

# Inspector's Report ABP 305226-19

Development:	Construction of a two-span footbridge over the River Dinin and alterations to existing stone masonry walls to facilitate the footpath approaches to the proposed footbridge and other associated site works.
Location:	Adjacent to the N78 Castlecomer Bridge (Protected Structure) in the townlands of Drumgoole, Castlecomer and Ardra, Co. Kilkenny.
Planning Authority:	Kilkenny Co. Council.
Type of Application;	Application for approval under Section 177AE (1) of the Planning and Development (Amendment) Act, 2010.
Date of Site Inspection:	September 9 <sup>th</sup> , 2019 & January 29 <sup>th</sup> 2020.
Date of Oral Hearing	January 30 <sup>th</sup> , 2020.
Inspector	Breda Gannon

# 1.0 Introduction

- 1.1. Kilkenny Co. Council is seeking approval from An Bord Pleanala for the construction of a two-span footbridge over the River Dinin in Castlecomer Co. Kilkenny. The footbridge will require in stream works within the River Dinin which flows into the River Barrow and River Nore SAC. There are other designated sites downstream of the works including the River Nore SPA and the Lower Suir SAC. A Natura Impact Statement (NIS) and application under Section 177AE was lodged by the Local Authority on the basis of the proposed development's likely significant effects on European sites.
- 1.2. Section 177AE of the Planning and Development Act, 2000, as amended 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 Planning and Development Act 2000, as amended, 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 **Proposed Development**

- 2.1. The proposal is to provide a footbridge immediately north of and parallel to the existing road bridge. The proposed bridge would be a two-span steel box girder structure, c 44m in length. It would be built independent of the existing road bridge, with abutments constructed on either bank to the east and west side of the river. A pier would be constructed within the river bed to provide structural support. The eastern and western spans would be 17.4m and 26.4m respectively and the footbridge would be 2.5m wide.
- 2.2. The works would include site investigation in advance of the main works, vegetation removal (including Japanese knotweed), excavation, piling, river diversion, pouring of concrete, input of fill for the embankments and erection of the bridge

superstructure. The river would be locally diverted with bunding and would be flumed to complete the construction works. The site investigation works would require similar water management including cofferdam bunding, electrofishing and dewatering prior to the test drilling of 4 no. boreholes.

- 2.3. The main construction works would consist of the following;
  - Excavation for new footbridge piles, foundations and retaining walls on the eastern and western bank.
  - Provision of new pier.
  - Grading and river bank reinstatement using willow spilling and rock armour.
  - Construction of a masonry wall on either side of both embankments, which will be graded, levelled and compacted with fill before top soiling and grass seeding of the verges.
  - Safety barriers and new raised concrete verges would be completed in conjunction with top soiling and grass seeding of verges.
  - Following construction, the watercourse diversion would be removed.
- 2.4. The pier would result in the permanent removal of 1m<sup>2</sup> of instream habitat and there would be removal/disturbance to a 3m wide riparian habitat along the eastern length of the works. There would also be the removal/disturbance of river bed from the bunding measures in the immediate area of the proposed works. A full description of the works is set out in Section 2.4 of the Environmental Impact Assessment Screening Report, to which I draw the attention of the Board.
- 2.5. A construction compound would be established in the Castlecomer Discovery Park on the eastern side of the river and would be set back a minimum of 10m from the watercourse. All plant and equipment would be stored, refuelled and maintained at the compound, which would be removed following completion of the works. Construction works are envisaged to last for a period of 6 months.
- 2.6. The application is supported by a number of documents. These include letters of support for the project and letters of consent to the making of the application from the landowners to the east and west of the bridge.

The main reports submitted include:

- Options Report.
- Environmental Impact Assessment Screening Report.
- Natura Impact Statement.

# 3.0 Site and Location

- 3.1. The site is located on the eastern side of Castlecomer Co. Kilkenny at the existing road bridge. The bridge forms part of the N78 national road and caters for both vehicular and pedestrian traffic. It is a five arch structure and is c 6.7m wide between parapets. The bridge is narrow with only one footpath, which is substandard and varies in width from 650-900mm. It intersects two watercourses, the River Dinin and Ardra Stream. There is a wide weir across the width of the River Dinin facing downstream at an angle of 45 degree to the bridge.
- 3.2. The bridge which was constructed c.1763 is a protected structure. Adjoining the bridge to the west is 'La Rive', an end of terrace house which is also a protected structure. Part of its garden, boundary wall and roadside trees would be impacted by the development. To the east there would be alterations to existing stone masonry walls associated with a protected gateway. The bridge is immediately east of the Castlecomer Architectural Conservation Area, centred on High Street, Market Square and Kilkenny Street.
- 3.3. The main settlement of Castlecomer lies to the west side of the bridge and there are substantial amenity areas to the east including Castlecomer Discovery Park and Castlecomer Golf Club. Lands adjacent to the River Dinin consists of woodland with some riverine amenity area. A Tree Preservation Order applies to the area of Sawneys Wood/Hill to the east and south of the bridge. Outside these areas the main land use is agriculture.

# 4.0 Legislative and Policy Context

4.1. 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).

- 4.2. European Communities (Birds and Natural Habitats) Regulations 2011: 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.
- 4.3. National nature conservation designations: The Department of Culture, Heritage and the Gaeltacht and the National Parks and Wildlife Service are responsible for the designation of conservation sites throughout the country. The three main types of designation are Natural Heritage Areas (NHA), Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) and the latter two form part of the European Natura 2000 Network.
- 4.4. European sites located in proximity to the subject site include:
  - River Barrow and River Nore SAC (Site Code: 002162)
  - Lower River Suir SAC (Site Code: 002137)
  - River Nore SPA (Site Code: 004233)
  - Slieve Bloom Mountains SAC (Site Code: 000412)
  - Coolrain Bog SAC (Site Code: 002332)
  - The Loughans SAC (Site Code: 000407)
  - Knockacoller Bog SAC (Site Code: 002333)
  - Slieve Bloom Mountains SPA (Site Code: 004160)
  - Spahill and Clomantagh Hill SAC (Site Code: 000849)
  - Lisbigney Bog SAC (Site Code: 000869)

- Galmoy Fen SAC (Site Code: 001858)
- Thomastown Quarry SAC (Site Code: 002252)
- Cullahill Mountains SAC (Site Code: 000831)
- 4.5. Planning and Development Acts 2000 (as amended): Part XAB of the Planning and Development Acts 2000-2017 sets out the requirements for the appropriate assessment of developments which could have an effect on a European site or its conservation objectives.
  - 177(AE) sets out the requirements for the appropriate assessment of developments carried out by or on behalf of local authorities.
  - Section 177(AE) (1) requires a local authority to prepare, or cause to be prepared, a Natura impact statement in respect of the proposed development.
  - Section 177(AE) (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 177(AE) (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 177(V) (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.

#### 4.6. Castlecomer Local Area Plan 2018-2024

The statutory plan for the area is the **Castlecomer Local Area Plan 2018-2024.** 

**Chapter 7 (Recreation, Tourism and the Arts)** of the LAP outlines details of pedestrian/cycle links which would increase connectivity in the town.

It is recognised that:

'there are opportunities to provide better linkages/connections for both pedestrian and cyclists throughout the Plan area. These linkages/connections would facilitate both recreational/leisure purposes and short cut links and would aid in pedestrian permeability throughout the town. It is proposed to add several new pedestrian links which should also provide cycle lanes.

A new pedestrian bridge over the River Dinin is identified as a first step to creating a link between the town and Castlecomer Discovery Park.

Relevant objective:

<u>RTA1:</u> To provide pedestrian linkages at the following locations:

PL 1 – between the Castlecomer Discovery park and the Town Centre/The Square (pedestrian bridge over the River Dinin required).

In **Chapter 9 (Transport)** it is noted that the main transport infrastructure is provided by the N78, which crosses the River Dinin at the eastern end of the town at a narrow bridge crossing which includes a very narrow pedestrian footpath.

It states that

'the fact that the National road goes through the heart of the town has over time and with the increase in traffic, lead to concerns over the future management of this traffic so as to allow for a walkable town with a minimum of conflict for local and through traffic'.

**Relevant Objective:** 

<u>Transport Objective T6</u> - To support the provision of a pedestrian link across the River Dinin from the Discovery Park into the town.

Under Transport Development Management Standards:

<u>TDMS 3</u> – To require the co-location of pedestrian and cycle routes on all new infrastructure connecting key destinations within the town, particularly between the Castlecomer Discovery Park and the Prince Grounds and/or The Square (pedestrian bridges over River Dinin required).

**Section 6.1 of the LAP (Built Heritage)** contains objectives to protect and preserve items of architectural and archaeological heritage (H6, HDMS10 and HDMS11). The Record of Protected Structures is contained in Appendix B2.

**Section 6.3 of the LAP (Heritage Objectives)** includes Objective H2 which seeks 'to protect natural heritage sites, specifically the River Dinin, part of the River Barrow and River Nore SAC'.

# 5.0 The Natura Impact Statement

- 5.1. Kilkenny County Council's application for the proposed development was accompanied by a Natural Impact Statement (NIS) 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 site's conservation objectives, and provided information to enable the Board to carry out an appropriate assessment of the proposed works.
- 5.2. The NIS describes the elements of the project (alone or in combination with other projects and plans) that are likely to give rise to significant effects on the European sites. Potentially significant impacts are set out, as well as an assessment of their effect and the mitigation measures that are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of the European sites.
- 5.3. The conclusion reached in the NIS is that subject to best practice and the full implementation of the recommended mitigation measures, that the proposed development either on its own, or, in combination with other plans or projects would not result in significant adverse effects on the integrity of the designated sites and their qualifying interests.

# 6.0 **Consultations**

6.1. The application was circulated to the following bodies:

- An Taisce
- Failte Ireland
- The Heritage Council
- Health Service Executive South Eastern
- Inland Fisheries Ireland
- Irish Water
- Minister for Culture, Heritage and the Gaeltacht.
- The Arts Council
- Transport Infrastructure Ireland
- 6.2. Responses were received from Department of Culture, Heritage and the Gaeltacht, Inland Fisheries Ireland and Transport Infrastructure Ireland.
- 6.3. The Department of Culture, Heritage and the Gaeltacht (DoCHG) notes that qualifying species of the River Barrow and River Nore SAC have the potential to be impacted by the proposed works including Atlantic Salmon, Brook Lamprey and River Lamprey. A conservation objective for the above fish species is to restore the favourable conservation condition of the SAC by ensuring accessibility to the river system.

The weir at Castlecomer, which lies in the path of the planned new footbridge is considered a high risk barrier to salmon and lamprey migration. The sill of the adjacent road bridge is also a migration barrier.

The proposed project includes the construction of one pier within the river bed to provide structural support to the footbridge. The pier will lie immediately adjacent and downstream of the weir. In order to restore the favourable conservation condition of the above fish, it is likely that remedial works to improve fish passage will have to take place at this location. The NIS does not state whether the footbridge has been designed to allow for such necessary conservation works. Critically, it is not clear that the proposed in-stream pier has been designed to withstand changed river flows should the weir be removed. It is likely that permanently impeding remedial works to improve fish passage at this location will significantly impact on the conservation objectives for a number of qualifying interest fish species. Further information on this matter is required in order for the Board to complete Appropriate Assessment and to ensure that this project will not adversely affect the integrity of the River Barrow and River Nore SAC.

The DoCHG concurs with the recommendations made regarding archaeological heritage protection and requires that a condition be attached to any permission requiring that an Underwater Archaeological Impact Assessment be carried out.

6.4. Inland Fisheries Ireland (IFI) - objects to the granting of permission for the proposed development. It draws attention to the requirements of the Water Framework Directive which requires that member states protect inland surface waters and implement the necessary measures to prevent deterioration of the status of all bodies of surface water. The development has the potential to further deteriorate the hydromorphological status of the River Dinin and therefore the River Nore and River Barrow SAC downstream through the construction of a column/pier, which will cause the loss of spawning and nursery habitat both during the construction stage and the lifetime of the bridge. The presence of a pier in the centre of the channel will also change flow rates and channels and possibly allow the collection of debris, which in turn may cause a barrier to the free movement of fish. It is the policy of the IFI for ecological and hydromorphological reasons, that all new bridge structures on such channels are clear span.

A report prepared by the Southern Regional Fisheries Board (now IFI) in 2008 titled *'Assessment of the risk of barriers to Fish Migration in the Nore Catchment'* identified Castlecomer Weir and the associated bridge apron downstream as a high-risk barrier. There are no facilities for fish passage at the weir. The weir is only passable to salmon during spate conditions and the weir and apron have a combined hydraulic jump of 2.25m making it a high risk to impassible barrier for lamprey and eel species. It is the first major barrier on the River Dinin and its removal would make over 5km of river channel available to migrating fish species before the next high risk barrier is encountered. The long-term plan of IFI is to remove the derelict weir under Section 117 of the Fisheries (Consolidation) Act, 1959 and in line with the objectives of the Water Framework Directive. In addition to the habitat loss and disturbance due to the construction of the pier, IFI are concerned that any additional in-river structures may impact on the options for the removal and/or the redesign of the weir and bridge apron. Salmon also utilise the area between the weir and the bridge as a resting place, particularly during lower flow conditions. The requirement for IFI for a clear span structure was clearly communicated to the project team during pre-planning discussions.

6.5. **Transport Infrastructure Ireland** issued a standard type response stating that it had no specific observations to make on the application.

#### 6.6. Public Submission

A submission was received from Eamonn Kelly who notes the protected status of the bridge and the need to protect architectural and archaeological heritage. His preferred option is for a bridge that would runs parallel to 'La Rive' garden, crossing the river further north and connecting into the Discovery Park and then on to the public footbridge (sketch attached). This option would retain the existing vista of the bridge from the Discovery Park.

A second option is put forward which would involve attaching the footbridge to the existing road bridge. It would be located well above the arches and balustrades with see through material, stainless steel posts, handrail and metal cables. Structural steel circular struts would sit on the pier shelves between the arches. The colour would be sympathetic with the granite bridge. This option would also protect the vista from the Discovery Park and the integrity of the bridge, weir and surrounds would not be compromised.

# 7.0 Oral Hearing

- 7.1. A limited agenda oral hearing was held on January 30<sup>th</sup>, 2020 in the Avalon House Hotel, Castlecomer. Co Kilkenny. The agenda was limited to the consideration of the following matters:
  - 1. Habitat loss (spawning and nursery) and disturbance during the construction and operational phase of the development, with particular reference to the proposed in-channel pier.

- 2. Impact of the proposed pier on salmon and lamprey migration, including flow rates and barriers to free movement of fish.
- 3. Potential implications for future conservation works, particularly the removal of the weir, arising from the construction of the pier.
- 4. Potential impacts on archaeological and architectural heritage and the alternatives considered in relation to location and design.

Those in attendance included the following:

#### Kilkenny Co. Council

- Mr Dermot Flanagan, SC.
- Mr John Harte, Solicitor.
- Mr Anthony O'Brien, Civil Engineer RPS (Submission 1 & 3).
- Dr Letizia Cocchiglia, Senior Ecologist RPS (Submission 2 & 2a).
- Mr John Cronin, John Cronin & Associates (Submission 4 & 5).
- Mr Francis Coady, Architectural Conservation Officer. Kilkenny Co Council.
- Ms Kelly, Planning Section. Kilkenny Co. Council.

#### Department of Culture, Heritage and the Gaeltacht

- Mr Gerry Clabby, Head of Ecological Assessment.
- Ms Ciara Flynn. Divisional Ecologist (Submission 6).

#### Inland Fisheries Ireland

- Mr Alan Cullagh, Fisheries Officer, South East Region.
- Mr David Mc Inerney, Director of IFI within South East River Basin.
- Jane Gilraine.

#### Observer

Mr Eamonn Kelly.

#### Submissions

A summary of the content of the submissions is provided below, which is discussed in more detail in the assessment. **Mr Anthony O' Brien** described the options considered and the factors that influenced the preferred option. He provided a detailed description of the construction works from initial site investigation through to project completion. He responded to the matters identified for consideration as follows;

Location of the pier - the chosen location is on a vegetated island which has developed as a result of deposition in the river. The island is above the water level and is not used for spawning. Fish currently migrate around it and the pier would not create any additional barriers to movement. The natural hydromorphology of the river in its current configuration causes the deposition of sediment and therefore the presence of the pier will not cause a notable change at this location.

Impact of the pier on flow rates – Mr O Brien referred to hydraulic modelling undertaken as part of the preliminary design of the scheme. A range of scenarios and flood events were modelled for flood and low flow events, as set out in the submission. He stated that the results indicate that both water levels and flow velocities are not sensitive to the addition of the pier in the river. It also demonstrates that the potential removal of the weir in the future would have a negligible impact on water levels and flow velocities at the proposed bridge pier locations.

<u>Impact of pier during construction</u> – it was noted that the construction of the pier involves the same methodology as the construction of a clear span structure. It would involve the creation of a sealed dry working space enclosed by a sand bag cofferdam. The main difference is that the working area would be extended further into the river channel to cover the area of the proposed pier during construction (Appendix A -Submission 1).

Impact of pier on future conservation works – the location of the pier is sufficiently removed from the weir and the design of the pier and its foundations is sufficiently robust to conclude that the pier will not impact on options for removal and/or design of the weir in the future. Given the protected status of the weir, it is considered that a fish pass is the most likely type of future conservation works in this location. Two possible options for a fish pass are detailed in Appendix B, which indicate that it is entirely feasible to implement the design and construction of a fish pass in the future with the proposed pier in its proposed location. It is concluded that the proposed pier

would not prevent the implementation of future remedial works to improve fish passage at this location.

Mr O' Brien also provided details of the Construction and Environmental Management Plan (Submission 3). He also noted that the temporary construction compound would be relocated from its original proposed location at the Discovery Park to the Ormond brick factory, thereby increasing the separation distance to watercourses.

**Dr Letizia Cocchiglia** in her evidence (Submission 2 & 2A) elaborated on the mitigation measures that would be employed to avoid/reduce impacts on protected habitat/species during construction. She stated that the pier would be located on a vegetated island within the river channel, which is not suitable salmonid/lamprey spawning or nursery habitat. The presence of the vegetation makes the area unsuitable for salmon/lamprey which require clean gravels for spawning. In order for salmon and lamprey eggs to survive the island would have to be inundated for at least 15 and 40 days and a series of photographs were produced to show that the island is rarely inundated except during high flow events (Figures 2.1 to 2.8). Fig 3.1 of her submission shows the 2019 annual flow levels in the River Dinin and peak flood events. Dr Cocchiglia noted its flashy nature with flows rising and falling quickly, which provides further evidence that should the island be inundated during a flood event it is not for long, and less than the time required for fish eggs to incubate.

Dr Cocchiglia did accept that salmonids have been observed spawning in areas surrounding the island due to the barrier the weir presents. However, she rated the instream salmonid and spawning habitat as sub-optimal due to siltation and moderate water quality (Q3-4).

Table 4-1 of the submission provides a summary of the impacts on the qualifying interests of the designates sites and the mitigation required. More detailed information on mitigation measures is provided in Section 5 of the submission.

**Mr John Cronin** – noted the architectural significance of the existing stone masonry bridge which in addition to being in the Record of Protected Structures and rated, of national importance in the NIAH, is part of a discernible typology known as the 'Kilkenny Group'. The spandrel niches are recognised as the most important

architectural detail on the bridge, tying together the other 18<sup>th</sup> century bridges in the locality.

Mr Cronin provided an assessment of the 5 no. options considered from a cultural heritage perspective, noting that the preferred option provides the thinnest cross section of the four independent options with less impact on the existing bridge. It is acknowledged that the proposal will have an *indirect, slight negative impact* on the setting of the existing bridge but will not give rise to direct impacts on original fabric of note. The impact on adjoining protected structures is assessed as *'direct, moderate and negative* on the curtilage of La Rive associated with the loss of part of its garden and for an *indirect, slight negative impact* on the protected gateway to the east of the bridge.

With regard to archaeology, it is acknowledged that the potential exists for impacts on as yet undiscovered features or deposits and that the measures stipulated by the DoCHG will be implemented.

Mitigation measures for cultural heritage are set out Submission 5.

**Ms Ciara Flynn** – stated that the DoCHG had concerns regarding the potential impacts of the proposed bridge on biodiversity within the River Dinin, in particular salmon and lamprey species. She stated that the in-stream pier would be located within the spawning grounds of Atlantic salmon. One of the conservation objective is to restore the favourable condition of salmon in the SAC, which is then defined by a list of attributes and targets. One of the targets for this conservation objective is that there should be no decline in the number and distribution of spawning redds due to anthropogenic causes. It was the Department's view that the direct and indirect impacts of the proposed construction works and proposed in-stream pier have not been fully addressed in the NIS, and in particular, it is unclear if the development would not negatively impact on the number and distribution of spawning redds.

Another target of the conservation objectives for Atlantic Salmin in this SAC is that water quality should be at least Q4. The bridge will be constructed in structural steel which will require periodic maintenance (cleaning and painting) over its 120 year design life. The impacts of maintenance of the bridge and in particular maintenance of the in-stream steel pier on water quality had not been assessed.

Ms Flynn noted that the impacts of construction works on salmon and lamprey migration and barriers to free movement of fish have been assessed and the NIS proposes suitable migration in this regard. The potential impacts of any necessary pre-construction tests works have not been assessed nor have the cumulative impacts of these and construction works been assessed in the NIS.

Ms Flynn noted that the weir and sill of the existing bridge are currently barriers to fish migration. The conservation objectives for salmon, brook and river lamprey all have targets which seek to ensure that the extent of migration is greatly enhanced. This will involve targeted nature conservation measures which remove as many barriers to fish movement as possible within the SAC. No evidence has been produced to demonstrate that the in-stream pier will not impede any other necessary nature conservation measures at this location which may be required. The applicant should have consulted with IFI and the DoCHG and sough the necessary conservation works at this location. In the absence of this information the Department is concerned that the proposed development will undermine the ability to achieve key conservation objectives for the SAC by limiting the ability to remove barriers to fish passage at this location.

**Mr Alan Cullagh** - stated that it was IFI's policy on bridges not to have structures in the channel. It was made clear to applicant from an early stage that a clear span bridge was IFI's preferred option. He referred to the dynamic nature of rivers and that putting structures in the middle of the channel changes its morphology. He accepted that the photographs presented indicate that the island structure has been there for at least 15 years, but it does not appear to have increased in size.

There were no real objections to the works, the issue was the pier which would be a permanent long -term structure in the river. Mr Cullagh stated that salmon do spawn in the area between the weir and the bridge throughout the winter months and that salmon fry were found when the area was electro-fished in 2010 and 2016, in addition to this winter. He stated that the removal of the barrier to fish movement either in the form of a fish pass or breach in weir should be designed in conjunction with the pier in river, if that is the final design.

**Mr David Mc Inerney** - stated that the principle of a pier in the river channel and within the SAC is not ideal. He acknowledged the additional information submitted by the applicant which shows that the island has been stable for 15 years, notwithstanding IFI's comments regarding the dynamic nature of rivers and morphological impacts. He stated that the information provided by the applicant to address the barriers to fish movement, while certain design issues have been identified, opens up a channel for discussion.

**Mr Dermot Flanagan SC** - referred to the CEMP and the updated mitigation measures outlined in the oral hearing submissions relating to the NIS and cultural heritage, which he said were now more targeted and specific than those outlined in the application documentation. He considered that the Board may consider attaching a condition requiring that all of the mitigation measures presented at the oral hearing be implemented in full, referring to precedent in this regard (25HA.0051 & 303274-18).

**Mr Eamonn Kelly** – said he would be sad to see the removal of the weir and hopes there is another solution. He acknowledges the need for a footbridge but it must be sympathetic to what exists. He considered that the option to locate the footbridge further north should receive further consideration and that a cantilever bridge would be the best option.

Both IFI and the DoCHG commented on the volume of material submitted to the oral hearing. The Inspector's offer of additional time to consider the information was refused. Dr Clabby, on behalf of the DoCHG, stated that the applicant's submission may have addressed some of the matters raised. He reiterated the DoCHG's focus is on the potential impacts of the proposed development on the qualifying interests of European sites, noting that the Board is the competent authority to evaluate the information put forward by all of the parties.

I would point out to the Board that the material submitted does not propose any material alterations to the proposed development. It essentially elaborates on the issues raised and provides more targeted information on the construction methodology and the mitigation measures proposed.

# 8.0 Assessment

- 8.1. The likely consequences for the proper planning and sustainable development of the area:
- 8.1.1. The layout of Castlecomer is such that the main developed areas of the town are located to the west of the bridge and the main areas of open space (Castlecomer Discovery Park and Castlecomer Golf Club) are located to the east. The formal layout of the town, planned streets and built heritage, which includes many protected structures, adds significantly to the quality and character of the townscape to the west. It is acknowledged in the plan that this creates potential for heritage led tourism and related services. On the opposite side of the river, Castlecomer Discovery Park is identified in the plan as a significant recreational/leisure product, which includes scenic walking trails, children's play area, café, craft workshops etc. This restricted connectivity is a factor impacting on the tourism potential of both products and commercial/tourism synergies could be developed/improved by strengthening the links between the town and the Discovery Park. Significant pedestrian safety issues exist on the existing road bridge associated with its narrow carriageway and footpath.
- 8.1.2. The proposed new pedestrian footbridge would provide an important connection, linking the east and west sides of the town. It would enhance connectivity between the town and the recreational facilities to the east while improving road safety for both pedestrians and road users. I consider that the new footbridge is entirely consistent with the stated objectives of the Castlecomer LAP and is acceptable in principle in this location. The proposed development is, therefore, in accordance with the proper planning and sustainable development of the area.

#### 8.2. The likely effects on the environment:

8.2.1. There is no provision under Section 177AE of the Planning and Development Act, 2000 as amended, to require Environmental Impact Assessment or to carry out a formal EIA Screening Determination for a Local Authority project, which was submitted under this section of the Act.

- 8.2.2. Having regard to the nature, scale and characteristics of the proposed development,I consider that the main environmental effects to be assessed, other than those covered under the Appropriate Assessment, are as follows:
  - Architectural and archaeological heritage.
  - Visual amenities.
  - Water Quality & Biodiversity.
  - Alternatives.

#### Architectural and archaeological heritage

- 8.2.3. The proposed footbridge would be located in a very sensitive location. It would be constructed immediately north of the existing masonry stone bridge (protected structure). It would also involve alterations to existing stone masonry walls associated with two other protected structures on either side to facilitate footpath approaches to the proposed footbridge. The area to the west of the bridge is designated an Architectural Conservation Area and the site is included within the Zone of Notification surrounding the historic town of Castlecomer (Monument No. KK005-082).
- 8.2.4. Appendix D of the Environmental Impact Screening Report contains an Archaeological and Architectural Heritage Assessment Report, prepared by John Cronin and Associates. Further submissions were made by Mr Cronin at the oral hearing (Submissions 4 & 5).

#### Architectural Heritage

8.2.5. The existing bridge is described as follows in the Record of Protected Structures (RPS Ref D13 – Appendix B2 in the LAP):

'Road over river bridge. Five-span segmental arches of varying size and with angled cutwaters. The westernmost arch leads on to a headrace to nearby flour and sawmills. The spandrels have Palladian motifs. Built to design prepared by George Smith (1763-7).

8.2.6. The bridge is rated as being of national importance in the National Inventory of Architectural Heritage (NIAH ref no 12301001). According to the details the bridge is largely original except for masonry repairs to parapets. It is described as follows: 'Five-arch road bridge (with slight hump-back) over river, built 1763..(uncoursed rubble sandstone) walls centred on granite ashlar triangular cutwaters to piers having pyramidal capping with lichen-spotted cut-granite stringcourses supporting parapets having lichen-spotted cut-granite coping (several sections of which have been replaced with cast concrete). Series of five round or segmental arches between round-headed niches with rusticated granite ashlar crow stepped voussoirs centred on lichen-spotted cut-granite triple keystones. Sited spanning Dinin River with wooded banks to river'.

8.2.7. The bridge is considered to be of significant heritage importance (NIAH appraisal):

'A bridge erected by George Smith representing an important component of the mid eighteenth-century civil engineering heritage of Co. Kilkenny with the architectural value of its composition, one succeeding a bridge washed away during the so-called Great Flood of 1763, confirmed not only by the silver-grey granite dressings demonstrating good quality workmanship, but also by the elegant 'sweep' of the arches making a pleasing visual statement at a crossing over the Dinin River: meanwhile a benchmark remains of additional interest for the connections with cartography and the preparation of maps by the Ordnance Survey (established 1824)'

8.2.8. In his submission to the oral hearing Mr Cronin acknowledged the architectural significance of the bridge. He drew attention to its architectural detail stating:

'The spandrel niches are recognised as the most important architectural detail of the bridge, tying together the other 18<sup>th</sup> century bridges in the locality in a discernible typology known as the 'Kilkenny Group'. Their acknowledgment of other fashionable designs outside of Ireland at this period, makes them nationally significant, with an international flavour'.

8.2.9. The existing masonry bridge is, therefore, a structure of significant architectural and heritage value and its protection is just one of the many competing constraints that must be considered in the assessment of this proposal. It stands as an important landmark structure at the edge of the town and makes a significant contribution to the its character and visual amenities. It is largely original and incorporates important features which must be protected and conserved. The challenge is how to best

accommodate the new footbridge and to retain the character and special interest of the existing masonry bridge.

- 8.2.10. Due to its architectural significance and heritage value, various options for the new footbridge were considered, the details of which are set out in the Options Report (prepared by RPS). Due to its protected status and significance both locally and nationally the replacement or widening of the existing bridge was not considered an option. This is considered reasonable.
- 8.2.11. The Options Report considers 5 no.options which includes a cantilever structure and independent footbridge options (4.no), both single/double span using a variety of materials (steel, concrete, glulam and composite materials). Drawings and photomontages of each options are provided with the application and in Appendix A of the report. Each option is evaluated under various criteria (technical, aesthetics, maintenance, hydraulic considerations, health and safety, construction and buildability, ground conditions, economic and environmental). A matrix is presented in Table 14-1 where each option is ranked against these criteria (Table 14-1). Option No 4, which is a two-span steel box girder footbridge emerged as the preferred option.
- 8.2.12. A brief summary of each option is provided below for the information of the Board. Each of the options is brought forward on the basis of specified design parameters including a design life of 120 years, a minimum width of 2.5m and with minimal or no perceptible dynamic excitations. It is acknowledged that all of the options presented provide technical solutions and there are advantages and disadvantages associated with each.
- 8.2.13. Before moving forward, I would also like to point out to the Board that the location of the proposed footbridge is dictated by the pedestrian desire line, which follows the N78 as the primary artery into the town. It is considered that relocating it to another point upstream/downstream of this location is likely to result in the existing road bridge continuing to be used by pedestrians. I would also note that the primary views of the bridge are from the Castlecomer Discovery Park to the north and to a lesser extent from the footpath adjacent to the bridge to the east.
- 8.2.14. Whilst details of the application were forwarded to various relevant prescribed bodies, none of the responses made any comment on the location of the new

footbridge. The planning authority refers to on-going consultation with the Conservation Officer of Kilkenny Co Council, the DoCHG and the TII Project Archaeologist, which influenced the selection of the preferred design and a move away from affixing a cantilever structure to the existing bridge.

- 8.2.15. Option No 1 Cantilever Structure This would involve a new cantilever structure supported by struts attached to the existing protected structure. Extensive works to the existing bridge would be required including demolition of the existing spandrel wall and excavation of the carriageway between the arches to construct the anchorages. It would require substantial support from the existing bridge in the form of a buried anchorage or tie bar to support the main deck. The demolition and modification required could pose a risk to the integrity of the protected structure.
- 8.2.16. In his submission to the oral hearing Mr Cronin provided further elaboration of the impacts on the masonry bridge. He noted that 'the cantilever option would result in 'splitting' the round headed spandrel niches, the very element which identifies the typology of the 'Kilkenny Group' of bridges and which identifies the 18<sup>th</sup> century bridge of national importance'. The support stays would require direct impact fixing to the top of the granite cutwater and the insertion of the cantilever beam would result in significant intrusion into the bridge façade and core'. The structure would also 'blind' the niches above the cutwaters and it would no longer be possible to see the overall façade of the existing bridge. This option was rejected on the grounds of its negative impact on the fabric of the bridge, architectural details and its visual impact.
- 8.2.17. I accept that the works required, which include demolition and modifications, would impact significantly on the character, integrity and visual appreciation of the existing bridge and that it is reasonable that the cantilever option is rejected on this basis.
- 8.2.18. The Board will note that the second option but forward by Mr Eamonn Kelly would involve a structure attached to the face of the existing bridge which raises similar considerations.
- 8.2.19. Option 2 to 5 Independent footbridges In the case of the independent options the position of the footbridge remains as close as possible to the existing bridge while allowing sufficient clearance to maintain visibility of the masonry arches. A gap of 3m is adopted as a minimum on the west side increasing to approximately 15m on the

east side. This ensures that the new structure can be clearly seen as independent of the existing bridge.

- 8.2.20. The advantages associated with these options is that there is less impact on the existing bridge, no intrusive works are required and views of the bridge and its features would be maintained, albeit from a different perspective. Views of the masonry arches would be maintained in views from the Discovery Park and close up views of the whole façade of the existing bridge would be available from the new footbridge. There would also be minimal disruption to road traffic and utilities as the works would be limited to either end of the existing bridge as opposed to the cantilever option where works would be required along its entire length.
- 8.2.21. With regard to single span (Option 2 and 5) and two-span options (Options 3 and 4) the benefit of providing an intermediate support and a two-span structure is to achieve a thinner deck. Single span options are noted to be more complex in terms of dynamics and require significant inertial stiffness and therefore structural depth to satisfy dynamic requirements. With a span of c 46m, the depth required was considered to impact on the aesthetics of the existing bridge and negate the benefit of using a single span. In terms of materials, the use of steel would enable a significantly thinner section than timber and it is noted there is little experience of design and construction of glulam bridges in this country and they cannot be guaranteed to meet the requirements of the brief for a 120-year design life.
- 8.2.22. Having considered the 4 no. independent options, the two-span steel box girder footbridge (Option No 4) was selected as the most appropriate as it had the thinnest deck (depth from soffit of sub structure to the underside of deck). In response to questions from the Inspector during the oral hearing, Mr O'Brien confirmed that the maximum depth of the preferred option was 800mm which tapers to 600mm at both abutments. This compares to 1200-1600mm for other independent options. The independent single-span options were rejected on the grounds of their bulky nature and massing, which would require a deeper deck and would obscure much of the 18<sup>th</sup> century bridge from the north.
- 8.2.23. Mr Cronin's Brief of Evidence contained correspondence from the Built Heritage Section of the DoCHG which confirmed that the selected option was considered to

be the best overall option in architectural terms and produced a high-quality structure in its own right. It noted;

'The decision to use a single pier ... allows the bridge to be a much shallower structure than possible with a single-span bridge and the curved deck softens the rigidity of a straight deck, which is subtle and positive characteristic given that the masonry bridge and the approaches to it are on a bend on the road. The selection of materials for the bridge and ancillary fixtures has considered their visual benefit and performance properties. Finally, the footbridge opens up the north western view to footbridge users while not blocking the view from the Discovery Park.

- 8.2.24. I accept that it is difficult to attach a new structure to the existing bridge without impacting on its character and integrity. I consider that the Options Report and Mr Cronin's evidence to the oral hearing provides a comprehensively analysis of the various alternatives and that an independent footbridge provides the optimal solution in terms of minimising intrusive works and protecting the character, integrity and the visual appreciation of the protected structure.
- 8.2.25. I accept that the two-span steel box girder provides the most appropriate solution in terms of minimising impacts on the setting of the bridge and views of its architectural detail. I accept that the support pier will also have visual consequences but this has to be weighed against the advantages provided by the thinner desk and the elliptical plan of the pier, which will reduce its overall bulk and its impact on the visual amenities of the area.

#### Impacts on adjoining protected structures

- 8.2.26. Sections of the western and eastern approach walls on the northern side of the bridge would be removed to create tie-ins and pedestrian access to the new footbridge. These changes would affect protected structures on both sides of the bridge.
- 8.2.27. On the western side stands 'La Rive' (16 High Street), an end of terrace private house and garden. It is described as follows in the Record of Protected Structures in the LAP (Ref No C491-Appendix 2B):

'La Rive. Three-bay, three-storey end terrace structure with carriage arch and doorway with blocked granite architrave structure with attached two-bay, three-storey wing'.

- 8.2.28. The house has a large garden which extends down to the western bank of the river. Part of the masonry wall adjacent to the bridge would be removed and part of the garden associated with the house (100m2) would be acquired to facilitate the construction of the approach to the new bridge. The house is best appreciated from High Street, where it forms part of a group of impressive buildings located within the designated Architectural Conservation Area to the west of the bridge.
- 8.2.29. The section of the masonry wall to be removed extends from a wooden gateway to the east of the house. This section of the wall is not entirely original with clear evidence of interventions. The height of the wall has been raised with random sandstone rubble over the original vertical coping stones. Sections has also been rebuilt using cast-concrete capping adjacent to the gate piers. A section of the wall would be reduced in height to bring it back to the original parapet height, as defined by the vertical coping stones.
- 8.2.30. The works would also result in the loss of part of the grounds associated with the house and some mature vegetation. Whilst this contributes to the overall setting of the house, it is largely screened from view by the existing wall and vegetation. It was confirmed by the applicant following questions from the Inspector that the land take and associated impacts on the protected structure would be similar for all of the independent options.
- 8.2.31. The works to the east side of the bridge would also involve alterations to an existing wall. The wall extends to a gateway to the east (associated with the Discovery Park) which is also a protected structure (RPS Ref C853). The structure is described as follows in the RPS:

'Gateway, c1850, comprising pair of limestone ashlar piers with moulded stringcourses, cut-limestone capping, sections of curved wrought iron flanking railings, limestone ashlar terminating piers, and random rubble stone boundary wall to perimeter of site'.

8.2.32. The gateway itself would not be impacted but a section of the associated wall would be removed. According to the assessment report, the wall has been significantly altered and is of limited heritage value. While there is evidence of repair work carried out to sections of the wall between the gateway and the ridge, the wall retains some of its original characteristics including its height and vertical coping. It was confirmed by the applicant following questions from the Inspector that the impacts on this wall would be similar for all of the independent options.

- 8.2.33. Whilst I accept that it would be preferable if the works did not impact on adjoining protected structures, I also accept that there are many competing factors associated with the provision of the new footbridge, including the preservation and protection of the existing bridge, the need to provide improved connectivity between the town and the amenities associated with the Discovery Park and the need for improved facilities for pedestrian safety. I note that the DoCHG have raised no issues regarding impacts on built heritage.
- 8.2.34. Having considered all of the options presented, I accept that the proposal is the optimal solution which minimises the impact on the character and integrity of the bridge. I consider that the loss of sections of masonry wall (which are not entirely original) and the loss of grounds associated with 'La Rive' is an acceptable compromise in light of the advantages associated with the provision of the new footbridge, including connectivity and safety conditions for both pedestrians and vehicle users.
- 8.2.35. Subject to the suite of mitigation measures proposed, which includes the preparation of a conservation method statement, that the works be supervised by a suitably qualified built heritage specialist and the re-use where practical of masonry removed during construction, I do not consider that the impacts will be significantly adverse.
- 8.2.36. The east end of the ACA terminates at the west end of the bridge. While the new footbridge will be viewed as a contemporary structure adjacent to the existing road bridge, its curved alignment and overall height, which respects the character of the existing bridge ensures that it will not adversely impact on the ACA.

#### Archaeological heritage

8.2.37. The bridge is not a recorded archaeological monument but is located with the *Zone of Influence* surrounding the historic town of Castlecomer (KK005-082). The Archaeological Assessment identifies the existing bridge and the environs of the river as part of a battlefield site (KK005-102) located immediately east of the bridge. The site is also located within the wider environs of an earlier conflict centred on 'the Garrison' or castle located c 155m to the northwest of the bridge. The report further notes:

'The recent archaeological discovery of the remains of a bastion (KK005-104) located 150m northwest of the bridge and built to protect the river crossing in the 17<sup>th</sup> century highlights the military and strategic significance of the bridge and its environs to the historical development of the town. Historical sources also attest to the presence of buildings destroyed during the 1790 battle on both sides of the bridge and sub-surface remains of these structures may survive.

Riverine crossing areas also have the potential to contain the remains of earlier bridge or fording features as well as stray archaeological artefacts. Riparian settings are also suitable topographic locations for the site of Bronze Age fulachta fia'

- 8.2.38. The construction of the abutments and tie-ins on both sides of the bridge and the provision of a new pier on raised ground within the river have the potential to result in direct impacts on as set undiscovered archaeological features associated with the battlefield site and other archaeological activity in the area.
- 8.2.39. Subject to the mitigation measures proposed, I accept that the proposed development is not likely to impact significantly on the archaeological resource. The measures proposed are standard best practice and include an underwater archaeological impact assessment of the in-channel areas to be impacted by the development, archaeological test trenching of ground either side of the river which would be impacted by groundworks and archaeological monitoring of all ground and in-channel works. I note that the DoCHG has raised no issues regarding the recommendations made in the Cultural Heritage Assessment Report subject to its requirements regarding underwater archaeological impact assessment.

#### Visual amenities

- 8.2.40. The site is located within the 'Castlecomer Plateau Landscape Character Area' which is considered to be of 'significant value' and 'highly sensitive to change'. I note that there are no designated landscapes or scenic views in the vicinity of the site. The existing masonry bridge is a significant and attractive feature at the eastern end of the town framed by existing mature trees. Some of the trees and woodland to the south of the bridge are the subject of a Tree Protection Order.
- 8.2.41. There would be impacts associated with the construction and operational stage of the development which have the potential to impact on the visual amenities of the area. These impacts are assessed in a Landscape and Visual Assessment

contained in Appendix E of the EIA Screening Report. In terms of views and prospects, the effects on visual amenity from a number of selected viewpoints in the vicinity of the bridge are assessed.

- 8.2.42. During construction there would be removal of small areas of vegetation including woodland and scrub on the eastern and western banks of the river and an area of grassland along the river bank. No trees associated with the TPO would be affected. The construction of the tie-ins with the existing footpath on either side of the bridge would involve the removal of sections of the existing bridge wall and some vegetation. These impacts will be highly localised and confined to the immediate area of the bridge. Due to the limited scale and nature of the development and its location adjacent to the existing bridge, significant effects on the character of the landscape surrounding the site and the wider setting of the town will not arise.
- 8.2.43. The impacts during the operation phase will arise as a result of the introduction of a new permanent contemporary footbridge adjacent to the existing masonry bridge. I accept that the new structure will alter the overall setting of the existing bridge and the riverscape when viewed from the north. While the intention is to design the pier to minimise its visual impact and to align it with the existing stone arch, it will remain visible in views from the Discovery Park.
- 8.2.44. However, the impacts will be highly localised with the greatest impacts on recreational viewers at the picnic area within the Discovery Park to the north of the bridge, and from along the northern side of the existing bridge where the footbridge would be visible at short range. I accept that the proposal addresses the identified need for a new footbridge and that efforts have been made to design the bridge as an aesthetically pleasing structure which is sympathetic to its surroundings.
- 8.2.45. No cumulative impacts are identified in relation to landscape and visual impact.

#### Water Quality & Biodiversity

The in-stream works have the potential to result in the release of sediment and other pollutants to the watercourse, with impacts on water quality and the species it supports. The construction stage may also cause temporary disturbance to wildlife and the spread of invasive species. The issues arising from the proximity/connectivity to European Sites and impacts on water dependent habitats

and key species of conservation interest are dealt with in the Natura Impact Statement and is considered in more detail in Section 8.4 of this report.

A suite of measures are proposed to mitigate potential impacts on water quality. All works will be conducted during low flow conditions and in a dry sealed environment created by a sand bag cofferdam to ensure that the works area is isolated from the river channel. These are standard best practice construction methodologies and environmental controls will be implemented to ensure that sediment and other pollutants are prevented from entering the river system. The measures are detailed in the CEMP.

A Bat Survey Report is contained in Appendix F of the report. The existing bridge was assessed as not suitable for roosting bats and no tree roosts were recorded during the site visit. However, the riparian and woodland habitats adjacent to the footbridge are considered of high suitability for foraging and commuting bats. One of the trees which will be removed in the adjacent garden associated with La Rive (Horse Chestnut) is considered to be of moderate suitability for bats. It is accepted that the loss of potential or actual roosting sites would have a direct, significant negative permanent impact on bats at the local level.

In terms of mitigation, it is recommended that the tree be examined by an experienced bat ecologist prior to commencement of work on the site. Should the tree be identified as a roost site, a derogation licence from the NPWS would be required to remove the bats and fell the tree. To minimise disturbance to bats, it is recommended that works be carried out during daylight hours as lighting during construction can cause avoidance of the area for commuting bats and can prevent/reduce foraging.

The lighting proposed for the bridge following completion is designed to avoid illuminating important foraging and commuting areas for bats. It will illuminate the deck of the pedestrian bridge and the niches/spandrel of the adjacent road bridge. No significant impacts on bats are predicted.

There is potential for the proposed works to spread Japanese knotweed or other invasive species to downstream hydrologically connected European sites. Japanese knotweed was identified in 2 no. locations on the north side of the bridge. There is a large dense infestation (c 60m2) adjacent to the existing bridge extending 2m from

the water edge to the east. The extent of the excavated area at the eastern abutment location is dictated by the requirement to excavate and remove an area infected by Japanese Knotweed. The bridge footing will be located to the east of the main infestation area (mapped in Appendix A of Submission 1) and will encroach on the main infestation and the 7m buffer zone where rhizomes are likely to be present.

An Invasive Alien Species Management Plan (IASMP) has been prepared which presents the methodology for the treatment of invasive species and sets out best practice measures to avoid its spread (Appendix B of the NIS). It recommends the application of a herbicide by injection to kill off surface vegetation and minimise any damage to surrounding vegetation. This form of herbicide management has already been carried out on the site and is noted to have achieved a good level of control.

Following the installation of silt traps and dewatering, the soil in the infested area will be excavated to a depth of 1.8m and within a 7m radius. The excavated soil will be loaded into bio-secure trucks to licensed landfill and under licence from the NPWS. Where a 7m radius cannot be maintained from the edge of an infestation or a depth of 1.8m cannot be achieved, impermeable root barrier membranes will be installed to prevent the spread of the species.

Cherry laurel was located on the bank of the Ardra stream and close to the Japanese knotweed infestation. Canadian pondweed was recorded growing throughout the river section immediately above the weir. It was not detected downstream or in the vicinity of the existing bridge. Established protocols for the treatment of these infestations are set out in the IASMP which sets out established protocols for the treatment of these treatment of these infestations.

I accept that the implementation of the Invasive Alien Species Management Plan (IASMP) as proposed will control the spread of invasive species and the potential impacts for habitats and species.

#### Alternatives

8.2.46. One of the alternatives suggested by Mr Eamonn Kelly was that the footbridge should be located further north. While I accept that this would reduce the potential for impacts on the character and setting of the existing bridge and its visual impact from the Discovery Park, the location of the proposed new footbridge follows the pedestrian desire line adjacent to the main traffic artery into the town. Kilkenny Co. Council makes the point that moving the footbridge further north would result in the perception that there is a longer distance involved to cross the river, with a potentially unknown destination, which would be likely to result in pedestrians reverting to using the existing road bridge, which is deficient. It was further noted that the Discovery Park do not wish to have unimpeded access to the grounds at all times. Other matters raised by the applicant related to increased land take associated with a northern crossing and the requirement for significant structures to be constructed on both sides of the river.

8.2.47. It is an objective of the LAP to provide a pedestrian link at the existing road bridge (PL 1) and at a location further north (PL 2). The plan does not prioritise one over the other. Having regard to the lack of adequate pedestrian facilities on the existing road bridge, and the identified importance of the link between the east and west side of the town, I consider that it is reasonable that a new footbridge at this location, which remains proximate to the existing road bridge and close to the established pedestrian desire line is prioritised.

### 8.3. The likely significant effects on a European site:

- 8.3.1. The requirements of Article 6(3) as related to appropriate assessment of a project considered under 177AE of the Planning and Development Act 2010 (as amended) 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.
  - Screening the need for Appropriate Assessment
  - The Natura Impact Statement.
  - Appropriate Assessment.

# **Compliance with Articles 6(3) of the EU Habitats Directive:**

8.3.2. 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.

8.3.3. 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).

#### Screening the need for Appropriate Assessment

- 8.3.4. The first test of Article 6(3) is to establish if the proposed development could result in likely significant effects to a European site. This is considered Stage 1 of the appropriate assessment process i.e. screening. The screening stage is intended to be a preliminary examination. If the possibility of significant effects cannot be excluded on the basis of objective information, without extensive investigation or the application of mitigation, a plan or project should be considered to have a likely significant effect and Appropriate Assessment carried out.
- 8.3.5. Having regard to the information and submissions available, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, the following European sites are considered relevant to include for the purposes of *initial* screening for the requirement for appropriate assessment on the basis of likely significant effects.
- 8.3.6. European sites considered for (Stage 1) by the applicant included the following:
  - 1. River Barrow and River Nore SAC (Site Code 002162)
  - 2 Lower River Suir SAC (Site Code: 002137)
  - 3 River Nore SPA (004233)
  - 4 Slieve Bloom Mountains SAC (000412)
  - 5 Coolrain Bog SAC (Site Code: 002332)
  - 6 The Loughans SAC (Site Code: 000407)
  - 7 Knockacoller Bog SAC (Site Code: 002333)
  - 8 Slieve Bloom Mountains SPA (Site Code: 004160)
  - 9 Spahill and Clomantagh Hill SAC (Site Code: 000849)

- 10 Lisbigney Bog SAC (Site Code: 000869)
- 11 Galmoy Fen SAC (Site Code: 001858)
- 12 Thomastown Quarry SAC (Site Code: 002252)
- 13 Cullahill Mountains SAC (Site Code: 000831)
- 8.3.7. With respect to the majority of the sites (10 no.), it is concluded in the AA Screening Report that there is no potential for direct/indirect impacts arising from the proposed works. This arises as some of the sites (4 no.) are located upstream of the proposed development and are not designated for species that may migrate into lower catchments or habitats which may be impacted downstream. These sites are:
  - Slieve Bloom Mountains SAC,
  - Coolrain Bog SAC,
  - The Loughans SAC, and
  - Knockacoller Bog SAC.
- 8.3.8. These sites are of conservation interest for terrestrial/wetland habitats (blanket bog, raised bog, wet heaths, alluvial forests, turloughs etc) with no potential to be impacted either directly/indirectly by the proposed works. With regard to the remaining 6 no. sites the potential for effects was excluded on the basis of lack of connectivity (hydrological or terrestrial) between the proposed works and the protected sites. The sites are as follows:
  - Slieve Bloom Mountains SPA,
  - Spahill and Clomantagh Hill SAC,
  - Lisbigney Bog SAC,
  - Galmoy Fen SAC,
  - Thomastown Quarry SAC, and
  - Cullahill Mountains SAC).
- 8.3.9. With regard to the remaining 3 no. designated sites, the site is located within the boundary of the River Barrow and River Nore SAC and is also hydrologically connected to the River Nore SPA and the Lower Suir SAC.

- 8.3.10. Based on my examination of the NIS report 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 3 no. of the European sites referred to above as the possibility for significant effects cannot be ruled out.
- 8.3.11. The remaining 10 no. sites can be screened out from further assessment because of the scale of the proposed works, the nature of the Conservation Objectives, Qualifying and Special Conservation Interests, the separation distances and the lack of a substantive linkage between the proposed works and the European sites. The habitat for which a number of the sites are designated are terrestrially based and there no pathway exists. Other sites are located up-catchment or of a significant hydrological distance from the subject site.
- 8.3.12. It is therefore reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No(s) 000412, 002332, 000407, 002333, 004160, 000849, 000869, 001858, 002252 and 000831 in view of the site(s) conservation objectives and Appropriate Assessment is not therefore required for these sites.

#### **The Natura Impact Statement**

8.3.13. The application was accompanied by an NIS 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 the 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.

- 8.3.14. The NIS was informed by the following studies, surveys and consultations:
  - A desk top study.
  - Ecological baseline survey included site visit and aquatic survey undertaken on September 24<sup>th</sup>, 2018
  - Standard habitat classifications within/adjoining works area (Fossit, 2000)
  - Review of EPA's water quality data and WFD status for River Dinin.
  - Examination of GIS data for geological and hydrological information.
  - Consultation and review of NPWS site synopsis and conservation objectives for relevant European sites
  - Consultations with NPWS and IFI.
- 8.3.15. The report concluded that, subject to the implementation of best practice and the recommended mitigation measures, the proposed development would not individually or in combination with other plans or projects adversely affect the integrity of any European site.
- 8.3.16. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identify the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided and they are summarised in Section 6 of the NIS and in the CEMP and submissions made during the oral hearing. I am satisfied that the information is sufficient to allow for appropriate assessment of the proposed development (see further analysis below).

#### Appropriate Assessment of implication of the proposed development

- 8.3.17. The following is an objective scientific assessment of the implications of the project on the relevant conservation objectives of the European sites using the best scientific knowledge in the field (NIS). All aspects of the project which could result in significant effects are assesses and mitigation measures designed to avoid or reduce any adverse effects are examined and assessed.
- 8.3.18. A separate report has been prepared by Dr. Maeve Flynn, Senior Ecologist, An Bord Pleanala to support the Appropriate Assessment process and is attached under separate cover (ABP-305226A-19).

#### **Relevant European sites**

8.3.19. Details of the 3 no. sites brought forward for Appropriate Assessment together with their Qualifying Interests and the distance from the development site are set out below. A description of these sites and their Conservation Objectives and Qualifying Interests/Special Conservation Interests, including relevant attributes and targets for these sites are set out in Section 4.6 of the NIS.

Tab	ole	1
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Site Name	Qualifying Interests	Distance
1.River Barrow and	Estuaries [1130]	0.0km
River Nore SAC	Mudflats and sandflats not covered by seawater at low tide [1140]	
	Reefs [1170]	
	Salicornia and other annuals colonising mud and sand [1310]	
	Atlantic salt meadows [1330]	
	Mediterranean salt meadows [1410]	
	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	
	European dry heath [4030]	
	Hydrophilous tall herb fringe communities of plains and of the montaine to alpine levels [6430]	
	Petrifying springs with tufa formation [7220] *	
	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	

Site Name	Qualifying Interests	Distance
	Alluvial forests with Alnus glutinosa and	
	Fraxinus excelsior [91E0]*	
	Desmoulin's Whorl Snail [1016]	
	Freshwater Peral Mussel [1029]	
	White-clawed Crayfish [1092]	
	Sea Lamprey [1095]	
	Brook Lamprey [1096]	
	River Lamprey [1099]	
	Twaite Shad [1103]	
	Salmon [1106]	
	Otter [1355]	
	Killarney Fern [1421]	
	Nore Pear Mussel [1990]	
2.River Nore SPA	Kingfisher	17.2km
3.Lower River Suir	Atlantic salt meadows [1330]	43.8km
SAC	Mediterranean salt meadows [1410]	
	Water courses of plain to montane	
	levels with Ranunculion fluitantis and	
	Callitricho-Batrachion vegetation [3260]	
	Hydrophilous tall herb fringe	
	communities of plains and of the	
	montane to alpine levels [6430]	
	Old sessile oak woods with llex and	
	Blechnum in the British Isles [91A0]	

Site Name	Qualifying Interests	Distance
	Alluvial forests with Alnus glutinosa and	
	Fraxinus excelsior [91E0]*	
	Taxus baccata wood of the British Isles	
	[91J0]*	
	Freshwater Pearl Mussel [1029]	
	White-clawed Crayfish [1092]	
	Sea Lamprey [1095]	
	Brook Lamprey [1096]	
	River Lamprey [1099]	
	Twaite Shad [1103]	
	Salmon [1106]	
	Otter [1355]	

Note (\* = priority)

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

- 8.3.20. The development site is located within the boundaries of the River Barrow and River Nore SAC, which consists of the freshwater stretches of the Barrow and Nore River catchments and also includes the tidal elements and estuary. It is of significant ecological importance and hosts a range of species and habitats, including priority habitat as detailed in Table 1 above.
- 8.3.21. Detailed site specific conservation objectives have been published for the site, with the overall objective being to maintain or restore the favourable conservation condition of the Annex 1 habitats(s) and/or the Annex 11 species for which the SAC is selected.
- 8.3.22. The proposed bridge would be constructed over the River Dinin, which is a major tributary of the River Nore catchment. The development would involve in-stream works associated with site investigation and the construction of the abutments, pier

and ancillary works. These works would take place within the SAC and the abutments and pier would become permanent features within the SAC boundary.

- 8.3.23. The works would have direct impacts on habitat both through permanent removal and temporary disturbance of sections of the river bed. The uncontrolled release of sediment and other pollutants during construction could impact on water quality and potentially result in a decline both in habitat quality and in the extent and distribution of spawning/nursery beds. There is also potential for habitat fragmentation for freshwater species that have been recorded in the Dinin River (Salmon, Brook and River lamprey and Otter). The partial damming of the river and construction along the river bank during site investigation/main construction works may temporarily deter these species from moving within the river corridor preventing them from reaching habitat upstream/downstream of the works.
- 8.3.24. In terms of qualifying <u>habitats</u>, it is noted in the NIS that there are no examples of any of the Annex 1 habitats within the development area. There are no potential impacts on the qualifying <u>terrestrial habitats</u> of the SAC as they are not present in the works area or are otherwise excluded due to their remoteness, or lack connectivity with the site. The remaining 4 no. water dependent habitats (Estuaries, Floating River Vegetation, Hydrophilous Tall Herb Communities and Alluvial Forests) have the potential to be impacted via hydrological connections, in the absence of mitigation.
- 8.3.25. With regard to qualifying <u>species there are no records of Killarney Fen or</u> Desmoulin's Whorl Snail from this area. The 9 no. water dependent species with the potential to be impacted by the proposed works include *Freshwater Pearl Mussel*, *Nore Pearl Mussel, White-clawed Crayfish, Brook, River* and *Sea Lamprey, Twaite Shad, Salmon* and *Otter*. These qualifying interests are either found within the proposed works area or a potential source-pathway-receptor has been identified.
- 8.3.26. In terms of adverse effects there is potential for;
  - loss and disturbance of river bed associated with the works (no examples of any qualifying Annex 1 habitat within the development area)
  - direct impacts on qualifying species of the SAC which are likely to be present in the works area including Salmon, River and Brook lamprey, Crayfish and Otter.

 impacts on the remaining species and water dependent habitats via hydrological connectivity arising from increased sediment load and other pollutants to the river during construction.

#### **River Nore SPA.**

8.3.27. The site is a long linear site which includes the river channel and marginal vegetation. The site is of special conservation interest for <u>Kingfisher</u>.

The generic conservation objective is:

'To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA'.

The bridge would be built over the River Dinin which flows into the River Nore 17km downstream of the proposed footbridge site. The works would not impact directly on Kingfisher within the SPA. The NIS considers the potential for indirect effects on Kingfisher as a result of the works through a potential reduction in food sources. There will be some loss of trees to facilitate construction, which may be used by Kingfisher for perching.

#### Lower River Suir SAC.

- 8.3.28. The Dinin River flows into the River Nore and then joins the River Barrow. The Barrow and Suir meet east of Waterford City in the estuary. While hydrologically connected via the catchment, the River Suir SAC is a remote site, located c 88km downstream. Due to the significant separating distance, adverse effects can be ruled out on qualifying interests, with the exception of mobile species that utilise the wider catchment.
- 8.3.29. Site specific conservation objectives have been published for the site with the overall objective being to maintain or restore the favourable conservation condition of the Annex 1 habitat(s) and/or Annex 11 species for which the site is selected
- 8.3.30. The NIS limits its consideration to only those migratory qualifying species within the Lower River Suir SAC which may utilise the transitional waters where the Barrow meets the Lower River Suir SAC (*Sea Lamprey, Brook Lamprey and River Lamprey, Twaite Shad, Salmon* and *Otter*). This is considered reasonable. *The Freshwater Pearl Mussel* is also included as it relies upon the migratory salmonid fish to complete its life cycle. These qualifying species may utilise these waters during

migrations and therefore may be impacted through sedimentation and/or reduction in water quality. The qualifying habitats and remaining species of the SAC are either located greater than 80km downstream or are not found within the Nore/Suir transitional area.

# Potential adverse effects during construction on qualifying species and habitats of the designated sites.

#### Construction phase

#### 8.3.31. Adverse effects on water dependent habitat

- Potential for temporary indirect impacts on water dependent qualifying habitats downstream of the works arising from water quality deterioration and/or sedimentation.
- Potential for water dependent habitats to be impacted by the spread of invasive species.

#### 8.3.32. Adverse effects on qualifying species

- Potential for adverse effects on key species of conservation interest known to occur in the River Dinin including salmon, lamprey species, crayfish and otter through disturbance and habitat loss/fragmentation.
- Potential for adverse effects on other qualifying species downstream of the development including Freshwater Peral Mussels or Nore Freshwater Pearl Mussel (with the potential to impact on salmonid fish which the species require to complete their life cycle) Sea Lamprey and Twaite Shad) due to sedimentation and/or a deterioration in water quality. Otter may be impacted indirectly through a reduction in water quality which could also result in loss of fish stock and impact on otter populations.
- There will be no direct impacts on Kingfisher associated with the River Nore SPA as a result of the works, due to the remoteness of the site (17km). Whilst the NIS refers to the potential for indirect effects arising from construction related pollution which could affect fish species upon which Kingfisher is dependent, the Kingfisher associated with the River Dinin are not likely to be connected to the River Nore populations due to the distance involved.

- Potential loss/disturbance and fragmentation of habitat for qualifying species.
- Potential decline both in habitat quality and in the extent and distribution of habitat (spawning/nursery beds) for key species arising from reduced water quality arising from the release of sediment and other pollutants
- Potential for indirect impacts on all qualifying species by the spread of invasive species.

### Key issues raised by IFI and the DoCHG

- The construction of the pier would cause loss of spawning and nursery habitat.
- The presence of the pier in the river would change flow rates and channels and possibly allow the collection of debris which would create a barrier to the free movement of fish.
- The pier may impact on any future conservation works to improve fish passage and open up the catchment for upstream migrating species (salmon, brook and river lamprey) which is a target set for achieving conservation objectives. The existing weir and bridge sill are identified as barriers to fish migration, with recommendations that that the weir be removed and that a partial rock ramp be constructed on the bridge sill to improve access upstream for fish (O'Sullivan<sup>1</sup>). Both IFI and the DoCHG have concerns that the proposed in-stream pier would impact on the potential future options for removal and/or redesign of the weir and bridge sill.
- Impacts on water quality within the SAC arising from future maintenance (cleaning and painting) of the bridge.

#### Plans and projects considered for in combination effects:

- 8.3.33. The NIS (Table 5-3) considers plans and projects that may contribute to incombination effects:
  - Kilkenny Co Development Plan contains policies and objectives to protect and, where possible enhance the natural heritage sites, plant and animal

<sup>&</sup>lt;sup>1</sup> Sullivan, A (2007) Assessment of fish Passage and the Ecological Impact of Migration Barriers on the River Nore Catchment.

species and their habitats designated under European and National legislation.

- River Basin Management Plan 2018-2021 contains policies/objectives to ensure compliance with relevant EU legislation, to prevent deterioration of water quality and meet the objectives for designated protected areas.
- Inland Fisheries Ireland Corporate Plan 2016-2020 seeks to ensure that Ireland's fish populations are managed and protected to ensure their conservation status remains favourable.
- Ormonde Brick Limited located c 0.9 km from the site has surrendered its IPPC licence and all licensable activities have ceased.
- Fleming's Fireclays manufacturing Ltd is located c 9.8km from the works area Rainwater is pumped to a settlement pond via a small waterway which drains into the River Dinin.
- Works at the Avalon Hotel to install underground tanks.
- 8.3.34. The overall conclusion reached in the NIS is that the plans contain objectives for the protection of biodiversity and that their implementation would not contribute to cumulative or in-combination impacts with the proposed footbridge. There is potential for discharges from the former brick factory and the development at the Avalon Hotel to act in-combination with the proposed development in the absence of mitigation.
- 8.3.35. Having regard to the potential adverse effects on the conservation objectives of the designated sites, the NIS, the CEMP and the updated information provided at the oral hearing propose a number of mitigation measures which must be assessed in order to determine if the proposed development would adversely affect the integrity of the European sites.

#### **Mitigation measures**

#### Mitigation measures during construction

8.3.36. A suite of mitigation measures are proposed to address the potential adverse effects of construction. The measures are set out in Section 6 of the NIS and were updated in the submissions made during the oral hearing (Submission No 2a & 3). The measures proposed are targeted to avoid and reduce potential impacts on the

designated sites and their qualifying interests and to avoid the spread of invasive species.

- 8.3.37. An outline of the main mitigation measures is provided below:
  - An Ecological Clerk of Works (ECoW) shall be appointed to monitor the construction works, ensure the implementation of the mitigation measures and liaise with IFI.
  - A temporary construction compound will be established at the site of the Ormond Brick factory c 100m from the Ardara stream and 400m from Dinin River.
  - A temporary crossing will be installed in consultation with IFI over the Ardra watercourse to allow machinery to cross, to prevent disturbance and water quality impacts and provide access to the River Dinin bank. The crossing will be in place in advance of construction and flow will be maintained to provide for the passage of fish and macroinvertebrates.
  - Drainage, erosion control and sediment control measures will be in place and functioning before earthworks commence.
  - Pre-construction otter surveys will be undertaken prior to commencement of any works. Derogation licenses sought for any works likely to cause disturbance/destruction to active breeding holts.
  - All works including site investigation, the construction of the bridge abutments, pier construction, Japanese knotweed removal and other works will be conducted in a sealed dry working environment.
  - To facilitate dry working conditions the works area within the river would be bunded with a sandbag cofferdam (Appendix A -Submission 1 of NIS). This will ensure that the works area is isolated from any flowing water and that sediment or other water borne pollutants will not enter the river environment.
  - All works would be conducted during the summer months (July 1<sup>st</sup> -September 30<sup>th</sup>) during periods of low flow in the river and outside both the salmon and lamprey spawning reasons and the season when crayfish are with ova or young.

- Prior to dewatering the bunded area would be electro-fished by a suitably qualified ecologist to remove and protect any salmonids, lamprey or crayfish that may be present. Any species found would be released downstream and away from the works.
- The water from the bunded area would be treated prior to discharge, with no direct pumping of sediment laden water from the works to any watercourse.
- All excavated material from the bank and riverbed will be checked for lamprey or other species such as white-clawed crayfish. Any protected species will be released.
- Normal best practice will be employed regarding the storage of top soil, stockpiling of materials etc.
- Standard measures will be employed to prevent fuels, hydraulic oils, lubricants and other hazardous materials from entering the watercourse. Best practice measures will be implemented in the management of concrete.
- Invasive Alien Plant Species contaminated material shall be removed and transported off site immediately to a licensed waste facility and will not be stockpiled anywhere on the site.
- Following completion of the works all riverbed removed shall be reinstated with spawning gravel and boulder and cobbles for crayfish habitat to improve upon existing conditions
- Following completion of the works, bunding will be removed slowly to allow the area within the bunding to re-water slowly to prevent a sudden discharge of water.
- Riparian habitat will be left intact where possible and protection provided by fencing set back from the watercourse.
- Topsoil required for bank reinstatement will be stockpiled within the construction compound. The bank will be reinstated using a combination of rock armour and willow spilling. The area will be finished with top soil and grass seeding.

8.3.38. It is considered that the measures proposed, which involve standard best practice and environmental controls, are sufficient to address the potential adverse effects of the development and to ensure the protection of the integrity of the River Barrow and River Nore SAC (Site Code 002162), the River Nore SPA (Site Code 004233) and the Lower River Suir SAC (Site Code 002137) and the conservation status of the habitats and species they support.

#### Issues raised by IFI and DocHG

- 8.3.39. Both IFI and the DoCHG raised concerns regarding the impacts of the pier on water levels and flow velocity in the river and on future conservation works to improve fish passage.
- 8.3.40. In his evidence to the oral hearing, Mr O'Brien confirmed that the results of hydraulic modelling indicates that water levels and flow velocities are not sensitive to the addition of the pier in the river, with negligible levels in water levels and flow velocities anticipated. Modelling conducted for the 100 year flood level indicated that there is a slight (0.01m) increase in surface water elevations in the cross sections immediately upstream of the structure. Velocities in the watercourse are only marginally affected by the addition of the pier with reductions in velocities between 0.01m/s and 0.4m/s predicted for cross sections immediately upstream of the pier. I would note that full details of the modelling is not included with the application.
- 8.3.41. Mr O'Brien also confirmed that the location of the pier is sufficiently removed from the existing weir and the design of the pier and its foundation is sufficiently robust to conclude that the pier will not impact on any possible options for removal and /or redesign of the weir in the future. The pier would be located 7.5 m from the existing weir and its foundation would be 5.75m from the base of the existing weir. It would be supported on piled foundations and any potential future works that involve excavation of the riverbed or other intrusive works adjacent to the bridge would not result in undermining or loss of support for the bridge pier. He confirmed that hydraulic modelling indicates that the removal of the weir at some future date would have negligible impacts on water levels and flow velocities at the proposed bridge location (Section 4.2 Submission 1). I would point out to the Board that the original weir was installed for industrial purposes and not to control flows in the river.

- 8.3.42. Due to the protected status of the weir, it was Mr O' Brien's opinion (which he said is shared by IFI) that the provision of a fish pass would be the most likely type of conservation work that would take place in this location. Appendix B of his Brief of Evidence includes a drawing (MCT0759PL0104) showing two possible options. Both are partial width rock ramps and deal with the existing bridge apron and the existing weir. He stated that the drawings show that the footbridge pier would not impact on the provision of a fish pass in the future.
- 8.3.43. Following questions from the Inspector, it was confirmed by IFI that there are no specific designs or certainties regarding the modifications required to the weir and bridge sill and no timeframes. Mr Alan Cullagh (IFI) stated that conservation works were on a list for attention but that larger projects were taking precedence. He also stated that there are potential issues associated with the indicative fish pass but accepted that it was not a final design. He acknowledged that it may be possible to install fish passes to improve fish migration and would welcome discussion on how it could be provided as part of the development.

#### **Residual Impacts**

- 8.3.44. The NIS notes that in the absence of mitigation, the construction of the footbridge would have the potential to result in adverse effects on the habitats and species for the 3 no. designated sites brought forward for Appropriate Assessment. I consider that the implementation of the mitigation measures outlined in the CEMP, the NIS and in the submissions made during the oral hearing, which are in accordance with best construction practice and environmental controls will remove the possibility of adverse effects on the designated sites and their qualifying interests. No residual impacts are therefore anticipated.
- 8.3.45. It has been demonstrated that the placement of the pier in the river would not cause significant hydraulic changes and would have negligible impacts on water levels and flow velocities in the river with the potential to result in adverse effects on qualifying species.
- 8.3.46. On the basis of the information submitted, I consider that it has been established that the proposed in-stream pier would not impede other nature conservation measures at this location at any time in the future, or limit the ability to remove the barriers to fish passage that currently exist. I accept that any such measures would require

collaboration between all relevant stakeholders including IFI, DoCHG and Kilkenny Co. Council. I consider that it is reasonable to conclude, based on the best available scientific information available that the proposed in stream pier would not prevent the achievement of the key conservation objectives of the SAC.

#### **Conclusion on Appropriate Assessment**

8.3.47. I have considered the report and assessment prepared by the Inspectorate Ecologist and I concur with its conclusions. Having regard to the nature of the proposed development and the mitigation measures proposed, the scientific information presented with the application, including the Natura Impact Statement, and at the oral hearing which I consider adequate in order to carry out a complete assessment of the implications of the proposed development on the integrity European Sites, I consider it reasonable to conclude that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the River Barrow and River Nore SAC (site code: 002161, the River Nore SPA (site code 004233) and the Lower River Suir SAC (site code 002137), or any other European site, in view of the sites' Conservation Objectives. There is no reasonable doubt as to the absence of such effects.

# 9.0 Recommendation

9.1.1. On the basis of the above assessment, I recommend that the Board approve the proposed development subject to the reasons and considerations below and subject to conditions requiring compliance with the submitted details, and with the mitigation measures set out in the NIS and the submissions made to the oral hearing.

#### **Reasons and Considerations**

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

- (a) the EU Habitats Directive (92/43/EEC),
- (b) the European Union (Birds and Natural Habitats) Regulations 2011-2015,
- (c) 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 a European Site,

- (d) the conservation objectives, qualifying interests and special conservation interests for the River Barrow and River Nore SAC (site code: 002161), the River Nore SPA (site code: 004233) and the Lower River Suir SAC (site code: 002137),
- (e) the policies and objectives of the Castleomer Local Area 2018-2024.
- (f) the nature and extent of the proposed works as set out in the application for approval,
- (g) the information submitted in relation to the potential impacts on habitats, flora and fauna, including the Natura Impact Statement,
- (h) the submissions and observations received in relation to the proposed development, including the oral hearing,
- (i) the Inspectorate Ecologist's assessment, 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 reached in the Inspector report that the River Barrow and River Nore SAC (site code: 002161), the River Nore SPA (site code: 004233 and the Lower River Suir SAC (site code: 002137), 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 including those made to the oral hearing and the Inspectorate Ecologist's assessment. The Board completed an appropriate assessment of the implications of the proposed development for three European Sites, namely the River Barrow and River Nore SAC (site code: 002161), the River Nore SPA (site code: 004233) and the Lower River Suir SAC (site code: 002137), in view of the site's conservation objectives. The Board considered that the information before it was adequate to allow for a complete assessment of all aspects of the proposed development and enable them reach complete, precise and definitive conclusions for 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 current proposal, and
- 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 site's 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 site's conservation objectives and there is no reasonable scientific doubt remaining as to the absence of such effects.

# 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 footbridge 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 is in accordance with the stated objectives of the Castlecomer LAP 2018-2024 to improve pedestrian links across the River Dinin. It would constitute a significant improvement in terms of pedestrian comfort and safety and would, therefore, be in accordance with the proper planning and sustainable development of the area.

#### Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application and the information contained

in the Natura Impact Statement, as amended by the further details submitted at the oral hearing, except as may otherwise be required in order to comply with the following conditions. Where any mitigation measures or any conditions of approval require further details to be prepared by or on behalf of the local authority, these details shall be placed on the file and retained as part of the public record.

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

 The proposals, mitigation and commitments set out in the Construction and Environmental Management Plan, and in the Natura Impact Statement as amended by the details submitted at the oral hearing shall be implemented in full as part of the proposed development.

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

3. Prior to commencement of development, the local authority, or any agent acting on its behalf, shall prepare/update in consultation with the relevant statutory agencies, the Construction Environmental Management Plan (CEMP), incorporating all mitigation measures indicated in the Natura Impact Statement and in the submissions made to the oral hearing and demonstration of proposals to best practice and protocols.

**Reason:** In the interests of protecting the environment, the landscape, European Sites, sensitive receptors and in the interest of public health.

 No site investigation, excavation or construction shall take place between October 1<sup>st</sup> and June 30<sup>th</sup> in any year.

**Reason:** In the interest of nature conservation and to ensure the protection of the European sites

5. Prior to commencement of development, details of measures to protect fisheries and water quality of the river systems shall be outlined and placed on the file as part of the public record. In channel works shall adhere to the timing restrictions to avoid damage to spawning and juvenile fish. Full regard shall be had 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). A programme of water quality monitoring shall be prepared in consultation with the contractor, and relevant statutory agencies and the programme shall be implemented thereafter. Details of such monitoring shall be maintained on file as part of the public record.

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

6. The local authority and any agent acting on its behalf shall ensure that all plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

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

7. 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 NIS, CEMP and submissions made to the oral hearing. 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.

- 8 The local authority 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. In this regard, the County Council shall:
  - a) employ a suitably qualified archaeologist prior to commencement of the development who shall assess the site and monitor all site investigations and other excavation works, and

- b) undertake an Underwater Archaeological Impact Assessment in advance of any works. The assessment shall be carried out in accordance with the requirements of the Department of Culture, Heritage and the Gaeltacht and shall include the following: detailed desktop study and archaeological assessment to include intra-riverine assessment and if necessary, a dive survey. The assessment shall include survey and recording of the area of the river that will be impacted and adjacent areas,
  - i. a metal detection survey,
  - ii. the nature and location of any archaeological material on the site,
  - iii. the impact of the proposed development on such archaeological material

A report containing the results of the assessment and any recommendations to mitigate any negative impacts shall be submitted to the Underwater Archaeological Unit for consideration in advance of any works commencing on the site.

 c) provide arrangements, acceptable to the Department of Culture Heritage and the Gaeltacht for the recording and removal of any archaeological material which it is considered appropriate to remove.

**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.

9.(a) A conservation expert shall be employed to manage, monitor and implement the works on the site and to ensure adequate protection of the retained and historic fabric during the works. In this regard, all permitted works shall be designed to cause minimum interference to the existing masonry bridge and masonry walls

(b) All repair work shall be carried out in accordance with best conservation practice as detailed in the Architectural Heritage Protection Guidelines for Planning Authorities issued by the Department of Arts, Heritage and the Gaeltacht in 2011. The repair works shall retain the maximum amount of historic fabric in situ and shall be designed to cause minimum interference to the bridge and masonry walls. Items that have to be removed for repair shall be recorded prior to removal, catalogued and numbered to allow for authentic re-instatement.

(c) The replacement of any masonry stone or any works of re-pointing shall be undertaken so that it matches the original existing bridge and wall finish and shall be in accordance with current Conservation Guidelines issued by the Department of Arts, Heritage and the Gaeltacht.

**Reason:** To ensure that the integrity of the bridge and associated masonry walls is maintained, that the structures are protected from unnecessary damage or loss of fabric and to ensure an appropriate standard of restoration works for the protected structure.

- 10. The construction of the development shall be managed in accordance with a Construction and Traffic Management Plan, which shall be placed on the file and retained as part of the public record. The plan shall provide details of the intended construction practice for the development, including
  - (a) Location of the site and materials compounds(s) including area(s) identified for the storage of construction waste;
  - (b) Location of areas for construction site offices and staff facilities;
  - (c) Details of security fencing and hoardings;
  - (d) Details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site;
  - (e) Measures to obviate queuing of construction traffic on the adjoining road network;
  - (f) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network;
  - (g) Alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of the public road or footpath during the course of site development works;

- (h) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;
- (i) Containment of all construction related fuel and oil within specifically constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater;
- (j) Details of how it is proposed to manage excavated soil;

A record of daily checks that the works are being undertaken in accordance with the Construction and Traffic Management Plan shall be maintained on file as part of the public record.

Reason: In the interests of amenity, public health and safety.

Deela yannen

Breda Gannon Senior Planning Inspector

19th March 2020