



An
Bord
Pleanála

Inspector's Addendum Report J0041/ CH3303

Development	Realignment of the N26 National Primary Route at Cloongullaun.
Location	Townlands of Pollsharvoge and Cloongullaun and in the DED of Cuildoo and Swineford, Co Mayo.
Planning Authority	Mayo County Council
Applicant(s)	Mayo County Council
Type of Application	Application for approval under the provisions of S.177AE of the Planning and Development Act, 2000 (as amended) and Application for confirmation of Compulsory Purchase Order under the provisions of S.76 of the Housing Act, 1966 (as amended).
Remaining Objectors to CPO	(i) Patricia Browne (ii) Anne Taylor
Observer(s)/ Prescribed Bodies	(i) Depart of Arts Heritage, Regional, Rural and Gaeltacht Affairs (ii) Inland Fisheries Ireland (iii) Transport Infrastructure Ireland (iv) An Taisce
Inspector	Donal Donnelly

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1.0 Introduction

- 1.1. Pursuant to Section 177AE(5) of the Planning and Development Act, 2000 (as amended), the Board in considering the application for the realignment/ improvement of the N26 National Primary Route, requested further information from Mayo County Council on 8th January 2018. The Board was not satisfied that there was sufficient information available to it to undertake an Appropriate Assessment consistent with the requirements of the Habitats Directive and to ensure priority species and habitat will not be adversely affected by the proposed development at this particular location.
- 1.2. Mayo County Council's response to this request was received by the Board on 26th July 2018. This response includes a revised Natura Impact Statement. Submissions/ observations were invited in relation to the further information and responses were received from Transport Infrastructure Ireland, An Taisce, Inland Fisheries Ireland and the Department of Culture, Heritage and the Gaeltacht.
- 1.3. This addendum report assesses the further information and submissions/ observations with the main purpose of deciding if sufficient information now exists to carry out an Appropriate Assessment and to make a recommendation on the proposed development. An Appropriate Assessment screening exercise and Stage 2 Appropriate Assessment is undertaken below which amends the previous screening and Stage 2 Appropriate Assessment completed as part of the main Inspector's Report.

2.0 Board's Section 132 Request

- 2.1. The Board was of the opinion that further information may be needed with respect to the following:
 - Demonstration that woodland habitat on the northern and southern banks of the River Moy are not Annex 1 habitat or, alternatively, that the proposed crossing will not result in an adverse effect on the integrity of the SAC – advised that further surveys in the growing season be carried out.
 - Demonstration that shallow bridge abutment foundations will not encounter artesian conditions, and should they be encountered, will not result in surface

water discharge to the River Moy that would result in an adverse effect on the integrity of the SAC or any freshwater pearl mussel.

- Proposals for a bottomless culvert crossing the Swineford River and mitigation measures to ensure there will be no adverse effects on the integrity of the SAC.
- Details on the distribution and status of freshwater pearl mussel at the bridge crossing, assessment of any effects on this species and any mitigation measures.

2.2. It is stated that a revised NIS, based on best scientific evidence, shall consider all qualifying interests of the SAC regardless of the outcome of the Stage 1 screening assessment.

3.0 Planning Authority Response

3.1. The Planning Authority's response to the further information highlights the following points from the revised NIS:

Woodland habitat

- 1-in-5 year flood level set out to assist with woodland assessment.
- Areas of Annex I alluvial woodland identified adjacent to the southern abutment and on margins of the area north-east of (and remote from) the proposed river crossing.
- Works exclusion zone has been extended to include Annex I habitat areas (updated drawing in Appendix B of revised NIS).
- Footpath re-routed through abutment (Appendix A).

Shallow foundations

- Description of proposed development expanded and cross references relevant ground investigation data.
- Borehole data added to drawings to show the relative levels of the shallow foundations, the bedrock level and the artesian strike that occurred 10m below the rockhead in one of the four abutment boreholes.

- Boreholes extended deep into rock to prove the foundation and demonstrate that there will be no requirement for further excavation below the rockhead.

Bottomless culvert

- Details included in the expanded description of the proposed development.
- Assessment of effect of construction and operation on qualifying interests and conservation objectives of SAC, and appropriate mitigation, have been amended to reflect the adoption of this option.

Freshwater Pearl Mussel

- Detailed assessment concluded that there are no live freshwater pearl mussel and little suitable habitat in the vicinity of the proposed bridge.
- Dead shells do not appear to be of recent origin.
- Mitigation contained within revised NIS is sufficient to protect any freshwater pearl mussel population which might exist further downstream of the proposed bridge.

3.2. The content of the revised Natura Impact Statement is assessed in further detail under the Appropriate Assessment below.

4.0 Submissions/ Observations

4.1. The Board received the following four submissions/ observations in response to an invitation for comments on the Mayo National Roads Design Office further information response:

An Taisce

- Recommend that buffer zone at River Moy bridge and Swinford River culvert should be >5-10m as recommended in scientific literature and as outlined in a guidance document developed by Shannon Regional Fisheries Board.
- Visual inspection by appointed environmental manager is not sufficient means to accurately assess the level of sediment within the watercourse – recommended a scientific test of turbidity be carried out, with monitoring results carefully assessed and reported as necessary.

Inland Fisheries Ireland

- River Moy system is considered Ireland's most productive salmon fishery with important spawning and nursery habitat for salmon and trout at Cloongullaun, which is also a popular location for game angling.
- Catchment has been allocated good ecological status in the River Basin Management Plan and this status must be protected.
- Development lies within the River Moy SAC, which has been designated for protection of Atlantic salmon, lamprey species and white-clawed crayfish.
- IFI satisfied that concerns raised earlier have been addressed – change in culvert design over the Swinford River from a box culvert, involving removal of salmonid spawning habitat, to a clear span structure will ensure this valuable habitat is protected.

Department of Culture, Heritage and the Gaeltacht

- Notes the care taken by the Board in seeking further information and clarification on key ecological matters, in particular the scientific evidence and data necessary to identify and classify the implications of the proposed development for the conservation objectives and integrity of the European Site – Point 1 to 4 of Board's FI request are central to these considerations.
- Specialist assessment of woodland habitat is noted - project may result in damage to a small number of trees and a small amount of ground flora of this habitat during construction of the southern embankment and abutment – impact is considered by consultants to be of a small magnitude and a temporary duration and fully reversible, and therefore does not constitute an adverse effect.
- Detailed mitigation outlined in Section 6.0 of the revised NIS has been noted.
- Conclusions of Dr. Eugene Ross have been noted including that *“no evidence of live FPM was observed in the survey stretch and consequently the N26 realignment and construction of new clear-span bridge over the River Moy at Cloongullaun is not likely to result in negative impact to freshwater pearl mussels in the survey stretch investigated.”*

- Board shall take appropriate steps to avoid in a European Site the deterioration of natural habitats of species as well as disturbance of species for which the site has been designated.
- Competent authority shall only give consent after having determined that the proposed development shall not adversely affect the integrity of a European Site – determinations shall not have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of a project on a European Site.

Transport Infrastructure Ireland

- TII has no specific comments to make in relation to the further information submitted.

5.0 **Appropriate Assessment**

5.1. The EU Habitats Directive (92/43/EEC) requires competent authorities to review planning applications and consents that have the potential to impact on European designated sites, i.e. Special Protection Areas (SPA's) and Special Areas of Conservation (SAC's). To assist this process, the applicant has prepared a Screening Report for Appropriate Assessment and Natura Impact Statement (NIS), and a revised NIS.

5.2. **Stage 1: Screening**

5.2.1. The first stage of the Appropriate Assessment process is the screening exercise where it should be decided if the effects of a development on a European site are likely and whether or not the effects are significant in light of the Conservation Objectives for the site. The precautionary principle should apply if there are significant effects that cannot be excluded, or where the likelihood is uncertain.

5.2.2. The first step of this stage is to identify all European sites which could potentially be affected using the Source-Pathway-Receptor model. Having regard to the nature and scale of the proposed development and the implications and receiving environment, it is reasonable in this instance to evaluate sites within a 15km radius for the purposes of identifying sites that could potentially be affected. There are

three SACs within 15km of the subject site: Lough Hoe Bog SAC (site code: 000633) is located 8.2km north of the site and Lough Nabrickeagh Bog SAC (site code 000634) is 14.45km north-east of the site. The site is located partially within the River Moy SAC (site code: 002298). The Lough Conn and Lough Cullin Special Protection Area is the only SPA within 15km of the site, being a distance of 8.35km west of the subject site.

- 5.2.3. Having regard to the nature and scale of the proposed development, impact pathways would be restricted to hydrological pathways and mobile species pathways. The physical distance from the project site to Lough Hoe Bog SAC, Lough Nabrickeagh Bog SAC and Lough Conn and Lough Cullin SPA is such that any impact from the hazard source will be well diminished along the pathways in question by the time it reaches the receptor. It can therefore be reasonably concluded that the proposed development would not have a significant effect individually or in combination with other plans or projects on European sites in excess of 8km from the site having regard to the conservation objectives for these European Sites, the nature of proposed construction works, and the source-pathway-receptor risk assessment principle.
- 5.2.4. Using the source-pathway-receptor risk assessment principle, the European site that could potentially be affected by the proposed development is the River Moy SAC (site code: 002298). Potential pathways of risk exist between the proposed development and White-Clawed Crayfish, Sea and Brook Lamprey, Atlantic Salmon and Otter, as the proposal will involve the crossing of watercourses containing suitable habitat likely to support these species. The proposal will also result in the loss of small areas of riparian trees that could be classified as alluvial forest. These species and habitat are all receptors at risk, being qualifying interests or potential qualifying interests of the River Moy SAC, and for which it is a conservation objective to restore or to maintain the favourable conservation condition of these species/habitat. As significant works are proposed within the SAC, hazard sources and receptors will be side-by-side and the consequences of such must be determined.
- 5.2.5. All qualifying interests within the River Moy SAC are reliant upon the aquatic environment. Therefore, the pathway between the receptor and the hazard source will be via surface water and possibly groundwater. There is potential for release of pollutants such as suspended solids and contaminating substances during

construction works, as well as chemical substances associated with temporary sanitation during construction. The potential for water quality reduction is likely to affect the conservation status of the qualifying interests for which the European Site is designated.

- 5.2.6. Obstruction of culvert passages for aquatic fauna and change in water quality and velocity could occur from the installation of culverts. This would result in disturbance to substrate and river sediments and physical damage to habitat structure along riverbanks.
- 5.2.7. The construction of bridge abutments, involving excavation, erection of the support structures, laying of approach embankments and installation of a pedestrian walkway could result in existing riparian woodland habitat being modified, fragmented, destroyed or isolated. The species reliant on this habitat would also be adversely affected by any loss, damage or deterioration of Annex I priority habitat quality
- 5.2.8. Finally, it can be determined that likely significant effects, either individually or in combination with other plans or projects, on the River Moy SAC cannot be reasonably ruled out in this case on the basis of objective scientific information. A Stage 2 Appropriate Assessment must be carried out to establish if the project will adversely affect the integrity of the European site, either individually or in combination with other plans and projects, in view of the site's conservation objectives.

5.3. Stage 2: Appropriate Assessment

- 5.3.1. The purpose of the Stage 2 Appropriate Assessment is to establish if the project will adversely affect the integrity of the European site, either individually or in combination with other plans and project, in view of the site's conservation objectives. The Stage 2 Appropriate Assessment should consider mitigation measures where appropriate, both those proposed by the applicant and those that may be considered necessary to be required by the Board.
- 5.3.2. Firstly, the conservation objectives shall be identified for the European Site that could potentially be affected using the Source-Pathway-Receptor model. The conservation objective of the River Moy SAC (002298) is to maintain or restore the

favourable conservation status of the following habitats and species of community interest:

- 1092 White-clawed Crayfish *Austropotamobius pallipes*
- 1095 Sea Lamprey *Petromyzon marinus*
- 1096 Brook Lamprey *Lampetra planeri*
- 1106 Salmon *Salmo salar*
- 1355 Otter *Lutra lutra*
- 7110 Active raised bogs*
- 7120 Degraded raised bogs still capable of natural regeneration
- 7150 Depressions on peat substrates of the Rhynchosporion
- 7230 Alkaline fens
- 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
- 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)*

5.3.3. The next step of a Stage 2: Appropriate Assessment is to identify the potential (a) likely and (b) significant effects (direct or indirect) of the project alone on the European site **solely** within the context of the site's conservation objectives in light of best scientific knowledge in the field.

Proposed development and works within SAC

5.3.4. The proposed development involves the construction of 1.8km of Type 2 single carriageway (2 x 3.5m lanes and 2 x 0.5m hard strips) that will include the construction of a single span bridge over the River Moy with reinforced concrete abutments set back from the river bank approximately 10m; the culverting of the Pollsharvoge and Swinford Rivers (tributaries of the River Moy); earthworks (cuttings and embankments); construction of road drainage including treatment ponds/wetlands; and diversion of utility services. Shallow foundations supported on rock will be used rather than piled foundations.

5.3.5. At the location of the proposed bridge the construction sequence will include installation of sediment control measures (silt fences and straw bales, sediment lagoons, settlement trenches), excavation for all bridge supports; construction of

reinforced concrete abutments and pier; construction of approach embankments; assembly of deck steelwork behind the east abutment; lifting of the deck steelwork into place with permanent participating formwork; construction of the concrete deck; construction of the wingwalls; completion of waterproofing and the additional protective layer; and backfilling evenly on both sides.

- 5.3.6. Two culverts are proposed at tributaries to the River Moy at Pollsharvoge to the west and at the Swinford River to the eastern side of the proposed development. A bottomless culvert is now proposed at the Swinford River and a box culvert will be installed at the Pollsharvoge River.
- 5.3.7. From the outset it is important to note details of the area of the River Moy SAC that will be traversed by the proposed road. The CPO boundary overlaps the SAC at the location of the proposed bridge over an area of approximately 2.15 hectares. The realigned road will continue through the SAC for a distance of approximately 200m. Mayo County Council's further information response received by the Board on 19th April 2017 includes area measurements of habitat types where the SAC overlaps the CPO lands. A works exclusion zone either side of the bridge includes the channel itself and the river bank either side, extending on the north-western side as far as the existing Cloongullaun Bridge, and including all of the wooded area in that location.
- 5.3.8. Following the issue of a Section 132 notice which noted that woodland habitat is present on both the northern and southern banks of the River Moy at this location of the proposed river crossing, a further woodland habitat assessment was carried out that recorded the presence of Annex I habitat adjacent to the southern bridge abutment. Arising from this, the works exclusion zone was extended to include this area, necessitating the relocation of the proposed footpath through the bridge abutment. The works exclusion zone also now includes a strip of alluvial woodland to the western side of the proposed bridge.
- 5.3.9. The habitat type on the northern bank within the works exclusion zone is described as Oak, Ash, Hazel woodland (WN2) and Wet Willow, Alder, Ash woodland (WN6) including Alluvial margin and Treelines (WL2). On the southern bank, habitat type includes Wet Willow, Alder, Ash woodland (WN6), non Annex I Alluvial Woodland (0.02hectare) and Annex I Alluvial Woodland (0.12 hectare). An area (0.24 hectare)

to the south of the exclusion zone on the southern bank is described as comprising conifer plantation (WD4) grading into Wet Willow, Alder, Ash woodland (WN6).

- 5.3.10. Other SAC lands within the CPO line on the north-western side of the river include separate areas of grasslands (GS4) / Scrub (WS1) permanently required for construction and future maintenance of earthworks (0.32 hectare) and to be used as a works area temporarily available to the contractor to be landscaped on completion (0.27 hectare). A 0.13-hectare area within the SAC to the north-east includes buildings and artificial surfaces (BL3) comprising a residential/ farm property to be retained and sold for future residential use.
- 5.3.11. The only other remaining area within the SAC/ CPO line is below the bridge deck and a part of a drainage channel on the northern bank that discharges directly into the River Moy. An attenuation pond located to the south of an upgraded "T" junction will discharge to this drainage channel, which will be cleared and regraded. The area of this drainage channel within the SAC measures approximately 500 sq.m.

Surveys

- 5.3.12. Ecological surveying of an area 1km downstream and 300m upstream of the existing bridge commenced in March 2014 as part of the preliminary assessment of alternative crossing points in terms of their ecological impact. This included a multi-disciplinary walkover survey to identify habitats and fauna present. Some of the low-lying woodland on the southern side of the river was identified as having the potential to be classified as Annex I Priority Habitat Alluvial Forest (91E0) and at the time it was recommended that further survey effort would be required to determine its exact status. The area was shown on mapping downstream a distance of approximately 250m from the proposed crossing. A small but similar habitat type (Wet Willow Alder Ash Woodland (WD2)) was identified at the location of the proposed bridge on the southern side of the river.
- 5.3.13. The walkover survey conducted at this time also assessed the fauna of the area. A badger print was recorded on the northern side of the river and otter spraint and prints were discovered throughout the study area and in particular within the woodland downstream from the proposed crossing.

5.3.14. It was stated that the river could contain suitable spawning habitat for Salmon, Lamprey and White Clawed Crayfish. It was also noted that no Crayfish signs were observed in the Otter spraints recorded.

5.3.15. Detailed habitat surveys and woodland relevé assessments were carried out in May 2015 for ground investigation works at the proposed crossing. On the basis of the relevé surveys carried out within two 10x10m areas on the southern bank of the site, the presence of Annex I habitat was discounted by the ecologists for the following reasons:

- The areas were not situated on alluvial soils;
- The areas included small patches (0.08 hectare and 0.13 hectare) within a larger conifer plantation (below the minimum reference set out in the survey methodology in Perrin 2008);
- Relevé data failed according to Perrin for not supporting the necessary diversity of indicator species, the presence of non-native species and the lack of age, structure and diversity.
- Woodland did not exist prior to 2000 and conifers have been planted since. No mature, senescing or dead trees were present and all trees had a diameter of less than 40cm.
- Regeneration within the plot was primarily non-native sycamore;
- Areas were subject to drainage for both agricultural improvement of lands to the west and forestry plantation;
- Woodland areas do not provide connectivity with woodlands in the wider area – there are agricultural grasslands, residential properties and gardens in the surrounding area.

5.3.16. It should be noted at this point that the above ground investigation works were subject to Appropriate Assessment screening. Works involved site clearance, trial pits and silt trenches, rotary boreholes, cable percussion boreholes, ground probing and material testing. The overall conclusion of the screening exercise was that the ground investigation works, either individually or in combination with other plans or projects, would not be likely to have significant effects on the River Moy SAC.

- 5.3.17. Following on from the above, a desk study and multidisciplinary walkover survey was carried out in January 2016 by the project ecologists. This included a full otter survey of the River Moy and the Swinford and Pollsharvoige Rivers (tributaries), as well as habitat suitability assessments on the tributaries for White Clawed Crayfish, Lamprey and Atlantic Salmon. A woodland field assessment sheet was completed for the area of Wet Willow/ Alder/ Ash woodland located immediately north-west of the proposed southern bridge abutment to validate previous work.
- 5.3.18. The final multidisciplinary walkover survey was undertaken by independent ecological consultants in April 2016 to include a full otter and badger survey and Bat Suitability Assessment.
- 5.3.19. A further woodland assessment was prepared by Dr. John Cross in response to the Section 132 request. This assessment was informed by surveys conducted on 15th & 16th May 2018 and the 10th July 2018. This Alluvial Woodland Report included as an appendix to the revised NIS now identifies areas of Annex I alluvial woodland adjacent to the southern embankment of the proposed bridge and on the margins of the area of woodland north-east of the (and remote from) the proposed river crossing.

Identification of likely and significant effects (direct or indirect) on the SAC

- 5.3.20. This stage of the appropriate assessment seeks to identify the likely significant direct and indirect effects of the proposed development, individually, within the context of the sites conservation objectives in light of best scientific knowledge in the field on the River Moy SAC in view of the site's conservation objectives.
- 5.3.21. It is a conservation objective of the River Moy SAC to maintain the favourable conservation condition of **White-clawed Crayfish**. The potential likely significant effect on this species arises from the installation of culverts during construction works within the Swinford River, which is directly connected to the River Moy and has been identified within surveys as containing suitable Crayfish habitat. Culvert installation can also give rise to the potential for physical decline in habitat quality and heterogeneity for crayfish. Furthermore, there is also potential for likely significant effects from occurrences of crayfish plague given the popularity of the river amongst overseas anglers.

5.3.22. Following the Board's Section 132 further information request, a bottomless culvert is now proposed at the Swinford River crossing. The sides of the culvert will be set back at least 2m from both riverbanks for its entire length and mammal ledges will be incorporated.

5.3.23. Predicted impacts on White Clawed Crayfish outlined in the NIS and revised NIS are summarised as follows:

- Vulnerable to damage/ loss of habitat and direct mortality during excavations in river channel;
- Operation of culvert will result in permanent loss of habitat along river margins and substrate.
- Berried females and those carrying hatchlings are present from November to June and can be disturbed during works, reducing recruitment success;
- Long term habitat loss and barriers to movement can significantly restrict the distribution of crayfish;
- Significant effects from installation anticipated during both construction and operational phases from installation of proposed culvert on Swinford River.
- Risk of crayfish plague being transferred to or spread within the River Moy SAC on vehicles, plant, machinery or personnel.
- Excavation and pouring of concrete for the foundations of the now proposed bottomless culvert on the Swinford River poses a risk of accidental input of fine sediments, concrete, hydrocarbons or other pollutants into this watercourse.

5.3.24. It is a conservation objective to restore the favourable conservation condition of the **Sea Lamprey** and **Brook Lamprey**. Predicted impacts on Sea Lamprey and Brook/ River Lamprey set out in the NIS and revised NIS are summarised as follows:

- Installation of bottomless culvert on the Swinford River poses a risk of accidental input of fine sediment and construction material into the watercourse.
- Proposed box culvert on Pollsharvoge River and creation of a diversion channel, including reflooding of the original channel post-installation, poses a risk of accidental input of sediment or construction material into the watercourse, causing a deterioration in the suitability of habitat for spawning.

- Riverine habitat suitable for spawning will be dried and excavated to facilitate laying of culvert sub-base and placement of precast concrete units – could lead to direct mortality, temporary loss of habitat and barrier to migration.

5.3.25. It is a conservation objective to restore the favourable conservation condition of **Atlantic Salmon** in the River Moy SAC. Two salmon redds were recorded during surveys at the location of the proposed culvert on the Swinford River. The proposed development could result in the decline in the number and distribution of spawning nests and therefore significant effects on Atlantic Salmon cannot be ruled out in view of the relevant conservation objectives. Inland Fisheries Ireland also had concerns regarding the box culvert design at the Swinford River and requested that a bottomless design be included to ensure that habitat is not altered and to negate the requirement for a diversion. This requirement has now been met and IFI is satisfied the change in culvert design over the Swinford River from a box culvert, involving removal of salmonid spawning habitat, to a clear span structure will ensure this valuable habitat is protected.

5.3.26. The predicted impacts on Atlantic Salmon set out in the NIS are summarised as follows:

- Crossing of the River Moy and Pollsharvoge and Swinford Rivers poses a risk (in the event of accidental release of sediment or construction materials to watercourse) of significant deterioration in the quality of habitat currently suitable for spawning by lamprey species and Atlantic Salmon.
- Should fine sediments or construction materials be accidentally released into the Swinford River during construction of the bottomless culvert, there is a risk that the two redds recorded at that location during the January 2016 survey could be lost.
- Original substrate of Pollsharvoge will be reinstated after installation of box culvert.
- There will be no adverse effects on redds or suitable spawning habitat during the operational phase.

5.3.27. It is a conservation objective to restore the favourable conservation condition of **European Otter** in the River Moy SAC. Suitable habitat for Otter occurs throughout

the catchment and the evidence of presence was recorded within surveys at the proposed culvert on the Swinford River. There is also the possibility that this species may establish new couching sites or holts within this area in the period between the ecological surveys and the commencement of construction.

5.3.28. The predicted impacts on European Otter set out in the NIS and revised NIS are summarised as follows:

- There are predicted barriers to connectivity along the River Moy due to construction disturbance during daylight hours. There will also be noise and light disturbance from plant.
- Construction activities are likely to cause a short-term, but fully reversible, barriers to connectivity.
- There is potential for accidental otter fatalities across new road alignment.
- European Otter will habituate to the human presence in the proposed pedestrian underpass and this path will not give rise to any adverse effects on this species.

5.3.29. It is a conservation objective to restore the favourable conservation condition of **Alluvial Forests** with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) in the River Moy SAC. The Screening Report concluded that no element of the project is likely to result in significant change to any Annex I habitat, or cause a reduction in the area of any listed habitat within the River Moy SAC. On the basis of relev  surveys, the presence of Annex I habitat was discounted at the location of the proposed bridge on the southern river bank.

5.3.30. Notwithstanding this, the likelihood of significant effects exists if it cannot be determined beyond reasonable scientific doubt that Annex I priority habitat is present at this location, or that it will not be significantly affected by the proposed development. Furthermore, the Board is referred to conservation objectives for the site, which also seek to restore the favourable conservation status of habitats and species, which might be degraded at present but may regenerate in future.

5.3.31. Having regard to the precautionary principle, the predicted impacts on possible Alluvial Forests are as follows:

- Direct impact through habitat loss, damage or deterioration of habitat quality at the location of the proposed bridge over the River Moy on both river banks;

- Further fragmentation and isolation of treeline along the river bank connecting to other areas of potential Annex I priority habitat;
- Further degradation of species composition and ecological changes within the stand of trees on the southern river bank following site investigation works;
- Overshadowing arising from bridge limiting the potential for possible Annex I priority habitat to regenerate itself;
- Impacts on species reliant on riparian woodland.

5.3.32. The DAHRRGA noted that the riparian woodland supports characteristic tree and scrub species of alluvial woodland, Alder (*Alnus glutinosa*), Ash (*Fraxinus excelsior*) and Willow (*Salix cinerea*, and other *Salix spp.*), as well as other characteristic species including Hawthorn (*Crataegus mongyna*), Meadowsweet (*Filipendula ulmaria*), Water Avens (*Geum rivale*), Yellow Irish (*Iris pseudacorus*), and Reed Canary Grass (*Phalaris arundinacea*).

5.3.33. The Interpretation Manual of European Union Habitats, 2013 provides descriptive sheets for Annex I priority habitat, which establish clear, operational scientific definitions of habitat type, using pragmatic descriptive elements (e.g. characteristic plants), and taking into consideration regional variation. Characteristic plants listed in the interpretation manual for alluvial forests include Alder (*Alnus glutinosa*), Ash (*Fraxinus excelsior*), Meadowsweet (*Filipendula ulmaria*) and Water Avens (*Geum rivale*). The DAHRRGA consider that there may be correspondence with Annex I priority habitat, Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) [91E0], as qualifying interests of the River Moy SAC.

5.3.34. The Board sought further information from Mayo County Council within the Section 132 notice of 6th December 2017 requesting an assessment to demonstrate whether or not the areas of woodland on the northern and southern banks of the River Moy are or are not Annex I habitat, or alternatively, that the proposed crossing at this location will not result in an adverse effect on the integrity of the SAC.

5.3.35. In response, a report dated 19th July 2018 was submitted to the Board by an expert woodland ecologist to inform the Appropriate Assessment. An initial survey was carried out on 12th April 2018 and it was considered that relevé sampling previously

undertaken in two stands of native trees (Areas 1 & 2) on 6th May 2015 either side of the proposed bridge on the southern side of the river were representative of the habitats present. Follow up surveys were also carried out on 15th & 16th May 2018 within woodland on the northern side of the river (Area 3) and in Area 2 where two relevés were taken. A survey was also undertaken in 10th July 2018 to determine more precisely the boundaries of the alluvial woodland and the limit of flooding.

5.3.36. From the results of the field surveys and analysis of vegetation classification, the following is concluded in the assessment:

- Area 1 represents a small alluvial stand but it is neither sufficiently large nor sufficiently well developed to be categorised as Annex I priority habitat;
- Area 2 is better developed and is representative of Annex I priority habitat, as defined in the Interpretation Manual of European Union Habitats – EUR28;
- The riparian strip within Area 3, although very narrow, is an area of significance for biodiversity and is representative of Annex I priority habitat;
- The line of trees extending westwards is not a woodland but a treeline.

5.3.37. The proposed approach embankment and footpath on the southern bank have now been rearranged to eliminate the need for construction works within the Annex I priority habitat identified in Area 2 (Drawing SK-202, Appendix 1 of the Alluvial Woodland Report). The works exclusion zone has now been extended around this area as illustrated in Figure 1, Appendix B of the revised NIS. It is stated that it may be necessary to cut or pollard some trees on the extreme southern or western edge of the alluvial woodland and some minor change to the ground vegetation may be inevitable. However, trees will sprout from the stumps and the herbaceous vegetation will readily regenerate. It is therefore considered that there will be no loss of Annex I priority habitat and any potential damage caused during construction will be small in magnitude, of temporary duration and fully reversible. The report also sets out opportunities for the improvement of the conservation condition of Annex I alluvial woodlands arising from the proposed development.

5.3.38. It became evident during the course of the Oral Hearing that upwelling had been discovered on the southern river bank when site investigation works were taking place and there were problems trying to control **siltation**. Following a request for

further information, the applicant confirmed that artesian groundwater conditions were encountered within a borehole, and after attempting to plug the borehole, it was not possible to prevent flow from running across the vegetated buffer towards the River Moy. A small settlement pond was created and flow was directed through a silt fence and straw bales to mitigate against siltation in the river. The DAHRRGA pointed out at the Oral Hearing that the proposal should include details of surface water management and the risk of encountering further artesian groundwater flows. As a result of these ground investigation works, the applicant proposes that the bridge abutments are constructed on shallow foundations.

5.3.39. The predicted impacts from sedimentation in the River Moy are as follows:

- Habitat degradation downstream;
- Impacts on amount of light entering water;
- Impacts on the area of a river that is used for spawning;
- Reduction of light under bridge will reduce vegetation and possibly cause erosion and sedimentation;
- Acts as a vehicle for certain chemicals.

5.3.40. Further detailed information was sought from the applicant under the Section 132 request to demonstrate that the shallow foundations will not encounter artesian conditions, and should they be encountered, will not result in an adverse effect on the integrity of the SAC.

5.3.41. In response, the applicant has expanded the development description section within the revised NIS and has cross referenced the relevant ground investigation data. Borehole data has now been added to drawings to show the relative levels of the shallow foundations, the bedrock level and the artesian strike that occurred 10m below the rockhead. There will be no requirement for further excavation below the rockhead.

Cumulative impacts

5.3.42. The potential (a) likely and (b) significant effects (direct or indirect) of the project in combination with other plans or projects on the European site solely within the

context of the site's conservation objectives in light of best scientific knowledge in the field must also be identified.

5.3.43. The Natura Impact Statement and revised NIS prepared by the applicant sets out a list of water and wastewater services projects, national roads projects, energy infrastructure projects and planning applications that may have a significant in-combination effect with the proposed development. It was concluded that the N5/ N26/ N58 Turlough to Bohola and Swinford to Mount Falcon Road Project is the only plan or project likely to have in-combination effects.

Mitigation

5.3.44. The NIS and revised NIS include a series of mitigation measures for the significant impacts that were identified. Mitigation measures are also included for sedimentation/ erosion. The following mitigation measures are recommended by the applicant having regard to the significant effects likely to arise both individually and in combination with other plans:

Mitigation for White-Clawed Crayfish

- Biosecurity protocol, i.e. the "Check, Clean, Dry" procedure for all vehicles, plant machinery, equipment, clothing and footwear when entering and leaving the site to manage the risk of crayfish plague.
- Preparation and implementation by the contractor of a Construction Management Plan, which must include certain commitments in respect of the protection of water quality during construction.
- As many individuals as practical should be displaced before culvert installation through drag and sweep netting for juveniles and manual searches for adults.
- Captured individuals will be release immediately upstream or downstream.
- Best practice guidelines (IFI, 2016) will be followed and IFI will be closely consulted to mitigate against sedimentation;
- Permanent loss of benthic habitat will be mitigated by installing original substrate material inside the finished culvert.
- Installation of similar rock armouring to existing bank inside the culvert, which is of high suitability to Crayfish.

Mitigation for Sea Lamprey and Brook/ River Lamprey

- Restriction of works to period between 1st July to 30 September to limit the impact of short term habitat loss.
- There will be no permanent loss of potential lamprey spawning habitat at Pollsharvoge River as the existing river substrate will be reinstated following the installation of the culvert.
- IFI will carry out electrofishing prior to construction to move any individuals from the area to be dewatered.
- Additional barrier to migration/ connectivity resulting from culvert construction will not be in place during the migration period.
- Best practice guidelines (IFI, 2016) will be followed and IFI will be closely consulted to mitigate against sedimentation;
- No long-term effects on any of the Lamprey species are predicted.

Mitigation for Atlantic Salmon

- Restriction of works to the period from 1st July to 30th September which is less sensitive for migrating Salmon.
- There will be no permanent loss of potential Salmon spawning habitat at Pollsharvoge River as the existing river substrate will be reinstated following the installation of the culvert.
- Prior to construction, IFI will carry out electrofishing to move any individuals from the area to be dewatered.
- Best practice guidelines (IFI, 2016) will be followed and IFI will be closely consulted to mitigate against sedimentation;

Mitigation for European Otter

- Pre-construction surveys will be carried out 10-12 months prior to commencement of works and again 2-3 weeks prior in order to identify any new otter holts – any destruction of any couching sites or holts will be carried out having regard to standard best practice guidelines (NRA, 2006) and under appropriate licence issued by the NPWS.

- Noise and light will be mitigated by restricting works to normal working hours and ensuring there is no artificial lighting outside of those hours (otter are crepuscular species).
- 4m set back of construction activities from River Moy, in conjunction with the mitigation proposed to minimise disturbance to otter during hours of highest activity levels, will ensure continued connectivity for otter at this location.
- Pedestrian path under bridge will be designed to include loose surface material and appropriate controls will be in place at either end to prevent access by vehicles. Low intensity use of the path is expected.

Mitigation for Sedimentation/ Erosion

5.3.45. Contractor will produce a Construction Management Plan that will include a detailed programme of works and budget and will ensure that all construction activities are undertaken in a satisfactory and safe manner. The CMP will include the following:

- Details of working hours and days;
- Emergency Response Plans;
- Details of chemical/ fuel storage;
- A traffic management plan;
- Wheel washing and dust suppression proposals;
- Noise and vibration management;
- Landscape management;
- Procedures and method statements;
- Preparation of an Environmental Operating Plan;
- Appointment of an independent Environmental Manager.

5.3.46. The Contractor will prepare and implement a Construction Erosion and Sediment Control Plan (CESCP) that will include the following:

- Limiting the works to a minimum area and timescale;
- Water quality monitoring downstream during construction and for 24 months after.

- Formulation of dust minimisation plan;
- Direction of site drainage through a settlement facility before discharge;
- Maintenance of vegetated buffer of 4m at River Moy and 2m at the Swinford River culvert.
- Direction of site drainage through a settlement facility prior to discharge and provision of temporary facilities to trap any accidental spillage.
- Submission of method statements for works on watercourses to IFI.
- Promote awareness of good site management and the freshwater environment;
- Restriction of topsoil stripping near watercourses to dry weather conditions and location of stockpiles at least 100m from watercourses and covering of stockpiles within 200m of watercourse.
- Stripping of vegetation, covering of soil by Hessian or similar material and reseeded (with native grasses) immediately prior to the construction of road drainage outfalls;
- Pouring of concrete, sealing of joints, application of water-proofing paint or protective systems, curing agents etc. for outfalls to be completed in the dry;
- Storage of oils, fuel, chemicals, hydraulic fluids etc. to be located at least 30m from watercourses on an impervious base within a bund and appropriately secured; and,
- All machinery operating near watercourses to be steam-cleaned in advance of works and routinely checked to ensure no leakage of oils or lubricants and all fuelling of machinery to be undertaken a minimum of 30m from watercourses.

5.3.47. In addition to the above, IFI made a submission to the Board on 19th December 2016 which included the following mitigation measures in addition to those proposed by the applicant:

- IFI must be consulted on the design of all watercourse crossings – round or oval culverts should be limited to short runs and temporary crossings and no sills or aprons should be installed during culvert construction.

- Method statements for all in-stream works must be provided to IFI a minimum of one month prior to work commencing.
- Culvert design should ensure that bed width and material of natural watercourse is replicated, there is a constant slope and the bottom (invert) should be at least 300mm below the grade line of the natural watercourse bed.
- All mitigation for sedimentation and erosion within the NIS must be adhered to and additional measures such as the provision of spill kits and drip trays will be required.
- Topsoil stripping must be kept to an absolute minimum and a vegetated buffer zone of 2m min. must be maintained along all watercourses, with double silt fences outside these buffer zones.
- Surface water outfalls from the site must be visually checked twice a day during construction. Maintenance schedule must be in place for silt and pollution control measures during construction.
- An Emergency Response Plan must be produced and the IFI included as a notifiable body in the case of pollution to a watercourse.
- In-stream works must be carried out between May and September, in the dry and during low flow conditions.

Mitigation for alluvial forest

- 5.3.48. As the Qualifying Interest Alluvial forest with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) was initially screened out by the applicant as not being of sufficient scale or species composition to be considered Annex I priority habitat, no higher level assessment took place and therefore no mitigation measures were proposed within the NIS.
- 5.3.49. An Alluvial Woodland Report is appended to the revised NIS which concludes that the revised design of the proposed development ensures that there will be no significant loss of Annex I alluvial woodland.
- 5.3.50. Furthermore, the acquisition of certain lands presents an opportunity to improve the conservation condition of this habitat type that might include the planting of woodland between Area 3 and the proposed road; expansion of Area 1 to exceed

Recommended Minimum Habitat Size Threshold; and felling of the sycamore within Area 2 to increase the proportion of native tree cover.

Evaluation of potential effects taking account of mitigation

5.3.51. The potential effects of the proposed development on the conservation objectives of the site taking account of mitigation are evaluated with respect to effects on the Alluvial Forest qualifying interest, and in particular, the impact around the location of the proposed bridge, together within the effects arising from installation of the proposed boxed culvert on the Swinford River and the qualifying interests White-Clawed Crayfish, Sea and Brook/ River Lamprey, Atlantic Salmon and European Otter.

Annex II Species

5.3.52. It would appear that the likely significant effects on the qualifying interests of the River Moy SAC at the location of the proposed culvert over the Swinford River will be mitigated by a change in design to bottomless culvert, together with the additional measures put forward at this location during construction works, including strict adherence to best practice, and specific details relating to construction works on river banks, including measures to control erosion and sediment release.

5.3.53. Concern was raised at the Oral Hearing by observer, Mr. Peter Sweetman that the responsibility for control of sediment lies with the project contractor. An Taisce also recommended that a scientific test of turbidity should be carried out, with monitoring results carefully assessed and reported as necessary. The contractor will be required to prepare and implement a Construction Erosion and Sediment Control Plan. Furthermore, a condition can be attached to any grant of permission stating that all mitigation, including monitoring and enforcement, prescribed in the NIS and revised NIS shall be binding during the construction phase on the contractor and, during the operational phase, on the applicant.

5.3.54. The revised NIS contains significant additional information and analysis to assess the effects of the proposed development on Annex II species. Mitigation measures for these species have been detailed further and the proposed design changes are based on the presence of Annex II species and Annex I priority habitat. I would therefore be satisfied that with the full and proper implementation of the mitigation measures set out in the NIS and revised NIS, it can be determined, beyond

reasonable scientific doubt, that the proposed development will not have a significant effect of Annex II species.

5.3.55. Overall, it can be concluded that information relating to measures for mitigating the impact of the proposed development on Annex II species are now complete and informed by best scientific knowledge as to the effects on the conservation objectives and integrity of the European site. The best scientific information in the field should be regarded as information which is sufficient to dispel any reasonable scientific doubt about the adverse effects on the integrity of the European site, in light of the site's Conservation Objectives.

Annex I Priority Habitat

5.3.56. Annex I priority habitat are habitat types whose conservation requires the designation of a SAC and which are in danger of disappearing within EU territory.

5.3.57. Residual Alluvial Forests are an Annex I priority habitat, which according to the "Status of EU Protected Habitats and Species in Ireland" document (NPWS, 2013), comprise of "*riparian forests of ash (*Fraxinus excelsior*) and alder (*Alnus glutinosa*) occurring on heavy soils periodically inundated by the annual rise of river levels, but which otherwise are well drained and aerated during low water.*"

5.3.58. The overall status of this habitat is assessed as "Bad" due to historic losses, invasive species and the highly fragmented nature of this habitat. It is stated that there have been national efforts to remove non-native and invasive plant species and to reinstate correct hydrological regimes to generally improve the conservation status of alluvial woodlands.

5.3.59. The main area of contention with respect to the proposed development relates to the status of riparian woodland at the location of the proposed bridge over the River Moy. The construction of the bridge including abutments and approach embankments will necessitate the removal of part of a treeline along the northern bank, and a stand of trees situated on the southern bank of the river.

5.3.60. The project ecologists originally maintained that the treeline and clump of trees on the southern bank are not of a sufficient scale and do not comprise of a species composition that could be considered alluvial forests and a qualifying interest of the River Moy SAC. The DAHRRGA, meanwhile, was not convinced that the applicant had submitted sufficient scientific evidence to discount that the riparian woodland

along the River Moy, and at the location of a tributary stream on the southern side is Annex I priority habitat.

- 5.3.61. The revised NIS now provides a detailed assessment, prepared by an appropriately qualified and competent expert to demonstrate that the woodland areas are/ are not representative of Annex I priority habitat as defined in the Interpretation Manual of European Union Habitats – EUR28. This assessment includes a background analysis, methods for carrying out the assessment and detailed survey results. The Department of Culture, Heritage and the Gaeltacht (DCHG) noted the care taken by the Board in seeking further information and clarification on key ecological matters, and in particular with respect to scientific evidence and data necessary to identify and classify the implications of the proposed development on the conservation objectives and integrity of the River Moy SAC (site code 002298).
- 5.3.62. The proposed approach embankment and footpath on the southern bank have now been rearranged so that the main area of Annex I priority habitat is avoided. The construction exclusion zones will be extended around the Annex I priority habitat to ensure that no works take place in this area. The DCHG note that damage to a small number of trees and ground vegetation may occur but this impact is considered by the consultants to be small in magnitude, of a temporary duration and fully reversible, and does not therefore have an adverse effect.
- 5.3.63. The removal of woodland to facilitate ground investigation works in the past has led to a deterioration of the structure and function of the habitat; however, there is potential for this area to rehabilitate and the removal of none native and invasive plant species from the area could further improve the conservation status of the woodland. The overall aim of the Habitats Directive is to restore as well as maintain the conservation status of habitats and species of community interest. A number of opportunities are also highlighted within the revised NIS to improve the conservation condition of the Annex I alluvial habitat within the CPO boundary.
- 5.3.64. On the basis of the information provided with the application and appeal, including the Natura Impact Statement, and in light of the assessment carried out above, I am now satisfied that the proposed development individually, or in combination with other plans or projects would not adversely affect the integrity of European site No. 002298, in view of the site's Conservation Objectives.

Appropriate Assessment Conclusions

5.3.65. Having regard to the nature of the proposed works within the River Moy SAC, I consider that it is reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans and projects would not adversely affect the integrity of the European site no. 002298 in view of the site's Conservation Objectives.

6.0 Freshwater Pearl Mussel

- 6.1. Within the submission of the DAHRRGA received by the Board on 31st May 2017, it is noted that large numbers of dead shells of Freshwater Pearl Mussel (*Margaritifera margaritifera*) were revealed at the location of the proposed river crossing during low water levels in May 2017. Freshwater Pearl Mussel is listed in Annex II and Annex V of the Habitats Directive but is not a qualifying interest of the River Moy SAC.
- 6.2. The freshwater pearl mussel is highly threatened and categorised as critically endangered in Ireland and across Europe, with 90% of the species having died out across Europe in the 20th century. According to "The Status of EU Protected Habitats and Species in Ireland, 2013" (NPWS), the species' current severe decline is because of sedimentation and enrichment of its habitat. Freshwater pearl mussel require very clean and well oxygenated rivers so that very tiny young can burrow into river gravels to prevent them from being washed out to sea. It is noted that sediment and nutrients that enter mussel rivers can come from a variety of sources, including development activities. Furthermore, it is highlighted that the species can suffer direct impacts from in-stream works such as channelisation and bridge construction.
- 6.3. The Board's Section 132 notice issued to Mayo County Council on 21st December 2017 requested further information on the distribution and status of the freshwater pearl mussels in the vicinity of the bridge crossing and an assessment of the effects (if any) on this species from the proposed development, including relevant mitigation measures.
- 6.4. A freshwater pearl mussel assessment was undertaken which concluded that there is no evidence of live freshwater pearl mussel and consequently the N26 realignment

and construction of a new clear-span bridge is not likely to result in negative impact to freshwater pearl mussel in the survey stretch investigated.

- 6.5. I would be satisfied that the survey of the 820m section of the River Moy upstream and downstream of the proposed bridge at 18 locations where intensive mussel searches were undertaken in suitable habitat represents a thorough and complete finding that there is no evidence of live freshwater pearl mussel. Dead mussel shells are not considered to be of recent origin and may have died as a result of a destructive program of arterial drainage works in the 1960s and 1970s, or from eutrophication and siltation from agriculture, forestry or poor waste-water treatment systems.
- 6.6. Having regard to the above, I would be satisfied, based on the information available, and in view of the conclusions of the Freshwater Pearl Mussel Survey submitted to the Board, that proposed development will not have significant adverse effects on a species listed in Annex II and Annex V of the Habitats Directive.

7.0 Recommendation (CPO)

- 7.1. CONFIRM the compulsory purchase order for Mayo County Council to acquire lands for the proposed realignment of a section of the N26 National Primary Route at Cloongullaun to include a new bridge over the River Moy for the reasons and considerations set out below.

8.0 Reasons and Considerations

Having considered the objections made to the compulsory purchase order and not withdrawn, the report of the person who conducted the oral hearing into the objections, the purpose for which the lands are to be acquired as set out in the compulsory purchase order, and having regard also to:

- a) the provisions of the Mayo County Development Plan 2014 – 2020,
- b) the existing seriously substandard nature of the N26 at this location, and the resultant improvements arising from the proposed road development for all road users,

- c) the community need, public interest served and overall benefits to be achieved from the use of the acquired lands for the purpose identified in the order,
- d) the suitability of the site to meet the community need and the extent of lands being acquired that are only necessary to realise the development;
- e) provision of improved pedestrian and cyclist facilities,
- f) the absence of any reasonable alternative to the scheme.

it is considered that the acquisition by the local authority of the lands in question is necessary for the purposes stated and that the objections cannot be sustained having regard to the said necessity.

9.0 Recommendation (AA)

- 9.1. APPROVE, subject to conditions, the proposed development based on the reasons and considerations set out under.

10.0 Reasons and Considerations

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

- a) the EU Habitats Directive (92/43/EEC) and the Water Framework Directive (2000/60/EC),
- b) the European Communities (Birds and Natural Habitats) Regulations, 2011-2015,
- c) the conservation objectives, the qualifying interests and the special conservation interests of the River Moy Special Area of Conservation (site code: 002298),
- d) the provisions of the National Planning Framework – Project Ireland 2040, Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020,
- e) the related policies and objectives of the Mayo County Development Plan 2014-2020,

- f) the nature and extent of the proposed road improvement works, as set out in the application for approval, to provide for road improvements to the N26 National Road,
- g) the information submitted in relation to the potential impacts on habitats, flora and fauna, including the Natura impact statement and revised Natura impact statement,
- h) the submissions and observations received in relation to the likely effects on the environment, and on the likely significant effects of the proposed development on European Sites, and
- i) the report and recommendation of the person appointed by the Board to make a report and recommendation on the matter.

11.0 **Appropriate Assessment**

The Board agreed with and adopted the screening assessment carried out and conclusions reached in the Inspector's report that the River Moy Special Area of Conservation (site code: 002298) 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 revised 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 completed an appropriate assessment of the proposed development for the affected European Site namely the River Moy Special Area of Conservation (site code: 002298) 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 assessment, the Board considered, in particular, the following:

- 1) the likely direct and indirect impact arising from the proposed development both individually or in combination with other plans or projects,
- 2) the mitigation measures which are included as part of the current proposal, and
- 3) 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 and Inspector's Addendum Report of the potential effects of the proposed development on 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 a significant negative impact on the environment, would provide an improved and safer National Road for all road users, 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, 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 proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the application, including the Natura Impact Assessment and revised Natural Impact Statement and other associated documentation submitted with the application, except as may otherwise be required in order to comply with the conditions set out below. Where any mitigation measures set out in the Natura Impact Statement and revised Natural Impact Statement or any conditions of this Approval require further details to be prepared by or on behalf of the Local Authority, these details shall be placed on the file and retained as part of the public record.

Reason: In the interest of clarity and the proper planning and sustainable

development of the area and to ensure the protection of the environment.

2. The local authority, and any agent acting on its behalf, shall comply with the mitigation measures contained in the Natura impact statement and revised Natura impact statement, which were submitted with the application. All mitigation, including monitoring and enforcement, prescribed in the NIS and revised NIS shall be binding during the construction phase on the contractor and, during the operational phase, on the applicant.

Reason: In the interest of clarity and the proper planning and sustainable development and to ensure the protection of European Sites during construction.

3. Prior to the commencement of development, and following consultation with the National Parks and Wildlife Service and Inland Fisheries Ireland, the local authority shall prepare a Construction Management Plan, a Construction Environmental Management Plan and an Environmental Operating Plan incorporating all mitigation measures indicated in the Natura impact statement and revised Natura impact statement.

Reason: In the interest of clarity and the proper planning and sustainable development and to ensure the protection of European Sites during construction.

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

Reason: In the interest of clarity and the proper planning and sustainable development and to ensure the protection of European Sites during construction.

5. A suitably qualified ecologist shall be appointed by Mayo County Council to oversee the site set-up and construction of the proposed development in accordance with the mitigation measures set out in the Natura Impact

Statement and revised Natura Impact Assessment. Upon completion of the construction stage, an audit report of the site works shall be prepared by the appointed ecologist and submitted to the local authority to be maintained on record.

Reason: To ensure the protection of the designated sites during construction.

6. The local authority, and any agent acting on its behalf, shall facilitate the preservation, recording, protection or removal of archaeological materials features that may be existing within the site. A suitably qualified archaeologist shall be appointed by the local authority to monitor the site set-up and the construction of the proposed development. Upon completion of the construction stage, an audit report of the site works shall be prepared by the appointed archaeologist and submitted to the local authority to be maintained on record.

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.

Donal Donnelly
Planning Inspector

12th December 2018