



An
Bord
Pleanála

Inspector's Report ABP-311772-21

Development	Demolition of existing Hartley Bridge, reconstruction of a new bridge, construction of re-aligned L3400 local road and all ancillary works
Location	Hartley, Carrick on Shannon, Co. Leitrim and Cleaheen, Co. Roscommon
Local Authority	Leitrim County Council
Type of Case	Application for approval made under Section 177AE of the Planning and Development Act 2000 (local authority development requiring appropriate assessment)
Prescribed Bodies	Dept. of Housing, Local Government and Heritage Waterways Ireland
Observers	Paul Blackwell and Una Sugrue
Date of Site Inspection	2 nd December 2021
Inspector	Niall Haverty

Contents

1.0 Introduction.....	4
2.0 Site Location and Description	4
3.0 Proposed Development	5
4.0 Planning History.....	6
5.0 Legislative Context	6
5.1. The EU Habitats Directive (92/43/EEC)	6
5.2. European Communities (Birds and Natural Habitats) Regulations 2011, as amended.....	6
5.3. National Nature Conservation Designations	7
5.4. Planning and Development Act 2000, as amended	7
6.0 Policy Context.....	8
6.1. Leitrim County Development Plan 2023 – 2029	8
6.2. Roscommon County Development Plan 2022 - 2028	17
7.0 Consultations.....	23
7.1. Statutory Bodies.....	23
7.2. Public Observations	26
7.3. Request for Further Information	27
7.4. Further Submissions	28
8.0 EIA Screening.....	30
9.0 Assessment.....	31
9.1. Overview	31
9.2. Likely Consequences for Proper Planning and Sustainable Development..	32
9.3. Likely Effects on the Environment.....	39
9.4. Likely Effects on any European Sites (Appropriate Assessment).....	57

10.0	Recommendation	82
11.0	Reasons and Considerations	82
12.0	Conditions	84

Appendix 1: EIA Screening

1.0 Introduction

- 1.1. Leitrim County Council (LCC), acting on behalf of itself and Roscommon County Council (RCC), is seeking approval from An Bord Pleanála for the Hartley Bridge Project. This comprises the demolition of the existing Hartley Bridge over the River Shannon, the construction of a new bridge, the re-alignment of the L3400 local road on its approaches to the proposed bridge and all ancillary works.
- 1.2. The site and the proposed development traverse the Leitrim/Roscommon border, which is delineated by the River Shannon in this area. LCC and RCC have agreed in accordance with the provisions of section 85 of the Local Government Act 2001 that LCC will be lead authority for the project. A Letter of Authority was submitted with the application in this regard.
- 1.3. The application is made under Section 177AE of the Planning and Development 2000, as amended (PDA), and was lodged by the Local Authority on the basis of the proposed development's likely significant effect on a European site.
- 1.4. Section 177AE requires that where an Appropriate Assessment is required in respect of development by a local authority the authority shall prepare a Natura Impact Statement (NIS) and the development shall not be carried out unless the Board has approved the development with or without modifications. Furthermore, Section 177V of the PDA requires that the Appropriate Assessment shall include a determination by the Board as to whether or not the proposed development would adversely affect the integrity of a European site and the Appropriate Assessment shall be carried out by the Board before consent is given for the proposed development.

2.0 Site Location and Description

- 2.1. The existing Hartley Bridge is located along the L3400 Local Road crossing over the River Shannon, c. 2.8km north of Carrick-on-Shannon, Co. Leitrim. As noted above, the site is located on the county boundary between Counties Roscommon and Leitrim and includes lands in both counties.
- 2.2. The existing bridge was constructed in 1915 and is an early example of a reinforced concrete bridge. It is c. 75m in length and comprises a six-span integral structure and an adjoining two-span reinforced concrete structure. There is clear cracking and

spalling of concrete apparent on the structure and it is subject to a weight limit of 3 tonnes, with barriers on the approach roads limiting vehicle heights to 2.5m. The centre of the bridge has a pronounced humpback shape, but it is at grade with the adjoining roads to east and west.

- 2.3. The surrounding area is rural in character, comprising agricultural grasslands, scattered one-off rural housing development to the west (i.e. Roscommon side) and more dense ribbon development along local roads to the east (i.e. Leitrim side).

3.0 Proposed Development

- 3.1. The proposed development is described as follows:

- Demolition of the existing Hartley bridge over the River Shannon.
- Construction of new 3-span replacement bridge structure 25m downstream of the existing bridge crossing.
- Construction of the realigned (vertical and horizontal) L3400 on approaches to the new bridge structure.
- Decommissioning of defunct sections of the L3400.
- All ancillary works associated with the above works, including:
 - Temporary Site Compound.
 - Drainage and other Utility Works.
 - Road Safety Barriers.
 - Fencing.

- 3.2. The cover letter submitted with the application states that the requirement for the replacement of the bridge has arisen as a result of structural assessments of the bridge undertaken in 2016 and 2017 which identified that the deck soffit and beams exhibited widespread spalling with exposed reinforcement evident throughout the soffit of the bridge deck, longitudinal beams and transverse beams. It goes on to state that the widespread nature of the spalling indicates that the bridge deck is nearing the end of its serviceable life with deterioration of the fabric of the structure likely to accelerate in the short to medium term.

3.3. The application was accompanied by: copies of the notices and notifications to prescribed authorities; section 85 letter; various planning, civil and structural engineering drawings; Appropriate Assessment Screening Report; Natura Impact Statement; Planning Report; Ecological Impact Assessment; Construction and Environmental Management Plan; Environmental Impact Assessment Screening Report; Visual Impact Assessment; Outline Construction & Demolition Waste Management Plan; Outline Traffic Management Plan; Preliminary Health & Safety Plan; bathymetric survey drawings; Archaeological Impact Assessment; and Stage 1 and 2 Structural Assessment Reports.

4.0 **Planning History**

4.1. **Ref. P02-C-14:** Part 8 development proposal approved in 2003 to “construct new bridge over the River Shannon and widen / realign existing road LP03400 in the townland of Hartley (Co. Leitrim) and the LP92 in the townland of Cleaheen (Co. Roscommon) for a distance of 400 metres approximately in each direction. Existing bridge will be demolished on completion of new bridge”.

5.0 **Legislative Context**

5.1. **The EU Habitats Directive (92/43/EEC)**

5.1.1. This Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) and 6(4) require an appropriate assessment of the likely significant effects of a proposed development on its own and in combination with other plans and projects which may have an effect on a European Site (SAC or SPA).

5.2. **European Communities (Birds and Natural Habitats) Regulations 2011, as amended**

5.2.1. These Regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in CJEU judgements. The Regulations in particular

require in Reg 42(21) that where an appropriate assessment has already been carried out by a 'first' public authority for the same project (under a separate code of legislation) then a 'second' public authority considering that project for appropriate assessment under its own code of legislation is required to take account of the appropriate assessment of the first authority.

5.3. National Nature Conservation Designations

5.3.1. The Department of Housing, Local Government and Heritage 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) with the latter two forming part of the European Natura 2000 Network.

5.3.2. The closest European sites to the subject site include:

- Lough Arrow SAC and SPA (c. 14.3km and 14.7km, respectively).
- Cuilcagh - Anierin Uplands SAC (c. 14.3km).
- Ballykenny - Fisherstown Bog SPA (c. 23.5km and 38.2km via surface water connectivity).
- Lough Forbes Complex SAC (c. 24km and 38.2km via surface water connectivity).

5.3.3. The western half of the application site (i.e. within County Roscommon) is located within the Lough Drumharlow pNHA.

5.4. Planning and Development Act 2000, as amended

5.4.1. Part XAB of the PDA sets out the requirements for the appropriate assessment of developments which could have an effect on a European site or its conservation objectives.

- Section 177AE sets out the requirements for the appropriate assessment of developments carried out by or on behalf of local authorities.
- Section 177AE(1) requires a local authority to prepare, or cause to be prepared, a Natura impact statement in respect of the proposed development.

- Section 177AE(2) states that a proposed development in respect of which an appropriate assessment is required shall not be carried out unless the Board has approved it with or without modifications.
- Section 177AE(3) states that where a Natura impact assessment has been prepared pursuant to subsection (1), the local authority shall apply to the Board for approval and the provisions of Part XAB shall apply to the carrying out of the appropriate assessment.
- Section 177V(3) states that a competent authority shall give consent for a proposed development only after having determined that the proposed development shall not adversely affect the integrity of a European site.
- Section 177AE(6)(a) states that before making a decision in respect of a proposed development the Board shall consider the NIS, any submissions or observations received and any other information relating to:
 - The likely effects on the environment.
 - The likely consequences for the proper planning and sustainable development of the area.
 - The likely significant effects on a European site.

6.0 Policy Context

6.1. Leitrim County Development Plan 2023 – 2029

6.1.1. The Leitrim County Development Plan 2023 - 2029 has been adopted since the lodgement of the application.

6.1.2. The Core Strategy sets out a series of Strategic Objectives, including:

“1. To build on the regional-level linkages between Co. Leitrim and other parts of the Northern and Western Region (with particular emphasis on the Sligo Regional Growth Centre) and adjoining regions such as the Eastern and Midlands Region and Fermanagh & Omagh District Council in Northern Ireland and by supporting the implementation of regional spatial and economic strategies, collaborating on support for critical enabling

infrastructure, such as inter-regional road linkages, and co-operating on areas of mutual planning interest.

5. To provide for sustainable transport infrastructure and connectivity including walking and cycling infrastructure and initiatives, and optimise the return of investment on infrastructure while preserving the natural and built heritage;

6. To achieve a sustainable, integrated and low carbon transport system for the county and to protect, improve and extend water services and other enabling infrastructure in line with national, regional and local population and economic growth for the county;

7. To protect, conserve and enhance the built, natural and cultural environment through promoting awareness, utilising relevant heritage legislation and promoting good quality urban and rural design.”

6.1.3. Chapter 8 of the Development Plan relates to Transport. It states that “the continued delivery, expansion and maintenance of a well-functioning, multi modal transport network is essential to delivering the county’s economic competitiveness, improving the quality of life of residents and achieving better social cohesion. Accessibility and mobility for all sections of the community is vital for the future development of the county”.

6.1.4. The following Policy is noted:

- **MSSM POL 1:** To support sustainable mobility, enhanced regional accessibility and connectivity within Co. Leitrim in accordance with the National Policy Outcomes of the National Planning Framework 2040 and the National Development Plan.

6.1.5. Section 8.11 relates to Roads, and states that:

“The Council acknowledges the importance of Co. Leitrim’s strategic road infrastructure in providing intra and inter county movement of goods and services. Whilst the Plan supports the promotion of sustainable transport, it is recognised that the roads infrastructure maintains a central position in the overall transportation network.

A modern, efficient and safe road network is vital for the future development of Co. Leitrim. The existing public road network in Co. Leitrim extends to approximately 2,150 km in length, with over 56km of National Primary roads traversing the county. Both regional and local roads provide vital links between the towns and villages to retail, service and employment centres throughout the county and to adjoining counties.”

6.1.6. Section 8.11.5 notes that “local roads serve an important economic role and have a valuable social and community function, as they are often the sole means of access for local economic activity”. The following Objective is noted:

- **TRAN OBJ 7:** To construct a new bridge over the River Shannon to replace the now deficient Hartley Bridge (in conjunction with Roscommon County Council) on the L3400 Local Road linking Carrick-on-Shannon to Cootehall.

6.1.7. Chapter 11 relates to Heritage and Biodiversity. The following Policies and Objectives are noted:

- **NH POL 1:** To protect and conserve Special Areas of Conservation and Special Protection Areas.
- **NH POL 2:** To implement Article 6(3) and where necessary Article 6(4) of the Habitats Directive, to ensure that Appropriate Assessment is carried out in relation to works, plans and projects with the potential to impact European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, and the Planning & Development Act 2000, as amended as relevant.
- **NH POL 3:** To protect designated Natural Heritage Area (NHA) sites, including proposed Natural Heritage Area sites (pNHA) and seek to develop linkages between designated sites and other non-designated sites of ecological importance, where feasible and as resources permit.
- **NH POL 5:** To ensure that development does not have a significant adverse impact on plant, animal or bird species or habitats protected by law, subject to satisfactory mitigation measures.

- **NH OBJ 1:** To ensure that no project or programme giving rise to significant adverse, direct, indirect, secondary or cumulative impacts on the integrity of any Natura 2000 site(s), having regard to their qualifying interests and conservation objectives, arising from their size, scale, area or land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either alone or in combination with other plans or projects).
- **NH OBJ 2:** To protect and conserve those sites designated as Special Areas of Conservation (SACs) during the lifetime of this Plan.
- **NH OBJ 3:** To protect and conserve those sites designated as Special Protection Areas during the lifetime of this Plan.
- **NH OBJ 4:** To protect and conserve Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs) that become designated and notified to the Local Authority during the lifetime of this Plan.
- **NH OBJ 5:** To protect the character, appearance and quality of the habitats and semi-natural features in Co. Leitrim such as woodlands, hedgerows, peatlands, wetlands and artificial waterways of historic or ecological importance.
- **NH POL 6:** To protect and where possible enhance wildlife habitats and landscape features which act as ecological corridors/networks and stepping stones, such as river corridors, hedgerows and road verges, and to minimise the loss of habitats and features of the wider countryside (such as ponds, wetlands and trees) which are not within designated sites.
- **NH POL 8:** To protect ecological networks linking protected and designated important sites within the county, in accordance with Article 10 of the Habitats Directive.
- **NH POL 9:** To ensure that appropriate mitigation and/or compensation measures to conserve biodiversity, landscape character and 'Green Infrastructure' networks are required in developments where habitats are at risk or lost as part of a development.

- **NH OBJ 7:** To encourage appropriate management of landscape features, particularly through the development management process and using planning agreements with landowners and developers, where appropriate.
- **TWH POL 1:** To discourage the felling of healthy mature trees to facilitate development and to encourage the retention of healthy mature trees within developments to the maximum extent practicable.
- **TWH POL 2:** To require the planting of native broadleaved species, and species of local provenance, in new developments as appropriate.
- **TWH POL 4:** To protect and preserve existing hedgerows and minimise their removal. Where their removal is necessary, to seek their replacement with new hedgerow material native to the area.

6.1.8. A Landscape Character Assessment is contained as Appendix VII of the Development Plan. The site is located within the ‘Drumlin Farmland’ Landscape Character Type (LCT). This LCT is described as follows:

“The Drumlin Farmland occupies a large part of the southern part of the county and features a distinctive drumlin hill topography. The consistent orientation of the hills gives the landscape a uniform grain and has its origins from the direction of ice flows during glaciation. The pattern or grain can be difficult to appreciate, being masked largely by the abundant mature hedgerows which race up and down the hillsides forming a patchwork pattern usually of small-scale. The drumlins have steep sides with broad rounded tops although their size and shape vary considerably throughout. Land cover is generally pasture with marshy areas within the inter drumlin hollows. Patches of commercial coniferous forestry are dispersed throughout this landscape, some areas being fairly extensive in size. The plantation coniferous forest is a frequent feature and has become influential in the local landscape character.”

6.1.9. The site is also within the ‘South Leitrim Drumlins and Shannon Basin’ Landscape Character Area (LCA 13) which is described as follows:

“The South Leitrim Drumlins & Shannon Basin Character Area comprises an extensive lowland in the southern part of County Leitrim. Its boundary is

formed by Lough Allen, the foothills of Sliabh an Iarainn and the Ballinamore Loughlands in the north and by the Corriga Uplands in the east. The southern part of this LCA is relatively flat and features pastoral farmland, peat bogs, marshy areas, small loughs and streams. Further north, the topography changes to distinctive drumlin hills. Mature hedgerows enclose a small-scale field pattern resulting in an intimate landscape.

Occasionally enclosure is defined by post and wire fences and in some cases, stone walls. Lough of varying size feature throughout, the largest of which is Lough Rynn. Elevated views are possible across extensive areas from the top of some drumlins and isolated rocky outcrops which rise above the surrounding landscape.”

- 6.1.10. One of the identified valued and sensitive attributes for this LCA is the “River Shannon landscape as popular scenic destination”. The conservation recommendations for the LCA include “Manage farming and other land based activities to conserve valued wetland habitats such as rivers, river meadows and inter drumlin wetlands”.
- 6.1.11. The site is also within the ‘River Shannon and Lakes’ Area of High Visual Amenity (B11) which comprises an elongated river landscape along the western county boundary from Drumshambo to Roosky. The special qualities and statement of importance of this AHVA, as contained in Appendix VIII of the Development Plan, is as follows:
- “B11 River Shannon and Lakes AHVA is centered on a section of the River Shannon from Lough Allen in the north to Lough Bofin in the south and is part of the Shannon catchment as the longest river in Ireland. The northern section from Lough Allen to Leitrim comprises an intimate and almost secretive tranquil landscape centered on the river which follows a narrow and winding, almost mysterious course between Lough Allen and Leitrim Town. Further south, the river widens as it passes through a relatively flat landscape and soon expands to meet the large lakes at Lough Boderg and Lough Bofin. The openness of the gently undulating tranquil farmland that surrounds the river allows for intermittent views of mountain and hill landscapes further afield such as that at Slieve Anierin and Sheemore.

The importance of this landscape and hence its inclusion in an AHVA designation is attributed to the following special qualities:

- Unique Shannon River as longest river in Ireland;
- Intimate and tranquil river landscape in the north as the Shannon follows a winding narrow course;
- River expands southwards featuring the large lakes at Lough Boderg and Lough Bofin;
- Surrounding gently undulating farmland setting of some scenic quality and in good condition;
- High levels of tranquillity and sensory appeal away from regional and busy minor roads and settlements;
- Intermittent open views towards hills and mountains including Sheemore and Slieve Anierin;
- River margins or callows feature wetland grasses which have striking seasonal colour; and
- General absence of detracting built elements of a scale that would undermine the quality of this landscape.”

6.1.12. There are no Protected Views and Prospects identified to or from the site and its surroundings.

6.1.13. The following Policies and Objectives relating to Landscape matters are noted:

- **LCA POL 1:** To conserve and enhance the high nature conservation value of the Landscape Character Areas in order to create/protect ecologically resilient and varied landscapes.
- **LCA POL 2:** To protect, enhance and contribute to the physical, visual and scenic character of Co. Leitrim and to preserve its unique landscape character.
- **LD POL 2:** To protect Areas of Outstanding Beauty and Areas of High Visual Amenity from inappropriate development and reinforce their character, distinctiveness and sense of place.

- **LD POL 3:** To permit development in an Area of High Visual Amenity only where the applicant has demonstrated a very high standard of site selection, site layout and design and where the Planning Authority is satisfied that the development could not be accommodated in a less-sensitive location.
- **LD POL 5:** To ensure that development proposals have regard to the Landscape Character Assessment, the value of the landscape, its character, importance, sensitivity and capacity to absorb change.
- **LD OBJ 1:** To protect the quality, character and distinctiveness of the landscapes of the county.
- **LD OBJ 4:** To protect Areas of Outstanding Natural Beauty and Areas of High Visual Amenity from inappropriate forms of development.

6.1.14. Section 11.17 relates to 'Protection of the Built Environment'. I note that the existing Hartley Bridge is not included in the Record of Protected Structures for the County. The following Policies and Objectives are noted:

- **ARCH POL 1:** To secure the preservation (i.e. preservation in-situ or in particular circumstances where the Council is satisfied that this is not possible, preservation by record as a minimum) of all archaeological remains and sites of importance such as National Monuments, Recorded Monuments, protected wrecks and underwater archaeological heritage, to include their setting and context.
- **ARCH POL 4:** To protect, preserve and promote the archaeological value of underwater archaeological sites and objects in rivers, lakes, intertidal and subtidal environments. In assessing proposals for development, the Council will take account of the archaeological potential of rivers, lakes, intertidal and sub-tidal environments. Where flood relief schemes are being undertaken, the Council will have regard to the 'Archaeological Guidelines for Flood Relief Schemes' (DHLGH and OPW 2021).
- **ARCH OBJ 2:** To ensure that any development (above or below ground or underwater), within the vicinity of a site of archaeological interest or protected wreck or area of underwater archaeological heritage shall not be detrimental to the archaeological remains, character of the site or its setting.

- **ARCH OBJ 3:** To require, where appropriate, that an archaeological assessment or underwater archaeological impact assessment be carried out by a suitably qualified person prior to the commencement of any activity that may impact upon archaeological heritage, including underwater archaeological heritage.
- **ARCH OBJ 4:** To protect the zones of archaeological potential, as identified in the Record of Monuments and Places, protected reefs and underwater archaeological heritage.

6.1.15. Chapter 9 of the Development Plan relates to Energy and Infrastructure. The following Objectives and Policies are noted:

- **WQ OBJ 2:** To achieve our targets of attaining and maintaining a minimum of 'good status' in all water bodies in compliance with the Water Framework Directive and to co-operate with the implementation of the National River Basin Management Plan 2018-2021, and subsequent replacement plans. This includes contributing towards the protection of Blue Dot catchments and drinking water resources whilst having cognisance of the EU's Common Implementation Strategy Guidance Documents No. 20 and 36 which provide guidance on exemptions to the environmental objectives of the Water Framework Directive.
- **WQ OBJ 3:** To implement the measures of the River Basin Management Plan, including continuing to work with communities through the Local Authority Waters Programme to restore and improve water quality in the identified areas of action.
- **WQ OBJ 4:** To ensure that development will not have an unacceptable adverse impact on water quality including surface water, ground water, designated source protection areas, river corridors and associated wetlands.
- **FRM POL 1:** To adopt a comprehensive risk-based planning approach to flood management to prevent or minimise future flood risk. In accordance with the Planning System and Flood Risk Management – Guidelines for Planning Authorities, the avoidance of development in areas where flood risk has been identified shall be the primary response.

- FRM POL 2 To ensure that a flood risk assessment is carried out for any development proposal, in accordance with the Planning System and Flood Risk Management (DoEHLG/OPW 2009) and Circular PL2/2014. This assessment shall be appropriate to the scale and nature of risk to the potential development.
- **FRM POL 4:** To protect and enhance the county's floodplains and wetlands as 'Green Infrastructure' which provides space for storage and conveyance of floodwater, enabling flood risk to be more effectively managed and reducing the need to provide flood defences in the future, subject to normal planning and environmental criteria.
- **FRM POL 9:** To ensure that in assessing applications for developments, that consideration is had to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021 and any subsequent local or regional plans.

6.2. Roscommon County Development Plan 2022 - 2028

6.2.1. The Roscommon County Development Plan 2022 - 2028 has been adopted since the lodgement of the application.

6.2.2. The following Strategic Aims of the Plan are noted:

- **11:** Protect and enhance the natural assets of County Roscommon, including clean water, biodiversity, landscape, green infrastructure, heritage and agricultural land.
- **14:** To protect, conserve and enhance the built and natural heritage and the landscape of County Roscommon for future generations; and reinforce the distinctive character of the county through ensuring that recognised sites and species of environmental importance are conserved and managed appropriately

6.2.3. Chapter 7 relates to 'Infrastructure, Transport and Communications'. In relation to road transportation and movement, the Development Plan states that "The road network will continue to be of significance in the future development of the county and ensuring sufficient connectivity within the county, as well as wider regional and

national connectivity, as advocated in Growth Ambition 3 (Connected Region) of the RSES is vital”.

6.2.4. The proposed development is not included in the list of planned road improvements for non-national roads set out in Table 7.3, however I note the following generic Policy Objective:

- **ITC 7.12:** Provide a safe and modern road network throughout the county, having regard to national and regional policies and guidelines as well as liaising with national agencies.

6.2.5. Chapter 9 relates to ‘Built Heritage’. I note that the existing Hartley Bridge is not included in the Record of Protected Structures for the County. The following Policy Objectives are noted:

- **BH 9.1:** Ensure the protection of the architectural heritage of County Roscommon through the compilation of a Record of Protected Structures, the designation of Architectural Conservation Areas, the safeguarding of historic gardens, and the recognition of structures and elements that contribute positively to the vernacular and industrial heritage of the county.
- **BH 9.13:** Secure the preservation (i.e. preservation in situ or, as a minimum, preservation by record) of all archaeological monuments included in the Record of Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act, 1994, and of sites, features and objects of archaeological interest generally. In securing such preservation Roscommon County Council will have regard to the advice and recommendations of the National Monuments Section of the Department of Housing, Local Government and Heritage.

6.2.6. Chapter 10 relates to ‘Natural Heritage’ and the following Policy Objectives are noted:

- **NH 10.1:** Ensure the protection, conservation and enhancement of the biodiversity of the county.
- **NH 10.2:** Support the implementation of the relevant recommendations contained in the National Biodiversity Action Plan, including no net loss in biodiversity, and the All Ireland Pollinator Plan.

- **NH 10.4:** Proposals where woodland, tree or hedgerow removal is proposed will be required to demonstrate a sufficient level of protection to Annex IV species, such as Bats and Otter, in accordance with the Habitats Directive.
- **NH 10.5:** Ecological Impact Assessment (EclA) will be required for proposed developments likely to significantly impact on natural habitats and/or species, and which are not subject to Environmental Impact Assessment
- **NH 10.6:** Require all new developments in the early pre-planning stage of the planning process to identify, protect and enhance ecological features by making provision for local biodiversity (e.g. through provision of swift boxes, bat roost sites, green roofs, etc.) having regard to the recommendations outlined in the Habitat Mapping in Co. Roscommon, 2011 and the County Roscommon Swift Survey, 2020.
- **NH 10.7:** Implement Article 6(3) and where necessary Article 6(4) of the Habitats Directive and to ensure that Appropriate Assessment is carried out in relation to works, plans and projects likely to impact on European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European Communities (Birds and Natural Habitats) Regulations 2011.
- **NH 10.8:** Ensure that no plans, programmes, etc. or projects are permitted that give rise to significant cumulative, direct, indirect or secondary impacts on the integrity of European Sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects, (either individually or in combination with other plans, programmes, etc. or projects).
- **NH 10.9:** Ensure that any plan or project that could have a significant adverse impact (either alone or in combination with other plans and projects) upon the conservation objectives of any Natura 2000 Site or would result in the deterioration of any habitat or any species reliant on that habitat will not be permitted unless in exceptional circumstances.
- **NH 10.10:** Actively promote the conservation and protection of areas designated as an NHA (including proposed sites) and to only consider

proposals for development within or affecting an NHA where it can be clearly demonstrated that the proposed development will not have a significant adverse effect on the NHA or pNHA.

- **NH 10.13:** Encourage the retention of hedgerows and other distinctive boundary treatments in rural areas and prevent loss and fragmentation, where practically possible. Where removal of a hedgerow, stone wall or other distinctive boundary treatment is unavoidable, mitigation by provision of the same type of boundary will be required.
- **NH 10.15:** Ensure that hedgerows that are required to be removed in the interests of traffic safety or where breaches to hedgerows occur in compliance with relevant legislation, are replaced by the applicant/developer with suitable native species to the satisfaction of the Council.
- **NH 10.18:** Manage, enhance and protect the wetlands of the county having regard to the County Roscommon Wetland Survey (2017) and ensure that there is an appropriate level of assessment in relation to proposals which would involve draining, reclaiming or infilling of wetland habitats. The Council shall be available to engage with the NPWS with the objective of facilitating the monitoring and surveying of wetland sites in Roscommon.
- **NH 10.19:** Ensure that the county's watercourses are retained for their biodiversity and flood protection values and to conserve and enhance where possible, the wildlife habitats of the County's rivers and riparian zones, lakes, canals and streams which occur outside of designated areas to provide a network of habitats and biodiversity corridors throughout the county. The Council shall be available to engage with the NPWS with the objective of facilitating the monitoring and surveying of wetland sites in Roscommon.
- **NH 10.20:** Protect waterbodies and watercourses from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. To this effect, consideration should be given to Inland Fisheries Ireland's guidance document Planning for Watercourses in the Urban Environment (2020).
- **NH 10.23:** Require all development proposals to address the presence or absence of invasive alien species on proposed development sites and (if

necessary) require applicants to prepare and submit an Invasive Species Management Plan where such a species exists to comply with the provisions of the European Union (Birds and Natural Habitats) Regulations 2011 to 2015.

- **NH 10.25:** Minimise visual impacts on areas categorised within the County Roscommon Landscape Character Assessment including “moderate value”, “high value”, “very high value” and with special emphasis on areas classified as “exceptional value” and where deemed necessary, require the use of Visual Impact Assessment where proposed development may have significant effect on such designated areas.
- **NH 10.26:** Protect important views and prospects in the rural landscape and visual linkage between established landmarks, landscape features and views in urban areas.

6.2.7. Chapter 11 relates to ‘Social, Community and Cultural Development’. The following Policy Objective is noted:

- **SCCD 11.17:** Preserve and enhance, insofar as practicable, the existing and reputed public rights of way to recreational areas including, mountain, lakeshores, riverbank areas, heritage sites and other places of recreational utility, in accordance with the sustainable management practices and the overall amenity of these areas and where necessary to establish new ones in co-operation and consultation with landowners and the local community.

6.2.8. A public right of way is identified in Table 11.2 of the Development Plan as ‘Access to Fishing Area at Hartley Bridge on the River Shannon’. This is described as follows:

“This route is along the River Shannon. It is accessed from the L1018 local road at the north westernmost point of Hartley Bridge. A directional signpost is visible along the road adjacent to the access point to the route indicating that fishing is carried out along this stretch of the River Shannon. Access points are partially overgrown. Although access to this route appears to be poorly maintained and infrequently used, the route provides access to an important recreational area i.e. the River Shannon, and there is evidence that the area is used for fishing.”

6.2.9. A Landscape Character Assessment forms an Appendix of the Development Plan. The site is located within LCA 2 'Upper Shannon and Derreenannagh Drumlin Belt', which is described as follows:

"This area stretches northwest from the border of County Leitrim, at Carrick-on-Shannon, to a hill at Ballytormoyle. The upper Shannon forms the eastern boundary, while the western boundary is determined by the zone of theoretical visibility from the river.

The landform of the area is of low undulating drumlins flanking the River Shannon as it emerges from the southern tip of Lough Allen. There is one larger hill located at Ballyformoyle, rising to a height of 153m ASL. The other principal river is the Feorish River which drains Lough Skean in the west to the River Shannon in the east. The land cover is a complex mix of transitional woodland scrub, raised bog, fens and marginal farmland. The diversity of landcover in the LCA is one of the greatest among all the character areas studied in the county. The road network is comprised of mainly small rural roads with some third class roads and only one regional road, the R284, linking Leitrim Town in the south east to the village of Keadew in the north. While there are no major settlements in this character area, there are a number of towns just outside the boundaries (Leitrim village to the east and Carrick-on-Shannon to the south) from which development is creeping into the area. A large portion of the southern part of the character area is designated a Natural Heritage Area (NHA).

The overall image of this character area is one of a sparsely populated wooded drumlin landscape sloping down to the Upper Shannon."

6.2.10. The LCA is stated to be of 'Very High Value', as it forms part of the River Shannon corridor which is popular for both water and land based tourism.

6.2.11. The key recommendations for this LCA include:

- In this character area there are views of Slieve Anierin to the north and Sheemore Hill to the north east from Hartley Bridge. Such views create a sense of place and should be protected. A general policy position of protecting views from bridges should be expressed in the County Development Plan.

6.2.12. Figure 13 of the Landscape Character Assessment indicates a Scenic View (V8) from Hartley Bridge in a westward direction.

7.0 Consultations

7.1. Statutory Bodies

7.1.1. A submission was received from the Department of Housing, Local Government and Heritage (Development Applications Unit) and can be summarised as follows:

- Architectural Heritage:
 - The local authority does not have an Architectural Conservation Officer. The proposed demolition of the bridge without sufficient assessment of its cultural significance is a key concern.
 - An assessment, by a suitably qualified practitioner/historian, is recommended as the bridge may be considered as an exemplar of C20th construction in terms of design aesthetic and technical achievement as an example of the use of early concrete.
 - The association of the bridge to the adjacent property known at one time as Hartley Manor House is of interest. Whilst a date from the mid C18th is suggested, historical mapping suggests that an earlier date might be possible.
 - The existing bridge is a delightful design solution of considerable merit. The lightweight structural support creates an illusion of floating and ensure minimal structure impediment within the river to avoid blockages.
 - The historical context of the bridge is of special interest as a strategic crossing point on the River Shannon. The proposed removal is to deny the understanding of this strategic crossing point.
 - The submitted structural assessment is minimal and is not adequate justification for the removal of the bridge. It is apparent on review of the proposed replacement that greater capacity and load bearing is a requirement of the proposal.

- Re-consideration of the proposed demolition is requested and the retention and repair of the bridge and its springing points should be considered as part of the overall proposal.
- A cultural and architectural heritage assessment is necessary to ensure the successful integration of the proposed development in the context of the extant bridge and its approaches.
- Revised layout drawings describing their alignment and details of the consolidation/repair of the decking to sustain its use for pedestrian access only would be in line with best practice and would be supported by the Department.
- Archaeology:
 - Department concurs with the recommendations outlined in the Archaeological Impact Assessment. Conditions recommended with regard to archaeological monitoring during excavation/construction works.
- Nature Conservation:
 - Proposed new bridge and road realignment is within Lough Drumharlow pNHA, which encompasses an area of wetland habitats and river corridor that is host to several species of international conservation concern and regionally significant habitats.
 - ‘No net loss of biodiversity’ is the objective for all new developments in Ireland under the National Biodiversity Action Plan 2017-2021. The Department welcomes the replacement of the proposed hedgerows and trees with like-for-like, however the loss of seasonally flooding wet grassland habitat and reed bed/sedge habitat in the pNHA is not sufficiently offset by compensatory measures. More specific efforts should be undertaken to replace the areas proposed for removal and/or enhancement of remaining habitat.
 - Pollinator friendly grass seed mix should be specified to only include native species and be sourced from registered Irish feed stock.
 - Seasonally flooding wet grassland habitats are important winter foraging sites for Curlew and other wintering waders such as Lapwing and wildfowl,

as well as important summer breeding habitat for waders. The frequency and timing of the bird surveys (single day in February and August) was not in keeping with best practice for wintering and breeding birds and may not accurately reflect the potential bird activity occurring onsite. Condition requiring pre-construction surveys for breeding waders is recommended.

- In the interests of reducing impacts to breeding bird species, any habitat removal or ground preparation works within the wet grassland areas should be undertaken prior to the breeding season (either March or September/October).
- Swan species forage and overwinter in the area and use the river as a migratory or transit flightpath. These birds are slow moving with low levels of manoeuvrability and the bridge should incorporate specific measures to mitigate the risk of collision with high-sided vehicles.
- New bridge offers an opportunity to partially offset decline in Swift numbers in Co. Leitrim by including Swift nesting boxes as part of the biodiversity net gain measures.
- It is unlikely that bats are roosting in the existing bridge but new roosts or other measures to enhance the site for roosting/foraging bats could be included.
- Further detail required on oversight and implementation of invasive species management plan and qualifications/command line for ECoW.
- Stone imports often contain roots, rhizomes and seeds and strict enforcement is required with appropriate records kept for inspection by local authority and NPWS.
- It is unclear why the proposed dredging is required within Lough Drumharlow pNHA, given the bridge clearance is similar to the old bridge. A more comprehensive assessment of the impact of these works on the pNHA including seasonally flooding wet grassland and reed bed habitats, as well as other downstream protected nature conservation site should be undertaken. The dredging should also be assessed in combination with other Waterways Ireland dredging activities on the Upper Shannon.

- AA Screening Report does not include an in-combination assessment with the proposed N4 Carrick-on-Shannon to Dromod project, which is currently at route selection phase. Screening partially relies on natural attenuation and distance from the downstream SAC sites to mitigate risks. Considering the scale of the project proposed and the materials used, the Department recommends that dilution over distance is not considered as mitigation for risks arising.

7.2. Public Observations

7.2.1. One observation was received from Paul Blackwell and Una Sugrue and can be summarised as follows:

- Hartley Bridge is a structure of significant cultural heritage importance. Its special interest lies in the very early use of reinforced concrete in Ireland.
- It is an elegant and slender design and is a visually pleasing feature in the river landscape.
- The 2005 Assessment of the Upper Shannon Waterway Corridor Study evaluates it as being of significant cultural and industrial heritage. Its demolition appears to be pre-determined in that study.
- The bridge was never designed to carry 40 tonne loads. If these loads are required, a new bridge should be built, but not at the cost of losing the still functioning structure. The existing bridge could be used as a cyclist and pedestrian route.
- Every bridge requires ongoing maintenance. Why has the bridge not been maintained?
- The argument that the bridge has reached the end of its useful life is not borne out by the structural assessment reports or the fact that it is in daily, albeit restricted, use. Concrete repair options are available as well as options for strengthening works.
- The value of embodied carbon in the bridge has not been assessed.

- The removal of the bridge impacts on Co. Roscommon as well as Co. Leitrim but the impacts have not been assessed. Both County Development Plans include objectives to protect cultural and built heritage.
- The new bridge will create a 'rat run' and traffic will use this route to avoid the congested Carrick-on-Shannon crossing on the N4.

7.3. Request for Further Information

7.3.1. The Board issued a request for further information (RFI) to the applicant which can be summarised as follows.

- Confirm whether Waterways Ireland was notified as a prescribed authority.
- Submit an Architectural and Cultural Heritage Assessment of the existing bridge.
- Clarify whether the option of repairing and retaining the existing bridge for pedestrian use was considered. If it is not considered feasible, provide further justification for the demolition.
- Noting that the proposed development is within Lough Drumharlow pNHA and that 'no net loss of biodiversity' is the objective for all new developments under the National Biodiversity Action Plan 2017-2021, submit more specific proposals for replacement of areas proposed for removal and/or enhancement of remaining habitat.
- Provide an assessment of the risk of collision between swans and high-sided vehicles using the proposed bridge and, if necessary, incorporate specific design measures to the bridge to mitigate the risks.
- Respond to the Department's comments that the AA Screening Report does not include an in-combination assessment with the proposed N4 Carrick-on-Shannon to Dromod project and that dilution over distance should not be considered as mitigation for the purposes of AA.
- Clarify the nature and extent of dredging proposed and ensure that the EclA fully assesses the proposed development.

- Provide a more comprehensive assessment of the impact of dredging works on the pNHA habitats as well as on other downstream protected nature conservation sites. The dredging should also be assessed in combination with other Waterways Ireland dredging activities on the Upper Shannon.
- Clarify whether the existing bridge piers are being retained in the river or completely removed. If it is proposed to retain any existing piers, provide a justification for this and address whether this would result in the creation of a navigation hazard.
- Submit a drawing indicating the extent and proposed location of the construction compound, storage areas, contractor parking etc.
- Submit a copy of the Aquatic Impact Assessment, which is referred to in the EclA, CEMP and NIS.
- Respond to other issues raised in the submissions made.

7.3.2. The applicant's response to the RFI was received on the 11th May 2022, and included the following additional documentation:

- Memorandum addressing each of the items raised in the RFI.
- Summary Conservation Report, prepared by a Grade 1 Conservation Architect.
- Report by LCC Senior Planner dealing with the proposed demolition.
- Revised Ecological Impact Assessment.
- Preliminary Habitat Restoration Plan.
- Aquatic Ecological Assessment 2019.
- Revised Planning Summary Report.
- Revised Preliminary H&S Plan.
- Drawing of proposed construction compound areas.

7.4. Further Submissions

7.4.1. Waterways Ireland:

7.4.2. Following receipt of the response to the RFI, the applicant was requested to submit a copy of the application to Waterways Ireland (WI), who were given an opportunity to make a submission. Their subsequent submission can be summarised as follows:

- WI were made fully aware of the proposed development prior to submission.
- A number of pre-planning meetings were held where WI were given the opportunity to outline the key design elements that needed to be included as part of the final design submitted to the Board.
- A set of meeting minutes is submitted (dated 30th August 2021). These are from a virtual workshop meeting held between WI and the LCC consultant regarding the key factors of consideration that WI requested for inclusion in the final submission. It was felt by WI that these were, in the main, achieved and that, subject to continued consultation pre-construction, WI were satisfied with the proposal.

7.4.3. Paul Blackwell and Una Sugrue:

- As bridge was designed for 1915 loadings, those need not be exceeded if bridge is conserved and retained for pedestrians, cyclists and horses.
- Possible future introduction of a cycle lane is an afterthought and not a priority.
- Redesign of the new bridge supports to align with Hartley Bridge supports would add interest and visual design quality without having to shift the navigation channel and draft.
- Humpback shape of the existing bridge is part of its charm.
- Existing bridge is still open to restricted traffic despite two reports identifying significant areas of damage and decay. If it is as dangerous as stated it should have been closed immediately.
- Concrete repair techniques have advanced considerably in the last 20 years.
- An Taisce's comments are contradicted by others with specific engineering and architectural heritage training and expertise. In the 20 years since those comments, there is a greater appreciation of 20th century built heritage.

- Architectural Heritage Protection Guidelines state that early concrete bridges are relatively rare and should be carefully conserved. RIAI guidance notes that structures not included on the RPS may have significance that has yet to be identified.
- Demolition was pre-determined in the Assessment of the Upper Shannon Waterway Corridor Study of 2005.
- Demolition Waste Management Plan needs to be more site-specific and less generic. Value of the embodied carbon has not been assessed prior to proposing demolition.
- Disappointing that very few of the 26 bridges in the NIAH have been included in the RPS for Co. Leitrim.
- The impacts of increased traffic along the L3400 do not seem to have been considered on the Roscommon side.

8.0 EIA Screening

- 8.1. EIA screening was undertaken by the applicant, and I note that an EIA Screening Report has been submitted with the application. It concludes that the proposed development is not likely to have significant effects on the environment and therefore EIA is not warranted.
- 8.2. This is an application under section 177AE of the Planning and Development Act 2000, as amended, for local authority development requiring Appropriate Assessment. I note that the proposed development is not of a class listed in Parts 1 or 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended.
- 8.3. While the application has not been made under the Roads Act 1993, as amended, I note that section 50(1)(a) of said Act lists the following types of road development for which there is a mandatory requirement to carry out environmental impact assessment:
- (i) the construction of a motorway;
 - (ii) the construction of a busway;
 - (iii) the construction of a service area, or;

- (iv) any prescribed type of road development consisting of the construction of a proposed public road or the improvement of any existing public road.

8.4. The proposed development does not fall into the mandatory EIA categories (i), (ii) or (iii), as listed above, as it does not include the construction of a motorway, busway or service area. With regard to category (iv), I note that article 8 of the Roads Regulations 1994 (S.I. 119 of 1994) outlines the following:

“The prescribed types of proposed road development for the purpose of subsection (1)(a)(iv) of Section 50 of the Act shall be -

(a) the construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500m or more in length in an urban area;

(b) the construction of a new bridge or tunnel which would be 100m or more in length.”

8.5. The proposed development does not comprise a road with four or more lanes and the proposed bridge is c. 75m long. The proposed development does not, therefore, fall within category (iv) and it can be concluded that the proposed development does not require mandatory EIA. The proposed bridge would, however, represent a sub threshold form of development under the provisions of the Roads Act.

8.6. The submitted EIA Screening Report includes the information required under Schedule 7A of the Regulations and I have undertaken EIA Screening, as detailed in Appendix 1 of this report.

8.7. I conclude that the proposed development would not be likely to have significant effects on the environment and that the preparation and submission of an Environmental Impact Assessment Report is not, therefore, required.

9.0 **Assessment**

9.1. **Overview**

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

- (i) The likely effects on the environment,
- (ii) The likely consequences for the proper planning and sustainable development of the area, and
- (iii) The likely impact on any European sites (i.e. Appropriate Assessment).

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

9.2.1. Having reviewed the application, the supporting documentation and drawings, and the submissions received, I consider that the likely consequences of the proposed development for the proper planning and sustainable development of the area can be addressed under the following headings:

- Principle of proposed development.
- Residential amenity.
- Impact on waterway navigation.
- Traffic and transportation.
- Protection of right of way.

9.2.2. **Principle of Proposed Development**

9.2.3. Section 8.11.5 of the Leitrim County Development Plan 2023 – 2029 states that “local roads serve an important economic role and have a valuable social and community function, as they are often the sole means of access for local economic activity”. Objective TRAN OBJ 7 of the Plan states that it is an objective “to construct a new bridge over the River Shannon to replace the now deficient Hartley Bridge (in conjunction with Roscommon County Council) on the L3400 Local Road linking Carrick-on-Shannon to Cootehall”.

9.2.4. I note that the current Leitrim CDP was adopted following the lodgement of this application. The previous CDP, which was in place at the time of lodgement of the application, contained a similar Objective 37 which stated that “It is an objective of the Council to design and construct a new bridge over the River Shannon at Hartley on LP03400 local road to replace the existing deficient bridge”.

9.2.5. The proposed bridge replacement does not appear to be explicitly referenced in the Roscommon County Development Plan 2022 - 2028, however I note Policy

Objective ITC 7.12, which seeks to “provide a safe and modern road network throughout the county, having regard to national and regional policies and guidelines as well as liaising with national agencies”. Chapter 7 of the Development Plan also states that “the road network will continue to be of significance in the future development of the county and ensuring sufficient connectivity within the county, as well as wider regional and national connectivity, as advocated in Growth Ambition 3 (Connected Region) of the RSES is vital”.

- 9.2.6. The existing bridge is not listed as a protected structure under either Development Plan, however the policies relating to built heritage are noted. I also note that a scenic view from the existing bridge is designated in the Roscommon County Development Plan. The impact of the proposed development on built and natural heritage, on the receiving environment and on landscape and visual amenities will be assessed elsewhere in this report.
- 9.2.7. Subject to this assessment, I consider that the proposed development is acceptable in principle and that it would fulfil Objective TRAN OBJ 7 of the Leitrim County Development Plan 2023 - 2029 and would be consistent with Policy Objective ITC 7.12 of the Roscommon County Development Plan 2022 - 2028.
- 9.2.8. **Residential Amenity**
- 9.2.9. The existing bridge is located in a rural area in excess of 150m from the nearest houses to east and west. The applicant, in their response to the request for further information, has identified the locations of the required construction compounds, which are located in excess of 50m from the nearest house.
- 9.2.10. A Construction and Environmental Management Plan (CEMP) has been submitted with the application, which outlines the various best practice construction methods and measures to control dust, noise, waste and surface water. The CEMP states that the construction schedule will occur over a 12 month period, with works occurring over standard construction hours. As detailed elsewhere in this report, there are certain seasonal constraints on aspects of the development in order to avoid or mitigate impacts on biodiversity.
- 9.2.11. There are likely to be some negative impacts on local residents in the short term as a result of noise and disruption associated with the construction works and the required diversion resulting from the temporary closure of the river crossing.

However, these impacts will be temporary and will not be significant in my opinion. In this regard I note no issues relating to residential amenity impacts have been raised in the submissions received.

9.2.12. In the operational phase, I am satisfied that the proposed development will have a positive impact on residential amenity as a result of the improved and safer access across the River Shannon for local residents. While the proposed bridge is a larger and more substantial structure than the existing bridge, with elevated road approaches, I am satisfied that the separation distances with the nearest residential dwellings are sufficient to ensure no significant impacts on residential amenity.

9.2.13. **Impact on Waterway Navigation**

9.2.14. It was noted from the application documentation that the applicant had consulted with Waterways Ireland (WI) prior to the making of the application, but that WI was not formally notified of the application as a prescribed body. WI are responsible for Shannon navigation and as such they were subsequently invited to make a submission. WI, in their submission, confirmed that they were fully aware of the proposed development and that the matters raised in their meetings with the applicant were, in the main, addressed. They provided a copy of minutes of a meeting held with the applicant and confirmed that they were satisfied with the proposal, subject to continued pre-construction consultation.

9.2.15. The two aspects of the proposed development that have the potential to impact on waterway navigation, in my opinion, are the in-stream demolition and construction works which are programmed to take place in the period July to September (in the interests of protecting aquatic fauna) which will coincide with the peak boating season and the issue of the existing and proposed bridge piers within the river channel.

9.2.16. The documentation originally submitted with the application contained conflicting information regarding the existing bridge piers and whether they would be left partially in situ or fully removed during the demolition works. WI, in their pre-application consultation with the applicant had noted the potential navigation issues that would result from leaving the piers in situ. I would agree that the resulting multiplicity of piers within the river would have the potential to result in a significant navigation and public safety hazard. However, the applicant has confirmed in

response to the request for further information, that the existing piers will be fully removed and the documents have been updated accordingly.

- 9.2.17. Both the Department of Housing, Local Government and Heritage (Development Applications Unit) and the observer contend that the existing bridge could be retained for pedestrian use due to its heritage value, with the proposed bridge used for vehicular traffic. I have addressed the issue of architectural and cultural heritage elsewhere. However, with regard to waterway navigation, I consider that the provision of two bridges very close to each other and with non-aligned bridge piers would be likely to result in similar navigation difficulties or hazards as maintaining the demolished bridge piers in situ.
- 9.2.18. I consider that the proposed development will improve river navigation by replacing the existing multi-span bridge with a 3-span bridge that contains the navigable width of the River Shannon within the central span. The riverbed reprofiling works will also provide a consistent 1.7m depth draft across the width of the channel, which again will aid navigation.
- 9.2.19. With regard to the demolition and construction works during the peak boating season, the applicant has submitted sequencing drawings and details outlining how this will be achieved. I refer in particular to Section 4 of the Outline Traffic Management Plan (OTMP) and drawing No. 182-164-110, which illustrates how river navigation can be managed during demolition works.
- 9.2.20. The OTMP states that the Traffic Co-ordinator will be responsible for ensuring that there is no conflict between public watercraft and construction operations with limited short-term partial/full closures of the navigation channels. Proposed river traffic control measures include:
- Marine Notice to be issued in advance by WI closing the navigation formally.
 - Dates for closure of the navigation should be signalled well in advance.
 - Safety boats will be required upstream and downstream of the works.
 - The barge and temporary installations should be lit to ensure that it can be seen during darkness / reduced visibility.
 - Waste arising from the demolition of the existing bridge structure will be collected ashore locally with HGV hauling material off site via the L3400.

- The proposed sequencing of demolition activities aims to re-establish existing navigation arrangements as early as possible in the process.

9.2.21. The drawing referenced above includes details of navigation channel restrictions and the required temporary closures during each of the demolition stages, as the bridge is demolished span-by-span. I note that the closures are limited in duration, with each span removed over a 12 to 24 hour period. During the construction of the new bridge, the only anticipated disruption to navigation is a 24 hour closure to enable lifting of the precast beams across the central span and the installation of permanent formwork for the deck construction. It is stated that all river traffic management measures and details will be agreed with WI prior to commencement.

9.2.22. Having reviewed the submitted information, the minutes of the meeting between WI and the applicant and the subsequent submission made by WI, I am satisfied that the proposed bridge demolition and construction works can be achieved without a significant impact on river navigation or public safety, subject to implementation of the identified control measures. In the operational phase, I consider that the proposed development will result in an improvement to waterway navigation.

9.2.23. **Traffic and Transportation**

9.2.24. The existing Hartley Bridge carries the L3400 local road over the River Shannon, with the road having a number of bends on both the eastern and western approaches to the bridge. A traffic survey was not undertaken, however the rural and sparsely populated area surrounding the bridge would indicate a low level of traffic currently.

9.2.25. The Outline Traffic Management Plan (OTMP) submitted with the application outlines haul routes for construction traffic. As the existing bridge will be demolished, construction traffic will approach the site from the L3400 on both the Leitrim and Roscommon sides. In response to the request for further information, the applicant submitted a drawing indicating the construction compounds and stockpile/storage areas on both sides of the river, with a minimum 50m setback.

9.2.26. The level of demolition and construction traffic is likely to be relatively low and the OTMP estimates an average of 8 personnel on site during peak construction activity and c. 4 vehicles arriving/departing each day during peak activity. Standard construction hours are proposed.

- 9.2.27. The OTMP outlines various construction traffic management measures, including the appointment of a Traffic Management Co-ordinator, communications, scheduling of works, staggering of HGV movements to avoid queuing, and use of flagmen on the co-ordinate traffic entering/leaving the sites on both sides of the river.
- 9.2.28. With regard to the impact of the temporary closure of the river crossing on the public, Figures 3A and 3B of the OTMP illustrate the two road diversion options. This will entail crossing the River Shannon at either Cootehall to the north west or at Leitrim Village to the north east (a maximum 21km or 23km diversion route, respectively).
- 9.2.29. I consider that the applicant has adequately demonstrated that construction traffic associated with the proposed development can be adequately managed. However, as it is stated that the submitted OTMP is preliminary and that the contractor will be required to prepare their own TMP, I recommend that a suitable condition be imposed, should the Board be minded to approve the proposed development, requiring the preparation and submission of a Construction Traffic Management Plan. This should include temporary signage proposals for the L3400 diversion route.
- 9.2.30. In the operational phase, the proposed local realignment of the L3400 road on its approaches to the River Shannon will remove a number of bends, particularly on the narrow eastern approach, which currently has poor forward visibility. I consider that this will result in an improvement to road safety. The design of the proposed bridge is also likely to improve road safety by allowing for two-way traffic, by providing a footpath on the bridge and by providing clear forward visibility across the bridge. I consider this to be a clear improvement on the current bridge, which only allows one-way traffic, has no footpath and has poor forward visibility as a result of its humpback design.
- 9.2.31. The observation received contends that the proposed development may result in additional traffic on the L3400 and 'rat-running' to avoid congestion on the N4 Carrick-on-Shannon crossing. I do not consider that there is likely to be any significant increase in traffic, since the existing bridge is already open to the majority of car traffic and the proposed bridge will serve exactly the same function in terms of the local roads it will connect. There may be an increase in LGV, HGV or agricultural vehicles using the proposed bridge, however given the rural and sparsely populated characteristics of the area, such traffic is not likely to be significant. Furthermore, as

can be seen from maps, the obstructing presence of Drumharlow Lake/Lough Eidin would likely negate any particular benefit for 'rat running' traffic seeking to avoid congestion on the N4 through Carrick-on-Shannon, since it would involve a substantial detour on winding local roads to cross the Boyle River at Cootehall on the western side of Drumharlow Lake/Lough Eidin.

9.2.32. In conclusion, I am satisfied that the construction/demolition phase traffic can be managed in accordance with a TMP without significant effects on local roads, congestion or road safety and that in the operational phase the proposed development is not likely to result in significant additional traffic but will result in an improvement to road safety on this bridge crossing.

9.2.33. **Protection of Right of Way**

9.2.34. One of the public rights of way identified in Table 11.2 of the Roscommon County Development Plan 2022-2028 is 'Access to Fishing Area at Hartley Bridge on the River Shannon'. This is described as follows:

"This route is along the River Shannon. It is accessed from the L1018 local road at the north westernmost point of Hartley Bridge. A directional signpost is visible along the road adjacent to the access point to the route indicating that fishing is carried out along this stretch of the River Shannon. Access points are partially overgrown. Although access to this route appears to be poorly maintained and infrequently used, the route provides access to an important recreational area i.e. the River Shannon, and there is evidence that the area is used for fishing."

9.2.35. Policy Objective SCCD 11.17 seeks to "preserve and enhance, insofar as practicable, the existing and reputed public rights of way to recreational areas including, mountain, lakeshores, riverbank areas, heritage sites and other places of recreational utility, in accordance with the sustainable management practices and the overall amenity of these areas and where necessary to establish new ones in co-operation and consultation with landowners and the local community".

9.2.36. The access point in question appears to be a wooden stairs leading from the north western corner of the bridge down to the riverbank. The application documentation does not address if, or how, access will be retained to this designated right of way,

although I note that access under the proposed bridge is proposed on the eastern (Co. Leitrim) side to facilitate a potential future cycleway.

9.2.37. If the Board is minded to approve the proposed development, I recommend that a condition be included, requiring that the applicant preserve access to the public right of way identified in Table 11.2 of the Roscommon County Development Plan 2022 - 2028 as 'access to fishing area at Hartley Bridge on the River Shannon' in accordance with Policy Objective SCCD 11.17 of said Development Plan.

9.3. **Likely Effects on the Environment**

9.3.1. Having reviewed the application, supporting documentation and drawings, and the submissions received, I consider that the likely effects of the proposed development on the environment can be addressed under the following headings:

- Biodiversity.
- Soils and water.
- Air quality and climate.
- Landscape and visual amenity.
- Archaeological, architectural and cultural heritage.
- EIA Screening.

9.3.2. **Biodiversity**

9.3.3. An Ecological Impact Assessment (EclA), prepared by MKO, was submitted with the application, with a revised version submitted in response to the RFI. A copy of the Aquatic Ecological Assessment, referenced in the EclA and other documents, was also submitted in response to the RFI, as was a Preliminary Habitat Restoration Plan.

9.3.4. Details of the programme, phasing and methodology of the demolition and construction works, including the in-stream works, is provided in the EclA. Details of the desktop study and field surveys undertaken are set out and included: a multidisciplinary ecological walkover, including habitat survey and invasive species search; otter survey, badger survey and aquatic survey.

9.3.5. The EclA considers NHAs and pNHAs within 15km, or at greater distance where there is potential connectivity with the site. European Sites are not addressed within the EclA, and I have addressed the issue of Appropriate Assessment separately in Section 9.4 below. Table 4.4-1 of the EclA identifies all nationally designated sites within 15km or with potential connectivity and considers whether they are within the likely zone of impact. The following sites are identified as within the Zol:

- **Lough Drumharlow pNHA:** Potential direct effect as proposed works are within the pNHA boundary.
- **Lough Boderg and Lough Bofin pNHA:** No direct effect, but potential indirect effect as a result of surface water pollution. pNHA is located c. 11km south west of the site (25km hydrological distance).
- **Lough Forbes Complex pNHA:** No direct effect, but potential indirect effect as a result of surface water pollution. pNHA is located 23.5km (38.2km hydrological distance).

9.3.6. The existing habitats within the site boundary include: Depositing/lowland rivers (FW2); Wet grassland (GS4); Improved agricultural grassland (GA1); Reed and large sedge swamp (FS1); Scrub (WS1); Hedgerows (WL1); Treelines (WL2); Wet willow-alder-ash woodland (WN6). The WN6 habitat corresponds to Annex I Alluvial Woodland and is located outside of the development footprint. No other habitats or species listed under Annex I and II of the Habitats Directive or bird species listed under Annex I of the Birds Directive were recorded. No rare or protected botanical species were identified, with all species being common in the Irish landscape.

9.3.7. No evidence of Otter was found, although the river does provide suitable potential foraging and commuting habitat for the species. Badger snuffle holes were recorded in agricultural grassland to the east and west of the river, but no setts or latrines were recorded within the study area. The existing bridge and trees within the development footprint were assessed as having Negligible - Low bat roosting potential. The linear hedgerows and treelines in the study area were assessed as having Moderate - High commuting / foraging potential.

9.3.8. Birds recorded include mallard, heron, rook, blackbird, magpie, wren, great-crested grebe and curlew. Great-crested grebe is 'amber' listed and curlew is 'red' listed in the Birds of Conservation Concern in Ireland (BoCCI). Curlew were recorded

foraging on wet grassland adjacent to the study area, alongside the Shannon, however it is contended that the site does not offer suitable breeding habitat due to its close proximity to the public road and to trees which would encourage predation.

- 9.3.9. As noted above, the site is within Lough Drumharlow pNHA, which has been designated for Greenland white-fronted goose, which foraged on the wet grasslands. NPWS data shows no geese present in 2002 or 2012 and the site is considered to have been abandoned by NPWS. No geese were recorded during the site survey. Lough Drumharlow itself (also referred to as Lough Eidin) is also upstream of the site, with no hydrological downstream connectivity.
- 9.3.10. The River Shannon (Upper) has a WFD status of 'Poor' and is identified as 'At Risk'. The Q-value water quality status from monitoring stations upstream and downstream of the site is 4 (Good) and 3 (Poor), respectively.
- 9.3.11. With regard to fish, the EclA refers to the Aquatic Ecological Assessment, prepared by Ecofact, which states that:

“There is no habitat for salmonid fish at this site. The River Shannon at this site is however a migration pathway for Brown Trout (and perhaps the occasional Atlantic salmon). There is potential nurse habitat for Brook Lampreys *planeri* at this site. However, none were recorded during the sweep net sampling (which included sampling silt). Lamprey ammocoetes are likely to present in low densities – but none were found during the current survey despite extensive searching. There is no spawning habitat for lampreys this site and anadromous lampreys are not able to access this part of the River Shannon catchment due to downstream fish passage issues. The margins of the river do provide ideal spawning and nursery areas for cyprinids, perch and pike. Juvenile Roach *Rutilus rutilus* and were recorded during the sweep net sampling at this site. According to IFI this is an angling stretch and contains Bream *Abramis brama*, Tench *Tinca tinca*, Rudd *Scardinius erythrophthalmus*, Perch *Perca fluviatilis* and Pike *Esox Lucius*. IFI have stated that “Hartley Bridge [] can be a very productive venue in May as the shoals of Roach migrate up river to spawn. There are also Bream to 3lbs, Hybrids and Rudd in the section”.

“Small numbers of the critically endangered European eel *Anguilla* are also likely to be present.”

- 9.3.12. Of the various ecological receptors identified, the EclA assesses which of those can be considered ‘Key Ecological Receptors’, in accordance with NRA guidance for Assessment of Ecological Impacts of National Road Schemes. The identified KERs are: depositing/lowland rivers; reed and large sedge swamp; hedgerows; treelines; fish; European eel; otter; and waterbirds.
- 9.3.13. In the ‘do nothing’ scenario, where the proposed development does not proceed, the development site would likely remain under its current management routine.
- 9.3.14. Potential construction phase impacts on the identified KERs include: loss of hedgerow and treeline; loss of riverbed and reed and sedge swamp, associated with the bridge works and the reprofiling of the riverbed; and impacts on aquatic fauna due to habitat loss and deterioration and disturbance.
- 9.3.15. The impacts on hedgerow and treeline relate to the loss of c. 260m of treeline and c. 230m of hedgerow to construct the proposed development, which is considered to be a permanent slight negative impact in the absence of mitigation. The proposed mitigation is the planting of c. 490m of native tree and shrub species along the new sections of road, with no net loss of these habitat types and no significant residual effects.
- 9.3.16. The impacts on riverbed and reed and sedge swamp habitat relate to the installation of the bridge piers within the river channel, the riverbed reprofiling works required to maintain Waterways Ireland navigation requirements and the installation of rock armour along the riverbank. With regard to the riverbed reprofiling, it is stated that this will comprise the removal of c. 149m³ of material. The habitat loss is stated to be minimal in scale and the impacts are stated to be slight negative impacts, although a potential significant indirect impact on aquatic habitats is identified due to potential surface water pollution during construction.
- 9.3.17. The impacts on aquatic fauna relate to the loss of the habitats referenced above and the potential for indirect habitat loss as a result of surface water deterioration is also identified for the construction phase. Species potentially affected include Brook Lamprey, coarse fish, otter, eel and waterbirds. The impacts are stated to be slight negative impacts.

- 9.3.18. The proposed mitigation measures are outlined in the EclA and the CEMP and are outlined in Section 9.4.42 below. The measures include the carrying out of works during the period July - September (inclusive) in line with Inland Fisheries Ireland guidance, and various good practice water pollution prevention measures including silt fencing, designated construction access routes, fencing off of works areas, creation of dry working areas, and for machinery to use barges or operate from the riverbank. A pre-commencement otter survey is also proposed, and it is stated that all works will be monitored by an Ecological Clerk of Works and designated Environmental Officer.
- 9.3.19. With regard to biodiversity enhancement, as noted above it is proposed to carry out 490m of replacement native tree and shrub planting to ensure no net loss of this habitat. A pollinator friendly grass seed mix is proposed for the landscaping of the site to support existing invertebrates and encourage pollinators. A Preliminary Habitat Restoration Plan (MKO, dated 11/04/2022) was also submitted in response to the request for further information to address the loss of wet grassland (GS4) and reed swamp habitats. It is proposed to actively manage the riverbank in the area between the existing bridge and the proposed bridge to encourage wetland habitats. This will be achieved by lowering the height of the banks in the local area by 500mm to create low lying areas that are subject to regular inundation and will support a wetland vegetation similar to that being removed. The lowering will take place when water levels in the River Shannon are low to avoid water pollution and the lowered area will be reseeded with a native grass mix to stabilise the bank prior to its colonisation by wetland vegetation present in the surrounding area. The restoration areas will extend for c. 20m along the banks, and for c. 10 - 15m inland from the river.
- 9.3.20. Following implementation of the mitigation measures, no significant residual effect on biodiversity as a result of the construction of the proposed development is anticipated.
- 9.3.21. In the operational phase, no impacts on biodiversity are anticipated, noting that the proposed development includes drainage in accordance with TII guidelines and that there will be no significant change in usage between the new bridge and the old bridge.

- 9.3.22. With regard to decommissioning, this is unlikely to arise given that the proposed development is considered to be permanent. However, any future demolition works would be similar to those now proposed for the old bridge and potential impacts on water quality would be capable of mitigation in the same manner as proposed in the CEMP.
- 9.3.23. With regard to potential impacts on nationally designated sites, the Lough Forbes Complex pNHA boundary is concurrent with Lough Forbes Complex SAC and will be subject to the same mitigation measures. The site is within Lough Drumharlow pNHA, with direct impacts in the form of some minor loss of Local Importance (lower value) wet grassland habitat within the pNHA. As noted above, the proposed development includes biodiversity enhancement and replacement measures. The Greenland white-fronted goose population for which the pNHA is designated are no longer present and the site is considered by NPWS to be abandoned. The direct effects on the pNHA are considered negligible. The potential indirect impacts are related to disturbance and surface water pollution during the construction phase and subject to implementation of the measures outlined in the EclA and CEMP, no significant indirect impacts are anticipated. The same conclusion is reached with regard to the other pNHAs located downstream of the proposed development, with hydrological connectivity, such as Lough Boderg and Lough Bofin pNHA.
- 9.3.24. The EclA considers potential cumulative impacts on biodiversity with other plans and projects, including the two County Development Plans, the Carrick-on-Shannon to Battlebridge Blueway and various small-scale projects in the vicinity. No significant cumulative impacts are identified.
- 9.3.25. The EclA concludes that, following incorporation of best practice measures, the proposed development will not result in any significant residual effects on the flora, fauna and biodiversity of the existing environment.
- 9.3.26. The Department of Housing, Local Government and Heritage (Development Applications Unit) raised a number of biodiversity related issues in their submission, where were subsequently responded to by the applicant in their response to the request for further information. No further submission was received from the Department.
- 9.3.27. Habitat Loss

9.3.28. The Department, noting that 'no net loss of biodiversity' is the objective for new development under the National Biodiversity Action Plan 2017-2021, considered that the loss of the wet grassland habitat and reed bed/sedge habitat was not sufficiently offset by compensatory measures. In response, the applicant has proposed biodiversity enhancement measures for these habitats as outlined in the Preliminary Habitat Restoration Plan and detailed above. The applicant has also confirmed, as requested by the Department, that the grass seed mix will be specified to only include native species from registered Irish feed stock.

9.3.29. I am satisfied that the proposed development, as modified by the further information submitted, adequately mitigates the issue of habitat loss and that there is likely to be no significant habitat loss and no net loss of valuable or rare habitats.

9.3.30. Aquatic Ecology

9.3.31. I consider that the potential impacts on aquatic ecology are related to surface water pollution as a result of silt, hydrocarbons, or chemicals entering the water during the construction and demolition phase, or a result of the riverbed reprofiling works. However, I am satisfied that the applicant has provided sufficient detail on the proposed construction methodologies and proposed mitigation measures and best practice construction methods, including compliance with IFI guidance and the carrying out of in-stream works during the period July - September (inclusive). Subject to compliance with these commitments and the supervision of work by an ECoW, I am satisfied that there is not likely to be any significant residual impact on aquatic ecology.

9.3.32. Birds and Bats

9.3.33. The Department, noting that the seasonally flooding wet grassland habitats are important winter foraging sites for Curlew and other wintering waders as well as important summer breeding habitat for waders, contended that the frequency and timing of the bird surveys was not in keeping with best practice and may not accurately reflect the potential bird activity occurring onsite. They therefore recommend a condition requiring pre-construction surveys for breeding waders, including Lapwing, Snipe, Curlew, Meadow Pipit, Warblers and Reed Bunting. The Department also requested that any habitat removal or ground preparation works

within the wet grassland areas should be undertaken prior to the bird breeding season.

- 9.3.34. The surveys were undertaken on a single day in February and August, which the applicant contends was commensurate with the nature, scale and location of the proposed development, adjacent to a public road and bridge with existing treelines/hedgerows that may support nesting birds but would deter foraging or breeding waders and waterfowl. Notwithstanding this, the applicant undertakes to carry out an additional pre-commencement survey as requested by the Department and to remove vegetation outside of the bird nesting season.
- 9.3.35. While the bird surveys undertaken were relatively minimal, as noted by the Department, I concur with the applicant's position regarding the nature and scale of the proposed development and its location adjacent to public roads and treelines. I do not consider that the proposed development is likely to have a significant impact on breeding or foraging waders, however given the importance of wet grassland to these species, I agree with the Department's request for a pre-commencement survey and for vegetation removal to be undertaken outside of the bird breeding season. I recommend that suitable conditions be attached in this regard.
- 9.3.36. The Department also raised the risk of potential swan collision with high-sided vehicles on the new bridge. The applicant contends that there will be no increased level of risk, since the proposed bridge has a low-profile with no cables or towers and since it replaces a similar structure, which has not led to significant impacts on bird species.
- 9.3.37. The existing bridge is subject to a height restriction and the proposed development is therefore likely to result in an increase in high sided vehicles using the crossing. However, given the rural nature of the location, and the areas served by the local roads, the level of additional high-sided vehicle traffic is not likely to be significant in my opinion.
- 9.3.38. The applicant has stated that they can commit to the placement of reflective poles on the bridge to guide low flying birds over the height of any regularly occurring high sided vehicles (approx. 1.5m over the top of the parapet) if required. Given the likely low level of such traffic and the fact that the bridge replaces an existing bridge that does not appear to have caused any significant level of bird collision, I do not

consider that such reflective poles are warranted, given the visual and landscape sensitivities of the area, and the visual amenity benefits of utilising a low-profile, simple bridge structure.

9.3.39. The Department concurred with the applicant that it is unlikely that bats are roosting in the existing bridge, but they recommend that new roosts or other measures be included to enhance the site for roosting/foraging bats. They also suggest that Swift nesting boxes be provided to offset the decline in Swift numbers in Co. Leitrim. The applicant has undertaken to install both swift and bat boxes in/on the new bridge and I recommend that this be required by way of condition, should the Board be minded to approve the proposed development.

9.3.40. Biosecurity/Invasive Species

9.3.41. The Department's submission acknowledges that the proposed mitigation and protocols for invasive species are recognised best practice but they have sought clarity on oversight/implementation and the role of the ECoW. The applicant has outlined the role and required qualifications for the ECoW in both their CEMP and the response to the request for further information. They confirm that the ECoW will have the power to stop works if they are not being undertaken in accordance with the specified methodologies or if there is an environmental incident.

9.3.42. I note that the CEMP states that the ECoW will be engaged by the main contractor and will report to the Site Manager, while the response to the RFI states that the ECoW will liaise with the Site Manager and report to the client (Leitrim County Council). In order to avoid confusion and to ensure that the identified ecological and environmental mitigation measures are satisfactorily implemented and monitored, I recommend that the Board include a condition clarifying that the ECoW be retained directly by the local authority and that they shall have the power to stop works if necessary.

9.3.43. With regard to the proposed mitigation measures and best practice construction methods, I am satisfied that these are sufficient to adequately mitigate the risk of introducing or spreading invasive species. In response to the Department's request, the applicant has confirmed that full records will be retained for NPWS inspection if necessary.

9.3.44. In conclusion, subject to implementation of the identified mitigation measures and construction methods and protocols identified in the EclA and CEMP, and the imposition of suitable conditions, I do not consider that the proposed development is likely to have a significant impact on biodiversity.

9.3.45. **Soils and Water**

9.3.46. The Department queried the requirement for dredging within the pNHA, given that the proposed bridge clearance is similar to the existing bridge. The applicant states that the dredging of the navigation channel to achieve a 1.7m draft is a requirement of Waterways Ireland (WI) in order to facilitate river navigation and to comply with Shannon Navigation Bye-Law 8¹. This position is supported by a letter from WI and the record of a meeting with WI, both of which were submitted with the application. The subsequent submission from WI has indicated that they are satisfied with the proposed development.

9.3.47. Navigation through the existing multi-span bridge is currently restricted to particular spans, with a reduced water depth on the western side of the river. The proposed bridge design accommodates the full navigable portion of the river within the central span and therefore gives rise to a requirement for dredging or riverbed re-profiling, particularly on the western side of the river, to meet the 1.7m draft requirement.

9.3.48. A Bathymetric Survey has been prepared identifying the areas to be subject to localised riverbed re-profiling. I note that the extent and scale of these works is minor and will entail the removal of c. 149m³ of material. A methodology for the works is contained in the CEMP, and I note that the material arising from the re-profiling will be removed by barge and sent to a designated waste facility or re-used on site if suitable. Given the very minor scale of the reprofiling works relative to the scale of overall riverbed re-profiling activities carried out by Waterways Ireland to maintain navigation channels, the proposal to remove the material by barge, and the existing turbid nature of the water as detailed in the Aquatic Ecological Assessment I do not consider that the limited re-profiling/dredging works associated with the proposed development are likely to have a significant impact on water quality.

¹ "A vessel having a draft of more than 1.25 metres shall not navigate in the Ballinamore and Ballyconnell navigation (within the meaning of section 5 of the Act), and a vessel having a draft of more than 1.7 metres shall not navigate in the remainder of the navigation, without the consent of the Commissioners".

9.3.49. The potential for other impacts on water quality arising from pollution with silts, hydrocarbons, cement or chemicals during the demolition and construction phase has been adequately addressed in the application in my opinion. The applicant has clearly identified the construction methodologies and phasing and has identified a range of mitigation measures and best practice construction methods, including 50m buffer zones between the site compounds/material stockpiles and the water's edge, silt fencing and silt bags, excavation and removal of sediments at pier locations, use of a cofferdam to create a sealed dry working area for pier construction, use of barges for piling and material removal, timing of works outside of the most sensitive times of year for aquatic species, provision of spill kits, review of weather forecasts before concrete pours, use of bunded containers for fuels and oils and compliance with relevant IFI and CIRIA guidance.

9.3.50. The mitigation measures will also be used to prevent pollution of soils and I note that the applicant has committed to reusing demolition materials in the realigned approach road embankments, if suitable, which I consider to be a sustainable solution to protecting natural resources and avoiding undue impacts on local soils.

9.3.51. In conclusion, subject to implementation of the identified mitigation measures and construction methods and protocols, and the imposition of suitable conditions, I do not consider that the proposed development is likely to have a significant impact on soils and water.

9.3.52. **Air Quality and Climate**

9.3.53. Having regard to the nature of the proposed development, which entails the replacement of an existing bridge, I consider that the only potential for additional or increased impacts on air quality and climate arises during the construction phase.

9.3.54. The proposed development is not particularly extensive in scale and has a separation distance of greater than 150m from the nearest dwellings. The CEMP outlines a series of dust control measures, which generally comprise best practice construction methods. These include watering of site roads, use of water mists as required in dry weather conditions, covering of loads with potential to generate dust and speed control of works-related traffic. Subject to implementation of the CEMP I am satisfied that there is not likely to be any significant impact on air quality.

- 9.3.55. With regard to climate, it has been contended that the value of the embodied carbon already present in the existing bridge has not been assessed prior to proposing demolition, nor the impact of its removal.
- 9.3.56. As detailed elsewhere in this report, I consider that the applicant has adequately justified the proposed replacement of the existing Hartley Bridge. While the bridge may be capable of repair, this would not increase its capacity and a second bridge would still be required to allow unrestricted traffic movements. I do not consider that the retention of the existing bridge for pedestrian use, which would result in the provision of two immediately adjacent crossings across the Shannon, would be reasonable or desirable from the perspective of landscape and visual impact or river navigation.
- 9.3.57. The existing bridge is a concrete and steel structure and thus contains a substantial amount of embodied carbon. Set against this is the fact that the bridge has been in use for over 100 years and appears to be nearing the end of its lengthy useful life, as outlined in the structural assessment reports. The applicant has submitted an Outline Construction & Demolition Waste Management Plan and states that the waste material arising will be reused on site or salvaged for subsequent reuse to the greatest extent possible, with disposal only considered as a last resort. In this regard it is proposed to utilise the waste concrete as fill material for the approach road or in the manufacture of new concrete, subject to testing and compliance of material properties.
- 9.3.58. Having considered the rationale and purpose of the proposed development and the proposals for material re-use, I consider that the proposed development would not have a significant impact on climate and that the principles of sustainable development have been adequately considered.
- 9.3.59. **Landscape and Visual Amenity**
- 9.3.60. Hartley Bridge is located in a scenic area, and a Visual Impact Assessment, prepared by Punch Consulting Engineers, was submitted with the application.
- 9.3.61. The site is located within an Area of High Visual Amenity under the Leitrim County Development Plan 2023 - 2029. Under the Landscape Character Assessment for the Roscommon County Development Plan 2022 - 2028, the site is within the 'Upper Shannon and Derreenannagh Drumlin Belt' (LCA 2), which is stated to be of 'Very

High Value', as it forms part of the River Shannon corridor which is popular for both water and land based tourism. The LCA states "in this character area there are views of Slieve Anierin to the north and Sheemore Hill to the north east from Hartley Bridge. Such views create a sense of place and should be protected. A general policy position of protecting views from bridges should be expressed in the County Development Plan". A Scenic View (V8) is identified in the LCA from Hartley Bridge in a westward direction.

- 9.3.62. The existing bridge, which is in relatively poor condition, is a simple, low-profile structure with an idiosyncratic and somewhat irregular design, comprising a six-span integral structure and an adjoining two-span structure butting the six-span structure to the west. The bridge is narrow, with an asymmetrical humpback shape which facilitates river navigation while allowing for at-grade connections on either side of the river. The proposed replacement bridge is a more substantial structure, although it also has a relatively simple design comprising a flat three-span precast concrete structure with concrete abutments and mesh panel parapets. The L3400 local road will be locally realigned on both approaches to the bridge, to remove existing bends and will be elevated on embankments to facilitate the clearance required for river navigation. A useful overlay of the two bridges is illustrated in Figure 4-9 of the Visual Impact Assessment.
- 9.3.63. The proposed bridge is somewhat nondescript in terms of its design, however I consider this simple and relatively unremarkable design to be a reasonable response to the site location and characteristics, where the visual amenity and landscape character are primarily derived from the natural environment and the flat and expansive views of the River Shannon and the surrounding lakes and farmland.
- 9.3.64. With regard to the designed Scenic View V8 from the existing bridge, this will be replicated on the new bridge, which is located c. 25m downstream. The deck level of the new bridge is c. 2m higher than the existing bridge and it has perforated mesh panels on the parapets, rather than the solid wall on the existing bridge. These design features will serve to improve the scenic views towards Slieve Anierin and Sheemore Hill. The designated Scenic View, V8, will therefore be enhanced by the proposed development and the increased bridge width and the provision of footpaths on the bridge span will allow for safer enjoyment and appreciation of the Scenic View.

9.3.65. In conclusion, I do not consider that the proposed development is likely to have a significant negative impact on the landscape or visual amenity of the area and I consider that the proposed bridge design is appropriate to the receiving environment.

9.3.66. **Archaeological, Architectural and Cultural Heritage**

9.3.67. Architectural and Cultural Heritage

9.3.68. The submission received from the Department of Housing, Local Government and Heritage raised a number of issues relating to architectural and cultural heritage and archaeology. Similar issues were raised by the observer.

9.3.69. The existing Hartley Bridge, which dates from 1915, is an early example of a reinforced concrete bridge in Ireland. The bridge straddles the county boundary between Leitrim and Roscommon but is not included in the Record of Protected Structures for either county. Neither is it listed in the National Inventory of Architectural Heritage (NIAH). Notwithstanding this, I note that the Architectural Heritage Protection Guidelines for Planning Authorities (2011) states at Section 14.2 that “early concrete bridges are relatively rare and should be carefully conserved”.

9.3.70. The Department contended that the applicant had not provided sufficient justification for the removal of the existing bridge and requested that consideration be given to the repair and retention of the existing bridge to sustain its use for pedestrian access. The applicant was requested to address this issue in the request for further information.

9.3.71. A Summary Conservation Report, prepared by Fintan Duffy of DHB Architects (Grade 1 Conservation Architect), was submitted in response to the RFI. The report sets out the history and origin of the bridge and considers that it is of architectural, social and technical interest and that it would merit a rating of ‘Local’ to ‘Regional’ importance under the NIAH standards.

9.3.72. Having regard to the history of the bridge and the manner and date of its construction, I agree that it is of architectural, social and technical interest, but I consider it to merit a rating of ‘Regional’ importance. I note, with reference to the LCC Senior Planner’s letter dated 28th April 2022, that this would be consistent with the rating given in the preliminary issue of the NIAH survey for the County, albeit that the bridge was ultimately not included in the final issue of the NIAH survey.

- 9.3.73. The Department, in their submission, queried the possible association of the existing bridge with a nearby property known as Hartley Manor House. The Conservation Report does not give any support to such an association. It states that the name of the bridge may refer to Hartley townland, within which it is partially located, or to Hartley Manor House. The Report refers to the book 'Civil Engineering Heritage Ireland' (Cox and Gould), which states that the bridge was financed jointly by Roscommon and Leitrim County Councils and the Board of Works and was constructed to a design prepared for the County Surveyor of Leitrim. It therefore appears that the bridge was constructed as a public bridge, carrying the local road over the River Shannon and there is no indication of a historical or functional connection to Hartley Manor House.
- 9.3.74. The Department also consider that the proposed removal of the existing bridge is to "deny the understanding of this strategic crossing point of the River Shannon". However, as noted by the LCC Senior Planner in his letter, there is no indication in historic OS mapping of an earlier bridge crossing at this location, before the opening of the existing bridge in 1915. Instead, there are references on the historic mapping to a ferry crossing point a short distance to the north of the existing bridge location.
- 9.3.75. The applicant's Conservation Report concludes that, while the bridge has served its purpose well for a century, in order for it to continue as a functioning bridge, it would require a campaign of specialist conservation works to restore the integrity of its fabric and that without this expenditure, it is unlikely to survive another century as a safe and functioning structure. This conclusion is generally consistent with the two structural assessment reports submitted with the application.
- 9.3.76. The Stage 1 Structural Assessment Report (2016, Doran Consulting) found that five of the six spans that were subject to structural analysis for a 40 tonne loading failed the assessment, with a live load carrying capacity of < 3 tonnes. The subsequent Stage 2 Structural Assessment Report (2017, Roughan & O'Donovan) included extensive opening up works together with material testing of the concrete elements and the steel reinforcement and further structural analysis. I note that the report states that there was no evidence of structural distress in the bridge deck due to overload and that the patterns of cracking in structural elements indicates that the deterioration is due to poor quality concrete, lack of concrete cover and/or poor workmanship rather than overload or a loss of structural capacity due to corrosion.

Nevertheless, the report states that the bridge deck is nearing the end of its serviceable life and that significant remedial works are required to address the defects, followed by an onerous inspection and maintenance regime.

- 9.3.77. The report reaffirmed the 3 tonne live load capacity of the bridge and recommended that provision be made for replacing the structure in the short to medium term, subject to the findings of an economic appraisal of the options. In order to slow the deterioration, it also outlined remedial works, including repair of areas subject to spalling, use of corrosion protection materials to pillars and beams and waterproofing of the top of the slab.
- 9.3.78. The extensive spalling of concrete and the many areas of exposed and corroded steel reinforcement referenced in the structural assessment reports were readily apparent in the course of my site inspection, as was the narrow width and poor forward visibility on the existing bridge.
- 9.3.79. The applicant contends that the proposed demolition is fully justified and reasonable on the basis of the 2003 Part 8 planning approval (Ref. P02-C-14). The applicant refers to the submissions made by An Taisce and Dúchas, the Heritage Service, in that application. Dúchas did not object to the proposed demolition, while An Taisce stated that “the existing structure is of no design merit at the end of its performance life. Its replacement with a well designed modern bridge is welcome”. A copy of An Taisce’s 2003 submission was submitted by the applicant, but I note that An Taisce did not make a submission in respect of the current application.
- 9.3.80. With regard to the financial implications of rehabilitating and on-going maintenance of the existing bridge, the applicant states that this would likely take the form of initial, substantive repair works costing €500,000+ followed by on-going monitoring and maintenance interventions with an expected frequency of 10-15 year (values ranging from €50,000 - €100,000). A number of logistical difficulties with such repair work are identified, including upholding the 3 tonne weight restriction throughout the works, requirement for extensive scaffolding, ecological constraints, requirement for temporary closure of the navigation spans and for a temporary road closure for the duration of the works. The applicant contends that the extensive nature of the required interventions would require the removal and replacement of the original bridge fabric, significantly compromising the character and heritage fabric of the

existing bridge. In addition to these difficulties, it is contended that the retention of the existing bridge will still hinder safe river navigation and would not rehabilitate the bridge sufficiently to achieve the load carrying capacities required for contemporary traffic. This last point was reiterated by the Senior Planner of Leitrim County Council in his letter submitted in response to the request for further information. He noted that, even if the existing bridge were restored and repaired, the present 3 tonne weight limit would remain in place.

9.3.81. It is clear that substantial and extensive remediation works would be required to slow or arrest the deterioration of the existing bridge. However, this would not increase the structural capacity of the bridge and in order to remove the weight and height restrictions a new bridge would still be required. While it has been contended that the existing bridge could be retained for pedestrian/cycle use, the level of use it would receive would be minimal, given that the proposed new bridge has footpaths and noting the rural nature of the area. The very close proximity of the two bridges (c. 25m) would also detract from the visual amenities of the area, the heritage character and attributes of the existing bridge and would likely result in a significant obstacle to river navigation given the multitude of bridge piers that would be within the river channel.

9.3.82. While the demolition of the existing bridge would be regrettable, given its history and architectural, technical and social interest, I consider that the applicant has submitted a strong and persuasive rationale for its replacement. On balance, I consider that the road safety, public safety, river navigation and improved connectivity benefits of the proposed bridge outweigh the heritage loss of the existing bridge. A key consideration in this regard is that the existing bridge is not a protected structure and is not included in the NIAH.

9.3.83. If the Board is minded to approve the application, I recommend that a condition be included requiring that a full photographic and drawn survey of the existing bridge be prepared prior to its demolition in order to ensure the preservation by record of the architectural, social and technical heritage of the site.

9.3.84. Archaeology

9.3.85. With regard to archaeology, an Archaeological Impact Assessment (AIA), prepared by Mizen Archaeology, was submitted. The AIA was informed by a desktop study, an

underwater survey of the river crossing, archaeological testing of the affected terrestrial areas and full excavation of an archaeological site identified during the testing, under licence from the National Monuments Service.

- 9.3.86. A ringfort (RO007-083) is located to the west of Hartley bridge and there are a further cluster of three ringforts 500 - 700m to the north east. These sites will not be directly impacted by the proposed development.
- 9.3.87. The dive survey covered the entire width of the river for a length of 40m upstream and downstream of the existing bridge and found a significant amount of modern debris but no archaeological remains or features.
- 9.3.88. Archaeological test trenching was undertaken along the line of the proposed road realignment to the west and east of the proposed bridge location in three fields, numbered from 1 to 3 from west to east. No archaeological material was found in Fields 1 or 2, while 12 No. potential archaeological features were recorded in Field 3, at the eastern part of the site. Subsequent excavation under licence found a prehistoric ditched enclosure and metal working area, including burnt and unburnt bone, slag, copper and iron objects, prehistoric pottery, flint and chert scrapers, a chert projectile and debitage. I note that all topsoil within the site boundary in Field 3 was removed under archaeological supervision, other than a baulk along the northern fence where no ground disturbance is proposed, and all archaeological features and deposits were fully removed for analysis, with an excavation report to be prepared.
- 9.3.89. The AIA recommends archaeological monitoring of works within 30m of the western riverbank in Field 1, of topsoil stripping in Field 2 and of the removal of the field boundary ditch to the south east and west of Field 3. The AIA also recommends that excavation of the riverbed material during bridge demolition/construction should be archaeologically monitored by an underwater archaeologist.
- 9.3.90. The Department's submission concurred with these recommendations and recommended conditions accordingly.
- 9.3.91. I consider that the applicant has undertaken a suitably comprehensive assessment of the archaeological potential of the application site and I concur with the recommendations of the AIA regarding the need for archaeological monitoring of both terrestrial and underwater works during the construction phase.

9.3.92. Subject to the inclusion of suitable conditions regarding archaeological monitoring, I am satisfied that the proposed development is not likely to have a significant impact on archaeological heritage.

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

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

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

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

9.4.3. Article 6(3) of the Habitats 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 before consent can be given.

9.4.4. **The Natura Impact Statement**

9.4.5. The application included a NIS (MKO, 15/09/2021), which describes the proposed development, including demolition/construction methodologies and phasing, and the characteristics of the project site and the surrounding area. Appendix 1 of the NIS comprises the Stage 1 Appropriate Assessment Screening Report which concluded that a Stage 2 Appropriate Assessment was required. The NIS outlines the methodology used for assessing potential direct and indirect impacts on the habitats within the European Site that has the potential to be affected by the proposed development. It predicts the potential impacts for the site and its conservation objectives, it suggests mitigation measures, assesses in-combination effects with other plans and projects and it identifies any residual effects on the European site

and its conservation objectives. Appendix 2 of the NIS comprises the Construction and Environmental Management Plan for the project, which incorporates the identified mitigation measures.

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

- A desk top study, including reference to relevant guidance documents, biodiversity and water quality records, European Site Conservation Objectives and online NPWS, IFI, EPA, GSI and Geohive mapping.
- Ecological multidisciplinary walkover survey.

9.4.7. The River Shannon at the proposed development site is categorised as Lowland/depositing river (FW2). The western side of the river consisted of Wet grassland (GS4) which was primarily dominated by soft rush (*Juncus effusus*), Yorkshire fog (*Holcus lanatus*), creeping bent (*Agrostis stolonifera*) and marsh thistle (*Cirsium palustre*). Closer to the river the vegetation also included common sedge (*Carex nigra*) and water mint (*Mentha aquatica*). Reed and large sedge swamp (FS1) was recorded immediately adjacent to the eastern side of the river and was dominated by common reed (*Phragmites australis*), scattered immature regenerating willow (*Salix* sp.) and alder (*Alnus glutinosa*) were also recorded. This habitat graded into bramble (*Rubus fruticosus* agg.) Scrub (WS1) and Improved agricultural grassland (GA1). Improved grassland was dominated by Yorkshire fog and perennial ryegrass (*Lolium perenne*). The existing road and bridge are categorised as Buildings and artificial surfaces (BL3). The road west of bridge was bordered by a whitethorn (*Crataegus monogyna*) Hedgerow (WL1) and short willow Treeline (WL2). The road on the eastern side of the river was bordered by a whitethorn Hedgerow (WL1), roadside Treeline (WL2) consisting of alder, sycamore (*Acer pseudoplatanus*) and ash (*Fraxinus excelsior*). A small area of newly generated (post-2005) Wet willow-alder-ash woodland (WN6) was recorded south of the road, outside the proposed development footprint.

9.4.8. WN6 habitat corresponds to Annex I Alluvial woodland. None of the other habitats correspond to any habitat listed under Annex I of the EU Habitats Directive. No species listed under Annex II of the EU Habitats Directive or Annex I of the EU Birds Directive were recorded during the site visits.

- 9.4.9. No botanical species listed under the Flora (protection) Order 1999, as amended, listed in the EU Habitats Directive (92/43/EEC), or listed in the Irish Red Data Books were recorded on the site. Likewise, no invasive species listed on the Third Schedule of Regulations 49 and 50 of the European Communities (Birds and Natural Habitat) Regulations S.I. 477/2011 were recorded. It is stated that all species recorded are common in the Irish landscape.
- 9.4.10. The NIS concludes that, subject to the implementation of best practice and the recommended mitigation measures, there would be no residual impacts and the proposed development would not have an adverse effect on the integrity of the Lough Forbes Complex SAC (Site Code 001818) or any other European Site either individually or in combination with other plans or projects.
- 9.4.11. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided and they are summarised in Section 5.2.1.1 of the NIS. I am satisfied that the information is sufficient to allow for appropriate assessment of the proposed development.
- 9.4.12. **Stage 1 Screening for Appropriate Assessment**
- 9.4.13. The proposed development is not directly connected to or necessary to the management of any European Site and therefore is subject to the provisions of Article 6(3).
- 9.4.14. The screening contained within the NIS considers both European Sites within 15km of the proposed development and those at a greater distance with potential connectivity. Having regard to the nature of the proposed development, which includes in-stream works in the River Shannon, the nature of the receiving environment and the source-pathway-receptor model, I consider this to be a reasonable approach to identifying a zone of influence. There are 5 No. European Sites within the zone and Table 8.1 below lists the qualifying interests of these sites, their conservation objectives and identifies possible connections between the proposed development (source) and the sites (receptors).
- 9.4.15. The most distant sites are the Lough Forbes Complex SAC and Ballykenny - Fisherstown Bog SPA, which are located c. 38.2km hydrologically downstream in the

Shannon catchment. The AA Screening excludes sites further downstream on the Shannon catchment due to the scale of the proposed development, the distance and the attenuation properties of the watercourses involved. I consider this to be a reasonable conclusion.

9.4.16. Having regard to: the information and submissions available; the nature, size and location of the proposed development; its likely direct, indirect and cumulative effects; the source-pathway-receptor model; and the sensitivities of the ecological receptors, I consider that the 5 No. identified sites are relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects.

Table 8.1: European Sites considered for Stage 1 Screening					
European Site (Code)	Distance (Direction)	Qualifying Interest(s)	Conservation Objectives	Connections (Source-Pathway-Receptor)	Considered further in screening
Lough Arrow SAC (001673)	14.3km (NW)	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	To restore the favourable conservation condition of Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. In Lough Arrow SAC, as defined by a list of specific attributes and targets.	<u>No</u> No hydrological connection as the site is within a separate hydrological catchment.	<u>No</u> Site is not within likely Zone of Impact due to lack of connection.
Lough Arrow SPA (004050)	14.7km (NW)	Little Grebe (Tachybaptus ruficollis) [A004] Tufted Duck (Aythya fuligula) [A061] Wetland and Waterbirds [A999]	To maintain or restore the favourable conservation condition of the bird species listed as SCIs for this SPA To maintain or restore the favourable conservation condition of the wetland habitat at Lough Arrow SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.	<u>No</u> No hydrological connection as the site is within a separate hydrological catchment. No potential for impact on wetland habitats. No potential for indirect impacts on SCI species due to distance.	<u>No</u> Site is not within likely Zone of Impact due to lack of connection and distance.
Cuilcagh - Anierin Uplands SAC (000584)	14.3km (N)	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160]	To maintain or restore the favourable conservation condition of the Annex I habitats, as defined by a list of specific attributes and targets for each QI.	<u>No</u> No hydrological connection as the site is within a separate	<u>No</u> Site is not within likely Zone of Impact due to lack of connection.

		<p>Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]</p> <p>European dry heaths [4030]</p> <p>Alpine and Boreal heaths [4060]</p> <p>Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]</p> <p>Blanket bogs (* if active bog) [7130]</p> <p>Transition mires and quaking bogs [7140]</p> <p>Petrifying springs with tufa formation (Cratoneurion) [7220]</p> <p>Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110]</p> <p>Siliceous rocky slopes with chasmophytic vegetation [8220]</p> <p><i>Hamatocaulis vernicosus</i> (Slender Green Feather-moss) [6216]</p>		hydrological catchment.	
Ballykenny - Fisherstown Bog SPA (004101)	23.5km and 38.2km via surface water connectivity (SE)	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	<u>Yes</u> Hydrological connection between the site and the SPA via the River Shannon.	<u>No</u> Site is outside the core foraging range of Greenland White-fronted Goose (5-8km). Goose population have not been recorded at the SPA since the early 1990s and would have used the peatlands within the SPA

					<p>rather than the lake itself. The raised bog habitat is upgradient of the lake and therefore lake waters carrying pollutants cannot impact the peatland which geese would forage on.</p> <p>Site is not within likely Zone of Impact due to terrestrial nature of the foraging habitat for which the SCI species are dependent.</p>
Lough Forbes Complex SAC (001818)	24km and 38.2km via surface water connectivity (SE)	<p>Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150]</p> <p>Active raised bogs [7110]</p> <p>Degraded raised bogs still capable of natural regeneration [7120]</p> <p>Depressions on peat substrates of the Rhynchosporion [7150]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</p>	To restore the favourable conservation condition of the Annex I habitats, as defined by a list of specific attributes and targets for each QI.	<p>Yes</p> <p>Hydrological connection between the site and the aquatic QIs (3150 and 91E0) via the River Shannon.</p> <p>No pathway for impacts on the terrestrial QIs ((7110, 7120, 7150).</p>	<p>Yes</p> <p>In-stream demolition and construction works and earthworks beside the river could result in suspended solids, pollutants, hydrocarbons etc. entering the river resulting in surface water pollution could impact on the aquatic QIs (3150 and 91E0).</p> <p>No potential for impacts on the terrestrial QIs (7110, 7120, 7150).</p>

- 9.4.18. Based on my examination of the NIS and supporting information, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, separation distance and functional relationship between the proposed works and the European Sites, their Conservation Objectives and taken in conjunction with my assessment of the subject site and the surrounding area, I would conclude that a Stage 2 Appropriate Assessment is required for one of the 5 No. European Sites referred to above, namely the Lough Forbes Complex SAC.
- 9.4.19. The remaining 4 No. sites can be screened out from further assessment because of the scale of the proposed development, the nature of the Conservation Objectives, Qualifying and Special Conservation Interests, the separation distances and in particular the lack of a substantive linkage between the proposed development and the European sites.
- 9.4.20. The Department, in their submission, contend that the screening assessment for AA partially relies on natural attenuation and distance from downstream SAC sites, and states that dilution over distance is not considered as mitigation for risk arising from the proposed development. In response, the applicant notes that the Lough Forbes Complex SAC is located 32km downstream and states that it has been screened in on the basis of the precautionary principle. The applicant also notes that other European Sites located further down the Shannon Catchment are at closest over 50km downstream and are separated from the proposed development by a number of lakes including Lough Tap, Lough Boderg, Lough Bofin and Lough Forbes. It is contended that there is no potential for likely significant effects, even in the absence of any mitigation.
- 9.4.21. Having considered the submissions made by both the Department and the applicant, I agree with the applicant that the identification of the Zone of Influence and the relevant European Sites for the purposes of AA Screening was sufficiently robust and conservative. Having regard to the limited nature and scale of the proposed development, the very substantial distances to the other downstream SACs (>50km) and the presence of intervening lakes, there is no reasonable potential for likely significant effects on any such designated site individually or cumulatively, and in the absence of any mitigation.
- 9.4.22. **Screening Determination**

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

- Lough Forbes Complex SAC (001818).

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

- Lough Arrow SAC (001673)
- Lough Arrow SPA (004050)
- Cuilcagh - Anierin Uplands SAC (000584)
- Ballykenny - FisherstownBog SPA (004101)

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

9.4.26. **Appropriate Assessment of Implications of the Proposed Development**

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

9.4.28. The following European Site is subject to Appropriate Assessment:

- Lough Forbes Complex SAC (001818).

9.4.29. A description of the site, its Qualifying Interests and Conservation Objectives including the relevant attributes and targets for the site, are set out in the NIS and summarised in Table 8.2 of this report as part of my assessment. I have also examined the Natura 2000 data forms as relevant and the Conservation Objectives supporting documents for the site available through the NPWS website (www.npws.ie).

9.4.30. **Aspects of the Proposed Development**

9.4.31. In my opinion, having reviewed the development proposal, the main aspects of the proposed development that could adversely affect the conservation objectives of the European Site arise during the construction phase and include:

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

9.4.32. These potential construction phase adverse effects and associated mitigation measures are identified in Table 8.2 below.

9.4.33. In addition to the specific mitigation measures proposed, as outlined in the NIS and associated CEMP, I note that the design of the proposed development has comprehensively considered the demolition and construction methodology and the phasing of works in order to avoid or mitigate potential adverse by design.

9.4.34. During the operational phase, there will be no significant change to the operation of the new bridge compared to the existing bridge, The new road realignment includes drainage in accordance with TII Guidelines, including road gullies, drainage pipes and soak pits. No impacts are anticipated in the NIS. Having considered the nature, scale and design of the proposed development, I do not consider that the proposed development – once operational – is likely to adversely affect the integrity of the aforementioned European Site in light of its conservation objectives, and that no mitigation measures are required during the operational phase.

9.4.35. With regard to decommissioning, the NIS notes that the proposed development is intended to be permanent. Notwithstanding this, any future demolition works would be similar in nature and scale to those proposed for the existing bridge and would thus be capable of mitigation in the same manner.

9.4.36. **In-Combination Effects**

9.4.37. The potential for in-combination effects with other plans or projects are considered in Section 7 of the NIS. The identified plans and projects include:

- National Biodiversity Action Plan 2017 - 2020.

- Leitrim County Development Plan 2015 – 2021 (since replaced by the Leitrim County Development Plan 2023-2029).
- Roscommon County Development Plan 2014 - 2020 (since replaced by the Roscommon County Development Plan 2022 - 2028).
- Carrick-on-Shannon to Battlebridge Blueway.
- Small-scale projects in the townlands of Hartley and Cleaheen to the east and west of Hartley Bridge. These were generally works at individual rural houses or works to jetties/slipways.

9.4.38. With regard to the Carrick-on-Shannon to Battlebridge Blueway, a feasibility study from 2019 identified the existing Hartley Bridge as a hinderance to a Blueway, as there is no access under the bridge. The proposed development makes allowance for access beneath the new bridge.

9.4.39. As the NIS concluded that the proposed development will not result in any residual adverse effects on any European Sites, their integrity or their conservation objectives when considered on its own, it also concludes that there is therefore no potential for the proposed development to contribute to any in-combination adverse effects on any European Site when considered with other plans and projects.

9.4.40. No connection that could potentially result in additional or in-combination impacts was identified, and neither was any potential for different (new) impacts resulting from the combination of the various projects and plans with the proposed development. Therefore, no residual in-combination effects have been identified with regard to any European Site.

9.4.41. The Department's submission raised the issue of potential in-combination effects with the proposed N4 Carrick-on-Shannon to Dromod project. The applicant's response was that the N4 project was not listed because it was at route selection stage with no emerging preferred route finalised. Having considered the route options, the applicant contends that the proposed works will not result in any significant loss of habitat and will implement mitigation in the form of habitat compensation and replacement, along with measures to ensure that there is no degradation of habitats or species either at the site or in the surrounding areas, and that there is no potential for significant negative effects to occur when considered in

combination with any other plans or projects. While early route options included a route to the north of Carrick-on-Shannon, close to Hartley Bridge, I note that a 'Preferred Road Based Option Corridor' has now been identified², which runs to the south of Carrick-on-Shannon and crosses the Shannon to the south of the town. Having regard to the location and separation distance of the preferred route from the proposed development, the potential adverse effects and associated mitigation measures, I concur that there is no potential for significant residual in-combination effects.

² <https://carrickdromod.ie/>

Table 8.2: Summary of Appropriate Assessment of implications of the proposed development on the integrity of Lough Forbes Complex SAC (Site Code 001818) alone and in combination with other plans and projects in view of the site’s Conservation Objectives.

Lough Forbes Complex SAC (Site Code 001818)					
Summary of Key issues that could give rise to adverse effects:					
<ul style="list-style-type: none"> • Water quality impacts due to pollutants or soil/silt run-off during construction. • Introduction/spread of invasive species or biosecurity issues during construction. 					
Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO001818.pdf					
Summary of Appropriate Assessment					
Qualifying Interest feature	Conservation Objectives Targets and attributes	Potential adverse effects	Mitigation measures	In-combination effects	Can adverse effects on integrity be excluded?
Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150]	<p>Restore favourable conservation condition</p> <ul style="list-style-type: none"> ○ Habitat area is stable or increasing, subject to natural processes; ○ No decline in habitat distribution; ○ Typical species present, in good condition and demonstrating typical abundances and distribution; ○ All characteristic zones should be present, correctly distributed and in good condition; ○ Maximum depth of vegetation restored, subject to natural processes; ○ Maintain appropriate natural hydrological regime necessary to support the habitat; ○ Maintain appropriate lake substratum type, extent and chemistry to support the vegetation. 	<p>Yes – Indirect</p> <p>No direct effect due to distance outside SAC boundary (38km downstream). Potential indirect effects during construction phase due to hydrological link and potential surface water pollution.</p>	<p>See Section 9.4.42 below.</p> <p>Best practice surface water management and pollution prevention methods are set out in the NIS and include detailed measures to mitigate impacts to water quality.</p> <p>Biosecurity measures are also set out in the NIS to prevent introduction of invasive species/ biohazards.</p> <p>Ecological Clerk of Works to be appointed to monitor compliance with mitigation</p>	No likely significant in-combination effects.	<p>Yes</p> <p>No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent identified potential indirect adverse effects on integrity.</p>

	<ul style="list-style-type: none"> ○ Water quality: Maintain/restore appropriate water Secchi transparency. There should be no decline in Secchi depth/transparency; ○ Restore the concentration of nutrients in the water column to sufficiently low levels to support the habitat and its typical species; ○ Maintain appropriate water quality to support the habitat, including good chlorophyll a status; ○ Maintain appropriate water quality to support the habitat, including good phytoplankton composition status ○ Maintain trace/ absent attached algal biomass (<5% cover) and good phytobenthos status; ○ Restore good macrophyte status ○ Maintain appropriate water and sediment pH, alkalinity and cation concentrations to support the habitat, subject to natural processes; ○ Restore appropriate water colour to support the habitat; ○ Maintain appropriate organic carbon levels to support the habitat; ○ Maintain appropriate turbidity to support the habitat; ○ Maintain the area and condition of fringing habitats necessary to support the natural structure and functioning of the lake habitat. 		measures and conditions.		
Alluvial forests with Alnus	<u>Restore</u> favourable conservation condition	Yes – Indirect	See Section 9.4.42 below.	No likely significant in-	<u>Yes</u>

<p>glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</p>	<ul style="list-style-type: none"> ○ Habitat area stable or increasing, subject to natural processes; ○ No decline in habitat distribution; ○ Woodland area stable or increasing. Where topographically possible, "large" woods at least 25ha in size and "small" woods at least 3ha in size; ○ Diverse woodland structure with a relatively closed canopy containing mature trees; subcanopy layer with semi-mature trees and shrubs; and well-developed herb layer; ○ Maintain diversity and extent of community types; ○ Natural regeneration: Seedlings, saplings and pole age-classes occur in adequate proportions to ensure survival of woodland canopy; ○ Appropriate hydrological regime necessary for maintenance of alluvial vegetation; ○ Dead wood: At least 30m³/ha of fallen timber greater than 10cm diameter; 30 snags/ha; both categories should include stems greater than 40cm diameter (greater than 20cm diameter in the case of alder); ○ Veteran trees: No decline; ○ Indicators of local distinctiveness: No decline; ○ Native tree cover: No decline. Native tree cover not less than 95%; ○ Typical species: A variety of typical native 	<p>No direct effect due to distance outside SAC boundary (38km downstream). Potential indirect effects during construction phase due to hydrological link and potential surface water pollution.</p>	<p>Best practice surface water management and pollution prevention methods are set out in the NIS and include detailed measures to mitigate impacts to water quality. Biosecurity measures are also set out in the NIS to prevent introduction of invasive species/ biohazards. Ecological Clerk of Works to be appointed to monitor compliance with mitigation measures and conditions.</p>	<p>combination effects.</p>	<p>No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent identified potential indirect adverse effects on integrity.</p>
---	--	--	--	-----------------------------	--

	<ul style="list-style-type: none"> ○ species present, depending on woodland type, including alder (<i>Alnus glutinosa</i>), willows (<i>Salix</i> spp.), oak (<i>Quercus robur</i>) and ash (<i>Fraxinus excelsior</i>); ○ Negative indicator species, particularly non-native invasive species, absent or under control. 				
Active raised bogs [7110]	<p>Restore favourable conservation condition</p> <ul style="list-style-type: none"> ○ Restore the area of active raised bog to 43.5ha, subject to natural processes; ○ Restore the distribution and variability of active raised bog across the SAC; ○ No decline in extent of high bog necessary to support the development and maintenance of active raised bog; ○ Restore appropriate water levels throughout the site; Restore, where possible, appropriate high bog topography, flow directions and slopes; ○ Restore adequate transitional areas to support/protect active raised bog and the services it provides; ○ Restore 21.8ha of central ecotope/active flush/soaks/bog woodland as appropriate; ○ Restore adequate cover of high quality microtopographical features; ○ Restore adequate cover of bog moss (<i>Sphagnum</i>) species to ensure peat-forming capacity; 	<p>No No pathway for impacts on terrestrial QIs.</p>	No mitigation required.	None	<p>Yes No potential for impacts on the terrestrial QIs.</p>

	<ul style="list-style-type: none"> ○ Restore, where appropriate, typical active raised bog flora; ○ Restore, where appropriate, typical active raised bog fauna; Maintain features of local distinctiveness, subject to natural processes; ○ Negative physical features absent or insignificant; ○ Native negative indicator species at insignificant levels; ○ Non-native invasive species at insignificant levels and not more than 1% cover; ○ Air quality surrounding bog close to natural reference conditions. The total N deposition should not exceed 5kg N/ha/yr; ○ Water quality on the high bog and in transitional areas close to natural reference conditions 				
Degraded raised bogs still capable of natural regeneration [7120]	The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established; therefore, the conservation objective for this habitat is inherently linked to that of Active raised bogs (7110) and a separate conservation objective has not been set.	No No pathway for impacts on terrestrial QIs.	No mitigation required.	None	<u>Yes</u> No potential for impacts on the terrestrial QIs.
Depressions on peat substrates of the	Depressions on peat substrates of the Rhynchosporion is an integral part of good quality Active raised bogs (7110) and thus	No No pathway for impacts on terrestrial QIs.	No mitigation required.	None	<u>Yes</u> No potential for impacts on the terrestrial QIs.

Rhynchosporion [7150]	a separate conservation objective has not been set.				
------------------------------	---	--	--	--	--

Overall conclusion: Integrity test

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

9.4.42. **Mitigation Measures**

9.4.43. The proposed mitigation measures are set out in Section 5.2.1.1 of the NIS and generally relate to measures to prevent water pollution and the deterioration of surface water quality, since this is the potential pathway by which the proposed development could have an indirect effect on the aquatic/surface water dependant QIs of the European Site.

9.4.44. The proposed measures to mitigate impacts to water quality are set out in the Construction and Environmental Management Plan (CEMP) included in Appendix 2 of the NIS. They include:

- **Site Set-up (Terrestrial Works):**
 - Pre-commencement otter survey and derogation licence if required.
 - Site compound a minimum of 50m away from the water's edge, outside of identified flood risk areas. Compound shall be secured and all construction materials shall be stored in this defined area.
 - Silt fence erected along both sides of the river channel to prevent run-off entering the river.
 - Works area fenced off and no works outside this area.
 - Access routes clearly marked / identified.
- **Site Set-up (Instream Works):**
 - Clearance of the reed bed outside the bird breeding season (March 1st – Aug 31st).
 - Works are proposed to take place in the riverbed with disturbance of sediments expected.
 - Limited sediment excavation may be required around the pier foundations. Sediments are not expected to be contaminated as there is no history of industrial activity in the vicinity. Prior to removal, sediments will be subject to environmental sampling and analysis to confirm the most suitable recovery/disposal route.
 - Excavated sediments will be removed from the site by a qualified contractor for dewatering and recovery/disposal.

- A cofferdam will be used to create a sealed dry working area, preventing sedimentation of the river during the proposed works.
- Piles will be driven or bored into the riverbed from a barge and will involve minimal sediment disturbance and no excavation outside the physical area of the pile or cofferdam.
- IFI notified before works commence and recommendations adhered to throughout. Cofferdams will be electrofished to ensure no fish remain within the works area.
- Works carried out during the period July - September (inclusive) in line with IFI guidance.
- Clean water will be pumped from inside the cofferdam each morning in advance of the works proceeding.
- Any dirty water will be pumped to ground via a silt bag which will filter any sediment. Entire discharge area will be enclosed by a perimeter of silt fencing. Discharge point will be monitored and the silt bag and silt fencing moved as necessary to avoid erosion and sediment run-off occurring.
- No tools or potentially toxic materials will be stored or left within the cofferdam overnight or when there is any danger of it becoming inundated.
- All machinery and equipment to be used instream will be disinfected or steam cleaned in line within IFI Biosecurity Protocol to prevent transfer of aquatic invasive species.
- All pollution prevention equipment such as drip trays and spill kits will be readily available on site prior to works commencing.
- Pollution Prevention (Terrestrial):
 - Spoil arising from bore holes will be stored on board a barge for later disposal on land, at least 30m away from any water course.
 - Discharge of pumped water to ground via a silt bag which will filter any sediment. Entire discharge area from silt bags will be enclosed by silt fencing.

- Whilst no significant excavations are proposed, any ingress of water (ground or rain) requiring pumping will be done as described above or, alternatively, pumped to a sealed clean tanker and removed from the site and spread to improved agricultural grassland at a minimum of 50m from any watercourse.
- Stockpiling of excavated material will be temporary and in a clearly defined area a minimum of 50m from any watercourse. Stockpiles will be removed on a regular basis to avoid potential sediment-laden run-off escaping the site.
- Earthworks will take place during periods of low rainfall to reduce run-off and potential siltation of watercourses;
- Collection and treatment of surface water within the site, if required, will be completed using perimeter swales at low points around the construction areas. If required, water will be pumped from the swales into silt bags prior to overland discharge allowing water to percolate naturally to ground or disperse by diffuse flow into local drainage ditches;
- Weather forecast will be checked prior to the pouring of concrete and no such works will be undertaken when bad weather is forecast. Any works at any time when water levels may cause inundation of the works area will be avoided. Concrete will not be poured at times when rain is predicted as this may lead to run off and over spillage of the form work.
- Concrete trucks will not be washed out on-site. If chutes require wash out, this will be undertaken at a designated wash out tank located in the site compound. This will recycle waters within the tank.
- Good construction practices such as dust suppression on site roads, regular plant maintenance and use of CIRIA guidance on the control and management of water pollution from construction sites to ensure that surface water arising during the course of demolition and construction activities will contain minimum sediment.
- Daily monitoring and inspections of site drainage during construction will be completed.

- Pollution Prevention (Instream):
 - Cofferdams will be installed by a drill rig from a barge, to create a dry working area.
 - No materials will be stored within the cofferdam.
 - Where rock armour extends into the riverbed a dry working area will be created to prevent sedimentation of the watercourse both at the site and downstream, using either sheet piles or sand bags as appropriate. Rock armour will be installed c. 300mm below the riverbed to prevent potential erosion. Dry working area created for rock armour installation will be electrofished to ensure no aquatic fauna remain.
 - Where works are required instream, machinery will work from the bank or a barge.
 - Waste material from the demolished bridge will be collected on a barge and removed to the site compound prior to disposal to a licenced waste facility.
 - Formwork will be constructed with an adequate capacity and additional freeboard to prevent any spillage.
 - Concrete will be contained and managed appropriately to prevent pollution of watercourses. Pouring will occur in the dry with appropriate curing times (48 hours) before re-flooding.
 - Excavated material will be reused on-site where possible and otherwise will be removed from the site and disposed of in a licenced waste facility.
 - All plant will be inspected prior to use. Defective plant shall not be used until the defect is satisfactorily fixed. All major repair and maintenance operations will take place off site.
 - Vehicles will not be left unattended during refuelling. Only dedicated trained personnel will carry out refuelling and procedures shall be detailed in the contractor's method statements.

- Fuels, lubricants and hydraulic fluids for equipment used will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment.
- Potential impacts caused by spillages etc. during the construction phase will be reduced by keeping spill kits and other appropriate equipment on the workboat.
- Fuels/oils will be contained within bunded containers in the site compound.
- Refuelling will be completed in a controlled manner using drip trays at all times and at least 50m away from the watercourse.
- Waste Management:
 - Waste will be collected in skips. site will be kept tidy and free of debris.
 - Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from site for disposal or recycling.
 - Construction waste materials will be stored within the confines of the site, prior to removal to a permitted waste facility.
- Disturbance Limitation Measures:
 - Noisier plant will be positioned to optimise screening by other plant.
 - Plant machinery will be turned off when not in use.
 - Operating machinery will be restricted to the proposed development site boundary.
- Biosecurity:
 - Good construction site hygiene to prevent the introduction and spread of invasive alien plant species (e.g. Japanese Knotweed, Himalayan Balsam etc.) by thoroughly washing vehicles prior to entering the site.
 - Any soil and topsoil required on the site will be sourced from a stock that has been screened for the presence of any invasive species.
 - All machinery and equipment to be used instream will be cleaned with disinfectant or steam cleaned in line within IFI Biosecurity Protocols. This will also be carried out on completion of the works prior to machinery and

equipment moving off site to prevent potential spread of Asian Clam and Zebra Mussel which have been recorded in the River Shannon.

- Environmental Monitoring:
 - A Schedule of Works Operation Record will be implemented to programme individual work tasks and audit compliance of works with planning conditions and law relating to environmental protection.
 - Regular monitoring of weather patterns and river levels prior to works commencing as well as during the course of the day during the works period.
 - Monitoring by an ECoW to ensure all mitigation is carried out in line with NIS and all environmental documents and as detailed in the contractors Method Statements.
 - Member of site staff assigned as Environmental Officer with the responsibility for ensuring the environmental measures are adhered to. Any environmental incidents or non-compliance issues will immediately be reported to the project team.

9.4.45. I consider that the proposed mitigation measures generally comprise relatively standard good practice measures for surface water management, pollution prevention, waste management and for construction works in the vicinity of watercourses. I consider that the proposed measures, as well as the construction and demolition methodology and phasing set out in the NIS and CEMP are suitably detailed to remove any lack of clarity regarding potential adverse effects and that they are capable of being successfully implemented. With regard to the proposed biosecurity measures, I consider that these are again relatively standard and are in accordance with IFI guidance and can be readily implemented.

9.4.46. I note that the NIS also includes proposals for the monitoring of works by an Ecological Clerk of Works, with an Environmental Officer responsible for the adherence to the environmental measures.

9.4.47. Overall, I am satisfied that the measures as described will be effective in avoiding and reducing any potential adverse effects to a level that is not significant in view of the conservation objectives of the site. I recommend that suitable conditions should

be attached by the Board, if they are minded to grant approval, particularly in respect of the timing of works, and the appointment of an Ecological Clerk of Works to oversee the construction and demolition works.

9.4.48. **Integrity Test**

9.4.49. Following the appropriate assessment and the consideration of mitigation measures, I am able to ascertain with confidence that the proposed development would not adversely affect the integrity of the Lough Forbes Complex SAC (Site Code 001818) in view of the Conservation Objectives for the site.

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

9.4.51. **Appropriate Assessment Conclusion**

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

9.4.53. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on the Lough Forbes Complex SAC (Site Code 001818). Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of that site in light of its Conservation Objectives.

9.4.54. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of European site No. 001818 or any other European site, in view of the sites Conservation Objectives.

9.4.55. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures in relation to the Conservation Objectives of the Lough Forbes Complex SAC (Site Code 001818).
- Assessment of potential in-combination effects with other plans and projects.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Lough Forbes Complex SAC (Site Code 001818).

10.0 Recommendation

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

11.0 Reasons and Considerations

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

- a) the EU Habitats Directive (92/43/EEC) and Part XAB of the Planning and Development Act 2000, as amended, including Part 177(AE) and 177(V),
- b) the European Union (Birds and Natural Habitats) Regulations 2011, as amended,
- c) the Water Framework Directive (2000/60/EC),
- d) the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European Sites,
- e) the conservation objectives and qualifying interests for the Lough Forbes Complex SAC (Site Code 001818),
- f) the policies and objectives of the Roscommon County Development Plan 2022 - 2028 and the Leitrim County Development Plan 2023 - 2029,
- g) the nature and extent of the proposed works as set out in the application for approval,
- h) the information submitted in relation to the potential impacts on habitats, flora and fauna, including the Natura Impact Statement,
- i) the submissions and observations received in relation to the proposed development, and
- j) the report and recommendation of the person appointed by the Board to make a report and recommendation on the matter.

Appropriate Assessment

The Board agreed with and adopted the screening assessment and conclusion carried out in the Inspector's report that the Lough Forbes Complex SAC (Site Code 001818) is the only European Site in respect of which the proposed development has the potential to have a significant effect.

The Board considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment. The Board carried out an appropriate assessment of the implications of the proposed development for the affected European Site, namely the Lough Forbes Complex SAC (Site Code 001818), in view of the site's Conservation Objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

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

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 Site, 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 Site, in view of the site's Conservation Objectives.

Proper Planning and Sustainable Development / Likely Effects on the Environment

It is considered that, subject to compliance with the conditions set out below, the proposed development would not have significant negative effects on the environment or the community in the vicinity, would not give rise to a risk of pollution,

would not be detrimental to the visual or landscape amenities of the area, would not seriously injure the amenities of property in the vicinity, would not adversely impact on the cultural, archaeological and built heritage of the area and would not interfere with the existing land uses in the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

12.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars received by An Bord Pleanála on the 11th day of May 2022, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity.

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

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

3. Construction of the development shall comply with the following:
 - (a) No tree felling or vegetation removal shall take place during the period March to August (inclusive).
 - (b) In-stream works shall only take place between July and September (inclusive).

Reason: To prevent disturbance to breeding birds and aquatic species, respectively, and in the interest of nature conservation.

4. A suitably qualified ecologist shall be retained by the local authority to oversee the site set up and construction of the proposed development and implementation of mitigation measures relating to ecology set out in the Natura Impact Statement. The ecologist shall be present during site construction works and shall have the authority to stop works if required. 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.

5. Prior to the commencement of development, a pre-construction bird survey for breeding waders shall be undertaken by a suitably qualified and experienced bird specialist. The survey shall be kept on file as part of the public record and a copy shall be sent to the Department of Housing, Local Government and Heritage.

Reason: In the interests of nature conservation.

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

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

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

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

8. Swift boxes and bat boxes shall be installed on the new bridge and details of the boxes installed shall be kept on file as part of the public record.

Reason: To ensure the protection of the natural heritage on the site.

9. 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. A suitably qualified archaeologist shall be appointed by the local authority to oversee the site set-up and construction

of the proposed development and the archaeologist shall be present on site during construction works. The extent of archaeological monitoring shall be as set out in the submitted Archaeological Impact Assessment.

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.

10. A full architectural survey of the existing Hartley Bridge, to include archive standard drawings and a photographic survey, shall be carried out prior to its demolition and shall be kept on file as part of the public record.

Reason: In order to facilitate the conservation, preservation and/or recording of the architectural heritage of the site.

11. The local authority shall ensure that access to the existing public right of way identified in Table 11.2 of the Roscommon County Development Plan 2022 - 2028 as 'access to fishing area at Hartley Bridge on the River Shannon' is preserved in accordance with Policy Objective SCCD 11.17 of the Development Plan.

Reason: In the interests of proper planning and sustainable development.

Niall Haverty

Senior Planning Inspector

2nd November 2023

Appendix 1: EIA Screening

EIA Screening	
1. Characteristics of proposed development <i>(including demolition, construction, operation, or decommissioning):</i>	
(a) The size and design of the whole of the proposed development (including any demolition works).	Refer to Section 3 above.
(b) Other existing or permitted projects (including under other legislation that is subject to EIA) that could give rise to cumulative effects.	Other projects include Carrick-on-Shannon to Battlebridge Blueway proposal and the N4 Carrick-on-Shannon to Dromod road scheme. Neither of those proposals are yet permitted and the proposed development would not jeopardise their delivery or be likely to have significant cumulative effects. The applicant's EIA Screening Report identifies other small-scale permitted projects in the area, however no significant cumulative effects are likely to arise.
(c) Nature of any associated demolition works.	Demolition of the existing Hartley Bridge is proposed. The submitted documentation includes phasing details and methodology outlining how the demolition will be undertaken in a safe and environmentally sensitive manner.
(d) Use of natural resources, in particular land, soil, water and biodiversity. <i>Will construction or the operation of the proposal use natural resources such as land, soil, water, materials or energy, especially any resources which are non-renewable or are in short supply?</i>	Proposed development will use energy, concrete, soil, water, fuel and will involve development of currently undeveloped lands and minor loss of existing vegetation. In the operational phase there will be no use of natural resources.
(e) Production of waste. <i>Will the proposal produce solid wastes during construction, operation, or decommissioning?</i>	Proposed development will produce demolition waste from the existing bridge and site clearance (concrete, soil, stones, wood and metal), limited amounts of construction waste and dredged material from the river. No waste arising during operational phase. Outline C&D Waste Management Plan has been prepared.

<p>(f) Pollution and nuisances.</p> <p><i>Will the proposal release pollutants to ground or surface water, or air (including noise and vibrations) or water, or lead to exceeding environmental standards set out in other Directives?</i></p>	<p>Potential noise, dust, disturbance and pollution of watercourses with sediments, fuel, oil etc. during construction. No pollution or nuisance during the operational phase.</p>
<p>(g) Major accidents and/or disasters.</p>	<p>No COMAH sites in vicinity. Potential for accidents associated with demolition and construction works in River Shannon. In the operational phase, the new bridge will reduce likelihood of accidents.</p>
<p>(h) Risks to human health (for example due to water contamination or air pollution)</p>	<p>Potential construction phase impacts due to dust emissions, construction traffic and water contamination. Improved road safety and public safety in the operational phase.</p>
<p>2. Location of proposed development:</p>	
<p>The environmental sensitivity of geographical areas likely to be affected by the proposed development:</p>	<p>If relevant, briefly describe the characteristics of the location</p> <p>(with particular regard to the (a) existing and approved land use, (b) the relative abundance, availability, quality and regenerative capacity of natural resources, and (c) the absorption capacity of the environment):</p>
<p>(a) Generally describe the location of the site and its surroundings:</p>	<p>Refer to Section 2 above.</p>
<p>(b) Is the project located within, close to or has it the potential to impact on any site specified in Article 103(3)(a)(v) of the Regulations:</p> <ul style="list-style-type: none"> - European site - NHA/pNHA - Designated Nature Reserve - Designated refuge for flora or fauna - Place, site or feature of ecological interest, the preservation, conservation, 	<p>There are 5 No. European Sites with potential connectivity. 4 of these were screened out for AA and an NIS has been submitted with the application with regard to the possibility of significant effects on the Lough Forbes Complex SAC (001818) which is located 24km from the site, and 38.2km via surface water connectivity. The NIS concludes that the proposed development will not adversely affect the integrity of the European Site. The western half of the site (i.e. within County Roscommon) is located within the Lough Drumharlow pNHA which has been designated for Greenland white-fronted goose but the site is considered to have been</p>

protection of which is an objective of a development plan/ local area plan/ draft plan or variation of a plan.	abandoned by NPWS. An EclA has been submitted with the application.
(c) Are there any other areas on or around the location that are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other waterbodies (including riparian areas and river mouths), the coastal zone and the marine environment, mountains, forests or woodlands, that could be affected by the project?	The proposal includes works within and adjacent to the River Shannon and adjacent riparian areas.
(d) Is the proposal likely to be highly visible to many people? Are there any areas or features of high landscape or scenic value on or around the location, or are there any routes or facilities that are used by the public for recreation or other facilities which could be affected by the proposal?	The proposed bridge will be visible from the River Shannon and less visible from surrounding areas. An existing designated scenic view on the existing bridge will be replicated on the proposed bridge.
(e) Are there any areas or features of historic or cultural importance on or around the location that could be affected by the project?	The existing bridge is not a protected structure and is not on the NIAH. It is, however, of cultural and technical heritage value as an early concrete bridge.
(f) Are there areas within or around the location which are densely populated or built-up, or occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities that could be affected by the proposal?	No.
(g) Are there any areas within or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries,	Yes, the proposed development includes works in and adjacent to the River Shannon which has ecological, tourism, fisheries importance. The proposal has been developed following consultation with Waterways Ireland regarding facilitating navigation on the river and includes measures to protect water quality.

tourism, minerals, that could be affected by the proposal?		
(h) Are there any areas within or around the location which are already subject to pollution or environmental damage, and where there has already been a failure in environmental standards that could be affected by the proposal e.g. the status of water bodies under the Water Framework Directive?	The River Shannon (Upper) has a WFD status of 'Poor' and is identified as 'At Risk'. The Q-value water quality status from monitoring stations upstream and downstream of the site is 4 (Good) and 3 (Poor), respectively.	
(i) Is the site located in an area susceptible to subsidence, landslides, erosion, or flooding which could cause the proposal to present environmental problems?	Potential for flooding due to proximity to River Shannon.	
(j) Are there any additional considerations that are specific to this location?	No.	
(iv) Types and characteristics of potential impacts:		
<p>If relevant, briefly describe the characteristics of the potential impacts under the headings below.</p> <p>(including where relevant the magnitude and spatial extent of the impact (e.g. geographical areas and size of population likely to be affected), nature of impact, intensity and complexity of impact, probability of impact, and duration, frequency and reversibility of the impact):</p>	<p>If relevant, briefly describe any mitigation measures proposed to avoid or prevent a significant effect.</p>	<p>Is this likely to result in significant effects on the environment?</p>
<i>Population and human health:</i>		

Short-term dust, noise and disturbance during construction for human beings.	Mitigation measures are set out in the CEMP. Surrounding area is sparsely populated with a substantial separation distance to the nearest dwellings.	No. The issues can be dealt with under the planning assessment.
<i>Biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive.³</i>		
Potential biodiversity impacts include loss of habitats, disturbance of mammals and birds, impacts on aquatic species, spread of invasive species, and impacts on the pNHA and European Sites.	Detailed mitigation measures are contained in NIS, CEMP and EclA as well as commitments to comply with relevant guidance (e.g. IFI guidance for works in vicinity of watercourses). Replacement habitat is also proposed.	No. These issues can be adequately dealt with under the AA and planning assessment.
<i>Land, soil, water, air and climate:</i>		
Potential impacts on water quality of River Shannon due to sediments or pollutants. Potential emissions of dust during construction. Potential contamination of soils. Landtake.	Detailed mitigation measures are contained in CEMP and EclA as well as commitments to comply with relevant guidance. Dust emissions are not likely to be significant and will be temporary in duration. Landtake associated with development proposal is minimal. Replacement habitat is proposed.	No. These issues can be adequately dealt with under the planning assessment.
<i>Material assets, cultural heritage and the landscape:</i>		

³ -And with particular regard to areas specified in Article 103(3)(a)(v) of the Regulations.

Demolition of existing bridge which has cultural heritage value, despite not being a protected structure. Landscape and visual impacts of proposed bridge in a sensitive area. Generation of C&D waste, usage of natural resources such as concrete, steel, water, soil etc. Beneficial impact on road safety and community connectivity.	Detailed mitigation measures are contained in CEMP and EclA as well as commitments to comply with relevant guidance. Visual and landscape impacts are not likely to be significant. Outline Waste Management Plan submitted as part of CEMP. Quantities and nature of waste not likely to be significant. While existing bridge is not a protected structure, a detailed survey should be undertaken prior to its demolition.	No. These issues can be adequately dealt with under the planning assessment.
<i>Cumulative effects:</i>		
No significant cumulative effects identified.	N/A	N/A
<i>Transboundary effects:</i>		
No significant potential for transboundary effects having regard to nature of proposed development and site location.	N/A	N/A
4. Additional Considerations:		
Further relevant information, if any, relating to how the results of any other relevant assessments of the effects on the environment have been taken into account (e.g. SEA, AA screening, AA):	AA Screening and AA is addressed elsewhere in this report. I conclude that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of European site No. 001818 or any other European site, in view of the sites Conservation Objectives.	
Other relevant information/ considerations of note:	EIA Screening undertaken by applicant (Leitrim County Council), which concluded that the proposed	

	development is not likely to have significant effects on the environment.	
A. Determination:		
No real likelihood of significant effects on the environment.	X	EIAR is not required
Real likelihood of significant effects on the environment.		EIAR is required
B. Main Reasons and Considerations:		
<p>Having regard to the criteria in Schedule 7, the information provided in accordance with Schedule 7A of the Planning and Development Regulations 2001, as amended, and the following:</p> <p>(a) The nature and scale of the proposed development, which is not of a class specified in Schedule 5 of the Planning and Development Regulations 2001, as amended, and which is significantly below the length threshold for new bridges set out in the Roads Act 1993, as amended, and the associated Roads Regulations 1994.</p> <p>(b) The appropriate assessment to be carried out of likely significant effects on European sites,</p> <p>(c) The separation distance between the site and the nearest residential properties,</p> <p>(d) The detailed mitigation measures set out in the Construction and Environment Management Plan, the Ecological Impact Assessment and other submitted documentation,</p> <p>(e) The guidance set out in the “Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development”, issued by the Department of the Environment, Heritage and Local Government (2003)</p> <p>It is considered that the proposed development would not be likely to have significant effects on the environment and that the preparation and submission of an Environmental Impact Assessment Report is not therefore required.</p>		