



An
Bord
Pleanála

Inspector's Report ABP-310574-21

Development	R503/R497 Knockmaroe Junction Upgrade Scheme.
Location	Knockmaroe, Kilcommon, Co. Tipperary.
Local Authority	Tipperary County Council
Type of Application	Application for approval made under Section 177(AE) of the Planning and Development Act, 2000 (local authority development requiring appropriate assessment)
Prescribed Bodies	Geological Survey Ireland
Observer(s)	None
Date of Site Inspection	20 th September 2021
Inspector	Karla Mc Bride

1.0 Introduction

- 1.1. Tipperary County Council is seeking approval from An Bord Pleanála to undertake upgrade works at the existing R503/R497 road junction at Knockmaroe in Co. Tipperary. The existing junction and surrounding road network are located adjacent to the Slievefelim to Silvermines Mountains SPA which is designated as a Hen Harrier and there are several other European sites in the wider area (incl. Lower River Shannon SAC). A Natura Impact Statement (NIS) and application under Section 177AE was lodged by the Local Authority on the basis of the proposed development's likely significant effect on a European site.
- 1.2. Section 177AE of the Planning and Development Act 2000 (as amended) requires that where an appropriate assessment is required in respect of development by a local authority the authority shall prepare an NIS and the development shall not be carried out unless the Board has approved the development with or without modifications. Furthermore, Section 177V of the Planning and Development Act 2000 (as amended) requires that the appropriate assessment shall include a determination by the Board as to whether or not the proposed development would adversely affect the integrity of a European site and the appropriate assessment shall be carried out by the Board before consent is given for the proposed development.

2.0 Site and Location

- 2.1. The site is located to the SE of Kilcommon Village in County Tipperary and approximately equidistant from Limerick City to the W, Thurles to the E and Nenagh to the NW. The existing junction comprises the intersection of the R503 and R497 roads from Limerick and Nenagh which connect to Thurles via the R497, and the L2264 local road to Borrisoleigh.
- 2.2. The surrounding rural area is characterised by agricultural fields with some farm buildings and detached houses along the R497 and L2264, and there is an operational windfarm to the SW. The roadside boundaries are defined by trees, mature hedgerows and ditches, and there are agricultural field entrances off the road network. There are some heritage features in the surrounding area including a national monument (TN02593).

- 2.3. The Slievefelim to Silvermines Mountains SPA is located to the immediate W of the project site and the SW section of the R503 runs parallel to the site boundary of this site which is designated for Hen Harrier. The Lower River Shannon SAC is located c.3km to the SW and there is an aquatic connection via drainage ditches, the Aughvaria River and Bilboa River. The Lower River Suir SAC is located c.7km to the E and the Anglesey Road SAC is located c.3km to the S, and the area may be important for mobile species from other further afield European sites.
- 2.4. Photographs & maps in Appendix 1 describe the site & surroundings in more detail.

3.0 Proposed Development

3.1. Proposed upgrade works

The Council proposes to carry out an upgrade of the existing R503/R497/L2264 junction to change it from a skewed crossroads to a realigned “T” junction.

The proposed Upgrade Scheme would comprise:

- New full depth road construction at the R503/R497 junction.
- Earthworks, drainage & road fencing.
- Construction of a cattle underpass (R497).
- Ancillary works (incl. road signage).

3.2. Accompanying documents

The application was accompanied by the following documents:

- Preliminary Design report
- Habitats Directive Assessment Screening report
- Natural Impact Statement
- EIA Screening report
- Drawings
- List of Prescribed Bodies & copies of Public Notices.

4.0 Planning History

- 4.1. Several planning cases in the vicinity including agricultural, residential and windfarm cases, none of which are relevant to this application.

5.0 Legislative and Policy Context

- 5.1. **The EU Habitats Directive (92/43/EEC):** This Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) and 6(4) require an appropriate assessment of the likely significant effects of a proposed development on its own and in combination with other plans and projects which may have an effect on a European Site (SAC or SPA).
- 5.2. **European Communities (Birds and Natural Habitats) Regulations 2011:** 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:** The Department of Culture, Heritage and the Gaeltacht and the National Parks and Wildlife Service are responsible for the designation of conservation sites throughout the country. The three main types of designation are Natural Heritage Areas (NHA), Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) and the latter two form part of the European Natura 2000 Network.
- 5.4. European sites located within the Zone of Influence of the subject site include:
 - Slievefelim to Silvermines Mountains SPA (Site code: 004165)
 - Lower River Shannon SAC (Site code: 002165)

- Lower River Suir SAC (Site code: 002137)
- Anglesey Road SAC (Site code: 002125)

5.5. **Planning and Development Acts 2000 (as amended):** Part XAB of the Planning and Development Acts 2000-2017 sets out the requirements for the appropriate assessment of developments which could have an effect on a European site or its conservation objectives.

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

5.6. National and Regional Planning policy

National Planning Framework, 2018-2040

This Plan sets out a high-level strategic plan for shaping future growth and development to 2040. It seeks to develop a region-focused strategy to manage growth and environmentally-focused planning at a local level. It contains several National Strategic Outcomes (NSOs) which include seeking to achieve empowered rural economies and communities, enhanced amenity and heritage, and a transition to a low-carbon and climate resilient society.

National Development Plan, 2018-2027

This Plan underpins the National Planning Framework 2018-2040. It contains several priorities which include investment in regional growth potential and increasing investment in in national, regional and local roads.

Climate Action Plan, 2019

This plan seeks to tackle climate breakdown and achieve net zero greenhouse gas emissions by 2050. It identifies several risks as a result of climate change including rising sea-levels, extreme weather, further pressure on water resources and food production systems, and increased chance and scale of river and coastal flooding.

The Planning System and Flood Risk Management, 2009:

These Guidelines seeks to avoid inappropriate development in areas at risk of flooding and avoid new developments increasing flood risk elsewhere and they advocate a sequential approach to risk assessment and a justification test.

Southern Regional Economic & Spatial Strategy 2020:

This strategy supports the delivery of the programme for change set out in the National Planning Framework and the National Development Plan. It sets out a strategic vision and policy objectives for climate change, sustainable development, renewable energy, urban and rural areas, the economy, the environment, connectivity, amenities and utilities. Several policy objectives seek to promote economic development, enable appropriate infrastructure, protect water quality, enhance biodiversity, and ensure the protection of sensitive sites and habitats.

5.7. Local Planning policy

North Tipperary County Development Plan 2010 (as Varied & Extended)

The site and surrounding lands are located within a rural area which are covered by the policies and objectives contained in the current County Development Plan.

Climate Change & Low Carbon Economy:

Policy CEF1: seeks to promote and ensure sustainable settlement and transportation patterns in urban and rural areas by reducing energy demand & greenhouse gas emissions, and by adapting to climate change by ensuring sustainable settlement patterns.

Economic development & infrastructure:

Core Aim: seeks to promote sustainable transport patterns and integration of land-use and transportation policies and to safeguard and develop the county infrastructure to support continued socioeconomic growth.

Natural Heritage: site within 10m of the Slievefelim to Silvermines Mountains SPA.

Policy LH5: seeks to conserve, protect and enhance bio-diversity (incl. trees & hedgerows).

Policy LH6: seeks to ensure the protection, integrity & conservation of Natura 2000 sites and Annex I and II species listed in EU Directives.

Policy LH7: seeks to ensure the conservation & protection of NHAs.

Policy LH8: seeks to control the spread of invasive plant and animal species.

Landscape: site located within a Secondary Amenity Area.

Policy LH2: seeks to ensure the protection of the visual amenity, landscape quality and character of designated Primary & Secondary Amenity Areas, and new developments should: - avoid visually prominent locations; integrate with the landscape; protect existing landscape features (incl. trees & hedgerows: and comply with relevant development standards.

Cultural Heritage: site within 100m of a National Monument (TN02593).

Policy LH16: seeks to safeguard sites & features of archaeological interest.

6.0 Consultations

6.1. Prescribed Bodies:

The Council circulated the project details to the following Prescribed Bodies:

- Dept. of Communications, Climate Action & Environment
- Inland Fisheries Ireland
- Irish Water
- Failte Ireland
- An Taisce
- An Chomhairle Ealaíon

Geological Survey Ireland: had no comment in relation to the scheme.

6.2. Interdepartmental:

Project details circulated to the following Council departments:

- Planning section
- Water Services section
- Nenagh MD Customer Services Desk
- Environment & Climate Action section
- Nenagh MD District Engineers section

6.3. Public submissions:

None received.

7.0 Assessment

7.1. The likely consequences for the proper planning and sustainable development of the area:

The proposed junction upgrade works would comply with national, regional and local policy in respect of economic development, connectivity, transportation, rural amenity, cultural and natural heritage, and the environment. The Council's Preliminary Design report states that the works, which would reconfigure the existing skewed crossroads to a "T" junction, are justified as they would enable the junction to function effectively and safely by assisting traffic movement, improving sightlines, enhancing road safety and improving the road layout. The submissions received from Prescribed Bodies are summarised in section 6.0 above and no concerns were raised, and no submissions were received members of the public.

Design and layout:

The location and design of the proposed Junction Upgrade Scheme are described in sections 2.0 and 3.0 above and elaborated on in the Council's Preliminary Design report and accompanying drawings. The existing crossroads, which is located on the junction of 2 x regional roads (R503 & R497) and 1 x local road (L2264), is used by a mix of agricultural, residential, construction and commercial traffic traveling both locally and between Limerick, Thurles and Nenagh.

The Preliminary Design Report notes that the existing alignment of the approach roads are poor in terms of road safety. Existing issues of concern relate to poor sightlines and visibility, swept paths of HGVs cross opposing traffic lanes, junction configuration is misleading, and slow-moving agricultural vehicles and farm animals frequently cross the junction. The report notes that the existing regional and local roads drain into adjacent existing open roadside drains that discharge to the Aughvaria River, and that the site is not affected by either fluvial or pluvial flooding.

The Scheme would replace the existing four arm crossroads with a "T" junction located in the western quadrant of the existing junction along with the associated realignment of all the existing approach roads forming the arms of the new junction. The Scheme will provide for a cattle underpass along the R497 (NW) and a new field access off the R503, road signage and new drainage arrangements. The Preliminary

Design Report states that the design has been prepared in accordance with relevant TII publications.

Given that the Scheme would improve traffic safety for all road users along the local and regional road network, the design and layout of the proposed works are considered acceptable.

Residential & visual amenity:

The surrounding rural area is mainly characterised by agricultural uses with a small number of houses. The lands are not covered by any sensitive heritage or conservation designations, although the site is adjacent to the E site boundary of the Slievefelim to Silvermines Mountains SPA. The site lies with an undulating rural landscape that is classified as a Secondary Amenity Area in the Development Plan and the roadside boundaries are defined by a mix of mature hedgerows and trees of mixed species in various stages of maturity, all of which contribute to the overall character of the area. Policy LH2 of the seeks to ensure the protection of the visual amenity, landscape quality and character of such areas and new developments should avoid visually prominent locations, integrate with the landscape and protect existing landscape features (incl. trees & hedgerows). Although some of the roadside trees and hedgerows would be removed to accommodate the junction upgrade and to improve sightlines and visibility, the visual amenities of the area would not be adversely affected by the proposed works to any significant extent.

In terms of general residential amenity, the proposed works would not overlook, overshadow, result in a loss of privacy or otherwise adversely affect the amenity of any nearby dwelling houses. However, any localised removal of hedgerow vegetation in the vicinity of the works would have a minor adverse impact on the visual amenities and rural character of the area in the short term. Notwithstanding these concerns, the proposed works will not give rise to an adverse visual impact on the character of the area or the amenities of any nearby houses in the long term.

Biodiversity:

The site and environs are mainly characterised by agricultural fields that are defined by mature hedgerows and trees of mixed species in various stages of maturity, and the fields are traversed by drainage ditches that drain S the Aughvaria River and hence to the Bilboa River and Lower River Shannon SAC, and these rivers may be

important for aquatic and mobile species this European site. The site is not covered by any sensitive natural heritage designations although it is located adjacent to the E site boundary of the Slievefelim to Silvermines Mountains SPA which is designated for Hen Harrier. Issues related to Appropriate Assessment will be addressed in sections 7.13 below.

The nearby drainage ditches and receiving watercourses may provide a habitat, refuge, foraging area or resting place for a variety of terrestrial and aquatic animal species (incl. otters, birds, bats, fish & aquatic invertebrates). The Council's Habitats Directive Screening Report and Natural Impact Statement examined the relationship between the proposed Scheme and several European sites. The reports were informed by desk top studies and field surveys which described the ecological characteristics of the receiving environment and identified the potential impacts on European Sites and biodiversity. The NIS contains mitigation measures which will be incorporated into the CEMP.

No SAC QI habitats or species were recorded in the vicinity or downstream of the proposed Scheme, and no suitable for the SPA SCI species Hen harrier was noted in the desktop studies and field surveys. However, the Aughvaria River and Bilboa River may provide suitable support habitat for several fish species (incl. River & Brooke Lampreys and Salmon) and Otter may commute or forage along the watercourses and field drains, and the hedgerows and linear woodlands may contain suitable nesting and/or foraging habitat for birds and bats.

A variety of ***bird*** species were noted in the desk top study and field surveys of the site and surrounding area however none were recorded nesting at or close to site of the proposed works. There was no evidence of Hen Harrier or the presence of suitable/optimum habitat in the adjacent section of the Slievefelim to Silvermines Mountains SPA or in the wider area, which comprises agricultural fields and clear felled forestry areas. This SPA is also a traditional breeding site for a pair of Peregrine, Merlin has been recorded in the area and Red Grouse is found on some of the unplanted areas of bog and heath, however the roadside agricultural location does not provide a suitable habitat for these species. Notwithstanding this, a condition should be attached to ensure that the construction works take place outside of the bird nesting season.

The surrounding agricultural lands and the roadside hedgerows and trees may provide suitable foraging habitat for **bats** and a planning condition should be attached to require a pre-construction survey for bats, and to seek a Derogation Licence in the event that any species is present, to enable their safe and humane relocation to another suitable nearby habitat, as required.

The receiving watercourses may provide suitable habitat for several species of **fish** (incl. Salmon, Brown trout & Lampreys) along with suitable habitat for several prey species of **aquatic invertebrate** and macrophytes which form part of the food supply for fish species in the Aughvaria, Bilboa and Shannon Rivers. The watercourses have the potential to convey deleterious construction materials downstream in the absence of appropriate safeguards which could adversely affect water quality and fisheries (incl. riverbed smothering, changes to pH, clogging fish gills & habitat degradation). The proposed works have the potential to affect water quality along with general noise and disturbance. However, the mitigation measures contained in the NIS would ensure that appropriate protection measures are put in place during the construction works (incl. exclusion zones, no concrete mixing or vehicle washing on site, and protection of the watercourses from silt & chemical contamination and spill kits).

The proposed works would not require the substantial removal of **trees and hedgerows** with no significant adverse impacts on biodiversity during the works anticipated, however there could be some localised disturbance to foraging areas, resting places and refuges for birds and bats. The removal of vegetation during the bird nesting season should be prohibited and pre-construction surveys for Bats should be required by way of a planning condition.

Invasive plant species were not recorded at or in the vicinity of the proposed Junction Upgrade Scheme, however a biosecurity condition should be attached to ensure that the works (and vehicles) do not introduce invasive species to the area.

Project Ecologist should be appointed to oversee the works and to ensure that the mitigation measures contained in the NIS report and recommended conditions would protect sensitive species. This could be addressed by way of a planning condition.

Having regard to all of the above, the predicted impacts on biodiversity would be temporary and short term as most species will return to the area after the works are complete. It is noted that NPWS and IFI did not submit any observations. No significant adverse impacts on biodiversity are anticipated, subject to pre-construction otter and bat surveys, the avoidance of works during the bird nesting season, the implementation of water quality protection measures during the constructional and operational phases, and the appointment of a Project Ecologist.

Cultural heritage:

The crossroads site and its environs are not covered by any sensitive heritage designations, although there is National Monument located within c.100m of the site, and the surrounding area may contain archaeological heritage. The proposed development would not adversely affect the character or setting of any cultural heritage features in the area. However, it is possible that as yet undiscovered artefacts may be uncovered during the works, and archaeological monitoring should be required. This concern could be addressed by way of a planning condition. It is noted that Policy LH16 of the Development Plan seeks to safeguard sites and features of archaeological interest and the proposed development would comply with this policy.

Need, effectiveness & alternatives:

I am satisfied that the applicant has provided adequate background information to justify the need for the proposed Junction Upgrade Scheme which seek to improve traffic safety at the Knockmaroe crossroad junction, and that the proposed works will function effectively. I am also satisfied, on the basis of my examination of the submitted documents and assessment of the site, environs and surrounding road network, that the proposed works constitute an appropriate and proportionate response to the conditions along this section of the R503/R497/L2264.

Conclusions:

Having regard to the foregoing, I am satisfied that the proposed development is acceptable in principle and that the junction upgrade works are justified.

7.2. The likely effects on the environment

The applicants EIA Screening Report concluded that the proposed Junction Upgrade Scheme does not need to be subject to EIA and that no EIAR report is required for the proposed development. I note that there is no specific provision under Section 177AE of the Act to require EIA or to carry out a formal EIA Screening Determination for a local authority project submitted under this section of the Act. Nonetheless, the Board, in making its decision, is required to consider the likely effects on the environment in respect of the proposed development.

The project is not of a type included in Schedule 5 Part 1 or Part 2 of the Planning and Development Regulations 2001 (as amended) or in the Road Act 1993 (as amended). Furthermore, it does not meet any of the criteria set out in Schedule 7 of the Regulations for determining whether a sub-threshold development would be likely to have significant effects on the environment, with regard to the characteristics of the works, its location and the characteristics of potential impacts.

Having regard to the nature and scale of the proposed development, which would comprise the reconfiguration of the existing skewed crossroad junction to a “T” junction at the intersection of the R503, R497 and L2264 regional and local roads, and the characteristics of the site and receiving environment which is not densely developed or covered by any sensitive ecological (site), heritage or landscape designations, I am satisfied that the proposed works would not have any significant adverse effects on population and human health, biodiversity, land, soil or water, air and climate, material assets, cultural heritage or the landscape, and the need for environmental impact assessment can, therefore, be excluded.

Notwithstanding this conclusion, it is noted that the surrounding area has a rich cultural heritage related to the presence of a Recorded Monument, and the hedgerow/woodland/drainage ditch habitats provide a refuge and foraging opportunities for a range of species (incl. otter, fish, birds & bats). As such the Council should ensure that the NIS mitigation measures are fully implemented, that pre-construction otter and bat surveys are undertaken before works commence, that the works do not take place during the bird nesting season, and a Project Ecologist is appointed.

7.3. **The likely significant effects on a European site:**

The areas addressed in this section are as follows:

- Compliance with Articles 6(3) of the EU Habitats Directive
- The Natura Impact Statement
- Appropriate Assessment

7.4. **Compliance with Articles 6(3) of the EU Habitats Directive**

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

7.5. **The Natura Impact Statement**

The application was accompanied by a Natural Impact Statement (NIS) which scientifically examined the proposed development and European sites. The application was accompanied by a Habitats Directive Screening Report and the NIS was informed by desk top studies and field surveys, and a Preliminary Design Report was provided.

The desk top studies and field surveys described the site and surrounding area. This included details of potential connections between the proposed works and several European sites (incl. Slievefelim to Silvermines Mountains SPA & Lower River Shannon SAC). The NIS assessed the surrounding watercourses and environs for aquatic and mobile species of Qualifying Interest and Special Conservation Interest for the European sites. The ecological characteristics of the European site and receiving environment site were described. No European site QI habitats or species of SCI species were recorded on or in the vicinity of the site during the surveys. Although the site is within the favourable reference range for the SCI bird species (incl. Hen Harrier), it does not contain suitable habitat or foraging potential. No scheduled invasive species were also recorded in the vicinity of the site.

The AA Screening report identified 10 x European sites within a c.15km radius of the proposed Scheme, it examined connectivity and characterised the possible effects of the proposed development on these sites. It concluded that significant effects could not be ruled out for 2 x sites (Slievefelim to Silvermines Mountains SPA & Lower River Shannon SAC) and that the preparation of an NIS was required.

The NIS report described the receiving environment and the proposed development. It described the Slievefelim to Silvermines Mountains SPA and the Lower River Shannon SAC, listed the QI habitats and species and SCI species for these sites and described the nature of the connection between the proposed Scheme and the European sites. It characterised the potential effects on the European sites including in-combination effects in view of the site's Conservation Objectives. The identified effects related to surface water pollution and discharges resulting in loss/change to habitats. Section 3.5 of the NIS recommended mitigation measures which would be incorporated into a CEMP. The NIS formally concluded that, on the basis of the best scientific knowledge available, and subject to the implementation of the mitigation measures, that the possibility of any adverse effects the integrity of the aforementioned or any other European sites (having regard to their conservation objectives), arising from the proposed development, either alone or on combination with other plans and projects, can be excluded beyond a reasonable scientific doubt.

Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, does clearly identify the potential impacts, and does use best scientific information and knowledge, and details of mitigation measures are provided. I am satisfied that the information is sufficient to allow for appropriate assessment of the proposed development (see further analysis below).

7.6. **Appropriate Assessment**

- 7.7. The proposed development, which would comprise the configuration of a skewed crossroad road junction (R503/R497/L2264) to provide new “T” junction along with a cattle underpass, new field entrances and road drainage, is not directly connected with or necessary to the management of any European sites in the surrounding area.
- 7.8. Having regard to the information and submissions available, nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, the following European Sites in the table below are considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects.
- 7.9. The potential likely significant impacts that could arise during the construction and operational phases of the proposed development on the European site’s QI habitats and species, or SCI species are:
- Release of sediment & pollutants to surface & ground water during construction and operation.
 - Loss of or damage to habitat/resting/foraging places used by QI/SCI species.
 - Noise and disturbance to QI/SCI species during construction.
 - Dispersal of invasive species with resultant impacts on QI habitats and species, or SCI species during the construction works.

Stage 1 Screening Assessment.

The European sites within the Zone of Influence (i.e. the area over which an impact can have a potential effect in relation to proximity of European sites and the mobility of faunal species from further afield sites) of the proposed works and approximate separation distances are set out below.

European Site	Qualifying Interests	Distance	Link
Slievefelim to Silvermines Mountains SPA (004165)	Hen Harrier	Adjacent	Yes
Lower River Shannon SAC (002165)	Sandbanks & Estuaries Mudflats & sandflats Coastal lagoons & Reefs Large shallow inlets and bays Perennial vegetation of stony banks Vegetated sea cliffs Salicornia and other annuals Atlantic salt meadows Mediterranean salt meadows Common Bottlenose Dolphin Water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachion vegetation Molinia meadows Alluvial forests Freshwater Pearl Mussel Sea, Brook & River Lampreys Salmon & Otter	c.2.6km	Yes
Anglesey Road SAC (00215)	Species-rich Nardus grasslands	c.3.2km	No
Lower River Suir SAC (002137)	Atlantic & Mediterranean salt meadows Water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachion vegetation Tall herb fringe communities Old sessile oak woods Alluvial forests Taxus baccata woods of the British Isles Freshwater Pearl Mussel White-clawed Crayfish Sea, Brook & River Lamprey Twaite Shad, Salmon & Otter	c.6.1km	No

European Site	Qualifying Interests	Distance	Link
Bolingbrook Hill SAC (002124)	Northern Atlantic wet heaths European dry heaths Species-rich Nardus grasslands	c.8.4km	No
Keeper Hill SAC (001197)	Northern Atlantic wet heaths Blanket bogs	c.11.3km	No
Silvermine Mountains SAC (000939)	Northern Atlantic wet heaths Species-rich Nardus grasslands	c.12.3km	No
Silvermine Mountains West SAC (002258)	Northern Atlantic wet heaths European dry heaths Calaminarian grasslands	c.12.3km	No
Philipston Marsh SAC (001847)	Transition mires and quaking bogs	c.13.9km	No
River Shannon & River Fergus SPA (004077)	Cormorant & Whooper Swan Light-bellied Brent Goose Wigeon, Teal & Pintail Shoveler, Scaup & Shelduck Ringed, Golden, & Grey Plover Lapwing, Knot & Dunlin Black-tailed & Bar-tailed Godwit Curlew, Redshank & Greenshank Black-headed Gull Wetland and Waterbirds	c.35.4km	Yes

7.10. Based on my examination of the NIS report and supporting information (incl. the desktop studies & field surveys), NPWS website, aerial and satellite imagery, the scale of the proposed works and nature of the likely effects, the substantial separation distance and functional relationship between the proposed works and the European sites and their conservation objectives, the site specific characteristics and requirements, and the absence of an aquatic connection, taken in conjunction with my assessment of the subject site and surrounding area, I conclude that a Stage 2 Appropriate Assessment is required for 2 of the European sites referred to above which I consider to be within the Zone of Influence by reason of direct aquatic and/or

mobile connections (Slievefelim to Silvermines Mountains SPA and Lower River Shannon SAC).

7.11. In coming to this conclusion, I am satisfied that the River Fergus and River Shannon SPA can be screening out from any further assessment, notwithstanding the possible aquatic connection, having regard to the substantial separation distance (c.36km straight line) between the proposed Scheme and this European site and the site-specific coastal requirements of its SCI bird species.

7.12. **Stage 2 Appropriate assessment**

Slievefelim to Silvermines Mountains SPA:

This European site lies within the Zone of Influence of the proposed Scheme, the SPA site boundary runs parallel to the W site boundary of the proposed junction upgrade and it therefore has a connection to the site of the proposed works.

European site description:

This site comprises an extensive upland area located in Counties Tipperary and Limerick. It consists of a variety of upland habitats, though approximately half is afforested including first and second rotation plantations, with both pre-thicket and post-thicket stands present, and substantial areas of clear-fell. Some 25% of the site is unplanted blanket bog and heath and the remainder is mostly rough grassland used for hill farming. Some stands of deciduous woodland occur, mainly within the river valleys. Several rivers rise within the site including the River Bilboa which is connected to the development site via the Aughhvaria River and drainage ditches.

The SPA is of special conservation interest for Hen Harrier and the mix of forestry and open areas provides optimum habitat conditions for this Annex 1 species. The early stages of new and second-rotation conifer plantations are the most frequently used nesting sites, though some pairs may still nest in tall heather of unplanted bogs and heath. Hen Harriers will forage up to c.5 km from the nest site, utilising open bog and moorland, young conifer plantations and hill farmland that is not too rank. Birds will often forage in openings and gaps within forests for prey species (incl. small birds and small mammals).

- **Special Conservation Interest species:** Hen Harrier.
- **Conservation Objectives:** To maintain or restore the favourable conservation condition of the bird species (HH) listed as Special Conservation Interests for this SPA.
- **Attributes & targets:** None specified.

Potential direct effects: The proposed development would not be located within a European site, and it is not relevant to the maintenance of any European site. Although it would be located adjacent to the E site boundary of the SPA, there would be no potential for direct effects having regard to the absence of suitable/optimum habitat conditions for the SCI species within the adjacent section of the European site which comprises agricultural fields and cleared felled forestry areas.

Potential indirect effects: The construction works associated with the proposed Scheme and its future operational use will take place entirely within the boundaries of the development site. During the **construction phase** the proposed drainage arrangements and mitigation measures would ensure that no deleterious materials (incl. fine sediments, accidental chemical or fuel spills & other pollutants) would discharge to watercourses that drain into the Slievefelim to Silvermines Mountains SPA. The linear design of the Scheme would ensure that the project would not introduce a barrier to bird mobility or a collision risk. Further potential indirect effects relate to the uncontrolled introduction of invasive species from work vehicles which could give rise to the colonisation of habitats by invasive species, with possible resultant impacts on Hen harrier and prey species, in the absence of mitigation. There is no potential for any additional significant indirect adverse effects during the **operational phase** as the proposed works comprise an upgrade of an existing and long-established road junction, with a minimal additional land take.

Mitigation measures: The NIS contains mitigation measures which would serve to protect the SPA and its SCI species from adverse effects, and these include: -

- Installation of a fenced off Exclusion Zone with signage along the SPA/R503 boundary.

- Surface water management measures to protect water quality in nearby watercourses (incl. Exclusion Zones, surface water management plan, no concrete mixing or washing out on site, waste management & off-site disposal, protection of all watercourses & drains from sediment & chemical contamination, spill kits & regular road cleaning).

Potential in-combination effects: Potential indirect in-combination effects relate to damage to SCI species because of accidental spillages and sediment run off during the upgrade works, and the or introduction of invasive species from construction vehicles. This could give rise to pollution, contamination and/or colonisation with resultant impacts on water quality and the availability of prey species for Hen harrier, having regard to the various plans or projects in wider area which include agricultural works and wind farm construction, in the absence of mitigation. However, having regard to the implementation of the aforementioned mitigation measures and suggested conditions (see below) I am satisfied that there would be no adverse cumulative effects on the European site or its SCI species.

Residual effects: None anticipated post mitigation.

NIS Omissions: None noted.

Suggested conditions: All works should take place outside the bird breeding season. A Project Ecologist should be appointed to oversee the works. All plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

Conclusion: I am satisfied that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of this European site in light of its Conservation Objectives, subject to the implementation of mitigation measures outlined above.

Lower River Shannon SAC:

This European site lies within the Zone of Influence of the proposed works as it has a direct aquatic connection to the site of the proposed works via drainage ditches and the Aughvaria and Bilboa Rivers.

European site description:

This very large European site stretches along the Shannon valley from Killaloe in Co. Clare to Loop Head/Kerry Head over a distance of c.120km. The site encompasses the Shannon, Feale, Mulkear and Fergus estuaries, the freshwater lower reaches of the River Shannon, the freshwater stretches of much of the Feale and Mulkear catchments, and the marine area between Loop Head and Kerry Head. The Feale and Mulkear catchments exhibit all the aspects of a river from source to mouth. Semi-natural habitats, such as wet grassland, wet woodland and marsh occur by the rivers, but improved grassland is the most common habitat type. Rivers within the sub-catchment of the Mulkear include the River Bilboa. The Lower River Shannon SAC overlaps with the Slievefelim to Silvermines Mountains SPA (see above) and several of the rivers that drain into this SAC rise within the SPA site. This includes the River Bilboa which is connected to the development site via the River Aughvaria, and field and roadside drains.

Qualifying Interest habitats and species:

This SAC is designated for its importance to a wide variety of habitats and species, which extend from the upland source of the watercourse (N) to the coastal estuary (SW). The full list of QI habitats and species is set out in the table above.

It is noted from the NPWS documentation and accompanying maps that several of the QI habitats and species for the SAC (coastal & estuarine) are located a considerable distance downstream of the proposed development (more than 35km straight line). For this reason, combined with the modest scale of the proposed works, the specific QI site characteristics and locational requirements, and the dynamics of coastal and tidal processes, the following QI habitats will be excluded from any further consideration: -

- Sandbanks & Estuaries
- Mudflats & sandflats

- Coastal lagoons & Reefs
- Large shallow inlets and bays
- Perennial vegetation of stony banks
- Vegetated sea cliffs
- Salicornia and other annuals
- Atlantic salt meadows
- Mediterranean salt meadows
- Common Bottlenose Dolphin

It is further noted from the NPWS documentation and maps that several of the remaining QI habitats and species for this SAC are either located a considerable distance downstream of the proposed works (in excess of 30km straight line), along watercourses that are not connected to the Aughvaria or Bilboa Rivers or have site specific locational requirements (Freshwater pearl mussel). The NPWS documentation also notes that there are barriers to fish migration along some of the watercourses and barriers are present in the River Mulkear that the site ultimately discharges into via the Aughvaria or Bilboa Rivers (Sea Lamprey). For these reasons, combined with the modest scale and nature of the proposed works, and the specific QI site characteristics and locational requirements, the following QI habitats and species will be excluded from any further consideration:

- Sea Lamprey
- Freshwater pearl mussel

Conservation Objectives:

The Conservation Objectives for the various habitats and species seek to maintain the favourable conservation condition of the habitats and species in the Lower River Shannon SAC, which are defined by a specific list of attributes and targets.

Qualifying Interests, attributes & targets:

The relevant Qualifying Interests for the remaining habitats and species, and any applicable attributes and targets for the remaining QIs, are set out below.

Qualifying Interests	Attributes & targets
Floating river vegetation	Habitat Area (stable or increasing); Habitat Distribution (no decline); Hydrological regime (river flow & groundwater discharge); Substratum composition; Water chemistry; Water quality; Vegetation composition; Floodplain connectivity.
Molina meadows	Habitat Area (stable or increasing); Habitat Distribution (no decline); Vegetation structure & composition.
Alluvial forests	Woodland structure (no decline); Vegetation composition
Brook & River Lamprey	Distribution; Population structure of juveniles; Juvenile density in fine sediment; Extent and distribution of spawning habitat; Availability of juvenile habitat.
Salmon	Distribution; Adult spawning fish; Salmon fry abundance; Out-migrating smolt abundance; Number and distribution of redds; Water quality.
Otter	Distribution; Extent of terrestrial & freshwater habitats; Couching sites & holts; and Fish biomass (no significant decline).

Potential direct effects: The proposed development would not be located within a European site, and it is not relevant to the maintenance of any European site. No potential for direct effects having regard to the location and scale of the proposed Scheme and to the separation distance between the works and the European site and its QI habitats and species.

Potential indirect effects: There is potential for indirect effects on this European site during the **construction phase** as a result of: - water pollution from the unmitigated release of fine sediments in runoff during upgrade works and hydrocarbons by way of accidental spillages from machinery which could give rise to water pollution, chemical contamination, riverbed smothering and clogging of fish gills, with resultant impacts on the attributes and targets for the QI habitats and species, in the absence of mitigation. Further potential indirect effects relate to the uncontrolled introduction of invasive species from work vehicles which could give rise to the colonisation of habitats by invasive species, with resultant impacts on the attributes and targets for the QI habitats and species, in the absence of mitigation. There is no potential for any additional significant indirect adverse effects during the **operational phase** as the proposed works comprise an upgrade of an existing long-established road junction.

Mitigation measures: The NIS report contains a list of mitigation measures which would serve to protect the SAC and its QI habitats and species from adverse effects, and these include: -

- Installation of a fenced off Exclusion Zones along watercourse.
- Surface water management measures to protect water quality in nearby watercourses including:
 - surface water management plan,
 - no concrete mixing or washing out on site,
 - waste management & off-site waste disposal,
 - protection of all watercourses & drains from sediment & chemical contamination,
 - emergency spill kits
 - regular road cleaning

Floating river vegetation: The site and environs drain to the River Aughvaria and hence the River Bilboa which in turn forms part of the Lower Shannon SAC. The NPWS Site Synopsis notes that Floating river vegetation is present throughout the major river systems within the SAC, and that the rivers contain an interesting bryoflora with *Schistidium alpicola* var. *alpicola* recorded from in-stream boulders on the Bilboa. NPWS Map No.13 also indicates the presence of this habitat (Bryophyte-rich streams and rivers sub-type) further downstream of the proposed development. However, having regard to the nature and small scale of the proposed development, I am satisfied that following the implementation of the mitigation measures and any recommended conditions (incl. the management of sediments & accidental spills, and the control of invasive species) the proposed works would not have an adverse impact on water quality in the Lower River Shannon SAC, or introduce invasive species to the watercourse/s during any of the works. There would be no resultant adverse effects on this QI habitat with respect to its attributes and targets (incl. Habitat Area & Distribution, Hydrological regime, Substratum composition, Water quality, Vegetation composition/diversity, and floodplain connectivity).

Alluvial forests: There are no records to indicate the presence of this habitat in the vicinity or immediately downstream of the proposed development although the NPWS documentation notes that it may be present at various locations throughout the SAC. The NPWS Site Synopsis notes its presence in the low hills to the S of the Slievefelim Mountains and the valley sides of the River Bilboa. However, having regard to the nature and small scale of the proposed development, I am satisfied that in the event that Alluvial forest habitats may be present downstream of the works, I am satisfied that following the implementation of the mitigation measures and any recommended conditions (incl. the management of sediments & accidental spills, and the control of invasive species) the proposed development would not have an adverse impact the Lower River Shannon SAC, or introduce invasive species to the watercourses during any of the works. Therefore, there would be no resultant adverse effects on this QI habitat with respect to its attributes and targets (incl. Woodland structure & Vegetation composition/diversity).

Molinia meadows: There are no records to indicate the presence of this habitat in the vicinity or immediately downstream of the proposed development although the NPWS documentation notes that it has been recorded on the eastern bank of the Shannon, just N of Castleconnell, Co. Limerick, and that it may be present at various locations throughout the SAC. Having regard to the nature and small scale of the proposed development, and in the event that Molinia meadows habitats is present downstream of the works, I am satisfied that following the implementation of the mitigation measures and any recommended conditions (incl. the management of sediments & accidental spills, and the control of invasive species) the proposed development would not have an adverse impact on water quality in the Lower River Shannon SAC, or introduce invasive species to the watercourses during any of the works. Therefore, there would be no resultant adverse effects on this QI habitat with respect to its attributes and targets (incl. Habitat Area (stable or increasing); Habitat Distribution (no decline); Vegetation structure & composition).

Fisheries: The site and environs drain to the River Aughvaria and hence the River Bilboa which in turn forms part of the Lower Shannon SAC, and several species of fish (incl. River & Brook Lamprey and Salmon) have been recorded in these

watercourses during their various lifecycle stages. The NPWS documentation notes that artificial barriers can block or cause difficulties to fish migration, both up- and downstream, thereby possibly limiting the species to specific stretches and creating genetically isolated populations (Lampreys). Any deterioration of biological or chemical water quality or smothering of the riverbed substratum because of siltation, accidental fuel spills or poorly managed in-stream works could have adverse resultant impacts on the QI fish species, by affecting spawning grounds, food availability (incl. macro-invertebrates & macrophytes) and health (incl. clogging of fish gills). However, I am satisfied that following the implementation of the mitigation measures and any recommended conditions (incl. the management of sediments & accidental spills, and the control of invasive species), the proposed development would not have an adverse impact on fisheries in the Lower River Shannon SAC during the works. There would be no resultant adverse effects on these QI species with respect to their attributes and targets (incl. Distribution, Population structure & density, Extent and distribution of spawning habitat, Availability of juvenile habitat, & Water quality).

Otter. Otter has been recorded commuting and foraging along the larger rivers in the SAC (incl. the River Bilboa) and it is possible that it utilises the nearby watercourses (incl. the River Aughvaria). Any deterioration of water quality because of the proposed works and resultant impacts on the availability of fish biomass for Otter could have an adverse impact on this QI species. However, I am satisfied that following the implementation of the mitigation measures (incl. the measures to protect water quality and hence the availability of prey species) the proposed development would not have an adverse impact on Otter in nearby watercourses during the construction and operational phases. Therefore, there would be no resultant adverse effects on this QI species respect to its attributes and targets (incl. Distribution, Extent of terrestrial & freshwater habitats, Couching sites & holts, and availability of fish biomass).

Potential in-combination effects: Potential indirect in-combination effects relate to damage to QI habitats and species because of accidental spillages and sediment run off during the junction upgrade works, and the accidental introduction of invasive species by construction vehicles. This could give rise to pollution, contamination

and/or colonisation with resultant impacts on water quality, fisheries, and the availability of prey species for otter, having regard to the various plans or projects in wider area which include agricultural works and windfarm construction, in the absence of mitigation. However, having regard to the implementation of the aforementioned mitigation measures and recommended conditions (see below), I am satisfied that there would be no adverse cumulative effects on the European site or its QI habitats and species.

Residual effects: None anticipated post mitigation.

NIS Omissions: None noted.

Suggested conditions: All works should take place outside the bird breeding season. A Project Ecologist should be appointed to oversee the works. All plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

Conclusion: I am satisfied that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of this European site in light of its Conservation Objectives, subject to the implementation of mitigation measures outlined above.

7.13. **Appropriate Assessment Conclusions:**

Having regard to the foregoing 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. 004165 & 002165) or any other European site, in view of the site's Conservation Objectives.

8.0 Recommendation

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

Reasons and Considerations

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

- (a) the EU Habitats Directive (92/43/EEC),
- (b) the European Union (Birds and Natural Habitats) Regulations 2011-2015,
- (c) the Government of Ireland Climate Action Plan, 2019,
- (d) the Southern Regional Economic & Spatial Strategy, 2020,
- (e) the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on a European Site,
- (f) the conservation objectives, qualifying interests and special conservation interests for the Slievefelim to Silvermines Mountain SPA (site code: 004165) and the Lower River Shannon SAC (site code 002165),
- (g) the policies and objectives of the North Tipperary County Development Plan, 2010 (as Varied & Extended),
- (h) the nature and extent of the proposed works as set out in the application for approval,
- (i) the information submitted in relation to the potential impacts on habitats, flora and fauna, including the Natura Impact Statement, 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 Slievefelim to Silvermines Mountain SPA (site code: 004165) and the Lower River Shannon SAC (site code: 002165), are the only European Sites in respect of which the proposed development has the potential to have a significant effect. The Board considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development for the affected European Sites, namely the Slievefelim to Silvermines Mountain SPA and the Lower River Shannon SAC, 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 current proposal, and
- iii. the conservation objectives for the European Sites.

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

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

Proper Planning and Sustainable Development and 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 and it would not give rise to likely effects on the environment.

Conditions

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

Reason: In the interest of clarity.

2. The mitigation measures outlined in the plans and particulars relating to the proposed development or as may be required in order to comply with the following conditions shall be implemented. Prior to the commencement of development, details of a time schedule for implementation of mitigation measures shall be prepared by the local authority and placed on file and retained as part of the public record.

Reason: In the interest of protecting the environment and European Sites.

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

Reason: In the interest of protecting the European Sites and biodiversity.

4. The following nature conservation requirements shall be complied with:

- (a) A suitably qualified ecologist should be appointed to oversee the works and the implementation of the NIS mitigation measures and planning conditions.
- (b) No vegetation removal shall take place during the period 1st March to 31st August (inclusive).
- (c) A pre-construction otter survey shall be carried out before works commence.
- (d) A pre-construction bat survey shall be carried out before works commence. Any destruction of bat roosting sites or relocation of bat species shall be carried out by a suitably qualified ecologist under a Derogation Licence granted by the Minister for Housing, Local Government and Heritage.

Reason: In the interest of biodiversity and nature conservation.

5. 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. The ecologist shall be present during works. Upon completion of works, an ecological report of the site works shall be prepared by the appointed ecologist to be kept on file as part of the public record.

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

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

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

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

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

Karla Mc Bride
Senior Planning Inspector
24th September 2021