses. I consider that the proposed measures, as well as the construction methodology and phasing of works are suitably detailed to remove any lack of clarity regarding potential adverse effects and that they are capable of being successfully implemented. I note that the NIS does not commit to any monitoring of works. While the proposed development is small in scale and will be completed over a period of 6 days, it is immediately adjacent to the White Horse River, and I consider it

appropriate that construction works be supervised by an ecologist appointed by the local authority. Should the Board decide to approve the proposed development, I recommend that a suitable condition be included requiring monitoring of works.

9.4.37. With regard to biosecurity, no invasive species were recorded on site, however the NIS notes that crayfish plague was recorded in a number of rivers in the Barrow catchment in 2017 and 2018 and in the River Nore at Kilkenny in 2019. Since crayfish plague can be carried on wet equipment to new sites, specific mitigation measures are proposed as follows:

1. All equipment intended to be used at the site shall be dry, clean and free from debris prior to being brought to site.
2. If drying out of equipment is not feasible, equipment should be either: -
  - i. power steam washed at a suitably high temperature or at least 65 degrees, or
  - ii. disinfected with an approved disinfectant, e.g. Virkon or an iodine-based product. It is important that the manufacturer's instructions are followed and if required, the correct contact times are allowed for during the disinfection process. Items that are difficult to soak should be sprayed or wiped down with disinfectant.
3. During the duration of the proposed project, if equipment is removed off-site to be used elsewhere, the said equipment shall be cleaned and disinfected prior to being brought back to the works area of the proposed project.
4. Appropriate facilities shall be used for the containment, collection and disposal of material and/or water resulting from washing facilities of vehicles, equipment and personnel.
5. Importation of materials shall comply with Regulation 49 of the EC (Birds and Natural Habitats) Regulations 2011.

9.4.38. Noting the limited scale and extent of the works, the estimated 6 day duration of the works, and the limited need for machinery and material importation, I consider that the specified biosecurity measures can be readily implemented. In particular, I note that the proposed development can be constructed without the need for machinery to enter the White Horse River. As with the water quality measures, I consider it



appropriate that the works be monitored by an ecologist appointed by the local authority.

9.4.39. Integrity test

9.4.40. Following the appropriate assessment and the consideration of mitigation measures, I am able to ascertain with confidence that the project would not adversely affect the integrity of the River Barrow and River Nore SAC (Site Code 002162) or the River Nore SPA (Site Code 004233) in view of the Conservation Objectives of those sites.

9.4.41. This conclusion has been based on a complete assessment of all implications of the project alone and in combination with plans and projects.

9.4.42. Appropriate Assessment Conclusion

9.4.43. The proposed development has been considered in light of the assessment requirements of Section 177AE of the Planning and Development Act 2000 as amended.

9.4.44. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on the River Barrow and River Nore SAC (Site Code 002162) or the River Nore SPA (Site Code 004233). Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of those sites in light of their conservation objectives.

9.4.45. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of European site Nos. 002162, 004233, or any other European site, in view of the sites' Conservation Objectives.

9.4.46. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures in relation to the Conservation Objectives of the River Barrow and River Nore SAC (Site Code 002162) and the River Nore SPA (Site Code 004233).
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.

- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the River Barrow and River Nore SAC (Site Code 002162) or the River Nore SPA (Site Code 004233)

## 10.0 Recommendation

10.1. On the basis of the above assessment, I recommend that the Board approve the proposed development for the reasons and considerations below and subject to conditions including requiring compliance with the submitted details and with the mitigation measures as set out in the NIS.

## 11.0 Reasons and Considerations

11.1. In coming to its decision, the Board had regard to the following:

- a) the EU Habitats Directive (92/43/EEC) and Part XAB of the Planning and Development Act 2000, as amended, including Part 177(AE) and 177(V),
- b) the European Union (Birds and Natural Habitats) Regulations 2011, as amended,
- c) the Water Framework Directive (2000/60/EC),
- d) the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European Sites,
- e) the conservation objectives, qualifying interests and special conservation interests for the River Barrow and River Nore SAC (Site Code 002162) and the River Nore SPA (Site Code 004233),
- f) the policies and objectives of the Laois County Development Plan 2017-2023,
- g) the nature and extent of the proposed works as set out in the application for approval,
- h) the information submitted in relation to the potential impacts on habitats, flora and fauna, including the Natura Impact Statement,

- i) the submissions and observations received in relation to the proposed development, and
- j) the report and recommendation of the person appointed by the Board to make a report and recommendation on the matter.

### **Appropriate Assessment**

The Board agreed with and adopted the screening assessment and conclusion carried out in the Inspector's report that the River Barrow and River Nore SAC (Site Code 002162) and the River Nore SPA (Site Code 004233) are the only European Sites in respect of which the proposed development has the potential to have a significant effect.

The Board considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment. The Board carried out an appropriate assessment of the implications of the proposed development for the affected European Sites, namely the River Barrow and River Nore SAC (Site Code 002162) and the River Nore SPA (Site Code 004233), in view of the sites' Conservation Objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

- i. The likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,
- ii. The mitigation measures which are included as part of the proposed development,
- iii. The Conservation Objectives for the European Sites.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the integrity of the aforementioned European Sites, having regard to the sites' Conservation Objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the sites' Conservation Objectives.

### **Proper Planning and Sustainable Development / Likely Effects on the Environment**

It is considered that, subject to compliance with the conditions set out below, the proposed development would not have significant negative effects on the environment or the community in the vicinity, would not give rise to a risk of pollution, would not be detrimental to the visual or landscape amenities of the area, would not seriously injure the amenities of property in the vicinity, would not adversely impact on the cultural, archaeological and built heritage of the area and would not interfere with the existing land uses in the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

## **12.0 Conditions**

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions.

**Reason:** In the interest of clarity.

2. All mitigation measures and environmental commitments identified in the Natura Impact Statement shall be implemented in full as part of the proposed development.

**Reason:** In the interest of protecting the environment, the protection of European Sites and in the interest of public health.

3. A suitably qualified ecologist shall be retained by the local authority to oversee the site set up and construction of the proposed development and implementation of mitigation measures relating to ecology set out in the Natura Impact Statement. The ecologist shall be present during site construction works. Upon completion of works, an ecological report of the site works shall be prepared by the appointed ecologist to be kept on file as part of the public record.

**Reason:** In the interest of nature conservation and the protection of terrestrial and aquatic biodiversity.

4. All planting and landscaping within the public park shall be reinstated following installation of the proposed culvert. Any damaged or removed trees or hedgerows shall be replaced on a like-for-like basis.

**Reason:** In the interest of visual amenity.

5. All works shall have regard to Inland Fisheries Ireland's published guidelines for construction works near waterways (Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters, 2016).

**Reason:** In the interest of the protecting of receiving water quality, fisheries and aquatic habitats.

6. The County Council and any agent acting on its behalf shall ensure that any imported materials to the site are thoroughly screened for the presence of invasive species prior to the delivery to the site to prevent the spread of invasive species. The Council shall also ensure that all excavations carried out within the site are monitored for the presence of invasive species and if encountered disposed of in a manner which will not give rise to further spread of the species.

**Reason:** In the interest of the proper planning and sustainable development of the area and to ensure the protection of the European sites.

7. The County Council and any agent acting on its behalf shall facilitate the preservation, recording, protection or removal of archaeological materials or features that may exist within the site. A suitably qualified archaeologist shall be appointed by the County Council to oversee the site set-up and construction of the proposed development and the archaeologist shall be present on site during construction works.

**Reason:** In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

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Niall Haverty

Senior Planning Inspector

3<sup>rd</sup> September 2021